Maintaining/Reducing Hazardous Waste Generator Status

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About Your Presenter





- Ross Bunnell, Senior Sanitary Engineer CT DEEP Waste Engineering & Enforcement Division (860) 424-3274 ross.Bunnell@ct.gov
- 26 years with the DEEP's Hazardous Waste Program
- Permitting → Enforcement → Regulatory Analysis & Compliance Assurance.

What is HW Generator Status?

- A way of classifying Hazardous Waste Generators:
- <u>CESQG, SQG, LQG</u>.
- Dictates which HW requirements apply.
- Based on two things:
 - The amount of hazardous waste generated per calendar month; and
 - The total amount of hazardous waste stored on-site at any one time

Waste Generator Category	Amount of Waste Generated Per Calendar Month		Amount of Waste Stored On-Site At Any One Time
CESOG Conditionally Exempt Small Quantity Generator	No More than 100 kilograms And No More than 1 kilogram of Acute Hazardous Waste	OR	No More than 1000 kilograms And No More than 1 kilogram of Acute Hazardous Waste
SQG Small Quantity Generator	Between 100 - 1000 kilograms And No More than 1 kilogram of Acute Hazardous Waste	OR	No More than 1000 kilograms And No More than 1 kilogram* of Acute Hazardous Waste
LQG Large Quantity Generator	1000 kilograms or More Or Greater than 1 kilogram of Acute Hazardous Waste	OR	More than 1000 kilograms Or Greater than 1 kilogram* of Acute Hazardous Waste

Requirements for CESQGs

- Perform HW determinations & retain results.
- Use transporters with an EPA ID # and a DEP transporter permit.
- Send to a facility that is permitted to accept such waste.
- No accumulation time limit.



Requirements for SQGs

- Obtain an EPA ID # and use HW manifests.
- Container management requirements (storage, marking, dating).
- SQG tank requirements.
- Preparedness and Prevention requirements.
- Personnel Training.
- Emergency coordinator, posting emergency information next to the on-site telephone, and emergency response procedures.
- Pre-transport requirements (DOT containers, markings, etc.).
- Generator closure.
- 180-day accumulation time limit.

Requirements for LQGs

- Basically the same as SQGs, plus the following:
- More involved tank requirements:
 - Specific design standards.
 - PE certification of tanks.
- More involved personnel training:
 - Written training procedures.
 - Documentation of training for all staff with HW duties.
- Written Contingency Plan.
- Biennial Reporting.
- 90-day accumulation time limit.



Advantages of a Lower Generator Status

- Generator requirements are easier to comply with and less costly.
- Longer accumulation time limit.
- Lower disposal costs.
- Possibility for lower raw material costs.
- Reduced liability.
- Safer and more pleasant workplace.
- CESQGs are allowed to bring their waste to <u>HHW collections</u>:
 - Pre-approval required.
 - Charged on a pro-rated basis.
 - Collections are seasonal (~April through October).



How Can I Lower My Generator Status?

- Have a waste minimization/pollution prevention audit.
 - Hire a professional auditor.
 - Request a free <u>DEEP COMPASS Audit</u>.
 - Hold a LEAN (Kaizen) event (<u>CONNSTEP</u> can help).
- Recycle or reuse wastes on-site.
 - Solvent still.
 - Metals recovery (e.g., electrowinning).
- Eliminate operations that generate hazardous waste.
- Farm out operations that generate hazardous waste:
 - Parts cleaning Painting Metal Finishing.

How Can I Lower My Generator Status #2

- Improve Product Purchasing and Inventory Control:
 - Require pre-approval for all materials used on-site.
 - Avoid over-purchasing hazardous materials.
 - Avoid accepting product samples.
 - Improve materials handling to prevent spills and product loss.
 - See <u>HWAC Presentation by Electric Boat</u> for ideas.
- Use less-hazardous or non-hazardous raw products.
 - Switch from a listed solvent to a non-listed solvent.
 - Switch from solvent cleaning to aqueous cleaning.



How Can I Lower My Generator Status #3

- Improve segregation of hazardous materials:
 - Eliminate drag-out problems.
 - Remove contaminants from waste streams like filters, absorbents and used oil.
- Use good preventative maintenance:
 - Should you replace the filter or the whole bath?
 - Should you generate absorbents or fix the leaky seal?
- Talk to process operators what kinds of waste do they see?
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- Are raw materials being overused?
- Are process solutions being changed out too frequently?
- Send waste fuels for fuel blending (no longer counted as waste).
 - Make sure manifest properly reflects recycling ~ disposal.

How Can I Lower My Generator Status #4

- Eliminate aerosol cans or buy an aerosol can puncturing device.
 - Make sure the device meets DEEP requirements.
 - See <u>DEEP Aerosol can fact sheet</u>.
- Paint gun cleaning machine ~ manually cleaning it.
 - Also: don't spray solvent into spray booth filters (makes filters hazardous).
- Oil filter crusher.



Beware the Law of Unintended Consequences



- Be careful not to push a problem from one media to another:
 - Switching to aqueous parts washing may ↓ hazardous waste but will create a wastewater that needs to be properly managed (e.g., discharge permit).
- On-site recycling may \checkmark hazardous waste, but add new requirements:
 - Recycling registration.
 - Documentation of legitimate recycling.
- Lowering generator status may make you prone to "episodic generation events" (a temporary rise is generator status):
 - See <u>HWAC Presentation on Episodic Generation</u> for tips on avoiding this.

Beware of the Law of Unintended Consequences #2



- Beware of claims by salesmen and recycling product manufacturers.
 - Ask for references from other customers who have used the product.
 - Check with DEEP to see if it's legal in Connecticut.

Other Suggestions

- LQG → SQG or CESQG: keep up your Contingency Plan and Personnel Training Plan:
 - Good BMPs for any generator to follow.
 - Help avoid problems and keep you prepared for the unexpected.
 - Available if you have an episodic generation event.
- Re-assess and re-evaluate your waste-generating processes for new opportunities to reduce or eliminate waste.
 - Constant improvement the mantra of LEAN/Kaizen.

Resources for Further Information

- Past <u>HWAC Presentations</u>.
- DEEP Hazardous Waste Web Pages:
 - <u>www.ct.gov/deep/hazardouswaste</u>
- DEEP Pollution Prevention web page:
 - <u>www.ct.gov/deep/p2</u>
- CONNSTEP:
 - <u>www.connstep.org</u>



- <u>United Illuminating Business Sustainability Challenge</u> see presentation by Ariana Bain and Amy McLean-Salls later today.
- CL&P see presentation by Jack Trevor later today.

