## **December 2016**

## **HAZ-RAD REPORTER**

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### Department of Environmental Quality Division of Waste Management and Radiation Control

## Used Oil Recycling Update

by Karen Wehking

As of June 31, 2016 there are:

- 403 do-it-yourselfer (DIYer) used oil collection centers registered in Utah.
- 13 Local Health Departments and 29 counties.
- 453,644 gallons of used oil recycled.

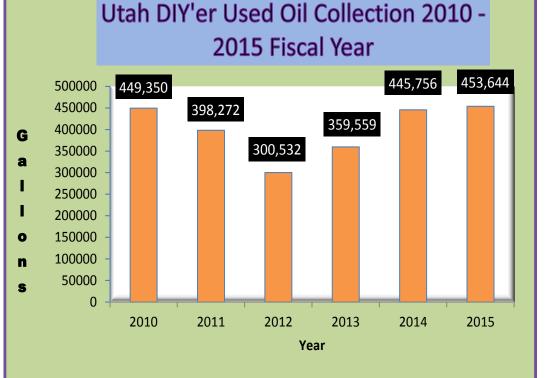


WASTE MANAGEMENT & RADIATION CONTROL

Utahans have made a tremendous impact on preserving Utah's environment through recycling efforts rather than careless disposal methods utilized in the past.

Thanks to those who voluntarily participate in the Used Oil Collection Program. The tremendous effort and hard work is ensures the success of the program.

## Keep Recycling!!!!



#### **CHANGES TO THE DEFINITON OF SOLID WASTE**

**By Thomas Ball** 

On December 10, 2014, EPA made changes to the definition of solid waste. These rules became effective in January 2015 and were adopted by the State of Utah in May 2016.

The changes deal predominantly with Hazardous Secondary Materials. A Hazardous Secondary Material (HSM) is a spent material, by-product or sludge that, when discarded, would be identified as a hazardous waste. HSM are EXCLUDED from the definition of solid waste if certain conditions are met and the material is reclaimed/recycled.

The rules for HSM exclusion are found at R315-261-4(a) (23), 4 (a) (24) and 4 (a) (27) and include three scenarios:

1. Generator controlled recycling where the generator generates and recycles the HSM at the same facility under common control or the generator generates the HSM and it reclaims it under a tolling agreement.

- 2. Generator transfer of the HSM to another person (company) for reclamation.
- 3. Remanufacturing exclusion for certain higher-value hazardous spent solvents that are manufactured into commercial grade products.

#### Scenario 1. Generator Controlled Recycling

In order for the HSM to be excluded from regulation as a solid waste under the first scenario, the following conditions must be met:

- The generator must store the HSM in containers that are in good condition, not leaking, properly labeled to identify the materials and are compatible with the materials being stored.
- The generator must comply with the emergency preparedness and response requirements in R315-261-400, 410, 411 and 420.
- The generator must ensure that the recycling process is legitimate as defined at R315-260-43 and that all four of the following criteria are met:

(1) The material must provide a useful contribution to the recycling process or to a product or intermediate of the recycling process;

- (2) the recycling process must produce a valuable product or intermediate;
- (3) the generator and recycler must manage the material as a valuable commodity; and
- (4) the product of the recycling process must be comparable to a legitimate product or intermediate.
- The generator must store the HSM in containers with an accumulation start date. This allows inspectors to ensure that the generator is not speculatively accumulating the material. See R315-261-1(c)(8) for a description of speculative accumulation.
- The generator must keep records of each material shipment for three years. Manifests are not required for shipments of excluded HSM.
- The generator must submit a notification prior to operating under the exclusion and by March 1st of each even numbered year thereafter. The notification should include types and quantities of HSM being reclaimed and must use EPA Form 8700-12.

#### Scenario 2. Generator Transfers HSM to Another Person

In order for the HSM to be excluded from regulation as a solid waste under this scenario, the following conditions must be met:

- The generator must store the HSM in containers that are in good condition, not leaking, properly labeled to identify the materials and are compatible with the materials being stored. The reclaimer or intermediate facility must manage the HSM in a manner that is at least as protective as the manner used for management of raw materials and the HSM must be contained. The generator must arrange for and ensure that the HSM is transported to a "verified" reclamation facility in the US or its territories.
- The generator, reclaimer and intermediate facility must comply with the emergency preparedness and response requirements located in R315-261-400, 410, 411 & 420.
- The generator must ensure that the recycling process is legitimate as defined at R315-260-43 and that all four of the following criteria are met:

- The material must provide a useful contribution to the recycling process or to a product or intermediate of the recycling process;
- (2) the recycling process must produce a valuable product or intermediate;
- (3) the generator and recycler must manage the material as a valuable commodity; and
- (4) the product of the recycling process must be comparable to a legitimate product or intermediate.
- Reclaimers must manage residues from the reclamation process in a manner that is protective of human health and the environment. If the residues are hazardous waste, they must be managed in accordance with applicable regulations
- Reclaimers and intermediate facilities must meet the financial requirements found in R315-261-140. A facility must keep records of each shipment of HSM for three years. Manifests are not required for shipments of excluded HSM. The reclaimer and intermediate facility must send confirmation of receipt to the generator.
- The reclaimer and the intermediate facility must submit notification prior to operating under the exclusion and by March 1st of each even numbered year thereafter. The notification should include types and quantities of HSM being reclaimed and must use EPA Form 8700-12.

Reclaimers without a Part B Permit must obtain an exclusion from the State of Utah. The exclusion can be granted for a time period not to exceed 10 years. In addition to the requirements above, the reclaimer must not have any formal enforcement actions or violations in the previous 3 years and not be classified as a significant non-complier or must provide evidence that the facility will manage the HSM properly. Reclaimers that have a Part B Permit do not need an exclusion.

#### Scenario 3. Remanufacturing of High Value Solvents

#### In order for the HSM to be excluded from regulation as a solid waste under this scenario, the following must be met:

• The HSM consist of one or more solvents such as Toluene, xylenes, ethylbenzene, 1, 2, 4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tertbuytl ether, acetonitrile, chloroform, chloromethane, dichloromethane, methyl isobutyl alcohol, ethanol and/ or methanol.

- The HSM originated from the use of one or more of the listed solvents in a commercial grade for reacting, extracting, purifying or blending chemicals or for rinsing out process lines associated with these functions in the following industries: pharmaceutical manufacturing, basic organic chemical manufacturing, plastics and resins manufacturing and/or paints and coatings manufacturing.
- The HSM generator must send the HSM to a remanufacturer in one of the industries listed above.
- After remanufacturing, the solvent can only be used for reacting, extracting, purifying or blending chemicals or for rinsing out process lines associated with these functions in the industries listed above. The solvents cannot be used for cleaning or degreasing oil, grease or similar material from textiles, glassware, metal surfaces or articles.
- Both the generator and remanufacturer must notify the State of Utah and update the notification every two years per R315-260-42. They must develop and maintain a remanufacturing plan and maintain records of the shipments and confirmations of receipts for a period of three years.
- Prior to remanufacturing, the spent solvents must be stored in tanks or containers that meet the technical specifications found in R315-261-170 through 179 and 190 through 200. The tanks and containers must be labeled or have a record of the material being stored.
- The remanufacturer must certify that the remanufacturing equipment, vents and tanks are equipped with air emission controls in compliance with 40 CFR parts 60, 61 or 63. In the absence of the Clean Air Act standards, the remanufacturer must certify that the equipment is in compliance with the appropriate standard in R315-261-1030 through 1035, 1050 through 1064 and 1080 through 1089.
- The generator and remanufacturer must meet the requirement prohibiting speculative accumulation in R315-261-1( c )( 8).

Rules for HSM exclusion are found in

R315-261-4(a)(23), 4(a)(24) and 4(a)(27).

## **New Hazardous Waste Generator Rules**

By Deborah Ng

The New Hazardous Waste Generator Rules were published in the Federal Register on November 28, 2016. There were over 60 changes to the hazardous waste generator program. The effective date will be six months after publication. The Division will start the adoption process once published. Please check



our website for the notice. The following is a summary of a few of the changes:

- Reorganization of the Generator Regulations in §262.13 through §262.17
- Emergency Preparedness and Planning
- Hazardous Waste Determinations Documentation
- Marking and Labeling
- Biennial Reporting
- Reporting and Recordkeeping
- Satellite Accumulation Areas
- Closure
- Drip Pad and Containment Buildings
- Additional Clarifications and Other Revisions

#### More Stringent than Current Rules

- SQG Re-notification
- Identification of hazards of waste being accumulated and labeling
- Notification of closure
- Closure as a landfill for LQGs accumulating hazardous waste in containers that cannot meet closure performance standards
- Biennial reporting for whole year, not just months the generator was an LQG.
- Biennial reporting for recyclers who don't store prior to recycling
- Requirement for a Quick Reference guide for contingency plans.

#### Less Stringent than Current Rules

- Very Small Quality Generator (VSQG) consolidation
- Episodic generation
- Waiver from 50-foot rule

#### WASTE TIRE PROGRAM

by Tina Mercer

The State of Utah has a Waste Tire Program established by the Waste Tire Recycling Act. Here is a link to the Act:

http://www.deq.utah.gov/Laws\_Rules/dshw/docs/2012/11Nov/19-06P8 Waste Tire Recycling Act columns 2012.pdf

- Facilities are encouraged to call a waste tire transporter and arrange for a pickup, or collection trailer, for proper disposal of waste tires.
- Utah statute bans the disposal of waste tires in landfills, except for tires received four or less at a time, or tires with a rim diameter over 24.5 inches.
- Landfill operators generally segregate tires and contract with tire transporters to collect them for recycling. Some landfills also accept waste tires that are also transported to a recycler. Landfill charges for accepting waste tires generally reflect the cost of transportation to a recycler.
- No more than 1,000 waste tires are allowed on a facilities' premise without first obtaining a waste tire storage permit.

#### **Utah Registered Tire Recyclers and Transporters**

Please see the Division's web page for a current list of waste tire recyclers:

http://www.deq.utah.gov/ProgramsServices/programs/waste/wastetires/docs/2014/04Apr/ Waste Tire Recycler Report.pdf

Please see the Division's web page for a current list of waste tire transporters:

http://www.deq.utah.gov/ProgramsServices/programs/waste/wastetires/docs/2014/04Apr/ Waste\_Tire\_Transporter\_Report.pdf



## The Role of the X-ray Program

Medical x-rays account for the majority of the average citizen's exposure to man-made radiation. Although most scientists believe there is a health risk from low levels of exposure to x-rays, the risk is generally considered to be small when compared with the benefits. Even though the risk is small, exposures should still be maintained As Low As Reasonably Achievable (ALARA). According to the ALARA principle, is important to avoid conditions where the amount of radiation used is more than that needed for the procedure, because there is no benefit from unnecessary radiation. The goal of radiation protection is to prevent or minimize exposures that have no benefit.

The use of radiation in medicine may be one of the most difficult areas for ensuring a balance between risk and benefit. Often there is not enough thought given to unnecessary patient exposure because the benefit of the x-ray is believed to be unlimited. As a result, analysis of risk and benefit is an infrequent consideration. Medical professionals are responsible for evaluating the risk versus the benefit to determine if an x-ray procedure is warranted.

X-ray exposure is minimized and image quality is improved when X-ray systems and operators perform properly. Therefore, the Radiation Control Rules require regular registration and inspection of X-ray units. Operators of X-ray equipment designed for human use must also meet the licensing requirements required by the State's Division of Occupational and Professional Licensing.

About 2,700 facilities are currently registered with the Division. Approximately 9,200 tubes or machines are being used in health care, research, and industrial applications throughout Utah. Dental and medical uses account for the majority of the machines, although there are a significant number of other uses. Our X-ray staff has experience and knowledge and are available to provide assistance.





If you have a question or problem related to X-ray machine regulations and safety, please call:

Dr. Lisa Mechem (801) 536-4286 or Ryan Abbott (801) 536-4268

ALARA is an acronym for As Low As Reasonable Achievable. This is a radiation safety principle for minimizing radiation doses and by employing all reasonable methods. ALARA is not only a sound safety principle but is a regulatory requirement for radiation safety programs.

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## **Registration for Drum Top Waste Lamp Crushers**

The crushing of waste lamps is not allowed **UNLESS** you have applied for and received approval from the Director of the Division of Waste Management and Radiation Control. The application form is available online at http://www.deq.utah.gov/forms/waste/docs/2016/04apr/drum-top-lamp-crusherapplication.pdf or by contacting the Division at 801-536-0200.

Crushing is allowed provided that the generator of the lamps:

- Applies for and obtains approval from the Director of the Division of Waste Management and Radiation Control;
- Uses an approved drum top crusher;
- Crushes lamps in a well-ventilated and monitored area to ensure compliance with applicable OSHA exposure limits for mercury;
- Ensures that employees crushing lamps are trained with proper waste mercury handling and emergency procedures;
- Stores crushed tubes in closed, non-leaking containers;
- Has financial assurance in accordance with the Rule; and
- Has a closure plan.

When making a decision to crush lamps, please be aware that the crushing may add additional cost to prepare lamps for disposal or recycling. In addition, lamp recyclers may prefer whole lamps to crushed ones. Crushing units also can pose health and environmental risks because of the release of mercury vapors.



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