Unraveling The CT EPA Regulations

Triumvirate Environmental

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Today’s Speaker’s

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Today’s Topics

- **EPCRA**
- **Air**
  - Greenhouse Gas Initiatives requirement
    - States – New England
    - EPA Greenhouse Gas Initiative
  - CT DEP Proposed Regulation Amendments

- **Hazardous Waste**
  - CT DEP Hazardous Waste Regulations
  - Proposed Universal Waste – Addition of Pharmaceuticals
  - EPA Lab Rule
Today’s Topics

- Oil SPCC – Dec 2008 Amendments
- Industrial Storm Water
- Aquifer Protection Planning

CT & EPA Audit Policy – Interim Approach
Emergency Planning & Community Right-to-Know Act
EPCRA – Chemical Inventory Reporting

Tier I and Tier II Forms
- Removed from CFR, now on EPA website
- NAICS code required
- Chemical or common name on MSDS must be provided

Hazardous Chemical Inventory Reporting for Chemicals in Mixtures
- Threshold quantity determination for EHSs must be total quantity of pure form and in mixtures
Effective as of the July 1, 2009 filing deadline

All reports on persistent, bioaccumulative, and toxic (PBT) chemicals must be submitted on "Form R"

For all other chemicals, Form A may be used if the annual reporting amount is 500 lbs or less and less than 1 million pounds manufactured, processed or otherwise used.

(3,500 additional facilities nationwide are now required to report)
Air Emissions
Greenhouse Gas Initiatives
Regional Greenhouse Gas Initiative

The Regional Greenhouse Gas Initiative, Inc. (RGGI, Inc.) –

- Non-profit corporation
- CO2 Budget Trading Programs – ten participating states
- Market based
- Fossil fuel electricity generators
Regional Greenhouse Gas Initiative

RGGI, Inc. provides technical and support services for:

- Development and maintenance of a data reporting system to track CO2 allowances
- Implementation of a platform to auction CO2 allowances
- Monitoring the market
- Providing technical assistance for emissions offset projects
- Providing technical assistance to evaluate proposed changes to the states' RGGI programs

Climate Registry General Reporting Protocol – emission factors
Ten States Involved with RGGI

- Connecticut
- Delaware
- Maine
- Maryland
- Massachusetts
- New Hampshire
- New Jersey
- New York
- Rhode Island
- Vermont

The first mandatory cap-and-trade program in the United States to reduce global warming gas emissions.
Cap-and-Trade System

Market-based cap and trade
- Set amount of allowances for CO\textsubscript{2} emissions are issued through auctions
- 1 allowance = X tons of CO\textsubscript{2} emissions

Facilities can buy, sell and trade allowances for current market value
- Incentive to abate emissions and sell allowances for $
- Companies that can’t afford to abate; purchase more allowances

Gradually the number of allowances being introduced into the market will decrease

RESULT: Emitters are forced to permanently lower emissions
Greenhouse Gases – CT State
CT – Control of Carbon Dioxide Emissions/Carbon Dioxide Budget Trading Program and Emission Offset Projects

- Will allow both allowance set-asides and auction revenues

- Increases use of energy efficiency, renewable energy and cleaner generation

- Voluntary renewable set-aside provision
Greenhouse Gases - EPA
Final EPA Greenhouse Gas Initiative

- Reporting threshold is 25,000 metric tons of CO2 per facility per year
- Schools/Universities are **not** exempted
- An estimated 13,000 facilities will be required to report
- Industries include suppliers of fossil fuel and industrial chemicals, manufacturers of motor vehicles and engines, and large direct emitters of greenhouse gases
- First report due in 2011 for calendar year 2010, except for vehicle and engine manufacturers which would begin reporting for model year 2011
- Estimated cost for private sector is $160 million for the first year and $127 million each subsequent year ($13K/facility)
- April 24, 2009 was the Deadline for Written Comments
Proposed State Implementation Plan (SIP) Revisions

- Visibility protection requirements
  - Also satisfies the Regional Haze Rule
- Update to Reasonably available control technology requirements

Connecticut attainment deadline of 2010

Public Hearing was held on August 27, 2009
October 1, 2010 - Stationary Compression Ignition Internal Combustion Engines (CI ICE) sources with a displacement of less than 30 liters/cylinder

- must use non-road diesel fuel that meets sulfur content, octane index, and maximum aromatic content requirements (40 CFR 80.510(b))
U.S. EPA & CT DEP
Hazardous/Universal Waste Rules
CT DEP requires generators to document all waste characterizations

- Must be done annually or whenever the generation process changes.
- Must be a documented evaluation that shows “a clear demonstration of the waste characterization”.
- If using “knowledge of process”, must document that information, including Material Safety Data Sheets (MSDSs), disposal facility waste profile sheets and analyses, raw product technical specifications, and other similar documents.
- All test results and “knowledge of process” information for each waste must be kept for at least three years, including non-hazardous wastes.
In addition to federally listed wastes, state authorized programs are allowed to add additional wastes.

Connecticut currently has five state codes, including:

- CR01 - PCBs and contaminated materials
- CR02 - Oil and petroleum can no longer be used
- CR03 - Oil and petroleum can no longer be used
- CR04 - Free flowing hazardous materials
- CR05 - Any solid or semi-solid chemical from public uses
State Waste Codes-Cont.

CR01- Any material containing or contaminated with PCBs, conc. 50ppm

CR02- Oil or petroleum that is no longer suitable for use as originally intended, and is not miscible in water

CR03- Oil or petroleum that is no longer suitable for use as originally intended, and is miscible in water

CR04- Any wastes that are a free liquid, or contain a free liquid and are;
   - Toxic
   - Hazardous to handle
   - May contaminate ground or surface water

CR05- Any chemical solid or semi-solid that comes from commercial, industrial, agricultural, or community related activities
State Manifest Requirements

- **Applicability** - A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage or disposal

- **In addition to federal requirements, small quantity generators in CT are:**
  - Subject to manifest requirements; and
  - Are not exempted from manifest requirements when they have a contractual agreement with a reclaimer.

- **Must make a legible photocopy of the top page of the completed manifest and send to CT DEP within seven (7) days**
Inspection Requirements

- Applicability - Inspection requirements apply to all SQGs, LQGs, and TSDFs
- Must inspect facility for any deficiencies which may cause or lead to a release of hazardous waste or which may pose a threat to human health
- A written inspection schedule needs to be created and maintained onsite
Written Inspection Schedule

Schedule needs to include all of the following:

- monitoring equipment
- safety and emergency equipment
- security devices
- operating and structural equipment
- containers
- container storage areas
- containment systems
- tanks and ancillary equipment
- loading and unloading areas
Plan needs to;

- Identify the types of problems to be looked for during an inspection
- Specify the frequency of inspection for all items on the schedule
  - containers, container storage areas, containment systems, and battery storage areas must be inspected weekly; tanks and loading/unloading areas subject to spills must be inspected daily; and it is advised that safety and emergency equipment be inspected at least monthly
- remedy any deterioration or malfunction of equipment or structures which the inspection reveals; and
- record inspections in an inspection log or summary.
The inspection summary must include the following:

- Date and time of the inspection
- Name of the inspector
- Notation of observations made; and
- The date and type of any repairs or other remedial actions.
Federal RCRA Training-LQG

- Applies to Large Quantity Generators only
- New employees must be trained within 6 months
- Must be repeated annually
- Requires specific recordkeeping,
- Must keep records on-site and for the duration of employment plus an additional 3 years
State RCRA Training Requirements

- Authorized States can extend these Federal LQG Training Requirements to Smaller Generators.
- Generators who need not comply with the federal training standard, must still train employees in all the applicable requirements and document that training.
- Connecticut - SQGs and CESQGs.
Main Accumulation Closure Rules

- Applies to generators who plan to discontinue storing hazardous waste
  - Includes those relocating a waste storage area within their facility

- Must characterize any residual contamination, clean it up, and verify that the clean-up is complete.

- Recommended, or in some cases required to;
  - Document all of your closure activities, including photographs
  - Maintain analytical results of samples
  - Maintain copies of manifests if decontamination activities generated waste
The EPA identifies four categories of Universal Waste:

- Mercury-containing lamps (e.g., fluorescent, UV, metal halide, sodium);
- Dry cell and sealed batteries (e.g., gel-cell lead acid, lithium, mercury, button batteries silver oxide, nickel-cadmium);
- Mercury-containing thermostats; and
- Pesticides collected as part of a pesticide collection program

State Universal Waste Rules may add additional categories of universal waste
Universal Waste-CT

- Cathode ray tubes- CRTs
  - monitors, oscilloscopes, radar screens, picture tubes-due to lead content in the glass
- Electronic Scrap- used electronic equipment
Non-RCRA hazardous waste
- Designated CR02 or CR03

Liquid Non-RCRA Hazardous Wastes must be treated and disposed of by a permitted CGS Section 22a-454 Waste Facility

May qualify to be burned on-site in a boiler, industrial furnace, or space heater
- Must be in accordance with Connecticut's recycling regulations.
- The DEP Bureau of Air Management must be contacted prior
Federal Oil SPCC Regulations

Finalized – 11/10/2009
Oil SPCC – 2008 Amendments

- Amends the facility security requirements
- Amends integrity testing for bulk storage containers for greater flexibility
- Sector-specific changes for agriculture and oil production facilities
- Amends integrity testing requirements for certain types of animal fat or vegetable oil
UPDATE: Effective date extended to JANUARY 14, 2010; comment period ended May 1, 2009

Streamlining and additional flexibility

- Tier I Qualified Facilities <10,000 gallon AST and largest tank no greater than 5000 gallons may use EPA Plan Template and Self-Certify
- Amends the definition of “facility”
- Amends the facility diagram requirement
- Defines “loading/unloading rack”
- Amends the general secondary containment requirement
- Exempts non-transportation-related tank trucks from sized secondary containment requirements
Let’s take a short break
U.S. EPA Hazardous/Universal Waste Rule Amendments
EPA Proposed Amendment to the Universal Waste Rule – Addition of Pharmaceuticals

- Proposed Dec. 2, 2008
- Comment period ended March 4, 2009
- Defines “pharmaceutical”
- Waste determination:
  - P-listed
  - U-listed
  - Characteristic

- Could affect:
  - Pharmacies
  - Hospitals
  - Physician’s offices
  - Other healthcare practitioners
  - Outpatient care centers
  - Ambulatory health care services
  - Residential care facilities
  - Veterinary clinics
  - Reverse distributors
EPA Proposed Amendment to the Universal Waste Rule – Addition of Pharmaceuticals

 Exceptions
- Syringes containing residue of a P- or U-listed drug hazardous waste only if the residue exhibits a hazardous waste characteristic
- Epinephrine salts
- Medicinal nitroglycerin

 Accumulation time limit
 Small and large quantity handlers
 Storage and labeling
 Tracking shipments
 Employee training
U.S. EPA – “Lab Rule” Adoption
EPA “Lab Rule”

Dec. 1, 2008 – Part 262 Subpart K

Alters and relieves several traditional RCRA standards for labs in “eligible academic entities”

- Colleges and universities, teaching hospitals, or non-profit research institutions with formal affiliation agreement with a college or university
- Only applicable in laboratory areas

Based on Laboratories XL Project (Boston College, UMV, UMass)
EPA “Lab Rule”

Example provisions

- Accumulation of unwanted chemicals/chemical waste for up to 6 months
- Excludes annual lab clean-outs from hazardous waste generator status determination
- Flexible container labeling and accumulation start date marking standards
- Delegation of hazardous waste determination responsibilities form lab personnel to trained individuals

Optional standard - requires written Laboratory Management Plan
## EPA “Lab Rule”

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Storm Water Updates
State and Federal
EPA Multi-Sector General Permit – Stormwater from Industrial Activities (Sept. 2008)

- Notice of Intent – additional information required

- Monitoring and reporting
  - Benchmark monitoring values updated
  - Benchmark monitoring schedule changes
  - Storm event criteria changes
  - Benchmark exceedence corrective action requirements
EPA Multi-Sector General Permit – Stormwater from Industrial Activities (Sept. 2008)

- MSGP Corrective Actions
  - Conditions Requiring Review and Revision toEliminate Problem
  - Conditions Requiring Review to Determine if Modifications are Necessary
  - Deadlines

- Water-Quality Based Control Measures

- Non-Numeric Technology Based Effluent Limits

- CT – Stormwater Construction General Permit
  10/1/08
CTDEP Wastewater Discharge Permitting

Regulates discharges to waters of the state
- Includes surface waters, ground waters and Publicly Owned Treatment Works

Applicability
- Any person or municipality that discharges water, substances, or materials into the waters of the state is required to obtain a permit prior to commencing the discharge.

Both individual and general permits
Ground Water Discharge Permit

- Regulates discharges to ground water from any source, including but not limited to large septic systems, agricultural waste management systems, and all waste landfills.
  - Administered by CTDEP

- Required to evaluate the hydraulic characteristics of the site.
Pre-treatment Permit Program - CTDEP

 Regulates discharges to a POTW

 All wastewaters that are hauled directly to a POTW will require either;
  ▪ pre-treatment permit, or;
  ▪ regulated under the POTW's permit.
  ▪ must submit permit renewal at least 180 days prior to expiration.

 May be required to receive prior approval from the affected POTW.
  ▪ large discharges may be required to assess the hydraulic, organic and toxic loading impacts upon the affected POTW.
CT – General Permit Renewal extended until Sept. 30, 2010.

New General Permit – Release Pending Q1, 2010

KEY CHANGES:

- New registration and fee of required
  - <50 Employees = $500 and >50 Employees = $1000
- 10 Industrial Sectors added with Specific Requirements
- Stormwater Pollution Prevention Plan must be publicly available.
- Monthly Inspection Required (Maintain Documentation)
- Quarterly Sampling and Visual Inspection
- Semi-Annual Sampling and Laboratory Analysis Req’d
- PE or CHMM must review and sign-off on SWPPP.
- Effluent Limitations for Specific SIC Coded Industries
Aquifer Protection Plans

- Administered by CTDEP, municipalities and water companies
- Protects major public water supply wells in sand and gravel aquifers
- Establishes Aquifer Protection Areas
- Restrict development of certain new land use activities that use, store, handle or dispose of hazardous materials
  - existing regulated land uses to register and follow best management practices
CTDEP & EPA – Audit Policies

CTDEP RCRA Assistance Program
- Goal: Perform 5+ Voluntary Audits in 2010 for SQG and CESQG
Develop a Compliance Calendar

- **Compliance Calendar**
  - Will track all of your facilities regulatory requirements
  - Ensures accountability for completion of projects
  - Track trainings
  - Ensures continuous compliance