

## Spring 2016

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# 2015 Tank Autopsy Report

Montana experienced 37 confirmed petroleum storage tank releases last year, representing the highest number of annual releases since 2008.

## Senate Bill 96

In 1997, the Montana Legislature created the Controlled Allocation of Liability Act (CALA), which included the orphan share account. The purpose of CALA was to help fund cleanup of state superfund facilities where a responsible party was bankrupt or defunct. Use of the orphan share account was limited to reimbursing responsible parties who completed the allocation process. However, during the 2016 Legislature, SB 96 was passed, which allows DEQ to use a portion of the orphan share account to investigate, remediate, and collect confirmation samples in order to evaluate impacted properties for closure or delisting.

## New Tank Program Employees

The Underground Storage Tank program has a new section supervisor, while the Petroleum Tank Cleanup section has three new project officers.

## **Enforcement Blotter**

Find out who the DEQ Enforcement Division has been working with to rectify violations and the penalties that have been assessed.

# **DEQ Reorganization**

The Montana Department of Environmental Quality has recently made some internal changes to our organization structure. Our focus with these organization changes is on making sure we optimize the tools, systems and structure in place for us to continue our work to protect, sustain, and improve a clean and healthful environment.

## Save the Date! Consultants Meeting

Tuesday, April 19, 1-5 p.m.

## Fund and Release Status Report

## Petro Board Meeting Schedule and Minutes

# Don't forget <u>DEQ's Data Search Tools</u> are a great resource for UST information and data!

### For More Information

- Mike Trombetta (Bureau Chief): 444-6463
  - Contaminated Site Cleanup Bureau
- Rebecca Ridenour (Section Supervisor): 444-6436
  - Petroleum Tank Cleanup Section
- Jeff Kuhn (Section Supervisor): 444-6567
  - Federal Facilities and Brownfields
- <u>Leanne Hackney</u> (Program Manager): 444-0485
  - Underground Storage Tanks Program
- Terry Wadsworth (Executive Director): 444-9712
  - Petroleum Tank Release Cleanup
- Jeni Flatow (Public Information Officer): 444-6469
  - Waste Management and Remediation Division

#### **Underground Storage Tank Section**

1520 East Sixth Avenue | Helena, MT 59602-0901

Phone: 406-444-5530 | Fax: 406-444-1374

E-Mail: dequstprogram@mt.gov | UST Web: http://deq.mt.gov/Land/ust

Petroleum Tank Cleanup Section | Federal Facilities and Brownfields Section

1225 Cedar Street | P.O. Box 200901 | Helena, MT 59601

Phone: 406-444-6444 | Fax: 406-444-6783 Remediation Web: <a href="http://deq.mt.gov/Land/rem">http://deq.mt.gov/Land/rem</a> **Petroleum Tank Release Compensation Board** 

1225 Cedar Street | P.O. Box 200901 | Helena, MT 59601

Phone: 406-444-9710 | Fax: 406-444-9711

PTRCB Web: <a href="http://deq.mt.gov/DEQAdmin/PET">http://deq.mt.gov/DEQAdmin/PET</a>

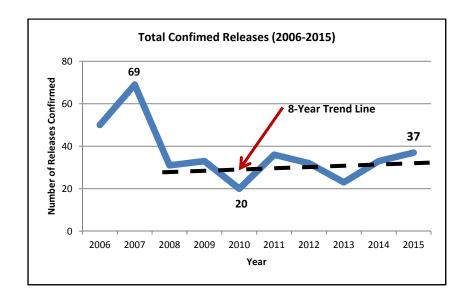


#### 2015 Tank Autopsies

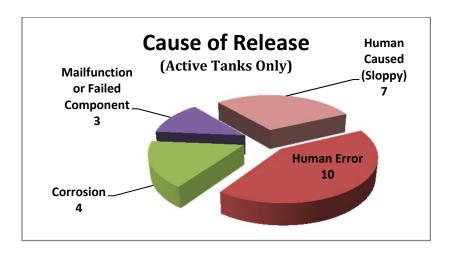
By Mike Trombetta

- Steel Rusts
- Humans Make Mistakes
- Know Your Leak Detection Limits

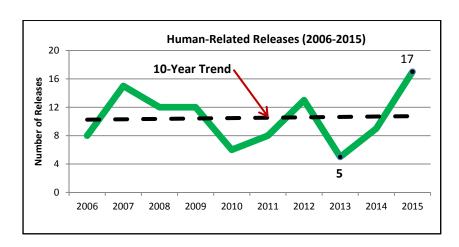
Montana experienced 37 confirmed petroleum storage tank releases last year, representing the highest number of annual releases since 2008. We hope this increase represents only a short-term spike rather than a long-term pattern. As the graph below depicts, the eight-year trend is still running between 20 and 40 new releases each year. Prior to 2007, it was typical to confirm over 50 releases per year. We don't expect to return to the flurry of releases discovered in the 1990s. Over 200 releases were reported every year during that decade, with a maximum 513 new releases reported in 1993. New equipment standards, leak detection requirements, and operator training have contributed to the current, more predictable era of underground storage tank releases. Educated professionals operating high-quality equipment help reduce past mistakes.



However, last year's numbers display a couple developing trends that are worth further evaluation. It is important to note that 24 of the 37 releases confirmed last year came from operating tanks, while 13 were historical in nature. This article will focus on further analysis of the 24 releases that came from currently operating tanks, so that we can consider areas for improvement.



First, we should look at the three main categories that resulted in releases last year. Looking at the chart above, we can see that petroleum releases due to human error are more than double that of equipment problems at a ratio of 17 to 7. Seven of these human-related releases are attributed to "sloppy" operations or procedures. These releases were not attributed to any single event, but rather to a build-up of soil contamination from spills around dispenser islands or tank fill pipes. While none of these releases probably resulted from a single large spill, it is important to note that every spill, no matter how small, are required by law to be cleaned up within 24 hours or reported to the Department of Environmental Quality (DEQ). For further information on reporting releases, you can refer to the administrative rules addressing release reporting at: <a href="http://deq.mt.gov/Portals/112/DEQAdmin/DIR/Documents/legal/Chapters/Ch56-05.pdf">http://deq.mt.gov/Portals/112/DEQAdmin/DIR/Documents/legal/Chapters/Ch56-05.pdf</a>.



The other ten human-related releases are attributed to one-time events where someone did something wrong. Below is a breakdown of those human errors:

#### Customer Mistakes (4 total)

- 3 Driving off with nozzle still in vehicle tank
- 1 Disabled automatic shut-off, then leaving dispenser running

#### <u>Tanker Drivers Filling Above-Ground Storage Tanks (ASTs)</u> (6 total)

- 3 Wrong valve open
- 2 Filled the wrong tank
- 1 Not paying attention

As this list illustrates, nine of these releases were due to carelessness and one was due to intentional misuse of equipment.

Customers driving off with nozzles still in their vehicle seems to be common. While only three of these releases, ranging in size from 25 to 150 gallons, were reported to DEQ last year, many others occur that do not exceed the reporting limits (over 25 gallons, or cannot be cleaned up in 24 hours). When I was filling my own vehicle the other day, I noticed the facility operator replacing a nozzle at the break-away valve due to a drive-off the day before. He told me that he sees between six and eight drive-offs every year! He added that so far, the break-away valves had worked in every case, and hardly any fuel was spilled. I was glad to hear the valves did their job but surprised to hear how many absent-minded drivers are out there!

The six AST overfills/spills are a little more disturbing, primarily because our professional drivers caused them. These releases range in size from 120 gallons to 5,000 gallons. The largest release is the most troublesome, because the driver never noticed the release; it was discovered five days later within the AST containment berm and the storm water system. It was reported that it happened in the early afternoon, but the delivery driver apparently never noticed diesel fuel (5,000 gallons total), gushing out of the top of the wrong tank. Filling the wrong tank is a mistake, but never noticing or reporting it is unacceptable.

In addition to human-related releases, we saw seven releases resulting from malfunction, failure, or corrosion of equipment. Below is a quick rundown of those releases:

#### Malfunctioned or Failed Equipment (3 total)

- 1 Legs of heating oil AST failed and the tank fell over
- 1 Dispenser nozzle didn't shut-off

1 - Leak detector developed small hole

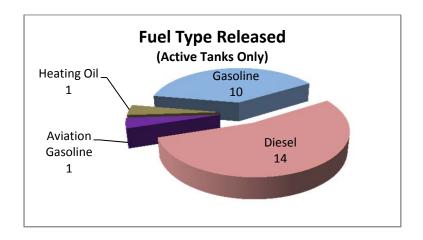
#### Corrosion (4 total)

- 3 Underground steel pipes with impressed current corrosion protection
- 1 Steel pipe between submersible pump and leak detector in STP sump

The important point here is that steel components corrode, whether they are protected by impressed current or whether they are not in contact with soil or not. If you have an old steel system in the ground, please keep a close watch on your leak detection system. It may also be a wise business decision to replace it.

It is important to note that while leak detection equipment identified two of the corroded pipe releases, three other piping releases were not identified through leak detection equipment. One release was discovered when fuel bubbled up through the asphalt. The release rate was apparently below the three gallons-per-hour threshold for the mechanical line leak detector; if it had not been noticed, it may have continued for the better part of a month until the statistical inventory method would have detected it. For SIRs methods that are not "real-time", it can take a minimum of 23 days' worth of data to detect a leak of this size. Two releases were discovered only through an inspection or unrelated maintenance. One occurred when a hole developed in the leak detector itself. In this case, the fuel flowed through an electrical conduit and was discovered dripping from a junction box into an unsealed sump. The other release also occurred in the sump and not identified by the leak detector. The bottom line is that even with line leak detection in place, operators should still be on the lookout for releases.

This wouldn't be a complete autopsy list without reporting on what products were lost last year. Below is a chart showing the products spilled in Montana from active tank systems in 2015 (includes two releases that contained two product types).



Please continue your hard work in preventing releases, particularly for older systems, and please stay vigilant detecting releases when they do occur.

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#### Senate Bill 96

In 1997, the Montana Legislature created the Controlled Allocation of Liability Act (CALA), which included the orphan share account. One purpose of CALA was to help fund cleanup of state superfund facilities where a responsible party was bankrupt or defunct. Use of the orphan share account was limited to reimbursing responsible parties who completed the allocation process and then completed all required remedial actions. However, during the 2015 Legislature, SB 96 was passed, which allows DEQ to use a portion of the orphan share account to investigate, remediate, and collect confirmation samples in order to evaluate impacted properties for closure or delisting. The CALA funding from the orphan share account will be used by the following DEQ programs: Abandoned Mines, Brownfields, Petroleum Tank Cleanup, and State Superfund. SB 96 does not replace the current allocation process under CALA or change other cleanup work already occurring. Rather, it complements the options available to complete investigation, cleanup, and confirmation sampling at sites and ensuring protection of human health and the environment.



Underground storage tank removal in Deer Lodge (September 2015)

Since July 2015, under SB 96, DEQ has initiated contracts or begun work at 33 project sites. Work has been completed and confirmation samples have allowed one

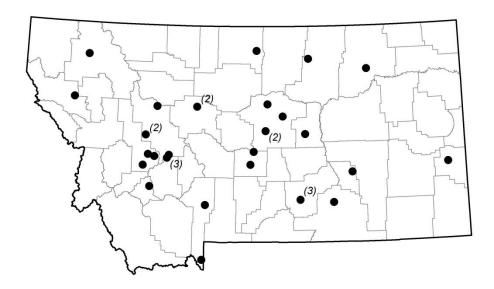
petroleum release to be resolved to date. Several additional releases are expected to be resolved when the data is received that demonstrates contamination is below screening levels. Here is a summary of money allocated as of the March 9, 2016, Environmental Quality Committee meeting update:

• Approved scopes of work: \$4,237,881

Hazardous Substance: \$3,414,698 (9 sites)Petroleum Tank Release: \$538,110 (23 sites)

o Mine Waste: \$285,073 (1 site)

Contracts in place: \$3,444,100Expended funds: \$1,214,831



Location of SB 96 projects (February 2016)



#### **New Employees**

The Underground Storage Tank Program has a new section supervisor.

Leanne Hackney was hired last December to replace Redge Meierhenry who retired from the program. Leanne comes to us with over 17 years' experience in the environmental science field, holding a Master's in Chemistry from the University of Colorado. Many of you may already recognize Leanne, as she has been working as an environmental science specialist for the UST Program since 2012, issuing permits, reviewing compliance inspections and helping owners and operators achieve overall compliance. Leanne says, "I am very excited and honored to be selected as the steward for the Underground Storage Tank Program. During the last three years, I have thoroughly enjoyed working with the stellar group of people in the program, as well as the owners and operators that comprise the regulated UST community. I look forward to continuing the legacy that was left to me, as well as bringing the program to new heights."



Leanne Hackney

The Petroleum Tank Cleanup Section has three new project managers.

Latysha Pankratz joined the team in July 2015. She was born and raised in Butte, Montana. She traveled to the University of Minnesota Morris where she received a Bachelor's degree in Geology. Before joining the DEQ, she spent five years in law

enforcement. Latysha is passionate about the environment and enjoys working and playing in it. She enjoys all things outdoors and spends most of her free time skiing, hiking, rock climbing, biking, camping, and fishing with her husband and children who also share her love and passion for nature. Latysha will be working in the Bozeman field office.



Latysha Pankratz

Heidi Barnes joined the section in 2016. She was born and raised in East Helena, Montana and is a recent graduate of Carroll College with a Bachelor's degree in Environmental Science and Engineering. Heidi is an avid outdoorswoman and enjoys hunting and fishing with her husband. She will be working in the Helena office.



Heidi Barnes

Dean Kinney joined the section in 2016. He grew up in the Seattle, Washington area and graduated from the University of Washington. Prior to joining DEQ, Dean worked in the environmental field. After being hired by DEQ, he moved from Renton, Washington to the Kalispell area. Dean enjoys all kinds of outdoor activities. He will be working in the Kalispell field office.



Dean Kinney



#### **Enforcement Blotter**

By Shasta Steinweiden

Jagadish, LLC entered into an AOC to resolve violations at Dollie's Convenience Store in Hardin. The violations were for:

- failure to obtain a compliance inspection 90 days prior to the expiration of the operating permit;
- failure to conduct leak detection monitoring;
- failure to have trained operators;
- failure to have a record of financial responsibility, and;
- failure to correct the violations within the allotted timeframe.

The AOC requires payment of a \$1,050 penalty, submittal of leak detection records, obtaining trained operators, submittal of a record of financial responsibility, and submittal of a reinspection of the facility.



#### **DEQ Reorganization**

The Montana Department of Environmental Quality has recently made some internal changes to our organization structure. Our focus with these organization changes is on making sure we optimize the tools, systems and structure in place for us to continue our work to protect, sustain, and improve a clean and healthful environment.

Our new organization structure is focused on integration of related work units, enhanced communication, resource capacity and flexibility, fostering employee and program innovation, and fully using staff expertise across the agency.

Our new organization structure has been implemented and consisted of moving the Waste and Underground Tank Management Bureau to the Remediation Division to better link similar functions, stakeholders and skill sets. This means that all of the tank programs are now in one division. This division is called the Waste Management and Remediation Division, headed by Jenny Chambers.

Public Water Supply will become part of the Planning Division, bringing together all the water-focused bureaus in one division. This Division is now the Water Division with Christian Schmidt as the Division Administrator.

The Energy Bureau will move to the former Permitting and Compliance Division, joining the Air Quality Bureau, the Environmental Management Bureau, and the Industrial & Energy Minerals Bureau. This new division will be the Air, Energy and mining Division and we are recruiting to fill the Division Administrator position.

A new Centralized Services Division will include the Offices of Information Technology, Human Resources, and Financial Services, and the existing functions of Emergency Response, Continuity of Operations, and Safety. This gives us an opportunity to link support services common across the department with a focus on effectiveness and best use of our resources, and ideally serving as a vehicle for innovation.

Improved interaction with our stakeholders and external publics remains a key objective for DEQ. We are creating a culture of continuous improvement and always looking at opportunities to do our work better.

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#### Save the Date - Consultants Meeting

Tuesday, April 19, 1-5 p.m.

Metcalf room 111 1500 6<sup>th</sup> Avenue Helena, Montana

#### Topics:

- New DEQ database (TREADS)
- PTS-specific topics
  - o Using LIF Guidance
  - o MNA: GW monitoring and cleanup goals
  - o CAP/Report requirements
- PTRCB Issues

Web conferencing will be available at DEQ's field offices in Kalispell (655 Timberwolf Parkway, room 126 – contact Reed Miner at 406-755-8982), Billings (Airport Business Park IP-9M,1371 Rimtop Drive – contact Jay Shearer at 406-247-4451).

If you can't attend in person at one of our three locations, teleconferencing and web conferencing though GoToMeeting will be offered. If you would like to receive a GoToMeeting log-in and conference call phone information, please contact Amber Skillman at 406-444-6443 or by email at <a href="mailto:askillman@mt.gov">askillman@mt.gov</a>.

Please direct other questions to Mike Trombetta at 406-444-6463 or <a href="mailto:mtrombetta@mt.gov">mtrombetta@mt.gov</a>.



#### **Fund and Release Status Report**

Petroleum Fund Financial Status – Through March 31, 2015, Fiscal Year 2016 (July 1, 2015 – March 31, 2016)

Total Revenue: \$4,864,772

Current and prior year claims expenditures: \$2,303,945

Outstanding work waiting to be obligated: \$2,187,999

Petroleum Releases – Through March 31, 2016, Fiscal Year 2016 (July 1, 2015 – March 31, 2016)

New Releases: 19

Releases Resolved (Closed): 52

#### **Summary of Total Petroleum Release Activity**

Total Confirmed Releases: 4644 Total Active Releases: 1208

Total Releases Resolved (Closed): 3436

\*Please note that these numbers include sites with the status "Transferred to Another Program or Agency." The other agency or program could be the EPA or another state-lead program (e.g. the DEQ State Superfund Program).