

Solid Waste Permitting for Combustion Units



Combustion RAP

Tuesday, April 12, 2011

DEQ, Piedmont Regional Office

Kathryn Perszyk
Solid Waste Permit Coordinator

Solid Waste Regulations

- VSWMR, 9 VAC 20-81-10, et seq.
 - Recently revised (effective March 16, 2011)



VSWMR Exemptions, 9 VAC 20-81-95

- Exclusion from definition of solid waste:
 - Wood wastes burned for energy recovery (C.4.)
- Beneficial use of waste materials:
 - Waste tires, tire chips or tire shred when burned for energy recovery or when used to produce fuel (C.7.1.)
 - Waste derived fuel product, derived from nonhazardous solid waste (C.7.m.)



Waste-derived fuel product

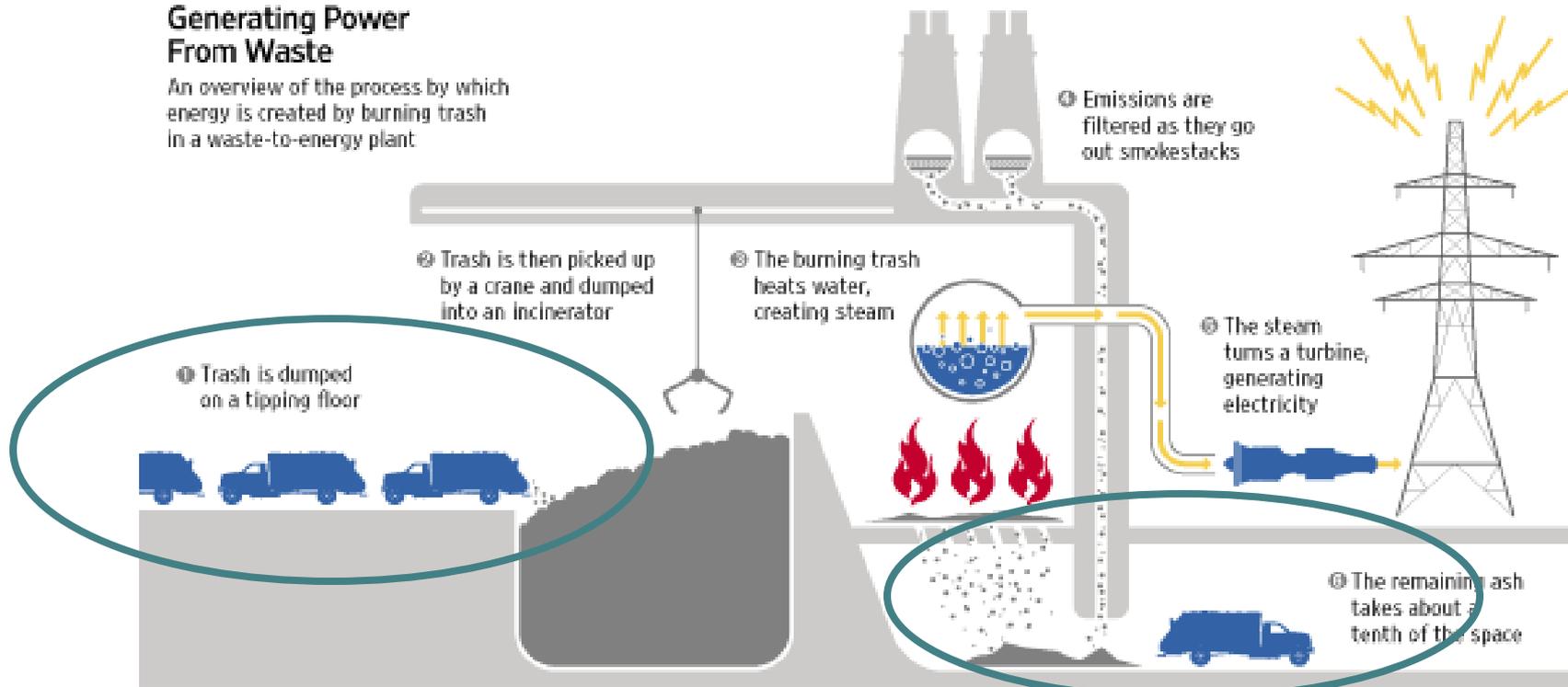
- A solid waste or combination of solid wastes that have been treated (altered physically, chemically, or biologically) to produce a fuel product with a minimum heating value of 5,000 BTU/lb.
 - Solid wastes must have a heating value, or act as binders, and may not be added to the fuel for the purpose of disposal.
 - Ingredients may not be listed or characteristic hazardous wastes.
 - The fuel product must be stable at ambient temperature, and not degraded by exposure to the elements.
 - This material may not be "refuse derived fuel (RDF)" as defined in [9VAC5-40-890](#).

Waste to Energy & Incineration Facilities

- VSWMR applies only to solid waste and process residue storage and handling areas

Generating Power From Waste

An overview of the process by which energy is created by burning trash in a waste-to-energy plant



Permitting under VSWMR

Permit-by-Rule

Solid Waste Permit (full permit)

Permit-by-Rule Application

- Notice of Intent
 - Area/Site Location Maps
 - Disclosure Statement
 - Local Gov't Certification
- Siting Certification
- SWMP Certification
- Ops Manual Certification
- P.E. Certification
 - Facility meets Design and Construction Standards
 - Facility has Closure Plan
- Demonstration of Legal Control
- SCC Certification for Owner/Operator
- Proof of Financial Assurance
- Public Participation Results
- Additional info for specific facility types
- Permit Fee

Local Gov't Certification (SW-11-1)

REQUEST FOR CERTIFICATION	
APPLICANT:	
APPLICANT'S MAILING ADDRESS:	
TYPE OF FACILITY:	
<p>The applicant is in the process of completing an application for a permit for a solid waste management facility to be issued by the Virginia Department of Environmental Quality. In accordance with §10.1-1408.1 and §10.1-1411, Code of Virginia (1950), as amended, before such a permit application can be considered complete, the applicant has to obtain certification from the governing body of the county, city, or town in which the facility is to be located that the location and the operation of the proposed facility and/or its proposed expansion is: either consistent with the regional solid waste management plan (SWMP) or has initiated the process of amending the SWMP to include the new or expanded facility; and is in accordance with all the local ordinances. For a permit by rule (PBR) application, in accordance with §10.1-1408.1Q, the SWMP must be consistent with the application and be approved in accordance with §10.1-1411. The undersigned requests that an authorized representative of the local governing body sign the certification below.</p>	
SIGNATURE OF THE APPLICANT:	
TYPED OR PRINTED NAME:	
TITLE:	
DATE OF APPLICATION:	
TELEPHONE:	
NOTE: The applicant should enclose an appropriate map showing the location of the proposed facility/expansion.	
CERTIFICATION	
<p>The undersigned certifies that the proposed facility/expansion is consistent with the regional solid waste management plan or this plan is being amended for consistency, and the location and operation of the proposed facility/expansion is consistent with all local ordinances. If the application is for a PBR, the undersigned certifies that the proposed facility is consistent with the SWMP and the SWMP has been approved in accordance with §10.1-1411, and the proposed location and operation of the facility is consistent with all local ordinances.</p>	
SIGNATURE OF THE AUTHORIZED LOCAL GOVERNMENT REPRESENTATIVE:	
TYPED OR PRINTED NAME:	
TITLE:	DATE:
COUNTY, CITY OR TOWN:	
TELEPHONE:	

- Local government agrees:
 - Facility conforms to local ordinances (zoning)
 - Facility is consistent with Solid Waste Management Plan

10.1-1408.1 B.1., B.9. & Q.,
9 VAC 20-81-410.A.2.c., & 450.B.3.

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Siting Certification

- Direct access to paved roads
- Outside areas subject to base floods
- Specified distances from receptors:
 - 50 ft from property boundary
 - 200 ft to residence, health care facility, school, recreational park, or similar public institution
 - 50 ft to perennial stream or river
- Provide room to minimize traffic congestion and allow for safe operation

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Operations Manual Contents

- Operations Plan
 - Inspection Plan
 - Health & Safety Plan
 - Unauthorized Waste Control Plan
 - Emergency Contingency Plan
-
- Initial certification w/ application, then required annual review and re-certification annually

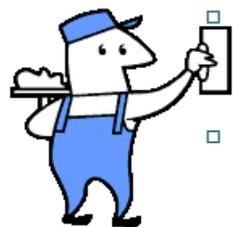


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Design/Construction Standards

- Designed to reduce the potential of elements that may degrade health or environment from crossing facility boundaries
- Provide an all-weather road
- All tipping floors, sorting pads, waste storage areas, bunkers and pits shall be:
 - Constructed of concrete or similar
 - Have floor drains and be graded to facilitate wash down
 - Designed to prevent groundwater intrusion (applies to base and side walls of waste and residue storage pits)
 - Have truck wheel curbs if pit is used for tipping



Design/Construction Standards, continued

- Structures, buildings, and ramps built of easily cleanable material
- Have internal storage areas, min. 3-day capacity
- Designed to prevent migration of odors and dust
- Onsite queuing capacity to prevent vehicle backup
- Have fire alarm/protection systems
- Have perimeter security fencing and gate controls



Design/Construction Standards, continued

- Design Description Manual containing:
 - Process rate
 - Designation of normal and emergency loading, unloading and storage areas
 - Designation of alternate disposal areas during downtime > 72 hrs
 - Expected qty of waste residue generation
 - Disposal location for all waste residues + schedule for securing contracts
 - Description of material use, reuse, or reclamation
 - Plan views and interior floor plans

Closure Plan Contents

- Steps necessary to completely close facility
- A schedule for final closure
 - Anticipated date when wastes will no longer be received
 - Date of completion of final closure
 - Intervening milestones to track progress of closure



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Public Participation Requirements

- Publish public notice, once a week for 2 weeks
- Provide 30-day comment period
- Hold a public meeting to discuss facility and answer questions
- Not required for WTE or Incineration facilities that obtained a permit from the State Air Pollution Control Board or State Water Control Board that required public participation



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- **Additional info for specific facility types**
- Permit Fee

Additional Information Required

- For WTE and incineration facilities, engaged in reclamation of Petroleum-contaminated materials
 - Copy of permit from State Air Pollution Control Board allowing reclamation activities
 - A description of how the requirements of 9 VAC 20-81-660. (special waste requirements pertaining to soil contaminated with petroleum products) will be met

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- Demonstration of Legal
 - Certification for Operator
 - Financial Assurance
 - Participation Results
 - Additional info for specific facility types
 - **Permit Fee**
- \$390**

Solid Waste Permit

- 9 VAC 20-81-410.A.4. ... *The department may require the operator to submit the full permit application and to obtain a regular solid waste management facility permit if it is determined the requested operation does not qualify for permit-by-rule status.*

SWP Components



- Notice of Intent, 9 VAC 20-81-450.B.
- Part A Application, 9 VAC 20-81-460
 - Part A Form + Attachments + Fee
 - Key and Near Vicinity Maps
 - Description of site geology and hydrogeology
- Part B Application, 9 VAC 20-81-480
 - Part B Form + Attachments + Fee
 - Design Plans and Report, CQA, Technical Specs
 - Financial Assurance
 - Closure Plan
 - Sound level data

Permit Modifications

Permit-by-Rule

Solid Waste Permit (full permit)

PBR Modifications

- Mentioned for Design and/or Operation changes
- New Operations Manual certificate
- New P.E. certificate of design/construction
- New P.E. certificate for Closure Plan, if changes
- New FA if increase in closure cost is expected
- New public participation (for design changes)
- PBR Modification fee (\$390)

SWP Modifications

- Major Modification
- Minor Modification
- Permittee Change

- Major/Minor modification requires submittal of any permit documentation that requires change
 - Notice of Intent
 - Part A Application
 - Part B Application

Questions



Kathryn Perszyk
Solid Waste Permit Coordinator

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