Welcome to Today’s Workshop on Universal Wastes
WHY ARE YOU HERE?

- Required by law and NH Solid Waste Rules.
- Build your resume
WHY UNIVERSAL WASTE?

• One of top 10 most dangerous jobs
  • 33 deaths per 100,000
  • Due to accidents and exposure to hazardous materials and heavy equipment
TODAY’S AGENDA

• Solid Waste Operator Rule Changes
• UW – Pesticides, CRTs, Auto Antifreeze
• Real Life UW – Part I
• Break
• UW – Batteries, Hg Devices, Fl Lamps
• Real Life UW – Part II
• Mercury
• Spill Clean Up
Solid Waste Operator Training
Rule Changes
Effective July 1, 2014
Establishes two types of operators:

1. Principal operator
   - Attend basic training and pass the exam.
   - May be in supervisory/management position.
2. Assistant operator

- Attend basic training, but do **not** take/pass the exam.
- Must work under supervision of principal operator.
OPERATOR QUALIFICATIONS

• No more minimum education/experience requirements.
• Employers determine who is competent, not DES.
TRANSLATION FROM LEVEL TO STEP

- Attendant in Training → Assistant Operator
- Level 1 → Principal Operator, Step 1
- Level 2 → Principal Operator, Step 2
- Level 3 → Principal Operator, Step 3
- Level 4 → Principal Operator, Step 4
Operators who had 20+ years of certification as of 7/1/2014 were designated Senior Principal Operators.
STEPS

• Recognition for continuing professional development.
• Awarded automatically with renewal.
• Step increases with hours of accrued training starting July 1, 2014.
## STEPS

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<th>Hours of Accumulated Continuing Professional Development</th>
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* Only for Principal Operators
“Continuing Professional Development” - professional or technical instruction that imparts information and instruction relevant to waste management and solid waste facility operations to individuals who have already attended basic training.
PROFESSIONAL DEVELOPMENT

• 2.5 hour minimum for annual renewal for **ALL** designations.

• Must be completed in the 12 months in-between expiration dates before you are considered late.
Repeated courses do not qualify for certification renewal or step increases.

In-house and third party training count, provided the topic is waste-related.

If you aren’t sure if the training you want to take will count, call and ask us before you go.
GRACE PERIOD

• There is a 90-day grace period for renewal applications

• A $25 late fee will be assessed if your complete renewal application is received within 90 days after your certification expiration date
BEYOND THE GRACE PERIOD

• If you miss the grace period, you must start over.
  • Come back to Basic Training; and
  • Take the test again
• The operator’s signature shall certify:
  • the information is true, complete and not misleading;
  • the operator understands s/he is subject to penalties of law for false swearing; and
  • the operator understands s/he is required to comply with RSA 149-M and SW Rules.
Universal Wastes...
Some Pesticides
Cathode Ray Tubes
Automotive Antifreeze
Some Batteries
Mercury-Containing Devices
Some Lamps
What Does “Universal Waste” Mean For You?

- This stuff might be hazardous, or it might not...but it probably is

- Options:
  - Take the time to prove it isn’t hazardous, or
  - Just assume it’s a hazardous waste and call it a universal waste
    - Easier regulations
    - Must be recycled
OVERVIEW

HAZARDOUS WASTES

“Typical” Hazardous Wastes
Managed under Env-Hw 500
Expensive & Hard

Universal Waste
Hazardous, but usually managed under Env-Hw 1100
Cheaper & Easier
Household Universal Waste

- Made by...households!
  - Not regulated by hazardous waste folks
- When a non-household accepts it, they become regulated
- Your solid waste facility becomes a “universal waste handler”
Unlike other hazardous wastes, you can legally accept universal waste from a business

- Is it a good idea?
  - What is the recycling market?
  - Will taxpayers support it?
  - Will management support it?

- They are also a “Handler”
What/who is a “Handler”?

- Someone who **receives** universal waste at their facility
- Someone who **makes** universal waste
- Someone who **stores** universal waste
- Someone who **sends** universal waste to another party
- **Households are not handlers**
Things Handlers Can’t Do

- Dispose of it
- Treat it – such as crushing lamps on purpose
- Give it to someone who isn’t going to handle it legally
Things Handlers Must Do

Rules
Rules for **ALL** Universal Wastes

1. Any containers that hold universal waste must be:
   - Closed
   - In good condition
   - Compatible with the waste
When is a container needed?

1. If batteries are leaking or damaged
2. All Pesticides
3. If mercury devices are leaking or damaged
4. Mercury ampoules removed from devices
5. Intact or broken lamps
6. Damaged or intentionally broken CRTs
7. Automotive antifreeze
Storage time requirement

- Must store for 1 year or less
  - Date container, or
  - Date the item, or
  - Maintain an inventory
Storage Time Requirement

- Store more than one year only if it is necessary to allow proper recovery, treatment, disposal
  - Contract to prove it
  - Date on materials
For All Universal Wastes

3. Outside storage must be covered
Leaks and Releases

4. Respond to leaks and other releases
   - Immediately contain
   - Clean up in 24 hours
   - If human health or the environment is threatened, notify local fire company and DES (271-3899)
All Universal Wastes

5. Ship in compliance with DOT
   • Use a bill of lading
   • Not required to use a registered hazardous waste transporter

6. Handlers must be trained to recognize risks of waste, be familiar with waste handling and emergency procedures
For All Universal Wastes

7. If you have $\geq 11,000$ pounds of universal waste on-site
   - Tell (Notify) DES
     - 271-2921
   - Don’t include the weight of batteries
   - Keep shipping records for 3 years

Pesticides, CRTs, Antifreeze
Pesticides
Pesticides have the Toughest Universal Waste Rules

- Designed to intentionally kill
- In a form that can easily get:
  - Moved
  - Inhaled
  - Ingested
  - Soaked into your skin
  - Dissolved
Pesticides have the Toughest Universal Waste Rules

- More likely to be destroyed than recycled
- Rules are designed more for large-scale collections
  - Major recalls
Rules for Certain Pesticides
Which Pesticides?
Rules for Certain Pesticides

Which ones?

Those that are suspended or recalled under “Federal Insecticide Fungicide Rodenticide Act” (EPA’s FIFRA)

Contact NH Dept of Agriculture for most up-to-date list

- 271-3550
List those pesticides

- **EPA Documents**
  - “Suspension of Registrations Under FIFRA”
    - [http://www2.epa.gov/pesticide-reevaluation/suspension-registrations-under-fifra](http://www2.epa.gov/pesticide-reevaluation/suspension-registrations-under-fifra)

- **NH Dept. of Agriculture Rules – Pes 701.04**
  - [http://www.gencourt.state.nh.us/rules/state_agencies/pes700.html](http://www.gencourt.state.nh.us/rules/state_agencies/pes700.html)
Rules for Certain Pesticides

1. Must be in a container (closed!)

Do better than this!
Rules for Certain Pesticides

2. Label with:
   • The label originally on the package **AND**
Pesticide Storage

3. Stored on an impervious surface
   • Secondary containment if near floor drains, sinks or manholes
Rules for Certain Pesticides

4. Equipment required near pesticides

- Fire Control Equipment
- Spill Control Equipment
- Decontamination Equipment
Rules for Certain Pesticides

5. Adequate aisle space
   • to respond to emergency
   • To find problems!

2 Feet!
Rules for Certain Pesticides

6. Telephone posting

- Local fire dept., 911, or both
- Local police, 911, or both
- DES (271-3899)
- DOS (223-4381)
- Local response team #
- Steps to take in an emergency
Rules for Certain Pesticides

7. Outdoor Storage Requirements
   - A barrier (fence, wall) surrounding waste
   - Controlled (gated) entry
   - Posting that says:
     “Danger – Unauthorized Personnel Keep Out”
Rules for Certain Pesticides

8. Personnel Training!!!
   - A formal –written training plan that tells who, what and when
   - Trained in hazardous waste management within 6 months
   - Can’t handle pesticides until trained
   - Receive training again every 6 months
   - Strict documentation of training records
Rules for Cathode Ray Tubes

1. Broken/damaged cathode ray tubes that could release glass particles must be in a container that is closed, impermeable, and prevents releases.

2. DO NOT BREAK OR CRUSH on purpose.

Cathode Ray Tubes (CRTs) contain lead.
Cathode Ray Tubes

3. Label:
   - “Universal Waste – Cathode Ray Tubes”
   - “Waste Cathode Ray Tubes”
   - “Used Cathode Ray Tubes”
Rules for Auto Antifreeze

1. Store in a container or tank (closed!)

2. Label the container or tank:
   - “Universal Waste Antifreeze”
   - “Waste Antifreeze”
   - “Used Antifreeze”

May contain heavy metals and cancer-causing benzene
Through use antifreeze becomes contaminated.
CRTS, ANTIFREEZE AND PESTICIDES

• How do you collect them?
• How do you store them?
• How do you manage them?
• Are they shipped properly?
• Are they recycled or properly disposed of?
CATHODE RAY TUBES

How do you collect them at your facility?

Indoors

Outdoors

Containment?

Labels?

Breakage?

Cover?
CATHODE RAY TUBES

How do you store them at your facility?

- Outdoors
- Indoors
- Covered?
- Breakage?
- Labels?
CATHODE RAY TUBES

How do you store them?
What can happen here?

Stable?
Containment
List?
HOW DO YOU SHIP CRTS?

Are they in the proper shipping container?

Electronics storage shed. Contain CRTs – still UW.
WHERE DO YOU SHIP THEM TO?

Are they in someone’s backyard?
...OR ARE THEY BEING PROPERLY RECYCLED?

Where are your shipping papers or BOL?
IMPROPER DISPOSAL OF ANTIFREEZE

From here ....

..or the local stream

...to the Municipal Sewer System
ANTIFREEZE

How do you collect it?

Drop off

Containment

Impervious surface?
ANTIFREEZE

How do you store it?

- Indoors?
- Outdoors?
- Open?
- Closed?
- Good condition?
- Condition?
- Containment?
- Floor drain?
ANTIFREEZE SHIPMENTS

How do you ship it?
- You can self transport
- No limit on amount
- Follow NHDOT Requirements
- Use bill-of-lading
IS IT BEING RECYCLED?

Can you document where your antifreeze is going?

Have you investigated the hauler or destination facility?
PESTICIDES

Which ones are UW?
Which ones are hazardous waste?

- Store them properly (containers/labels)
- Residents can toss their pesticides in the trash – not a BMP

Recommend: Have residents take them to a HHW day.
PESTICIDES

Options?

- Contact the NH Dept. of Agriculture [DOA] for assistance 271-3550
- Before calling the DOA, look for special coding on the container
- Inform your residents that they can bring any used pesticides to a HHW event
- Contact the Lakes Region HHW facility in Wolfeboro at 569-5826
- Contact the City of Nashua at 589-3410
- Keene HHW Facility at 352-6550
UNIVERSAL WASTES

Facts:

• They are hazardous.
• They can cause damage to the environment and/or human health if not properly managed.
• They can save money if recycled.
• You must be compliant with rules and regulations if accepting them.
BREAK TIME

- Batteries
- Mercury Devices
- Lamps
Rules for Certain Batteries

Which ones?
BATTERIES

Nickel-Cadmium (Ni-Cd)

Lithium

Button cell

Lead-acid

Dangerous for Heavy Metals, fire hazard, and sometimes acids
In 1996, Federal law is adopted (Mercury Containing and Rechargeable Battery Act) that prohibits addition of mercury to batteries (except for button cells).
Recycling Alkaline Batteries

- Vendors will take them for you – for a price
- Ask for documentation that they are truly recycled and not disposed of
Rules for Universal Waste Batteries

1. Any battery leaking, or at risk of leaking, goes into a container (closed! And compatible with the stuff that’s leaking!)

2. Label containers holding batteries:
   - “Universal Waste Batteries”
   - “Waste Batteries”
   - “Used Batteries”
LEAD ACID BATTERIES
Another option!
May be managed under Env-Hw 809 or the Universal Waste Rule (Env-Hw 1100)
Collectors (handlers)

“Store in a manner designed to ensure that the battery housings do not break or leak acid onto the soil or into any ground-waters or surface water”
Env-Hw 809

- Transporters
  - Load and brace to prevent damage or short circuits
  - Comply with State and Federal shipping regulations
Lead-acid Batteries

Additional Best Management Practices

- Stack on leak-proof surface
  - Also on a pallet is advised
- No more that 5 layers high
Lead-acid Batteries

- Additional Best Management Practices
  - Inside or under cover
Lead-acid Batteries

- Additional Best Management Practices
  - Keep any container lids loose to prevent build-up of dangerous gases or fumes
  - Store away from sparks or flames
Lead-acid Battery Cleanup

- Put on acid-proof gloves and eye protection at a minimum
Lead-acid Battery Cleanup

- Put leaking battery in a 5-gallon bucket
- Put baking soda or lime in bucket to neutralize acid that leaks out
  - Do **NOT** put baking soda or lime directly on battery
    - May spatter ("AAA")
- Recycler will probably still accept it with advanced notice
Lead-acid battery cleanup

- Neutralize acid on ground with baking soda
- Save contaminated soil and debris for HHW event
Mercury-containing Devices

- What are they?
Mercury-containing Devices
Mercury-containing Devices

1. Put any leaking devices into a closed & compatible container
2. Do not remove ampoules except in compliance with Env-Hw 1111.03(b)
3. Label:
   - “Universal Waste” – Mercury-containing Devices”
   - “Waste Mercury-containing Devices”
   - “Used Mercury-containing Devices”
Lamps

Which Ones?

Metal halide

Mercury vapor

Fluorescent

Neon – not red

High Pressure Sodium

THEY ALL CONTAIN MERCURY!
Metal halide automotive lamps “Xenon”

- Blue tinted light
- Three older models had mercury
  - “D1”
  - “D2”
  - “9500”
Lamps

1. Intact and broken lamps stored in CLOSED containers
2. DO NOT CRUSH THE LAMPS
   Permit required
Lamps

- Label:
  
  “Universal Waste – Lamps”
  “Waste Lamps”
  “Used Lamps”

- Do not tape lamps together
LED Lamps

- Not considered universal wastes
- Some versions have regulated lead and arsenic in them
  - Majority don’t
  - Don’t know if they would fail the test for hazardous waste
Why is this important?
Hazards –

What have we talked about?

- Cadmium = Cd
- Silver = Ag
- Lead = Pb
- Lithium = Li
- Mercury = Hg
- Sulfuric Acid = $\text{H}_2\text{SO}_4$

“Heavy” Metals
Health Concerns

- **Cadmium** – Ni-Cd batteries
  - Suspected of causing cancer
  - Poison by inhalation or ingestion

- **Silver** – button batteries
  - Discoloration of the skin
  - Toxic by inhalation
  - Toxic to marine life
Health Concerns

- **Lead** – lead-acid batteries, antifreeze, CRTs
  - Nervous system, blood, kidneys
  - Anemia, tremors, paralysis, hallucinations, swelling of brain, nerve damage
  - Inhalation more dangerous than ingestion (adults)
Health Concerns

- **Lithium** – batteries, button cells
  - Dangerous fire hazard
    - Use of typical fire extinguishers may cause explosion
    - Reacts violently with water
    - Fire releases toxic gas
    - Fire releases hydrogen gas (Hindenburg)
Health Concerns

- **Sulfuric Acid** – lead-acid batteries
  - Burns to skin on contact
  - Burns to lungs on inhalation (concentrated)
  - Higher concentrations will spatter if water is added
Health Risks

- **Pesticides**
  - Central Nervous System

- **Hormones**
  - Chemicals that tell your body what to do when
MANAGING UNIVERSAL WASTES AT YOUR FACILITY

- How do you accept them?
- How do you store them?
- It’s 5:00 pm, do you know where your universal wastes are?

Batteries, Mercury Devices, Fluorescents
AUTOMOTIVE BATTERIES

How do you accept them?

- covered
- on the ground
- containment

- sign
- containment?
- outdoors
AUTOMOTIVE BATTERIES

How do you accept them?

- covered?
- list?
- containment?
- covered
- containment
- sign?
AUTOMOTIVE BATTERIES

How do you store them?

- Propane tanks
- Outdoors!
- Covered?
- Containment?
- Sign?
AUTOMOTIVE BATTERIES

How do you transfer them?
HOUSEHOLD BATTERIES

How do you accept them?
HOUSEHOLD BATTERIES

How do you accept them?

- Signs
- Labels

Multiple use area

Mercury containing items
(thermostats, thermometers,
Tilt switches, etc.)

UNIVERSAL WASTE

Mercury containing items
(Batteries
Cd, Lithium, button cell,
rechargeable)

Rechargeable

Batteries

Mercury Switch
Thermostats
MERCURY DEVICES

How do you accept them?

MERCURY CONTAINING DEVICES
THERMOMETERS, THERMOSTATS, ELECTRICAL SWITCHES, MERCURY BUTTON CELL BATTERIES, AND FLUORESCENT LIGHT BULBS, INCLUDING COMPACT FLUORESCENT BULBS

EFFECTIVE JANUARY 1, 2008

NH STATE LAW RSA 149-M:58 PROHIBITS DISPOSING OF MERCURY-ADDED PRODUCTS IN SOLID WASTE LANDFILLS & INCINERATORS

NEW HAMPSHIRE The Beautiful

mercury ban sign

mercury ban sign

container
MERCURY DEVICES

How do you store them?

- Pack for stability
- Below counter
- Between stuff
FLUORESCENT LAMPS

How do you accept them?

outdoors

breakage?

sign?

# of lamps

outdoors

breakage?

# of lamps
FLUORESCENT LAMPS

How do you accept them?

lined boxes?
FLUORESCENT LAMPS

How do you store them?

- lined boxes
- list
- labels?

good idea?

breakage
FLUORESCENT LAMPS

How do you store them?

- no labels
- don’t tape
- labeled
- cart
BATTERIES, MERCURY DEVICES & LAMPS

How do you store them?
WASTE TRANSFER

- Should leave your facility with a bill-of-lading
- Identify either the number of items or the tonnage of each shipment
- Loads must be stable
IT’S 5:00 PM?

Do you know your hauler & where the waste is going?
Everything you Always Wanted to Know About Mercury But Were Afraid to Ask

Stephanie D’Agostino  271-6398
stephanie.dagostino@des.nh.gov
Mercury, what's the big deal?

Mercury is:

- Persistent;
- Bioaccumulative;
- Toxic;
- and everywhere!
Properties of Mercury

Unique Chemical and Physical Properties

- Electrical Properties
- Only metal liquid at room temperature
- Tolerant to wide temperature changes
- Abundant and inexpensive
Where Does Hg Come From And Where Does It Go?

- **Natural sources**
  - Volcanoes, erosion, weathering of rock, forest fires

- **Human origins**
  - Burning of wastes and fossil fuel fuels (esp. coal)

- **Global reservoir**
  - Mercury that is re-emitted to the environment from human as well as natural activities

- **Transport**
  - Travel via prevailing winds (power plants in the midwest)
Mercury in Products & Processes

• Used since 2000 BC

• Many common uses
  • Switches, thermostats, thermometers, light bulbs, medical devices, toys & games, sneakers

• Formulated products
  • Some vaccines, lab test kits, mercurochrome

• Industrial processes
  • Making chlorine and gold mining
National Atmospheric Hg Deposition

Deposition in μg/m²/yr
- 1.0-2.0
- 2.0-5.0
- 5.0-10.0
- 10.0-20.0
- >20.0


USGS
Symptoms and Health Effects

- Central nervous system
  - Loss of hearing or sight
  - Loss of memory
  - Lack of coordination, muscle spasms
- Kidney and liver damage
- Tingling and numbness in toes or fingers
- Personality changes
Going Mad?
(mercury inhalation)

Hat Makers (late 1800s)

Lighthouse keepers
ENVIRONMENTAL EFFECTS

- Plants
  - Decreased chlorophyll production
  - Inhibits growth
  - Damages leaves

- Wildlife: Loons, eagles, otter, mink, herons, snapping turtles
  - Primary exposure thru fish consumption
  - Reproductive effects are greatest concern
  - Other effects are similar to humans
Estimated Sources of Hg Deposited in the Northeast (1998)

- Sources in Region: 47%
- Sources out of Region: 30%
- Global Reservoir: 23%
History of Hg Reduction in NH

- Early 1990’s - Hg sampling / advisory issued
- Early reduction activities
  - Alkaline batteries, paint, pesticides, packaging
- 1998 NE Mercury Report
- 1998 NH Mercury Reduction Strategy & NEG/ECP Mercury Action Plan
  - Emissions Inventory MWCs, MWIs, Fossil fuels
  - Reduction Goals:
    - 50% by 2003
    - 75% by 2010
    - Virtual Elimination
Hg Values for Selected Fish Species
Northeast and New Hampshire

Parts per million (ppm)
(EPA reference dose is 0.3 PPM)
ACTIONS IMPLEMENTED

• Emissions Reductions
  • MWCs
  • MWIs
  • Coal-fired utilities (pending)
  • Other fuels (uncertainty in emissions factors)

• Outreach & Education Initiatives
  • Healthcare
  • Communities & Schools
  • MV Recycling Facilities
  • HVAC

• Hg Products Legislation
  • Certain products banned and/or restricted
  • Installation of dental amalgam separators
Reduction in NH Mercury Emissions

Major Mercury Emissions 1997 and 2013

Lbs per Year

Year

1997 2013

Fuel Oil Combustion
Coal Fired Power Plants
Sewage Sludge Incinerators
Medical Waste Incinerators
Small Solid Waste Incinerators
Large Municipal Waste Combusters
Mercury-Added Product Sales Ban
RSA 149-M:53
effective
January 1, 2008

Prohibits the sale of most mercury-added products by July 1, 2008.

Fluorescent lamps, Button Batteries and formulated products (reagents, compounds, etc.) are exempt.
RSA 149-M:58 Disposal Ban

Effective

January 1, 2008

“No person shall knowingly dispose of mercury-added products in solid waste landfills, transfer stations, or incinerators.”
Under RSA 149-M:58 solid waste landfills, recycling facilities, transfer stations and incinerators shall:

- Post signs at the facility
- Notify facility customers
- Implement monitoring procedures; and
- Educate customers on collection programs
Universal Wastes: Mercury

Lamps

- Straight lamps
  - T-12, T-8
- CFLs
- Circle and U-Tube
- High Intensity Discharge (HID)

Devices

- Thermometers
- Thermostats
- Button Batteries
- Tilt switches
- Manometers
- Float switches
• Fluorescent Lamps
  • Use less energy!
  • Good for the environment!

Fluorescent lights contain very little mercury— but there are **MILLIONS** out there!

Recycle me please!
Thermometers

Thermometers = 1 grams of mercury

...but non-mercury alternatives exist
Button Batteries & Thermostats

Thermostat = 3 grams of mercury
Switches

= 1 to 5 grams of mercury
Isn't it ironic?

Contain up to 0.5 grams of mercury
Mercury manometers

Keeps me happy!
How much mercury is in a lamp?

Mercury Dose
Mercury-containing Lamps

Recycle them through:

**NH Lamp, Ballasts, Batteries and Mercury Devices Recycling Contract**

Available to all New Hampshire Municipal Solid Waste Facilities

**CRT Processing (formerly, UniWaste)**

Trenten Tully 422-7711 x205
tully@universalrecyclers.com
Lamp Recycling “Kits”

4’ boxes hold about 70 T-12’s or 36 T-8’s and cost about $60.00

About twice as expensive per foot as “standard” recycling but very convenient

Storage/mailing box, shipping & recycling costs all included in single purchase price

Click Here ORDER ON-LINE for Pricing & Ordering
Mercury-containing thermostats

Thermostat recycling bins are available to any participant, including local programs for a one-time $25 fee

Shipping and recycling costs are included

Offered by the Thermostat Recycling Corporation
Call 1-888-266-0550
SUMMARY

• Mercury in the environment is still a problem

• Proper collection & management of products can help a lot

• Most products can be cost-effectively collected and recycled at your transfer station

• Help is available from DES
Mercury Spill Cleanup
Fact Sheet HW-15
Mercury Spill Cleanup

- Assess the damage
  - Small spill – consider cleaning it yourself
  - Big spill – get a contractor
Mercury Spill Cleanup

- DO NOT use a vacuum

$3K
DO NOT use a brush or broom
Mercury Spill Cleanup
Fact Sheet HW-15

- DO NOT wash mercury-contaminated clothes in a washing machine
Mercury Spill Cleanup
Fact Sheet HW-15

- DO NOT pour mercury down drain
Mercury Spill Cleanup
Fact Sheet HW-15

1. Open windows and let the area vent
   - Prevent others from entering area
Mercury Spill Cleanup

**DO**

- Have a mercury spill kit available
  - Latex gloves
  - 2 pieces of boxboard or stiff paper
  - Sealable plastic bags or glass containers
  - Garbage bags
  - Flashlight
  - Eyedropper
  - Tweezers
  - Duct tape
  - Set of instructions
Mercury Spill Cleanup

- Cleanup from hard surfaces
  - Put on gloves
Mercury Spill Cleanup

- Cleanup from hard surfaces
  - Pick up broken glass with tweezers or 2 pieces of cardboard/stiff paper – put in sealable container
Mercury Spill Cleanup

- Use cardboard to squeegee remaining glass and mercury beads
Mercury Spill Cleanup

- Cleanup from hard surfaces
  - Use flashlight at ground level to find beads
Mercury Spill Cleanup

- Use eyedropper and/or duct tape to pick up mercury that couldn’t get picked up by cardboard
Mercury Spill Cleanup

- Cleanup from Rugs and Fabrics
  - Put on gloves
Mercury Spill Cleanup

- Cleanup from Rugs and Fabrics
  - Use a sharp knife to remove contaminated section
  - Fold or roll section so mercury is trapped inside
Mercury Spill Cleanup

- Cleanup from Rugs and Fabrics
  - Put material into plastic garbage bag
  - Save for HHW event collection
Questions on anything you heard today?
THANK YOU!

• If not, please hand in your evaluation before you leave.

• Take the BMP Manual if you don’t already have one.

• Thank you for being here and have a great day!