BWON Off-Site Waste Issues

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Agenda

- Off-site wastes
- Off-site treatment requirements
- Receiving wastes from off-site
BWON Applicability

Subject Facilities
- Petroleum Refineries
- Chemical Plants
- Coke By-product Recovery Facilities
- Hazardous Waste TSDFs which handle wastes from the above facilities
Premise

> Rather than treating wastes on site, wastes can be sent “off-site” for treatment and be considered controlled

> Must be controlled prior to off-site shipment and until the point it is treated

> Obligations?
BWON “Wastes” Reminder

> BWON focuses on benzene in facility wastes.
> Special definition of “wastes” is used in BWON
> Wastes include virtually all benzene-containing materials at the facility that are not in the process and going forward in the process.
  ♦ Much broader than what the dictionary means by “waste.”
  ♦ BWON Wastes are not necessarily the same as EPA RCRA Hazardous Wastes either!
Common off-site Wastes

> Used Oil
> Contaminated Soil
> Spent Catalyst
> Spent Carbon
> Spent Caustic

Waste Treatment by 3rd Party
[61.342 (f)]

> Rather than treating the waste onsite, an owner or operator may elect to comply ...by transferring the waste off-site to another facility where the waste is treated in accordance with the requirements of paragraph (c)(1)(i) of this section.

> Disposer includes notice with shipment that waste must be managed and treated in accordance with BWON
Recordkeeping - 61.356(c)

For each shipment:

- Date waste is shipped off-site
- Quantity of waste shipped off-site
- Name and address of the facility receiving the waste
- Copy of the notice sent with the waste shipment.
Other Obligations for Generator?

Set It and Forget It

Cradle to Grave
Due Diligence

- How do you know off-site “waste is treated in accordance with the [BWON control] requirements”?
- RCRA auditing?
- Contracts?
- Best Practices
Reminder for 6BQ

> Organic wastes **must** be controlled
> > 10% Water? (Aqueous Wastes)
> ❖ The flow-weighted annual average water content of 10 percent or greater is determined on a **volume basis** as total water, as stated in 40 CFR §61.342(3)(2), amended by 58 FR 3074.

EPA, Benzene NESHAP FAQ Handbook for Subparts BB and FF, September 1997
Questions to Consider

> Can you send wastes to a “TSDF” that is not RCRA permitted?
What is a TSDF?

> Under BWON:

> A *hazardous waste treatment, storage, and disposal facility* is a facility that must obtain a *hazardous waste management permit* under *Subtitle C of the Solid Waste Disposal Act*
TSDF applicability narrowed

A commenter stated that the waste rule should be narrowed to exclude marketing.

Response: The EPA agrees that, as proposed, the benzene waste regulations could have been interpreted as applying to more source categories than intended. As a result, EPA issued a clarification notice in the Federal Register on December 15, 1989 (54 FR 51423) stating that the proposal had been intended to apply only to benzene waste from chemical plants, petroleum refineries, coke by-product recovery plants, and commercial hazardous waste treatment, storage, and disposal facilities. The final rule is consistent with this clarification and responsive to the comments requesting a narrowing of the coverage of the waste regulations.
The final rule is applicable to facilities in the following industry sectors: petroleum refineries, coke by-product recovery plants, chemical plants, and commercial TSDF that manage wastes generated by the other three industries (i.e., petroleum refineries, coke by-product recovery plants, and chemical plants). Examples of affected industries include SIC codes 2911, 3312, 2800’s, 4959, and 9511. The clarification of industries regulated appeared in the Federal Register on December 15, 1989, (54 FR 51423). Although, as mentioned previously, the definition of waste has not been changed from proposal, one of the effects of the clarification of the industries regulated is to eliminate consideration of wastes from community activities, which was a source of uncertainty for some commenters.
Inquiries have been received requesting clarification of the applicability of the benzene waste operations standard-to-facilities that treat, store, or dispose of benzene wastes generated by chemical plants, coke by-product recovery plants, or petroleum refineries. The applicability section of the rule, as written, inadvertently applies more broadly than the intent expressed in the preamble to the rule (March 7, 1990, 55 FR 8292) or in the December 15, 1989, Federal Register notice of clarification of the proposed rule (54 FR 51423). Therefore, paragraph (b) of § 61.340 is being revised: (1) To clarify that the subpart applies to offsite hazardous waste treatment, storage, and disposal facilities (TSDF) which are facilities that must obtain a hazardous waste management permit under subtitle C of the Solid Waste Disposal Act and (2) to clarify that the rule only applies to benzene-containing wastes. It should be noted that recent revisions to 40 CFR part 261, the toxicity characteristic (March 29, 1990, 55 FR 11798), will require most facilities receiving wastes with greater than 0.5 parts per million (ppm) benzene to be permitted as hazardous waste TSDF. The primary effects of the correction are to clarify that the rule does not apply to hazardous wastes from other industries and the rule generally does not apply to publicly owned treatment works and municipal solid waste landfills.

TSDFs with a RCRA permit that handle waste from BWON sites
Questions to Consider

> Can you send wastes to a non-BWON regulated TSDF and consider it controlled?
> Does sending them the waste bring them into BWON
  ❖ Do they know that?
Q: Although the annual quantity of benzene managed at a treatment, storage, and disposal (TSD) facility does not exceed 10 Mg, the TSD facility receives waste from facilities described in Sec. 61.340 which do generate an annual quantity of benzene greater than 10 Mg and are subject to Subpart FF. Will the treatment requirements in Sec. 61.342(c)(1)(i) and the control requirements in Sec. 61.342(c)(1)(ii) apply to the TSD facility?

A: Yes. A TSD facility is subject to the treatment and control requirements in Sec. 61.342(c)(1)(i) and (ii) if the total annual benzene (TAB) quantity received on-site is greater than or equal to 10 Mg per year, or if the TSD facility receives waste from any facility listed in Sec. 61.340(a) whose TAB exceeds 10 Mg.
Control of these wastes is required at the TSDF if either:

- (1) the TAB calculated for the TSDF is 10 Mg/yr or greater (based on the characteristics of the wastes at the point they enter the TSDF), or
- (2) if the waste would have been required to be controlled to meet the rule by the generator if it had not been shipped off-site (i.e., the generator's TAB is 10 Mg/yr or greater and the waste contains 10 ppmw or more of benzene).
Questions to Consider

> Can a “TSDF” that is not a BWON TSDF “voluntarily” follow BWON?

> Can wastes shipped outside the U.S. be controlled for BWON?
TSDF BWON Control Applicability

> If the TSDF facility receives waste from a BWON facility, the TSDF is considered to be an extension of that facility for the purposes of control and treatment. If the TSDF receives any amount (even just a bucket full) of waste from a BWON facility, whose TAB is equal to or greater than 10 Mg, then the TSDF is considered to be a 10 Mg facility and must comply with the specified control treatment requirements.

OR

> If the TSDF receives waste from facilities in 40 CFR §61.340(a) that are less than 10 Mg/yr facilities, the TSDF will need to calculate its own TAB at the point waste is received, and submit initial and annual reports updating TAB. The TSDF must determine its own TAB regardless of the generating facilities’ TAB. The TAB is calculated only on those wastes with 10% (or greater) water content. If the TSDF TAB is greater than or equal to 10 Mg/yr, then the TSDF has to comply with regulations regulating 10 Mg facilities.
TSDF POG is where waste enters the facility.
Receiving “controlled” wastes

A second way that TSDF could be affected by subpart FF is if they receive any individual waste streams subject to the rule that would have had to be controlled at the generator site. Any waste received by a TSDF from a facility subject to the rule that would have had to control that waste if it had remained onsite must be controlled at the offsite TSDF.

Consider, for example, a chemical plant with a TAB above 10 Mg/yr, which makes it subject to the control provisions of the rule. If the chemical plant ships offsite one or more of their benzene-containing waste streams that require control, the TSDF must manage these wastes in compliance with the control requirements of the rule. In this case, the need for control at the TSDF is determined based on the characteristics of the waste at the generator as opposed to the first case in which the need for control is determined based on the characteristics of the waste as it enters the TSDF. As specified in § 61.342(e)(2) of the rule, the owner or operator shipping the waste offsite must include with each offsite waste shipment a notice stating that the waste contains benzene which is required to be managed and treated in accordance with the provisions of subpart FF.
Quantifying Waste Received From Off-site

- Facilities receiving waste from off-site:
  - report the benzene quantity provided by the off-site facility, or
  - at the transfer point where the waste is received
- You might be receiving off-site waste even if you are not a “TSDF”

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1EPA, Benzene NESHAP FAQ Handbook for Subparts BB and FF, September 1997
Does the rule require controls for any wastes at TSDFs that contain benzene when the benzene in the wastes does not originate from petroleum refineries, chemical plants, or coke by-product recovery plants?

No.

[Citations: 40 CFR §61.340, and memorandum dated September 26, 1991 from Douglas M. Skie, Chief, Air Programs Branch, EPA Region 8 to Dakota Gasification Company]

Do you have a segregated system?

1EPA, Benzene NESHAP FAQ Handbook for Subparts BB and FF, September 1997
Issues for Co-Located Facilities

> One BWON “facility” vs. multiple facilities?
  ❖ Bigger topic for another day
> Are you providing notification for off-site treatment?
> Are you including receipts in TAB?
Remediation Waste

- For facilities with TAB > 10 Mg/yr and remediation waste is received from off-site, and the remediation waste water content > 10% or the remediation waste is mixed with water so that the average water content > 10%, then the remediation waste is reported in the TAB.

- [40 CFR 61.342 (a)(3)] Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility. If the facility’s total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of paragraphs (c) through (h) of this section. If the facility is managing remediation waste generated off-site, the benzene in this waste shall be included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.
TSDF

> What does it mean to control the waste while on-site?
> When do control requirements cease?
  ❖ Treatment Achieved
  ❖ Entering Process
  ❖ Converting to a Product
> Remember RCRA exemptions may be irrelevant
TSDF Concerns

- Enforcement
- Consent Decrees
- Contractual Obligations
- Compliance Implications for the Generator?
Summary

- Requirements for sending waste off-site
- TSDF due diligence
- Receiving off-site waste
Questions & Discussion

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