Sam Barrett
Waste Section Manager
TCEQ DFW Region

TCEQ Hazardous Waste Update
And Other Waste Issues
Texas Commission on Environmental Quality

- TCEQ is the Environmental Agency for the state of Texas.
- The TCEQ strives to make certain that Texans have a safe place to live and the resources necessary for a quality life.
- Our goal is clean air, clean water and the safe management of waste.
The DFW Region

- The DFW Region one of sixteen Regional Offices spread throughout Texas.

- The DFW Region is responsible for Air, Water and Waste compliance monitoring and enforcement activities for the DFW Metroplex and the surrounding nineteen counties.
Resource Conservation and Recovery Act

The objective of RCRA is to promote the protection of health and the environment and to conserve valuable material and energy resources by providing technical assistance and regulating the management of solid waste.
National Policy

- The national policy of the United States is to reduce or eliminate the generation of hazardous waste as expeditiously as possible. Waste that is nevertheless generated should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment.
What is a Solid Waste?

- Garbage, rubbish, refuse, sludge and other discarded materials including solid, liquid, semi-solid and contained gaseous materials.

- In Texas, we have industrial and municipal solid wastes.
Hazardous Waste Determination

Any one who generated a solid waste must determine if that waste is hazardous.
Definition of Solid Waste for RCRA Subtitle C Hazardous Waste

- [http://www.epa.gov/osw/hazard/dsw](http://www.epa.gov/osw/hazard/dsw)
- A solid waste is a discarded material.
- Abandoned.
- Recycled.
- Inherently Waste like.
- Military munitions.
Abandoned

- Disposed of
- Burned or incinerated
- Accumulated, stored or treated before or in lieu of.
Recycled

- Used in a manner constituting disposal.
- Burning for energy recovery.
- Reclaimed.
Reclaimed Secondary Materials

- Spent materials
- Sludges
- By-Products
- Off-spec commercial chemical products
- Certain Scrap metals
Materials that are not solid waste when recycled – 40 CFR 261.2(e)

- (e) Materials that are not solid waste when recycled. (1) Materials are not solid wastes when they can be shown to be recycled by being:
  - (i) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or
  - (ii) Used or reused as effective substitutes for commercial products; or
  - (iii) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials must be managed such that there is no placement on the land. In cases where the materials are generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at §261.4(a)(17) apply rather than this paragraph.
Burden of Proof

- 40 CFR 261.2(f)
- Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation..
EPA's new DSW rule.

- To encourage resource conservation by streamlining regulation of hazardous secondary materials that are reclaimed.

- Streamlining the regulations, while maintaining critical controls, will make recycling these materials not only safe, but also easier and more cost-efficient.
Goals of the DSW Rule

- To better define when hazardous secondary materials being recycled are discarded and are thus regulated by EPA
- To encourage legitimate reclamation of hazardous wastes
What materials are eligible for the final rule?

Hazardous secondary materials sent for reclamation are eligible for this rule.

This includes listed sludges, listed by-products, and spent materials, such as:

- Electric arc furnace dust
- Spent solvents
- Spent acids
- Metal-bearing sludges from air pollution control or wastewater treatment
What materials are eligible for the final rule?

Materials that are **NOT** eligible include:

- Materials recycled by ‘use constituting disposal’ (UCD) and burning for energy recovery (BFER)
- Inherently waste-like materials
- Materials already excluded from the definition of solid waste under 40 CFR 261.4
- Spent lead-acid batteries
- Spent petroleum catalysts (K171 and K172)
What exactly is in the DSW final rule?

Four major components of final rule:

1. **Under the Control of the Generator Exclusion**
   Self-implementing exclusion for materials generated and reclaimed under the control of the generator

2. **Transfer-based Exclusion**
   Self-implementing exclusion for materials generated and transferred to another company for reclamation

3. **Non-waste Determination Procedure**
   Materials that are non-wastes (determined through a petition process)

4. **“Legitimate” Recycling Provision**
What is the transfer-based exclusion?

- *Includes hazardous secondary materials that are generated and transferred to another person for reclamation.*

- **Under this exclusion, generators must:**
  - Legitimately recycle materials
  - Not speculatively accumulate materials
  - Submit notifications (using the Site ID form)
  - Ensure materials are "contained"
  - Make "reasonable efforts" to evaluate the reclaimer and intermediate facility to determine that they will safely and legitimately recycle
  - Must perform contractual arrangements with intermediate facilities to ensure materials are sent to the reclamation facility
  - Maintain records of off-site shipments and confirmations of receipt
  - Provide notice and obtain consent for exports
What is the transfer-based exclusion (cont.)?

- **Under this exclusion, reclaimers and intermediate facilities must:**
  - Legitimately recycle materials
  - Not speculatively accumulate materials
  - Submit notifications (using the Site ID form)
  - Ensure materials are “contained” and **managed in a manner at least as protective as analogous raw materials**
  - Manage recycling residuals safely
  - Maintain records of shipments and send confirmations of receipt to generator
  - Have financial assurance
What is “contained”?

- Generally, material is “contained” if it is placed in a unit that controls the movement of the material out of the unit and into the environment.

- Material that is released from the unit (e.g., through a spill) is considered a solid and hazardous waste unless it is immediately recovered.

- If a release is “significant” the material remaining in the unit could also be considered a solid and hazardous waste, depending on circumstances.
What is “contained” (cont.)?

◆ If the materials are not managed as valuable raw materials, the unit could be considered to be storing hazardous waste.

◆ “Significant” releases are not necessarily large in volume; small releases over time could also be considered significant under some circumstances.
What is “contained” (cont.)?

- Materials may be stored in both non-land-based units and land-based units.

- Land-based units are defined as an area where materials are placed in or on the land before recycling (e.g., surface impoundment or waste pile).

- Land-based units do not include land-based production units, which are used in the actual production of a product.
What are reasonable efforts?

- Reasonable efforts requires generators to evaluate a reclaimer or intermediate facility to ensure that they intend to properly manage and legitimately recycle the material prior to shipping it to the facility.

- Generators must make reasonable efforts and document the evaluation every three years at a minimum. Documentation includes a certification statement.

- The minimum standard for reasonable efforts consists of five questions.

- Reasonable efforts is not required if a generator chooses to send his materials to a facility that will manage the material under a RCRA Part B permit or interim status standards.
What are reasonable efforts (cont.)?

Five questions must be affirmatively answered by the generator:

1. Is the reclamation process legitimate?
2. Has the facility notified authorities and indicated that it has financial assurance?
3. Does publicly available information indicate that there are no formal enforcement actions taken against the facility in the previous three years and that the facility is not a “significant non-complier” with RCRA Subtitle C? If “no,” does the generator have “credible evidence” the material will be properly managed?
4. Does the facility have the equipment and trained personnel to safely recycle the material?
5. Does the facility have the required permits to manage residuals, have a contract to dispose of them at a permitted facility, or does the generator have “credible evidence” residuals will be safely managed?
What are the recordkeeping requirements?

- In addition to notification and documentation and certification of reasonable efforts...
  - Facilities must maintain for three years records of all off-site shipments sent and received at the facility.
  - Reclaimers must send and generators must maintain for three years confirmations of receipt.
  - Generators must obtain notice and consent for exports and must file annual reports of materials exported to foreign reclaimers.
What are intermediate facilities?

- Intermediate facilities are facilities that store (but do not generate or reclaim) materials for more than 10 days.

- Intermediate facilities do **not** include transfer facilities, which hold materials during the normal course of transportation for less than 10 days.

- Intermediate facilities must comply with the same conditions as a reclaimer (e.g., notification, financial assurance, recordkeeping).

- Generators must perform reasonable efforts on each intermediate facility and must perform contractual arrangements to ensure that the materials are sent to the reclamation facility chosen by the generator.
Legitimate Recycling
Provision
What is the legitimate recycling provision?

- The legitimate recycling provision is a condition of the new DSW exclusions and non-waste determinations.

- Is equivalent to the existing policy for legitimate recycling.
What is the legitimate recycling provision (cont.)?

- **Two mandatory factors**
  - Materials must provide useful contribution to the recycling process or to a product or intermediate
  - Recycling must produce valuable product or intermediate

- **Two factors must be considered**
  - Materials must be managed as valuable commodities
  - Products of recycling must not contain significantly higher levels of hazardous constituents than are in analogous products
What does it mean to meet the mandatory factors?

- **Persons must address the mandatory factors:**
  
  - **Material provides a useful contribution to the recycling process or a product or intermediate if it:**
    - Contributes valuable ingredients;
    - Replaces a catalyst or carrier in the recycling process;
    - Is a source of a valuable constituent recovered;
    - Is recovered or regenerated; **OR**
    - Is used as an effective substitute for a commercial product
  
  - **Recycling produces a valuable product or intermediate if it is:**
    - Sold to a third party; **OR**
    - Used by the recycler or generator as an effective substitute for a commercial product or as an ingredient or intermediate
What does it mean to meet (or not meet) the non-mandatory factors?

- **Persons must consider the non-mandatory factors:**
  - Materials must be managed as valuable commodities; and
  - Products of recycling must not contain significantly higher levels of hazardous constituents.

- If the recycling does not meet one of the non-mandatory factors, the recycler should be prepared to explain why the recycling is still legitimate, for example, by considering the protectiveness of the storage methods, exposure from and bioavailability of toxics in the products, and other relevant considerations in evaluating legitimacy.
Non-Waste Determination Procedure
What materials are eligible for a non-waste determination?

- **Includes hazardous secondary materials that are...**
  - reclaimed in a continuous industrial process; or
  - indistinguishable in all relevant aspects from a product or intermediate.

- Materials recycled by ‘use constituting disposal’ and burning for energy recovery are not eligible for a non-waste determination.

- Regulatory authorities approve non-waste determinations and may also stipulate conditions as part of the non-waste determination.
**Interstate Transport**

- Regulated hazardous waste from a state that has not adopted the DSW rule going to a state that has adopted:
  - MUST be managed as hazardous waste in the state that has adopted
  - The hazardous waste would not be eligible for the exclusion because the generator in the state that has not adopted would not meet the conditions and requirements of the exclusion (i.e., notification, reasonable efforts)
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<th>DSW Exclusion Conditions for GENERATORS</th>
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<td>Must be legitimately recycling</td>
<td>Must meet codified legitimacy criteria</td>
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<tr>
<td>Cannot accumulate waste for more than 90 days without a permit</td>
<td>Must meet speculative accumulation limits</td>
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<tr>
<td>Must meet specific storage standards for tanks and containers</td>
<td>Hazardous secondary materials must be contained</td>
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<tr>
<td>Must have emergency coordinator, test and maintain emergency equipment, and have emergency plan</td>
<td>No specific DSW requirements; may have to comply with OSHA requirements in 29 CFR 1910.120(q) and EPCRA requirements in 40 CFR 355</td>
</tr>
<tr>
<td>Must have personnel training plan</td>
<td>No specific DSW requirements; may have to comply with OSHA requirements in 29 CFR 1910.1200</td>
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<td>Applicable DOT regulations for transport</td>
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<tr>
<td>Manifest required</td>
<td>Records of shipments off-site</td>
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<td>Exception Reporting</td>
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<td>One-time notification</td>
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<td>Biennial Reporting</td>
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<td>Three-year record retention</td>
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<tr>
<td>Must ship hazardous waste to a TSDF</td>
<td>Must either ship to a TSDF or conduct reasonable efforts if shipping to a non-TSDF</td>
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<td>Exports</td>
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<td>o Notice &amp; consent</td>
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Exports
- Notice & consent
- Annual reports
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<tr>
<th><strong>Subtitle C Regulation Requirements for RECLAIMERS AND STORAGE FACILITIES</strong></th>
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<tr>
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<td>Must meet codified legitimacy criteria</td>
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<tr>
<td>Must obtain Subtitle C permit</td>
<td>Permit is not required, but must have financial assurance and must safely manage residuals of recycling process</td>
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<td>Waste analysis plan</td>
<td>No specific DSW requirements; MSDS reporting requirements in 40 CFR 370 may apply</td>
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<tr>
<td>Security measures</td>
<td>No specific DSW requirements; DOT transportation security requirements in 49 CFR 172 may apply</td>
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<tr>
<td>Financial assurance</td>
<td>Financial assurance (modified)</td>
</tr>
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<td>Personnel training</td>
<td>No specific DSW requirements; OSHA requirements in 29 CFR 1910.1200 may apply</td>
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<td>Must have emergency coordinator, and have emergency and contingency plan</td>
<td>No specific DSW requirements; OSHA requirements in 29 CFR 1910.120(q) and EPCRA requirements in 40 CFR 355 may apply</td>
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<td>Manifest requirements</td>
<td>Shipping records and confirmations of receipt required</td>
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<td>Operating record Biennial report Three-year record retention</td>
<td>Periodic Notifications Three-year record retention</td>
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<td>Specific design standards for tanks, containers, containment buildings, surface impoundments and inspection requirements</td>
<td>Hazardous secondary materials must be contained and managed in a manner at least as protective as analogous raw materials.</td>
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What is EPA doing to support implementation?

Website: http://www.epa.gov/epawaste/hazard/dsw/impresource.htm
SW-846

- "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods"

- Chapter 9 – Sampling Plan

- “Legally Defensible” representative sample.
Persons Responsibility for Solid Waste

- Texas Health and Safety Code
- Section 361.271
- Any person who manage a solid waste.