



Annual Report

Submitted October of 2019





Ty Howard,
Director of the Waste
Management and
Radiation Control Division

As the new director of the Division of Waste Management and Radiation Control (WMRC) I am excited to share this annual report. It highlights many accomplishments, including providing waste management assistance through public outreach and education, providing health and safety inspections of x-ray equipment and other radiation sources, ensuring the safe management of solid and hazardous wastes, promoting and ensuring safe recycling efforts for used tires and used oil, and continuing to assist developers and property owners in the cleanup of contaminated property so it can be put back into beneficial use.

A special congratulations goes to our Radioactive Materials and Low Level Radioactive Waste programs for a successful audit by the U.S. Nuclear Regulatory Commission (NRC). The programs are audited every four years as part of our agreement state status with the NRC. The audit included a thorough review of all program aspects including, inspector accompaniments, file reviews and staff interviews; our program received the highest rating possible.

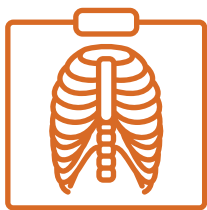
Our division goal, to continuously improve our efforts to ensure proper management of solid and hazardous waste, ensure safe management of radiation sources and low level waste disposal, and promote education and recycling efforts, fuels our work each and every day. Below you will find division highlights by state, federal or calendar year including, "at-a-glance" statistics to recap the success of each program within the division.



RADIATION PROGRAM

The Radiation Materials program regulates medical, industrial, and academic uses of nuclear materials through a combination of regulatory requirements; licensing; safety oversight, including inspection and enforcement; operational experience evaluation; and regulatory support activities.

X-Ray Program



9,393

Radiation-producing machines are registered in Utah



62%

are in dental facilities.



855

inspections were performed in FY19.



INCLUDING

432 at hospitals and hospital clinics

& 331 at dental facilities



2,764

facilities are registered by the X-Ray Program

Low Level Radioactive Waste Program

The Low-Level Radioactive Waste Section is tasked with reviewing and writing License conditions for EnergySolutions' Low-level radioactive waste license, 11.e.(2) license, state issued part B permit (mixed waste) and groundwater discharge permit.

The section conducts inspections for health physics, engineering and groundwater areas at EnergySolutions to evaluate compliance with the rules, permits and licenses. In addition, the section reviews performance assessments, manages outside contractor support, for new waste streams like depleted uranium, and reviews new construction and evaluates financial surety.



4,732

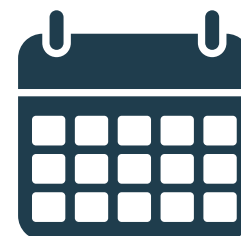
Hours spent on Inspections



6,339
Hours spent on Licensing

146

Days staff were on Site at the facility



The cover system used on the embankments at the Clive Facility was replicated on a test pad (Cover Test Cell) located away and apart from the embankments (above photo). This provided opportunity to perform investigations, repairs, and maintenance without disturbance of an actual embankment. The Cover Test Cell purpose was to measure soil moisture, horizontal drainage, and confirm parameters used in infiltration and transport modeling, used in the design of the embankments. In September of 2019, the Cover Test Cell was destroyed layer-by-layer to collect samples within each layer and to validate modeling. During the destruction of the Cover Test Cell, the Division examined the in-service physical properties of the earthen materials used in the Cover Test Cell. The field results looked promising showing the radon barrier still in tack. Laboratory results and the final report should be submitted within the next five months.

Generator Site Access Program

1670

Transportation Inspections 2018

Generators sending waste to EnergySolutions need to either have a Generator Site Access (GSA) Permit or use a transporter that has a GSA permit. We inspect shipments to ensure whether they are in compliance with Department of Transportation requirements, the GSA permit, that containers are in good condition and did not leak in transportation, are still secured, and that paper work is filled out accurately. We also survey shipments to evaluate our results based on those included with the load.

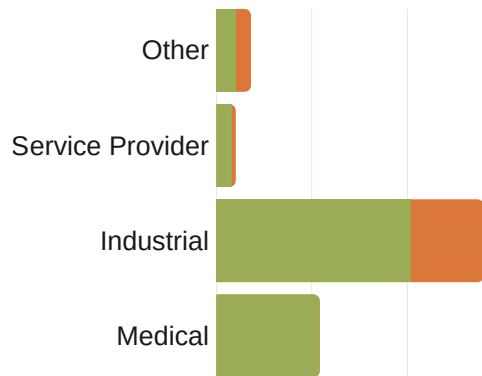
Radioactive Materials Program



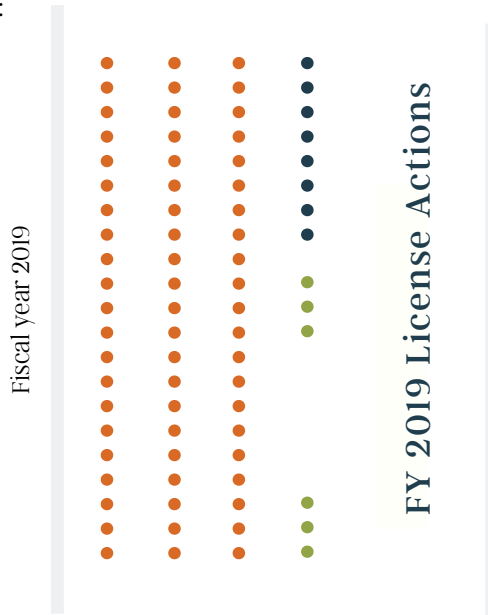
In September 2019 the U.S. Nuclear Regulatory Commission performed an audit of the State of Utah's Radioactive Materials program for the period of 2015-2019. As a result of the audit the program received the highest rating possible given out by the NRC for each criterion reviewed. This means the Radioactive Materials program has performed at the highest possible level for the past four years.

Inspections, Actions and Licenses

Inspections and violations by facility type:

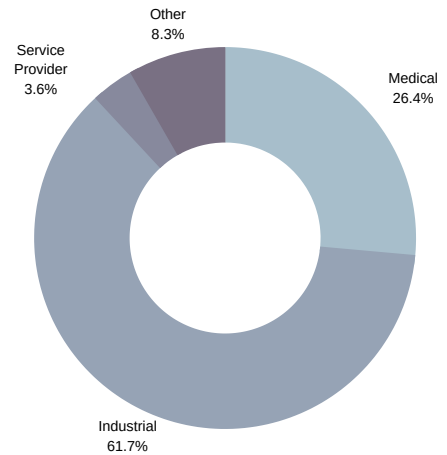


■ Licenses with violations 24
■ License Inspections 87



● 63 Amendments ● 3 Renewals
● 3 New Licenses ● 8 Terminations

Radioactive Materials Licenses by facility type:



There are currently 192 Radioactive Material Licenses in the State of Utah

Uranium Mills Program

The Uranium Mills program regulates the **three** conventional uranium mills in the State of Utah through a combination of regulatory requirements; licensing; safety oversight, including inspection and enforcement; operational experience evaluation; and regulatory support activities.



HEALTH PHYSICS, ENGINEERING, GROUNDWATER



Inspections completed on time



In September 2019 the U.S. Nuclear Regulatory Commission performed an audit of the State of Utah's Uranium Mills program for the period of 2015-2019. As a result of the audit the program received the highest rating possible given out by the NRC. This is the same result the program received in the last NRC audit (2015) for the period of 2011-2015, meaning the Uranium Mills programs has performed at the highest possible level for the past eight years.

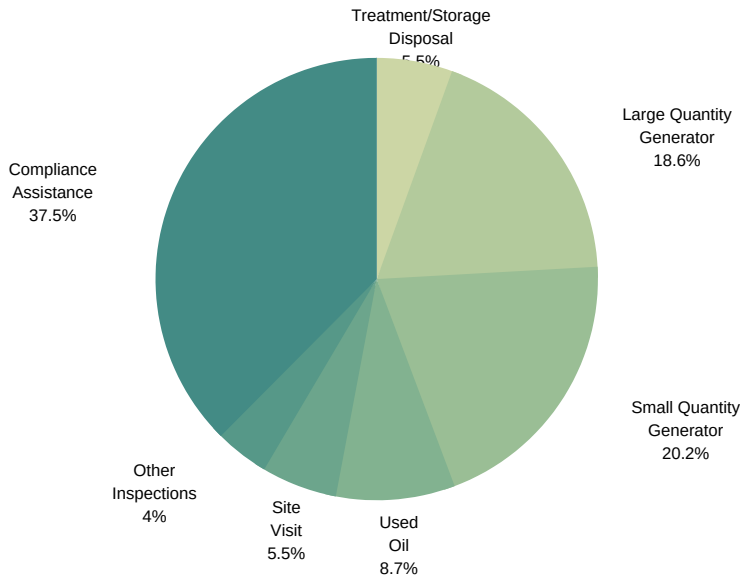
HAZARDOUS WASTE PROGRAM



Utah's Hazardous Waste and Used Oil programs are responsible for ensuring compliance with laws and regulations pertaining to the management of hazardous waste and used oil. Primary elements of the program include compliance assistance, compliance monitoring and enforcement, permitting, and information management.

Inspections & Permitting

Inspections by Facility Type:



110

Attendees participated in Full Day Hazardous Waste Generator Training Classes

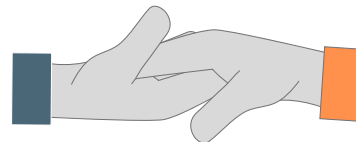
EDUCATIONAL OUTREACH PRESENTATIONS

- 31 BUSINESS & SCHOOL
- 12 COMPLIANCE ASSISTANCE
- 95 SITE VISITS TO REGULATED FACILITIES
- 13 LOCAL HEALTH DEPT. TRAINING
- 25 COMPLAINTS

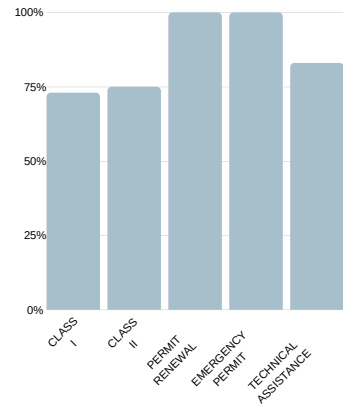
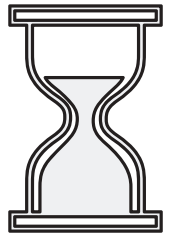
Rule Changes:

This years rule changes include:

- 1 Exemptions for recalled Takata Airbags during Transportation and Disposal
- 2 Hazardous Waste Generator Improvement Rule Updates
- 3 Used Oil Collection Center Reimbursement Payment Increase \$0.16 to \$0.25/ gal.
- 4 Used Oil Grant Expansion
- 5 Universal Waste Antifreeze



Permits completed within EPA Time Frames



427

Used Oil Collection Centers that recycle the public's motor oil for

FREE

USED OIL Fun Facts UTAH has...

8.6 million

Recycled gallons of oil in 2018



- Transporters 35
- Transfer Facilities 11
- Processors 10
- Marketer/Burner 25

Hazardous Waste and Used Oil Education Outreach Program

Educational outreach is a fundamental component of the Division of Waste Management and Radiation Control (DWMRC) hazardous waste and used oil programs. The Division works with the regulated community to enhance their understanding of what is required for them to properly manage their waste streams. Utah businesses welcome these outreach opportunities to help manage their waste properly and support their efforts to be good environmental stewards of the community.

Examples of Division outreach include: providing annual hazardous waste generator classes, business specific onsite training, local health department training, educational outreach at schools to promote better management of household hazardous waste, recycling, pollution prevention, and best management practices.



SOLID WASTE PROGRAM

The Solid Waste Program is responsible for oversight of solid waste facilities Statewide. The program reviews permit applications, plans of operation and conducts on-site inspections to ensure compliance at facilities that dispose, treat or transfer solid waste. The Waste Tire program provides oversight to waste tire transporters and recyclers in issuing annual registration certificates. The program also provides oversight for waste tire cleanups at landfills and abandoned waste tire piles.

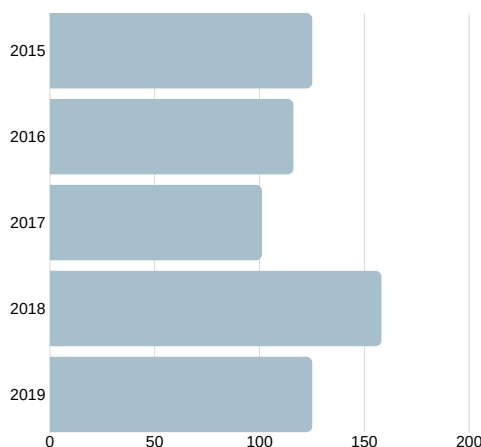


In 2019 the Solid Waste Program began conducting inspections using an electronic tablet. Tablet use has enabled inspectors the ability to document findings and observations during inspections, speeding up the inspection process.



Inspections completed within set time frames

Inspections by Year



90%

A new fee was implemented January 1, 2019 requiring all Solid Waste Facilities to pay a per ton fee



Waste Tires

In 2018 the waste tire recycling program provided funding for the cleanup of two landfill tire piles and one abandoned waste tire pile.

Tire piles cleaned up at landfills included the Carbon County Class IV and the Sevier County Class I Landfills. The tonnage of tires removed for recycling was a combined 330 tons or an estimated 26,000 tires.

Tonnage of tires cleaned up from the abandoned tire pile in Vernal was 195 tons or an estimated 15,000 tires.



Approximately

1,960,000

tires were recycled in 2018 from state wide collection of waste tires.



Highlights



Logan City – North Valley Landfill

In 2019 Logan City completed the installation of landfill cell liner for Cell #2 at the North Valley MSW Landfill. Cell #2 was constructed similar to landfill Cell #1 with a composite liner system consisting of a prepared subgrade, a reinforced geosynthetic clay liner, a 60 mil textured HDPE manufactured liner, a drainage net and finally a 36 inch protective cover. Cell #2 provides an additional 306,000 square feet of disposal area at the North Valley Landfill. Oversight inspections were conducted by the Division throughout the liner installation process, and final approval given on July 1, 2019.

A Waste Tire Program training brochure was developed in 2019 to assist landfill owners and operators and help them understand the rules and regulations governing management of waste tires. The brochure has been provided to landfill operators during inspections.

A spreadsheet was developed to track waste tire piles throughout the State. The tracking sheet helps the Division know the location of waste tire piles, estimated number of waste tires at each location and completed waste tire removals with associated cost.

The 2019 Legislature changed the Waste Tire Act to provide for 100% reimbursement for waste tire pile cleanup to counties of the 3rd through 6th class. This change was implemented with the approved cleanup of 295 tons of waste tires in Moroni City, and with submission of requests for reimbursement from Sanpete and Duchesne Counties.

CORRECTIVE ACTION



PROGRAM

The Corrective Action Section is responsible for overseeing the required investigation and potential remediation of solid and hazardous waste contamination at RCRA Permitted Treatment and Storage facilities in the State of Utah. The process ensures that any discovered contamination does not pose an unacceptable risk to onsite workers as well as ensuring it does not impact off-site properties.

In addition,

the section works with private property owners and prospective buyers who seek oversight of their investigative and potential remediation efforts. Those efforts facilitate the redevelopment and transfer of contaminated properties.



Permitted Treatment and Storage Facilities undergoing Corrective Action



Vineyard, UT, old site of Geneva Steel

Voluntary

Cleanup Sites worked on in FY19 (October 2018 to September 2019)

54



Former Geneva Steel Property

Over the last year the Corrective Action Section has worked with US Steel and Anderson Geneva Development (AG) to complete the design of a Corrective Action Management Unit (CAMU) on the northwestern portion of the property. On final design approval, US Steel and AG initiated construction of the large bathtub shaped disposal cell. On completion of the 20 acre disposal cell, a synthetic liner was installed. US Steel and AG have commenced removing contaminated soils from other areas of the property and placing them inside the CAMU. *The removal efforts will allow previously contaminated property to be re-utilized for commercial and residential development in the fast growing community of Vineyard, Utah.*



Former May Foundry Property

Mixtec North America, a manufacturer of industrial agitators and mixers, approached the Corrective Action Section during the past year with a plan to purchase the May Foundry Property in Salt Lake City. The Corrective Action Section worked with the company and their environmental consultant to develop an investigation plan to assess potential environmental impacts from historical operations. The plan was implemented and areas with contamination were properly addressed. The last phase was development of a Site Management Plan with institutional controls to mitigate residual contamination. In addition, an Environmental Covenant was recorded on the property that also identified the institutional controls. These efforts have allowed Mixtec to relocate their operations to the desired property.



Spanish Fork City/Woodbury Corp./Lowes Development

Woodbury Corp. requested the Corrective Action Section's involvement in their development project in Spanish Fork, Utah. Woodbury was interested in purchasing land that included a closed solid waste landfill formerly operated by Spanish Fork City. The section worked with the city and their environmental consultant to develop a plan to relocate the solid waste material. Once the plan was approved, the environmental consultant proceeded to implement the removal effort. On completion, Site Management Plans and Environmental Covenants were developed for different parcels of the land to address groundwater contamination on the property. The property was ultimately purchased by Lowes and included some mixed commercial businesses as well.

Ty Howard, Division Director

Rusty Lundberg, Division Deputy Director



PROGRAM MANAGERS:

Deb Ng, Hazardous Waste & Used Oil
Phil Goble, Radioactive Materials & Uranium Mill
Brad Maulding, Corrective Action
Don Verbica, Low Level Radioactive Waste
Allan Moore, Solid Waste
Tom Ball, X-RAY