Welcome

Common Environmental Violations at Federal Facilities: Ask the EPA Inspector

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Federal Facility Program Fundamental Principle

- Federal agencies, just like private parties, must comply with all applicable federal, state, tribal and local environmental statutes and regulations.
- EPA will use the full range of compliance assistance tools and enforcement authorities to ensure long term environmental compliance.

Agenda

1:00pm	Welcome and Introductions Anne Fenn and Lance Elson
1:05pm	Overview TSCA Lead Disclosure and Renovation, Repair and Painting Rule James Bryson, EPA Region I
1:20pm	RCRA - The Basics and Common Violations Susann Nachmann, EPA Region I
2:00pm	Underground Storage Tanks - Common Violations Richard Satterfield, EPA Hqs
2:15pm	Clean Air Act - Common Violations Lynne Roberts, Region V
2:35pm	Clean Water Act - Common Violations
3:00pm	Adjourn

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Lead-Based Paint Renovation, Repair, and Painting Rule 40 CFR 745

Overview October 2010

JAMES M. BRYSON REGIONAL LEAD COORDINATOR US EPA REGION ONE



Renovation, Repair and Painting Overview of Presentation:

RENOVATION REPAIR PAINTING -INTRODUCTION

RENOVATION REPAIR PAINTING -

RULE SCOPE CERTIFICATION/ACCREDITATION WORK PRACTICE STANDARDS INFORMATION RESOURCES

What is a Renovation?

- A renovation is a modification of any existing structure, or portion thereof, that results in the disturbance of painted surfaces, unless that activity is performed as part of an abatement. This includes:
 - Modification or repair of painted surfaces such as doors, surface restoration, window repair, or surface preparation activity (sanding, scraping).
 - Removal of building components, such as walls, ceilings, plumbing, or windows.
 - Weatherization projects, such as cutting holes in painted surfaces to install blown-in insulation or to gain access to attics or planing thresholds to install weather-stripping.
 - Interim controls that disturb painted surfaces, such as paint stabilization.
- Renovations that convert a building, or part of a building, into target housing or a child-occupied facility are covered.

Rule Scope Where:

IT APPLIES:

- Pre 1978 Housing (Target Housing)
- Child Occupied Facilities, Day Cares, Schools (Children Under 6)

IT DOESN'T APPLY:

- Zero Bedroom Dwellings (dorms, studio)
- Homes for the Elderly

Rule Scope When: A Painted Surface

Pre 1978 Housing and Child Occupied Facilities

APPLIES:

INTERIOR: Greater Than 6 Square Feet per room/30 day period (40CFR745.83) EXTERIOR: Greater Than 20 Square Feet ALL Window Replacement Activities

Rule Scope What does it require?

- Pre-renovation Notification: "Renovate Right"
- <u>Accreditation</u> of training providers.
 - April 2009 Ongoing.
- <u>Certification</u> of firms, renovators*, and dust sampling technicians.

October 2009 – Ongoing.

*Delayed till October 1, 2010- must be registered by 12/31/2010

• <u>Work practice standards</u>. Effective April 22, 2010.

Rule Scope

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- Homeowners may choose to opt out of the rule's requirements if
 - They occupy the housing to be renovated
 - The housing is not a child occupied facility and
 - No child under age 6 or pregnant woman resides there.

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Rule Scope Exclusions

- Renovations affecting only components that are free of lead-based paint
 - Regulation allows renovators to use EPA approved commercial Test Kits to determine if lead-based paint is present before a job begins.
- Minor repair and maintenance.
- Emergency Renovations.
- Renovations performed by homeowners in their own homes.

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Rule Scope Minor Repair and Maintenance Activities

- For the purposes of this rule, renovations do not include minor repair and maintenance activities.
- Minor repair and maintenance activities are activities, including minor heating, ventilation or air conditioning work, electrical work, and plumbing, that disrupt 6 square feet or less of painted surface per room for interior activities or 20 square feet or less of painted surface for exterior activities.
 - No prohibited practices.
 - No window replacements.
 - No demolition of painted surfaces.

Rule Scope Minor Repair and Maintenance Activities

- When removing painted components, or portions of painted components, the entire surface area removed is the amount of painted surface disturbed.
- Jobs, other than emergency renovations, performed in the same room within the same 30 days are considered the same job.

Rule Scope Emergency renovations

- Emergency renovations are renovation activities that were not planned but result from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, or threatens equipment and/or property with significant damage.
- Emergency renovations are exempt from the rule's requirements to the extent necessary to respond to the emergency.
 - Not required to provide pamphlet to owner/occupant.
 - Post-renovation cleaning and cleaning verification must be performed by certified firms and individuals in accordance with the rule requirements.

CERTIFICATION - ACCREDITATION State/Tribal Program Authorization

- RRP is a <u>delegable program</u>.
- Programs must be at least "<u>as protective as</u>" EPA requirements, and have "<u>adequate enforcement.</u>"
- <u>Reciprocity</u> will be encouraged.
- To date 9 states are authorized to administer and enforce an RRP program (Wisconsin, Iowa, North Carolina, Mississippi, Kansas, Rhode Island, Utah, Oregon and Massachusetts).

CERTIFICATION - ACCREDITATION EPA Overview



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CERTIFICATION - ACCREDITATION Training Providers

- Trainers must be accredited to provide renovator or sampling technician training, to become accredited they must <u>submit an</u> <u>application and fee</u> to EPA.
- Must be re-accredited every <u>4 years</u>.
- EPA developed model renovation training.
- Training providers must notify EPA of individuals who complete training.





CERTIFICATION - ACCREDITATION Certification of Firms

If you or your employees conduct renovation or repair activities in a pre-1978 residential building or child-occupied facility:

STEP 1: Submit an application and fee to EPA

STEP 2: Make sure your employees are trained in Lead-Safe Work Practices.

STEP 3: Once you receive your EPA Lead-Safe Firm Certification in the mail and logo instructions in your e-mail, update any desired outreach materials.







Work Practice Standards Renovator Responsibilities

- <u>Perform or direct work</u> to ensuring the work practices are followed.
- Be physically present at the work site:
 - When <u>warning signs</u> are posted, while <u>containment</u> is established, and during final work area <u>cleaning</u>.
 - Be <u>available</u>, either on-site or by telephone, at all other times.
- Provide on the job training to uncertified workers.
- When requested, use a <u>test kit</u> to determine if LBP is not present.
- Perform <u>cleaning verification</u>.
- Prepare <u>required records</u>.



Work Practice Standards Firm Responsibilities

- Ensure <u>all individuals</u> performing renovation activities are appropriately <u>trained</u>.
- A <u>certified renovator is assigned to each</u> <u>renovation</u>.
- All renovations are performed in accordance with the <u>lead-safe work practice standards</u>.
- Comply with <u>pre-renovation education</u> requirements prior to starting the work.
- Ensure the recordkeeping requirements are met.



Work Practice Standards General

- <u>Post signs</u> defining the work area.
- <u>Certain practices are prohibited:</u>
 - open-flame burning or torching.
 - operating a heat gun above 1100 °F.
 - machines that remove lead-based paint through high speed operation such as sanding, grinding, power planing, needle gun, abrasive blasting, or sandblasting, unless used with HEPA exhaust control.
- Ensure that all personnel, tools, and other items including waste are <u>free of dust and</u> <u>debris when leaving the work area</u>.
- Waste must be sealed in bags or plastic sheeting. Dispose of waste in accordance with Federal, State, and Local requirements.



LEAD WORK AREA POISON NO SMOKING OR EATING

Work Practice Standards Interiors

- Remove or cover all objects from the work area.
- Close and cover all <u>ducts</u> in the work area.
- Close all <u>windows</u>, and cover all <u>doors</u> in the work area.
- Cover the <u>floor surface</u> of the work area with plastic sheeting.



Work Practice Standards Exteriors

- <u>Close all doors and windows</u> within 20 feet of the renovation.
- <u>Cover the ground</u> with plastic sheeting extending out from the edge of the structure a sufficient distance to collect falling paint debris.



Work Practice Standards Cleaning

- Pick up paint chips and debris.
- Remove all protective sheeting.
- Clean all objects and surfaces in and around the work area.
 - <u>Clean walls</u> with a HEPA-equipped vacuum or with a damp cloth.
 - <u>HEPA vacuum all remaining surfaces</u> and objects in the work area.
 - <u>Wipe all remaining surfaces</u> in the work area with a damp cloth.
 - Mop uncarpeted floors.





Work Practice Standards Cleaning Verification

- <u>Wipe floors</u>, countertops, and windowsills with <u>wet</u> <u>cleaning cloth</u>.
- If the cloth <u>does not match</u> the verification card, <u>re-clean</u> that surface and then <u>re-wipe</u> with a <u>wet</u> <u>cleaning cloth</u>.
- If this cloth <u>does not match</u> the cleaning verification card, <u>allow the surface to dry</u> completely and <u>wipe</u> with a <u>dry cleaning cloth</u>.





Work Practice Standards Recordkeeping - Pre-Renovation Education

Renovations in common areas

- Sector Secto
- FIRM gives **owner** pamphlet and gets written acknowledgement OR gets certificate of mailing 7 days >start

AND FIRM Notifies each affected unit

- Written notice to each unit OR post informational signs
- Post pamphlet (or how to obtain a copy)

FIRM prepares written statement describing steps taken Notify if revisions to scope, location and/or dates



Work Practice Standards Recordkeeping – Training Certifications

- <u>Documents</u> demonstrating compliance with the rule must be retained for <u>3 years</u> following the completion of a renovation.
 - Pamphlet acknowledgment forms, documentation of work practices, checklists, on the job training
- EPA may <u>suspend</u>, <u>revoke</u>, <u>or modify a firm's</u> <u>certification</u> if firm is found to be in noncompliance.
- Non-compliant contractors may be subject to civil and criminal penalties up to <u>\$37,500 for</u> each violation, imprisonment, or both.





Information Resources Compliance Guide

- <u>Handbook</u> for contractors, property managers, and maintenance personnel working in federal facilities homes, child care facilities, and schools built before 1978.
- Contains <u>detailed information</u> and <u>flow charts</u> outlining the RRP requirements.



Small Entity Compliance Guide to Renovate Right EPA's Lead-Based Paint Renovation, Repair, and Painting Program

A handbook for contractors property managers and maintenance personnel working in homes and child-occupied facilities built before 1978.



Information Resources Steps Brochure

- A <u>guide</u> to lead-safe renovation, repair and painting.
- Covers <u>basic</u> lead-safe <u>practices</u>.
- Can be used as a <u>training</u> <u>guide</u> for on-the-job training.



Information Resources Test Kits



EPA Recognized and ETV Tested for use on PLASTER, DRYWALL, WOOD and METAL Surfaces.



Information Resources - Web Links Get Lead Safe - http://www.epa.gov/getleadsafe



Information Resources - Web Links FAQ's - http://toxics.custhelp.com



Information Resources - Web Links FIRMS - http://cfpub.epa.gov/flpp/searchrrp_firm.htm

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		207-318-3817							
		A.B. Smith 971 Main St.		Х	05/31/2015				

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Lead in Drinking water	State: Select a State			1	arsdc80@vahoo.com				- -	
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Information Resources Websites -



NEW EPA RULE: ALL CONTRACTORS NEED TO GET LEAD-SAFE CERTIFIED.



FIND AN ACCREDITED TRAINER NEAR YOU »


Information Resources Your EPA RRP Contacts http://www.epa.gov/lead/pubs/leadoff1.htm

NFW FPA RIII F:



Questions

RCRA Hazardous Waste Management:

<u>Federal Perspective</u>-Basics and Common Violations

Susann Nachmann, EPA Region I Environmental Engineer RCRA, EPCRA and Federal Facility Unit

STATE AUTHORIZED PROGRAMS

Many States have Authorized HW Management Programs

At least as Stringent as Federal Regs.... Sometimes more Stringent than Feds

Remember to Check your State Regs too

One Major Source of Violations:

You do not understand: The Definitions of Solid Waste and Hazardous Wastes

So....

You do not understand: The types of Solid and Hazardous Wastes you generate

To Understand: Conduct "Hazardous Waste Determinations"

When is a Waste a Waste?

When generated or no longer useable...

Next: Determine if the Waste is a Solid Waste...

<u>Statutory Definition of Solid Waste</u>:any <u>garbage</u>, refuse, sludge from a waste treatment plant, water supply plant or air pollution control facility, and other <u>discarded</u> <u>material</u>, including <u>solid</u>, <u>liquid</u>, <u>semi-solid</u>, or contained <u>gaseous</u> material...

Almost Everything but.....

EXEMPTIONS from Solid Waste Definition

- Domestic sewage
- Industrial wastewater discharges
- Radioactive waste
- Spent wood preserving solutions that are reclaimed and reused in the wood preserving process
- Processed scrap metal that is recycled
- Irrigation return flow
- In situ mining waste
- Secondary materials that are reclaimed and returned to the original process (reclamation & return process must be totally enclosed)
- Used as substitutes for commercial products returned back to the original process without first being reclaimed or land disposed

When is a Solid Waste a Hazardous Waste?

First: Meet the definition of a SW. Next: Check if exempt from HW Definition

Exemptions from Hazardous Waste Definition

- Agricultural wastes returned to the soils as fertilizers
- Fossil fuel combustion wastes
- Cement kiln dust (unless burned as hazardous waste fuel)
- Arsenic-treated wood wastes used for its intended purpose
- Used oil filters that have been hot drained
- Used chlorofluorocarbon refrigerants that are being reclaimed for reuse
- Samples collected for lab analysis (until they disposed of)
- Household waste
- Used oil that exhibits hazardous characteristics can be excluded if recycled (see <u>40 CFR Part 279</u>)

Definition of Hazardous Waste

- A <u>Solid waste</u> that:
- Exhibits <u>characteristics</u> of a hazardous waste,
- Has been <u>listed</u> in the regulations,
- Is a <u>mixture</u> of listed & non-haz. solid waste,
- Is a waste <u>derived from</u> treatment, storage, or disposal of a listed waste, or
- State regulated.

Characteristic Hazardous Waste

"Inherent Nature of the Waste"

NatureWASTE CODESIgnitability[D001]Corrosivity[D002]Reactivity[D003]Toxicity (TCLP)[D004-D043]**(includes 8 RCRA metals)

" <u>I Can Remember That</u> !"

LISTED HAZARDOUS WASTES

- 3 General Categories:
- Non-specific Source Wastes
- Specific Source Wastes
- Commercial Chemical Products

<u>5 Types of Listed HW</u>:

F listed = Common Process, Non-specific Sources e.g. F001-F002 spent halogenated solvents

K Listed = Specific Sources e.g. K015- still bottoms from distillation of benzyl chloride

P Listed = Pure/Unused/Commercial Grade Acutely Hazardous e.g. P013- barium cyanide

U Listed = Pure/Unused/Commercial Grade Off-Spec/Discarded-may exhibit characteristic e.g. U002- acetone (ignitable)

State listed wastes e.g. VT03- water miscible metal cutting/grinding fluid waste.

<u>UNIVERSAL WASTES</u>

>Widely generated/widely recycled subset of HW

Reduced management standards to facilitate their recycling:

Examples

- > Batteries
- > Pesticides -Recalled/Unused Stock
- Mercury containing thermostats
- Fluorescent light ballasts [PCBs]
- Mercury containing lamps

Wastes Often Overlooked

Expired chemicals
Unused/Unwanted chemicals
Facility Management wastes
Dental wastes (amalgam)
Photographic wastes (fixers, developers)

When are Mixtures Hazardous Waste

Mix anything with a listed waste = HW (e.g. spill residues, soil, debris, mixed with listed waste)

Mixture of non-HW with a characteristic HW and mixture retains the characteristic (Remember: ICRT!)

<u>"RCRA EMPTY CONTAINERS"</u> EMPTY CONTAINERS ARE NOT HW IF:

<u>Compressed Gas Cylinders</u> – no pressure

<u>P-listed Waste</u> – triple rinsed (Rinsate managed as H.W.)

<u>Other HW Containers</u> - all waste removed <u>and</u> < 1" of residue <u>or</u> < 3% of container capacity (if less than 110 gal)

RCRA Step 1: Hazardous Waste Determinations

Your (Owner/Operator) Responsibility Utilizing: <u>Process knowledge of</u>:

Generation points,

Waste contents (product labeling, MSDSs, Trade Association Information),

Impacts of process modifications & Xcontamination,

Expiration dates

Analysis (per methodology in Regs)

RCRA Step 2: <u>Generator Classifications</u>

You Identified the HWs, How Much You Generate per Month and Accumulate on Site

Determines Your Generator Size (Classification)

Less generated/accumulated = Smaller Classification = Less Management Standards

Each Class = Stds. for <u>maximum</u> monthly generation & accumulation amounts & storage times.

Federal Classifications (Small to Large):

- Conditionally Exempt Small Quantity Generators (CESQGs)
- Small Quantity Generators (SQGs)
- > Large Quantity Generators (LQGs)

[Check: State Regs may use different generator names and sizes]

Conditionally Exempt Generator

Generates per month:

< 220# (100 kg) - H. W. < 2.2 # (1 kg) - Acutely H.W. < 220 # (100 kg) - residual or co

Accumulate:

< 2200 # (1000kg) - H.W. <2.2 # (1 kg) - acute <220 # (100 Kg) - mater

H. W. Acutely H.W. residual or contaminated material from cleanup of acutely H.W.

kg) - H.W. acutely H.W.) - material from cleanup of acutely H.W.

Max. Storage Time: not limited

Small Quantity Generator [SQG]

<u>Generate per month</u>: ≥ 220# (100 kg) but < 2200 #(1000 kg) H. W.

<u>Never Accumulate</u>: more than 13,200 # (6000 kg) H.W.

Max. Storage Time: not to exceed 180 days

Large Quantity Generator [LQG]

Generate per month: \geq 2200# (1000 kg) -H. W. \geq 2.2 # (1 kg) -Acutely H.W. \geq 220 # (100 kg) -residual or co

H. W. Acutely H.W. residual or contaminated material from cleanup of acutely H.W.

Accumulate at any one time: > 13,200 # (6000kg) H.W. \geq 2.2 # (1 kg) Acutely H.W. \geq 220 # (100 Kg) material from cleanup of acutely H.W.

Max. Storage Time: not to exceed 90 days

RCRA Step 3.....

You Know Steps 1 + 2: Now Notify Your HW Activity to EPA or State (if authorized).....

You will get a 'location specific' EPA Identification Number used to track your activity/shipments

Next Major Source of Violations:

Mismanagement of identified hazardous wastes

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Failure to follow RCRA Management Standards And Recordkeeping Requirement

STANDARDS FOR.....

- Container Management
- Record Keeping/Reporting
- □ Housekeeping
- Accumulation Time Limits
- Emergency Preparedness Needs
- Employee Training
- Inspections

Main Container Storage Areas

- □ Labeling
- Dating
- Compatibility (wastes and/or container types)
- Aisle space
- Open vs. closed
- Condition of containers
- Special requirements for ignitable and reactive wastes

Satellite Storage Areas

□ At or near point of generation, □ Under control of operator, Less than 55 gallons [TOTAL], □ Labeled "hazardous waste," with words that describe contents, (for some state) waste codes □ Compatibility, Closed when not adding or removing wastes.

UNIVERSAL WASTE

Containerized and closed
 Label describing content
 Dating (keep less than 1 year)
 Record/Log of accumulation time

Main Container Storage Areas Inspections

- At least weekly,
- During regular business days,
- Looking for leaks, deterioration, aisle space, compatibility, housekeeping, storage beyond time limit etc....
 - Documentation [keep 3 years]

Hazardous Waste Management Training

□ SQG= Relevant to duties

LQG= Initial and annual refresher training

Relevant to job duties performed and

Completed & documented per an established training program

Emergency Preparedness For LQGs: Up-to-Date HW Contingency Plans:

Describe response actions
 Emergency contacts
 Arrangements with locals
 Emergency Coordinators
 Emergency equipment/locations
 Evacuation plans/muster areas

<u>Emergency Preparedness Tools at Main</u> <u>Container Storage Areas</u>

Alarm systems
 Communication devices
 Extinguishers
 Adequate water
 Aisle space
 Spill control equipment

HW Manifests (for HW or Non-HW)

	UNIFORM HAZARDOUS WASTE MANIFEST	1 Generator's US EPA ID No.	Manifest Document No.	2. Pag of	e 1 Informati is not req law	on in the uired by i	shaded areas ederal	
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What not to do.....



Re: Hazardous Waste Determinations

Lack of or Mischaracterized H.W. determinations:

What we want...

Properly identified hazardous wastes that are correctly labeled and stored

[e.g. The words "Hazardous Waste, " a description of the contents, the accumulation start date, proper aisle space, good container condition with compatibility considerations etc....]

Otherwise.....



	HAZARDOUS		
	WASTE		
	FEDERAL LAW PROHIBITS IMPROPER DISPOSAL		
	IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY. ACCUMULATION START DATE		
	D.O.T. PROPER		
1	U.N. OR N.A. NO		
	GENERATOR NAME		
	ADDRESS	P	
1	CITY STATE		
1	E.P.A. MANIFEST I.D. NO DOCUMENT NO		
	HAZARDOUS WASTE		
	HANDLE WITH CARE		
29	Published by J. J. KELLER & ASSOCIATES, INC. Neenah, WI 54956-0368 • (414)722-2848		
Open Containers

<u>Find</u>: No cover, no bung, funnel in opening, loose drum ring.

<u>Want</u>: All containers of hazardous waste closed unless materials are being added or removed

<u>Satellite Accumulation Area (SAA)</u> <u>Violations</u>

Storage not at or near point of generation
Not under operator's control
More than allowed volumes

No or Inadequate Hazardous Waste Management Training

A poor training program will lead to poor waste management!

No training program

- If applicable, no initial, annual training
- Lapsed training
- No job descriptions specified for employees with HW mgmt. duties
- Job descriptions no longer applicable to employee
- Training not relevant to employee duties
- Training not documented

Hazardous Waste Manifest Violations

CRADLE TO GRAVE DOCUMENTATION!!!

- Copies not maintained
- Photocopies maintained in lieu of actual records
- Final copy not maintained (most important manifest document!)

What we want...

 Copies of completed manifests maintained for 3 years, with copies of exception reports

Contingency Plan Violations

Missing, incomplete and/or not up-to-date contingency plans

Inspection Violations

- No inspections
- Missed inspections
- Not all areas inspected
- Inspections/corrective actions/dates/inspector identification not documented

[OK to document a problem and its solution !!]

<u>Want</u>...Inspections of main accumulation areas and satellite accumulation areas (state specific)

- Weekly for container storage areas
- Daily for tanks

<u>Storage > 90/180 Days</u>

What we find...

- Forgotten drums
- Just didn't ship

The accumulation of HWs for longer periods of time requires the additional protective measures of a Permit....

What we want...

 Wastes regularly moved off-site in less than 90/180 days (unless CESQG)

EXAMPLES OF VIOLATIONS FOUND DURING INSPECTIONS

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Please open door When Dumping Weste, the smell has become Overpowering Thanks.

IF YOU START A NEW WASTE DRUM NOT ON THE RAISED PLATFORM, YOU MUST WRITE THE ACCUM. START DATE ON THE WASTE LABEL.

Thank you for your cooperation



AGE SHOP

HAZARDOUS WASTE SATELLITE ACCUMULATION POINT

IN CASE OF SPILL CALL BASE FIRE DEPT EXT SII

SATELLITE ACCUMULATION POINT MONITORS PRIMARY MR PAUL BEACHELL ALTERNATE MR JOSEPH MONTANEZ ALTERNATE MR RAYMOND MOREHOUSE

NO SMOKING COMBUSTIBLE LIQUIDS

PUEL FILTRES DIESEL FTEL EXGISE OIL BYILL RESIDER EXGISE OIL / STS USED BLAST MEDIA SOLVENT MATS

WASTE TYPE

ENGINE OIL / DIESEL

ANTIFREEZE

OIL FILTERS

RYDRAULIC FLEID

RIETELE RIETELE RIETELE BOOT DOOT RIETELE RIETELE BIO TEST REO BIO TEST REO

WASTE CODE






Focused on Generators, Waste Identification, Container Management and Common Violations...

WHAT IF MY HAZARDOUS WASTE IS STORED IN TANKS?????

EPA Web Site for Understanding Hazardous Waste Tank Management:

Introduction to United States Environmental Protection Agency RCRA Tanks (40 CFR Parts 264/265, Subpart J) http://www.epa.gov/osw/inforesources/pubs/hotline/training/tanks05.pdf

<u>Good General Reference for Understanding RCRA</u>: RCRA Orientation Manual http://www.epa.gov/osw/inforesources/pubs/orientat/

<u>Remember....Always refer to the following for specific requirements:</u>

- Federal Regulations: 40 CFR Parts 260-279; and
- Your state's hazardous waste regulations. (Many states have Authorized RCRA Programs)

Whew!!!! Any Questions ???



Ten Most Common UST Violations

The Ten Most Common Types of UST Violations Encountered by EPA's FFEO What Are the Most Common UST Problems (Violations) ?

- Based on a review of 61 inspections at a variety of Federal facilities across the nation from 2007 to 2008.
- Myth vs. Reality
- What you can do to ensure compliance

Ten Most Common UST Violations Found during FFEO Inspections

- 1. Failure to provide adequate corrosion protection of steel tanks and peripheral piping.
- 2. Monthly release detection records of USTs not maintained.
- **3.** Monthly release detection records of pressurized piping not maintained.
- 4. Lack of or inadequate overfill protection.
- 5. Yearly ALLD functionality testing not conducted.

Ten Most Common UST Violations (Con't)

- Missing or inadequate UST registration forms;
- 7. No release detection provided for tanks;
- 8. No release detection provided for piping;
- 9. Failure to provide adequate spill prevention;
- 10. Improper closure;

Most Common Causal Factor to UST Non-Compliance

- Lack of or insufficient training:
- Evidenced by:
 - Not understanding how the leak detection equipment works;
 - Not maintaining appropriate records (Record Keeping);
 - Vague understanding of regulations;



No. 1: Failure to Provide Adequate Corrosion Protection

"My steel tank was installed 5 years ago with either galvanic protection or impressed current. I think we had it tested when the system was first put in. Anyway, my leak detection results have always indicated the system's tight-I'm covered. Test records...? What records?"





General Requirements

- 1. Non-metal tank/pipe material
 - Tank : Fiberglass or Fiberglass-clad steel
 - Pipe: Fiberglass, flexible plastic
- Galvanic cathodic protection
 STI-P3
- **3.** Impressed current cathodic protection





Most Common Finding: No Corrosion Testing and/or Record Keeping Galvanic and impressed current

- Galvanic and impressed current system must have cathodic protection test done:
 - All cathodic protection systems must be tested within 6 months of installation and at least every 3 years thereafter...
 - USTs with impressed current cathodic protection are inspected every 60 days
 - Inspection records must be maintained of the last 3 inspections for systems with impressed current and of the last 2 inspections for all other types of cathodic protection



Other Potential Problem Areas-Corrosion Protection

- Failure to follow-up on all test failures- know who to call to trouble shoot.
- Insufficient current on impressed current systems – most common target is – 850 mv.
- Steel piping not protected from corrosion
 - Piping can be in contact with soil just below the dispenser;
 - Manway sump full of rainwater.
- Impressed current:
 - anode wires damaged;
 - damaged rectifier;
 - Stray current.



Tank and Pipeline Leak Detection and Recordkeeping

- "I think Mike down at the fueling station keeps a few of those ATG printouts in a box somewhere if you'd like to look at them."
- "Monthly release detection records for piping? Oh! We have to have that too?"
- "We conduct annual line leak detection testing and so we don't bother with a yearly ALLD functionality test."
- "We pressure tested the tank and piping when it was first put in five or ten years ago, I think we're OK."



Leak Detection Methods

Tank

- Internal Monitoring (ATG, Inventory Control & Tank Tightness Testing, SIR, Manual Tank Gauging – small tanks only)
- Interstitial Monitoring (air, liquid, Vacuum or pressure monitoring)
- External Monitoring (groundwater, soil vapor)

Piping

- Varies according to whether pressurized or suction piping.
- A number of tank methods can also apply to piping .
- Pressurized piping must also have automatic line leak detector (ALLD).



Tank Leak Detection Requirements

- Must periodically determine whether or not tank and piping are leaking,
- Must be able to detect leak from any portion of the system routinely containing product,
- Equipment must be installed, calibrated, operated and maintained per manufacturer's specification,
- Each method must meet certain performance claims (accuracy of method, conditions during leak test, etc.),
- Prove your leak test detection history for last 12 months.
- Equipment must be third-party approved



Automatic Tank Gauging

- <u>What is it</u>: In-tank equipment that electronically monitors product level, water level, and temperature.
- Primarily used with petroleum products.
- Can do product leak detection, interstitial sensing and electronic line leak detection.
- Three modes of operation: Inventory management, leak testing, and Diagnostics.
- Federal regulations require that it detect a leak as small as small as 0.2 gallons per hour (gph).



ATG Problems

- Out of paper, no power;
- Invalid results: Tank is not full enough (>50%), Delivery too soon, Dispensing interruption;
- Silencing/ignoring or misunderstanding alarms;
- Not programmed properly;
- Float sticks;
- Console not secure from tampering.



Tank Leak Detection Record Keeping Requirements

- For any of your tank leak detection systems; keep all records and paperwork onsite or readily available about your release detection method, including:
 - Testing results (every 30 days)
 - Third party evaluations
 - Performance claims
 - Calibration, maintenance and repair.



Leak Detection Records for Piping Depends on:

- Pressurized or Suction?
- Pressurized piping must have an automatic line leak detector (ALLD) and one other method capable of detecting a leak:
 - Annual line tightness test; or
 - Monthly interstitial monitoring; or
 - Monthly vapor monitoring; or
 - Monthly groundwater monitoring; or
 - Monthly statistical inventory reconciliation; or
 - Other monthly monitoring that meets the performance standards
- Suction piping (excluding safe suction) requires:
 - Line tightness test every 3 years or interstitial monitoring, SIR, soil vapor monitoring or Groundwater monitoring.



Specific Record Keeping Requirements for PLD

- Make sure you keep the following records for at least one year:
 - Annual test that demonstrates that the ALLD is functioning properly;
 - Other release detection system tests (e.g., annual line tightness test) and those used for monthly monitoring of your piping;
 - All records of calibration, maintenance and repair of your release detection equipment;
 - All performance claims supplied by the installer, vendor or manufacturer



Failure to Provide Adequate Overfill Protection and Spill Prevention

- "Oh Wow! Hey Mike! Did you know that we don't have a spill bucket?!"
- "Mike always keeps his stick gauge in the drop tube so we always know where it is."
- "Yeah we know you can't hear the overflow alarm from the fill port area but Mike can hear it in the office when he's there".



General Requirements for Spill Prevention and Overfill Protection

- Must have a spill bucket to prevent spills during delivery;
- Overfill protection must do one of the following:
 - Automatically shut off flow into the tank when the tank is no more than 95% full;
 - Alert the operator when the tank is no more than 90% full by restricting flow into the tank or triggering a high-level alarm;
 - Restrict flow 30 minutes prior to overfilling, alert the operator with a high-level alarm 1 minute before overfilling, or automatically shut off flow into the tank so that none of the fittings are exposed to product due to overfilling. Typically accomplished by Ball float valve.
- Overfill Exemption: Not Required on UST systems like waste oil tanks that receive less than 25 gallons at a time.



Spill Bucket Issues

- Common Spill Bucket Problems:
 - None installed (upgrade violation);
 - Cracked lids, bad seals;
 - Compatibility with product;
 - Integrity of bucket not tested;
 - Holes, cracks, wear;
 - Drain plug sticks;
 - Full of debris, water, sorbents;
 - Surface damage.



Overfill Alarm Blues

Typical Problems include:

- Alarm not where the driver can hear or see it;
- Fuel is flowing over 300 gallons per minute – Alarm doesn't stop anything;
- Driver desensitized to meaning of alarm;
- Operator doesn't recognize alarm signal (know what it means);
- Operator doesn't know how to respond;
- Operator tends to ignore or silence them.





Monitoring

Owner or Operator:

- Measure the fuel level immediately before each delivery to make sure there is enough room in the tank;
- Test the alarm periodically to ensure it works <u>where it</u> <u>needs to be heard;</u>
- Have someone monitor the entire transfer;
- Report and cleanup all overfills.



Improper Closure and Missing UST Registration Forms

"Oh we stopped using those motor fuel tanks months ago... Sorry you inspector folks came all the way out here for nothing."
 "What's a Notification Form? Notify who for what?"



Federal Requirements for Temporary Closure

- Temporarily Closed means
 > 3 months;
 - Vents can stay open but all other access is to be locked and secured;
- Temporarily closed tanks must have continued maintenance:
 - Corrosion protection;
 - Leak detection (unless empty and Empty = 1 inch;



Federal Requirements for Permanent Closure

- Temporary closures > 12 months – tank must be permanently closed;
- Notify the regulatory agency 30 days prior to closure;
- Remove all product and sludge from tank (also required for change in service of tank);
- If tank is pulled, assess the excavation zone;
- If tank closed in place after contents removed, fill with inert material;
- Conduct a site assessment.



Typical Compliance Problems Related to Closure

- Temporary closure occurs without continuing leak detection on the tank;
- Closure and Removal occurs without notification to the regulatory agency;
- No site assessment for loss of product.
- Tanks are closed temporarily without being locked down.



UST Notification Forms

 Tanks brought into service (new), closed or undergo a change of service must be notified to the regulatory agency

 Typically compliance problems occur when new tanks replace old tanks without any notification to the regulatory agency.

In Conclusion:

- Become knowledgeable of the regulations and industry standards;
- Inventory what you have;
- Perform a self-audit or gap analysis of your tanks with federal and state regulations;
- Establish contract vehicles for quick and immediate response when needed;
- Correct problems or potential problems immediately;
- Look into the benefits of Environmental Management Systems;

Resources For UST Mangers

 OUST Website: Visit <u>http://www.epa.gov/oust/overview.htm</u>

FFEO's FedCenter: Visit <u>http://www.FedCenter.gov</u>

 EPA Regional and State Websites: Provide guidance and on-line training for general UST management, leak detection, corrosion protection, etc.





Ask the Inspector: Clean Air Act Compliance

Presented by Lynne Roberts U.S. EPA – Region 5 October 27, 2010

Clean Air Act Inspections

- What inspectors look for
 - Permits
 - Applicable regulations
 - Sources of air emissions
 - Air pollution control technology
 - Records, emissions testing data
How the Clean Air Act Regulations May Apply to Your Facility

Permits – Title V, Permits to Install/Operate

Area Source Regulations & Guidance: <u>www.epa.gov/ttn/atw/area/arearules.html</u>

Asbestos – Demolition, Renovation, & Disposal

Generators/Engines – NESHAP & NSPS Regulations

CFCs –Industrial Leak Rate Regulations

Permits

■ Title V – Major Sources, some Area Sources Operating Permits ■ Area sources Conditions wrapped into Title V Subject Process Units – Boilers, Furnaces, Incinerators, Generators Any sources of air emissions need to be considered Inspectors finding incomplete permits

Permit Content

Air Pollution Control Devices – Baghouses, Scrubbers, Thermal Oxidizers Operating limits Testing requirements Record keeping and reporting Inspectors find incomplete and/or inaccurate records and reports Permits may be incomplete: So know your Regs!

Asbestos Regulations

 Section 112 of Clean Air Act regulates Hazardous Air Pollutants (HAPs)

 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

40 CFR Part 61, Subpart M – National Emission Standards for Asbestos (Asbestos NESHAP) <u>www.epa.gov/asbestos</u>

 Inspectors find violations regarding notification, improper removal, labeling, and disposal

6

Asbestos NESHAP

- Asbestos NESHAP Demolition, Renovation, Disposal
 - Category I, Category II, and Friable

Reporting Requirements

 Report if asbestos is present, how much is being handled, and how it will be handled

Safe Handling and Disposal

- Adequately wet guidance
- Packaged and labeled, sent to appropriate landfill

Reciprocating Internal Combustion Engines (RICE)
NESHAP for <u>Stationary</u> RICE
40 CFR Part 63, Subpart ZZZZ
Applicability flowchart at: www.epa.gov/tm/atw/rice/flowchart_applicability.ppt

NSPS for <u>Stationary</u> Compression Ignition (CI) RICE
 40 CFR part 60 subpart IIII

NSPS for <u>Stationary</u> Spark Ignition (SI) RICE 40 CFR part 60 subpart JJJJ Summary of Bequirements for all 3 regulations at: www.epa.gov/tm/atv/rice/requirement

Summary of Requirements for all 3 regulations at: www.epa.gov/ttn/atw/rice/requirements_10-8-2010.xls Applicability Determinations Index (ADI) at: http://cfpub.epa.gov/ati/ 8

How Are These Rules Different?

RICE NESHAP

- Applies to existing, new, and reconstructed stationary engines (both CI and SI)
- Includes emergency engines
- Focus is air toxics
- CI/SI NSPS
 - Applies to new, modified, and reconstructed stationary CI/SI engines
 - Includes emergency engines
 - Focus is criteria pollutants
- Applicability, Control Measures & Reporting/Recordkeeping Requirements vary for Major and Area Sources of HAPs

RICE NESHAP: 2010

	AREA SOURCES				
	NEW/	EXISTING	NEW/	EXISTING	
> 500 HP	2008 rule	2010 rules	2004 rule	2004 rule	
				2010 rule (non-emergency CI)	
	NEW	EXISTING	NEW	EXISTING	
≤ 500 HP	2008 rule	2010 rules	2008 rule	2010 rules	

2004: Covered >500HP at major sources

2008: Added new engines <=500HP at majors plus all new engines at area sources 2010: Added existing engines ≤ 500 HP located at major sources, all existing engines at area sources, and existing non-emergency CI engines >500 HP at major sources

Common RICE Violations

- Emergency generator need to have hour meters
 Limited amount of time in operation to be considered emergency generator
- In cases where facility sells its power, cannot be considered emergency generator any longer
 Subject to more regulations than emergency generator
- Improper recordkeeping regarding operating hours and fuel usage
 Rolling 12-month averages



¹² July 2010



^cThe RICE Summary Table of Requirements provides additional information on 40 CFR part 63, subpart ZZZZ requirements and is available at <u>http://www.epa.gov/ttn/atw/rice/ricepg.html</u>.

Footnotes From Flowchart 1:

^aAn engine test cell/stand is any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines.
^bFor assistance in determining the potential to emit, please refer to http://www.epa.gov/ttn/chief/ap42/index.html or contact your EPA regional office or state permitting staff. To determine the potential to emit, you may use emission factors from http://www.epa.gov/ttn/chief/ap42/index.html or contact your EPA regional office or state permitting staff. To determine the potential to emit, you may use emission factors from http://www.epa.gov/ttn/chief/ap42/index.html or other published information.

Chlorofluorocarbons (CFCs)

Section 608 of the Clean Air Act

Protection of the Stratospheric Ozone – 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction

Stationary Refrigeration Information <u>www.epa.gov/ozone/title6/608/index.html</u>

Industrial Leak Rates Guidance

www.epa.gov/ozone/title6/608/compguid/compguid.html

 Inspectors find incomplete records, no records onsite for recovery equipment, technician certification

Benefits of Repair & Recovery

Environmental protection

■ CFCs (e.g. R-12) and HCFCs (e.g. R-22) are

Ozone-Depleting Substances (ODS)

HFCs (e.g. 134a) have Global Warming Potential

 Section 608 prohibits knowingly venting of any ODS or its substitutes

- Not repairing a known leak is considered "knowingly venting"
- May result in enforcement action

Leak Rate Regulations

Equipment that contains a CFC or HCFC refrigerant with full charge more than 50 lbs

 When a leak is found and refrigerant added, a leak rate must be calculated

If leak rate is triggered, repairs are required within 30 days

Leak Rates

Appliance Type	Trigger Leak Rate
Commercial refrigeration	35%
Industrial process refrigeration	35%
Comfort cooling	15%
All other appliances	15%

Leak Rate Calculation

Monthe Market Annual Leak Rate = [lbs of refrigerant added/lbs of Full Charge]*[365/# of days since refrigerant last added]x100

If leak rate is triggered, repairs are required within 30 days, or a retrofit or retirement plan must be developed within 30 days

Retrofit Option

Alternative to repairing the leak

Need to write a retrofit plan and keep on site

Need to execute plan within one year

Need to retrofit to a lower ODS-containing refrigerant or HFC

Recordkeeping

Date and unit added refrigerant Amount and type of refrigerant added Location of leak and repair Calculated leak rate Type of initial verification Date and type of follow-up verification Maintain all records for three years

Those CFC Web Sites Again!

Stationary Refrigeration Information
 Fact sheets, technician certification, recovery equipment certification form www.epa.gov/ozone/title6/608/index.html

Industrial Leak Rates Guidance <u>www.epa.gov/ozone/title6/608/compguid/compguid.html</u>

Other Common Violations Found at Federal Facilities

- Hospital/Medical/Infectious Waste Incinerators
 - Improperly operated, burning unpermitted waste
 - www.epa.gov/ttn/atw/129/hmiwi/rihmiwi.html#RULE
 - www.epa.gov/ttn/atw/129/hmiwi/hmiwi brochure.pdf
- Degreasing Operations
 - Covers left open, improper VOC calculations
- Boilers
 - Late or no notification, late stack testing, no fuel quality reports and/or fuel quality certifications
- Regulations & Guidance: <u>www.epa.gov/ttn/atw/mactfnlalph.html</u>

Questions?

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Clean Water Act Common Compliance Violations

- Three Primary CWA Programs Evaluated at Federal Facilities
 - National Pollutant Discharge Elimination System (NPDES) Permit Program
 - General Stormwater Permit Program
 - Pretreatment Program
- Format
 - Description of Program
 - Common Compliance Violations
 - Pictures Related to Violations

Michael K. Prescott, PE

- EPA Contract Inspector with Over 30 Years Experience
- Conducted Over 260 Compliance Inspections of Federal Facilities in Every EPA Region
- My Experience with Inspections of Federal Facilities Has Shown a High CWA Noncompliance Rate
- Majority of Noncompliance can be Easily Avoided by Being Familiar with the Regulations and Permits

NPDES Permit Program

- All discharges of pollutants to navigable waters of the United States must be regulated by a NPDES Permit
- Permits can be individual or general permits
- Includes general stormwater permits which will be discussed later
- Discuss common violations for individual NPDES Permits

NPDES Permit Common Violations

Monitoring and Reporting Violations

- Failure to submit monitoring reports or submitting them late
- Submitting incomplete monitoring reports
- Inadequate monitoring records kept
- Failure to calibrate pH meters properly

NPDES Permit Common Violations

Exceed permit effluent limits

- Inadequate O&M
- Failure to control upstream users/tenants
- Inadequate operator staffing or training
- Inadequate treatment for new pollutants or reduced limits

NPDES Permit Common Violations

Specific permit conditions not complied with

- Special studies and monitoring required
- Special plans required
- Secondary containment required

Failure to notify regulatory authority of violations or changes to the facility







General Stormwater Permits

- Three major types of general stormwater permits applicable to federal facilities
 - Industrial stormwater Multi-Sector General Permit (MSGP)
 - Municipal Separate Storm Sewer (MS4) Permit
 - Construction stormwater permit
- Permit requirements vary depending on the state or if EPA is the regulatory authority
- Discuss common violations for each type of permit

Industrial Stormwater Permit Common Violations

- Failure to apply for coverage under permit
- Failure to develop and implement a SWPP Plan
- Inadequate SWPP Plan
 - Not updated
 - Not site-specific
 - Inadequate BMPs
- Failure to conduct regular inspections and prepare annual compliance reports
- Failure to monitor stormwater outfalls
- Failure to conduct SWPP training








MS4 Permit Common Violations

- Stormwater Management Plan (SWMP) is inadequate or not updated
- Annual reports are not submitted or are late
- Failure to implement all aspects of SWMP
 - Perform illicit connection survey and eliminate illicit connections
 - Conduct oversight of construction activities
 - Conduct training, education, and outreach

Construction Stormwater Permit Common Violations

- Failure to apply for coverage under permit
- Failure to post Notice of Intent (NOI), Permit Notice, etc. or have SWPP Plan and Permit present (depends on permit requirements)
- Inadequate SWPP Plan
 - Not site-specific
 - Maps do not show all items required by permit
 - Erosion and sediment (E&S) controls changed but SWPPP not changed

Construction Stormwater Permit Common Violations (Continued)

- Failure to implement E&S controls in SWPP Plan or required by permit
- Failure to maintain E&S controls
- Stormwater inspector not qualified
- Stormwater inspections not conducted or documented

Construction Stormwater Permit Common Violations (Continued)

Also see prior construction stormwater webinar presentations given on 6/23/09 on FedCenter.gov (http://www.fedcenter.gov/training/epar9_stormwate r_webinar)

Note compliance with Energy Independence and Security Act Section 438 requirements is now required for federal construction projects >5,000 square feet







Pretreatment Program

- Regulation of discharges to Publicly Owned Treatment Works (POTWs)
- Federal regulations in 40 CFR Part 403
- Each POTW develops a regulatory program including permitting of industrial users
- EPA or the state may be the regulatory/control authority in certain cases
- Typically POTWs inspect federal facilities for Pretreatment compliance, but EPA may as well.

Pretreatment Common Violations

- Exceed effluent limits in permits or federal, state, or POTW regulations
- Slug discharges (e.g., spills, upsets, etc.)
- Failure to prepare required plans
- Interference with POTW
- Failure to conduct required self-monitoring and submit related reports



Some Potential Solutions

- Read your Permit! Identify all requirements and comply with them.
- Prepare required plans according to permit requirements and applicable guidance.
- Implement all aspects of required plans.
- Train personnel regularly, reinforcing key aspects of compliance.
- Conduct regular oversight inspections of your facility or construction site.

EPA and State Guidance

- FedCenter.gov
- EPA Office of Wastewater Management websites
 - NPDES (http://cfpub.epa.gov/npdes/home.cfm?program_id=45)
 - Stormwater (http://cfpub.epa.gov/npdes/home.cfm?program_id=6)
 - Pretreatment

 (http://cfpub.epa.gov/npdes/home.cfm?program_id=3)
- State regulatory authority websites for permits and guidance

Questions