Senate Bill 96 (2015) Status of \$7,000,000 Appropriation from the Orphan Share Account

Environmental Quality Council – Draft Final Report July 1, 2015 to June 1, 2017



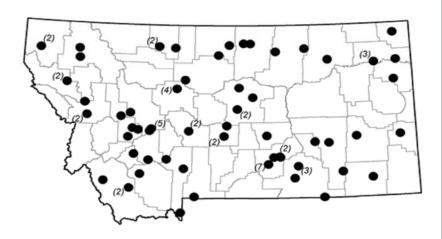


Removing buried rail cars used as petroleum storage tanks at defunct Chicago-Milwaukee Railroad rail vard near a slough of the Musselshell River in Harlowton. *November 2016*

QUICK FACTS

95 TOTAL PROJECTS

- 82 Leaking Petroleum Storage Tank Sites
- 12 Hazardous Substance & Water Quality Act sites
 - 1 Abandoned Mine



ACTIVITIES TO DATE

Sites closed or expected to close by end of FY17	56
Expected to close by FY19	
Cubic yards of contaminated soil removed and properly disposed or treated	
Savings to the Petroleum Tank Release Cleanup Fund	\$ 384,940
Over \$9.9 million funds leveraged from other sources:	
Federal Sources	\$6,075,228
State Sources (not including PTRCF)	\$3,846,597

INNOVATIONS

Implementation of Montana Petroleum Brownfields Revitalization Act (SB355, 2015)

Resource Effectiveness
Contractors completing closure packets
Contractors assisting with oversight

Continued refinement of DEQ's process to evaluate an owner's ability to pay for cleanup





Installing soil boring at a former service station, Billings (January 2016)

Petroleum product floating on high groundwater adjacent to wetlands and the Musselshell River; Harlowton (prior to cleanup)

Senate Bill 96 (2015) – Status of \$7,000,000 Appropriation from the Orphan Share Account – Interim Report – July 1, 2015 - June 1, 2017

Background

Senate Bill Number 96 (SB96, 2015), introduced by Senator Keane and supported by Senator Brenden, allows the Department of Environmental Quality (DEQ) to use Orphan Share Account funds to take remedial actions and address risks to human health or the environment. The funds can clean up hazardous substance and petroleum release sites where no readily apparent liable person exists and collect data with the goal of closing those sites. SB96 was effective July 1, 2015, and a one-time-only appropriation of \$7 million was identified for its purposes in the 2016-2017 Biennium.



Removing mine tailings from abandoned mine in the headwaters of the Little Blackfoot River near Elliston (August 2016)



Removing hazardous waste at former wood treating facility, Lewistown (February 2016)

Progress since July 2015

DEQ identified and evaluated 95 projects in 28 cities and 33 small towns across Montana that met the intent of SB96, and could be addressed with available funding. DEQ used this project to address 81 sites with on-the-ground work, and evaluated an additional 14 for site closure with verification of previous site work. Work has been completed and all invoices paid at 79 sites and the remaining 16 projects will be complete and invoices paid by the end of FY2017. Because some of the projects are not yet complete, figures for some projects in the site table at the end of this report are estimated.

Regulatory Realm	Number of Sites/Projects	Orphan Share Funds	Other Funds Leveraged
Leaking Petroleum Storage Tanks	82	\$1,479,005	\$ 794,512
Hazardous Substance & Water Quality Act	12	\$5,147,123	\$8,884,402
Mine Waste	1	\$ 403,872	\$ 212,911

This table depicts three broad categories of SB96 projects addressed this biennium.



Characterizing abandoned drums of unknown waste, Black Eagle (April 2016)



Locating potential buried pesticides near Missouri River, near Roy (March 2016)

Contamination Removed

As of the date of this report, approximately 54,294 cubic yards (yd³) of contaminated soil has been removed from project sites and properly disposed of or treated. This figure includes 45,093 yd³ of petroleum contaminated soil, 44 yd³ of hazardous waste and 9,157 yd³ of mine waste. All work is scheduled to be completed and invoices paid prior to the end of FY2017.

Sites Resolved, Closed, or Delisted

While some of the SB96 projects reduce human health risks by conducting interim actions at larger projects where work is needed to "close" the site, the majority of the sites addressed with this funding were entirely cleaned up. This means DEQ would either issue a "no further action" letter or formally remove the facility from DEQ's priority list, depending upon which statutory authority the site is regulated under. The statutory and administrative rule definitions DEQ follows are listed below:

<u>Delist ("Closed")</u> – For facilities regulated under the Comprehensive Environmental Cleanup and Responsibility Act (CECRA or "State Superfund"); "delist" means the criteria identified in ARM 17.55.114 are met and the conditions at the facility are protective of human health and the environment.

Resolve ("Closed") – For petroleum tank release sites regulated under the Montana Underground Storage Tank Act (75-11-521(3)(c), MCA); a site is categorized as "resolved" when DEQ determines that all cleanup requirements are met and conditions at the site ensure present and long-term protection of human health and the environment.

The following list depicts the current site closure status:

- 56 Sites closed or projected to close by June 30, 2017
- 11 Additional sites projected to be closed by June 30, 2019
- 28 Sites require additional cleanup or time to achieve protective levels





Daycare playground in Deer Lodge formerly contaminated with heavy metals. This cleanup created a clean play area for 13 enrolled children and 20 to 25 children in an after school program.

Additional Resolved Releases

While DEQ staff worked to identify release sites which could benefit from the SB96 project, 14 sites were found that could be closed with minimal work and did not need contracted services funding to reach completion. In many cases, the work needed was minor and could be accomplished by DEQ staff themselves.

Montana Petroleum Brownfields Revitalization Act – A "Win-Win"

In addition to the Legislature passing SB96 and appropriating \$7 million, Senator Ankney sponsored the Montana Petroleum Brownfields Revitalization Act (SB355) in 2015.

- Providing clear direction for the use of federal petroleum Brownfields funding in Montana, this act also significantly enhances the ability for SB96 funds to meet the PTRCF's co-payment requirements at eligible release sites.
- Prior to passage of this act, tank owners and the PTRCF split the first \$35,000 in cleanup costs; \$17,500 each. Now grants and other funds go directly toward this "co-payment" cost, with no expenditures from the PTRCF if the costs for remediation remain below \$17,500.
- Saves the PTRCF half of the eligible costs for cleanups costing less than \$35,000 and does not increase the PTRCF's liability for cleanups costing greater than \$35,000.
- This is a "win-win" for the PTRCF and the owner and facilitates cleanup at sites stalled for lack of owner funding.



Excavating petroleum contaminated soil, Hardin (April 2016)



Testing soil for petroleum near residence, Lewistown (May 2016)

Cost Effective Use of Technology Helena, Drycleaning Solvent Release

DEQ used a membrane interface probe (MIP) to map out solvent concentrations in real time to design an engineered soil vapor extraction, in-situ remediation system.





DEQ then used a mix of trenching, horizontal drilling, and simple handaugering to construct the remediation system targeting solvents beneath and around a building.



Savings to the Petroleum Tank Release Cleanup Funds

As described above, the Montana Petroleum Brownfields Revitalization Act allowed Orphan Share Account funds expended under SB96 to count toward the PTRCF co-payment requirement without an equivalent amount being reimbursed from the PTRCF to the owners of a petroleum release. Approximately 27 petroleum release sites were resolved at costs below the co-payment, which means the PTRCF did not have to reimburse any costs to achieve site closure. In calculating the total PTRCF savings, this report considered all petroleum releases that appear to be potentially eligible for PTRCF funding. Based upon this assumption, SB96 cleanup work saved the PTRCF approximately \$384,940.

PTRCB and Enforcement 'Catch-22'

Prior to streamlining DEQ's ability-to-pay process, DEQ relied on compliance assistance and formal enforcement to compel owners, regardless of their financial status, to complete the work. This proved counterproductive for releases that were eligible for PTRCF reimbursement. The Montana Petroleum Storage Tank Cleanup Act (75-11-301 et. Seq., MCA) requires owners to stay in compliance with DEQ's cleanup laws in order to receive reimbursement. When DEQ enforced against an owner for not cleaning up a release, the PTRCF reduced the owner's reimbursement, in many instances by the full amount. This permanent reduction in reimbursement stays with the release, even if the property is purchased by another party, or involuntarily transferred to a local government, which had nothing to do with the release or the failure to clean it up.



Installing borings at former service station, Plevna (February 2016)



Drilling soil to verify cleanup of gasoline and diesel at rural farm near Decker (August 2016)

With the streamlined ability-to-pay process, DEQ can more easily defer enforcement for owners who do not have an ability to fund the cleanup. This also facilitates DEQ's ability to find alternate funding sources such as the Reclamation Development Grants (RDG), Brownfields funding, Leaking Underground Storage Tank Trust Fund, or appropriations from the Orphan Share Account to assist with achieving PTRCF co-payment requirements.



Excavating a leaking underground storage tank (LUST) and associated petroleum contaminated soil at former Chicago-Milwakee Rail Yard, Harlowton (November 2016)

Leveraging of Other Funds

Over \$9.9 million dollars from other federal and state sources have assisted cleanup activities at 18 of the SB96 project sites. Many of these sites have long histories of a slow or stalled cleanup due to the absence of viable parties to address the contamination. DEQ worked diligently over the years, and sometimes decades, to identify appropriate funding sources for these types of sites. Following is a list of federal and state funding sources that contributed to the

investigation and/or cleanup actions at the SB96 sites listed in this report. It is important to note that some of the funded work goes back many years prior to SB96 funding being made available, and many projects will need additional work following this project. DEQ will continue to seek out funding opportunities to fully clean up these sites when possible.

Federal = \$6,075,228

\$4,000,000	EPA Emergency Removal
\$ 852,764	EPA Brownfields
\$ 497,482	EPA Leaking Underground Storage Tank (LUST) Trust Grant
\$ 303,157	EPA Performance Partnership Grant (Groundwater)
\$ 278,914	EPA Preliminary Site Assessment
\$ 32,000	EPA Clean Water Act (non-point source)
\$ 110,911	Office of Surface Mining – Abandoned Mine Lands
\$ 497,482 \$ 303,157 \$ 278,914 \$ 32,000	EPA Leaking Underground Storage Tank (LUST) Trust Grant EPA Performance Partnership Grant (Groundwater) EPA Preliminary Site Assessment EPA Clean Water Act (non-point source)

State = \$3,846,597

Ş 1	1,333,891	Environmental Quality Protection Fund
\$	200,000	Environmental Rehabilitation and Response Account
\$	215,030	LUST Trust Cost Recovery Fund
\$1	,967,676	DNRC Reclamation Development Grants/Planning Grants
\$	100,000	Governor's Emergency Contingency Account
\$	30,000	FWP Restoration Grant

The above list does not include funds from the Petroleum Tank Release Cleanup Fund, which could be significant for many of the petroleum tank releases that need cleanup beyond the co-payment requirements. This list also does not include funding provided by





Residential yard contaminated with heavy metals – before and after cleanup, Deer Lodge.

the parties responsible for the release or in-kind services they provided. In-kind services often provide key elements to cleanup logistics such as:

- excavation/trucking equipment
- dust control
- utility locate services
- secure locations to stockpile excavated waste
- clean soil for backfilling excavations
- building demolition

In one case Trout Unlimited, an interested non-government organization, provided grant management, permit writing, project design, and field oversight services at the Lilly-Orphan Boy mine reclamation site.

Reclamation Development Grants and planning grants, managed by the Department of Natural Resources and Conservation (DNRC) have also played a significant role in the cleanup of many of these projects by providing over \$1.2 million so far. In addition, the 65th (2017) Montana Legislature approved an additional \$775,000 for the cities of Harlowton and Lewistown for further cleanup at two of the SB96 project sites, for a total of over \$1.9 million leveraged toward these cleanup projects.



Excavating petroleum contamination at former Milwaukee Roundhouse facility in Deer Lodge (September 2015)

Costs Utilized by DEQ Programs

Because the funds appropriated for this project were identified for on-site cleanup work, DEQ utilized current appropriated budgets to cover personnel time and other administrative costs. This work was generally a good fit for the five cleanup programs involved (Petroleum Tank Cleanup, State Superfund, Brownfields, Groundwater Remediation, and Abandoned Mines). The SB96 approach to cleanup, where DEQ actually conducted the work differs from the typical approach used by many regulatory programs that typically only oversee work being completed by responsible parties. This work effort required many DEQ project

managers and regulatory programs to learn contracting skills and develop new business practices that required an increased project management effort. The total amount of programmatic funds dedicated to this project to date is \$287,306, which came from the following sources:

Federal Grant Funds = \$121,736

\$90,490 EPA Brownfields

\$ 26,310 EPA Performance Partnership Grant (Groundwater)

\$ 4,936 Abandoned Mine Lands Grant

State Special Funds = \$165,568

\$97,010 Petroleum Tank Release Cleanup Fund \$68,558 Environmental Quality Protection Fund

Excavating petroleum contamination at former Milwaukee-Chicago Rail Yard, Harlowton (November 2016). Excavation will be converted to a pond to enhance wildlife habitat and provide recreation opportunities following cleanup. As an added benefit, the expense and effort of backfilling with clean soil was not necessary.



Process Improvements

Remote DEQ Oversight — Because the process of DEQ completing the cleanup work was estimated to take additional staff time, some programs modified their process to change the way they provide some contractor oversight. This entailed using innovative methods to oversee and direct projects from Helena coupled with more detailed contract requirements. The process successfully streamlined the field work and saved DEQ program costs at the projects where it was utilized.

<u>Selection of Contractors</u> – Most of the technical engineering and scientific work for these sites was performed by many different environmental professionals whose services were procured through a DEQ Request For Proposal process. Because several of these firms are similarly qualified, DEQ chose the most cost effective contractor by reviewing their qualifications and requesting cost proposals for the projects. DEQ also grouped multiple projects needing specific types of work or ones that are located in the same general area to limit costs through an economy of scale.

Synchronizing Contract Payments with PTRCF Reimbursements – DEQ employed innovative contracting methods at some sites that are eligible for PTRCF reimbursement. When a large scope of cleanup work significantly exceeded the amount of costs necessary for a site to meet the PTRCF co-payment (>\$10,000 above the co-pay), DEQ employed contracts that allowed the contractor to receive reimbursement payments directly from the PTRCF.



Drilling through basement floor to inject in-situ treatment chemicals near former dry cleaners, Havre (February 2016)



Injecting in-situ
remediation
chemicals to target
petroleum migrating
underneath
Highway 2,
Harlem (May 2017)



Removing halfburied tank at Unionville School (March 2016)

<u>Contractors completing closure packets</u> – The Petroleum Tank Cleanup Section was already reviewing its closure documentation process when the SB96 project started. The section took this opportunity to test a new process where contractors completed site closure documentation following SB96 work at selected sites. This inventive test provided much useful information that, not only saved staff resources during this project, but will also assist the program to further update this process.

These process improvements, new methodologies, and experiences gained will promote program efficiencies beyond the end of this one-time-only funding. This project also demonstrated that DEQ can effectively partner and collaborate with other agencies, non-governmental organizations, local governments, and the regulated public with a common goal to clean up the environment, protect communities, and redevelop Montana properties. It also demonstrated that there is much more cleanup needed across the state where funding is an issue.

Mine cleanup following restoration. Original vegetation was reused as erosion control and habitat improvement within the floodplain.

Creek restored to original alignment.

Wetlands recreated without contaminated sediment. Telegraph Creek, tributary to the Little Blackfoot River.



<u>Conclusion</u> – In response to legislative direction and support, DEQ effectively and efficiently put Montanans to work cleaning up Montana. Several regulatory cleanup programs within the agency developed and refined business processes that will streamline cleanup actions down the road.

DEQ partnered with other state and federal agencies, local governments, non-profit organizations, and several individuals and companies to significantly improve environmental conditions and redevelopment opportunities at 95 sites across the state.

The foresight of the legislature combined with the dedicated hard work of many individuals came together to maintain and improve Montana's clean and healthful environment. This successful alliance has helped ensure that Montana will remain the Last Best Place!



Excavating soil contaminated with hazardous woodtreating chemicals, West Yellowstone (July 2016)

Senate Bill 96 (SB96) Acronym/Terminology List

AST Above-ground Storage Tank

CECRA Comprehensive Environmental Cleanup and Responsibility Act - also known as State

Superfund

Co-Pay PTRCF Co-Payment

DEQ Montana Department of Environmental Quality

DNRC Montana Department of Natural Resources and Conservation

DoD U.S. Department of Defense

EPA U.S. Environmental Protection Agency – manages grant programs that are a potential

source of funding that could be leveraged for SB96 projects

EQPF Environmental Quality Protection Fund

ERRA Environmental Rehabilitation and Response Account

FWP Montana Fish Wildlife and Parks Department

LUST Leaking Underground Storage Tank

LUST Trust Federal funds used to cleanup LUST sites

MUSTA Montana Underground Storage Tank Act

N/A Not Applicable (no funds leveraged)

PPG Performance Partnership Grant (EPA grant)

PTRCB Petroleum Tank Release Compensation Board (also called "Petro Board")

PTRCF Petroleum Tank Release Cleanup Fund (also called "Petro Fund")

RDG Reclamation Development Grant – managed by DNRC

WQA Montana Water Quality Act

Project Name	Location	Project Scope & Status	Cleanup	Assessment	Total	Other Leveraged Funds
Graham Property LUST	Great Falls	Post-Excavation compliance monitoring completed in August 2016. This release was resolved 02/12/16		\$21,008	\$21,008	PTRCF Eligible
Ehlert Brothers Service LUST	Winifred	Excavation completed in April 2016. If excavation successful and groundwater contamination drops below screening levels, release may be resolved in 2017. Future treatment of excavated soil and monitoring will be completed using LUST Trust funds based upon priority.	\$146,292		\$146,292	Ineligible for PTRCF \$50,000 DNRC Planning Grant Potential future LUST Trust
Hot Springs School LUST	Hot Springs	Injection wells installed and in-situ oxidation chemicals injected in October/November 2015. Results appear promising, but due to low-permeability of soils at the site, additional future work is needed. The school district is exploring funding sources to continue work.	\$31,694		\$31,694	Ineligible for PTRCF Additional funding will be needed to complete remediation.
Pine Hills Country Store LUST	Billings	Soil borings to determine if contamination remained in the soil. Samples indicated no contamination remained above screening levels. This release was resolved 02/9/16.		\$8,051	\$8,051	Ineligible for PTRCF
4-U Husky LUST	Plevna	Confirmation sampling completed in February 2016 identified contamination needing cleanup. Additional site work will be completed using PTRCF.		\$20,209	\$20,209	PTRCF Eligible
Cary Residence LUST	Helena	Confirmation sampling completed in February 2016. This release was resolved 06/30/16.		\$9,774	\$9,774	PTRCF Eligible
GS Oil Co. LUST	Winnett	Confirmation sampling completed in March 2016 identified contamination needing cleanup. Additional site work will be completed using PTRCF.		\$11,824	\$11,824	PTRCF Eligible
Songers Exxon Service LUST	Judith Gap	Confirmation sampling completed in March 2016. Results indicate that this release can be resolved. This release was resolved 07/12/16.		\$12,986	\$12,986	PTRCF Eligible
Post Office (private) LUST	Augusta	Confirmation sampling completed in January 2016. This release was resolved 06/8/16.		\$12,052	\$12,052	\$111,507 LUST Trust
Sanders General Store LUST	Sanders	Confirmation sampling of soil and groundwater completed in March 2016 identified contamination needing cleanup. Additional site work including review of appropriate cleanup alternatives and cleanup selection will be required. Funding for additional work will be provided by the responsible party and the PTRCF.		\$11,347	\$11,347	PTRCF Eligible
Stoners Stage Stop LUST	Lincoln	Confirmation sampling completed in January 2016. This release was resolved 08/17/16.		\$9,217	\$9,217	PTRCF Eligible
McMillon Residence LUST	Helena	Confirmation sampling completed in January 2016. Results indicate that this release can be resolved. This release was resolved 06/30/16.		\$8,001	\$8,001	PTRCF Eligible
Chriss Repair LUST	Lincoln	Confirmation sampling completed in January 2016. This release was resolved 08/17/16.		\$7,652	\$7,652	Potentially PTRCF Eligible
Macintyre's, Inc. LUST	Billings	Confirmatory samples collected January 2016. This release was resolved 03/24/17		\$12,707	\$12,707	PTRCF Eligible
Avon General Merchandise LUST	Avon	Confirmatory sampling completed in January 2016. This release was resolved 12/15/16.		\$10,223	\$10,223	\$19,984 LUST Trust
Camp Custer Service LUST	Hardin	Soil successfully excavated in April 2016. Additional site work will be completed using PTRCF. If groundwater contamination continues to show improvement, the release will be resolved in 2017 or 2018.	\$15,843		\$15,843	PTRCF Eligible
Former K & L Grocery LUST	Dodson	Confirmation sampling completed in May 2016 identified contamination needing cleanup. Additional site work will be funded by the responsible party.		\$19,829	\$19,829	Ineligible for PTRCF
estland Service Station LUST	Glasgow	Confirmation sampling completed in May 2016 identified contamination needing cleanup. Additional site work will be funded by the responsible party.		\$20,483	\$20,483	Ineligible for PTRCF
Saco Conoco LUST	Saco	Confirmation sampling completed in May 2016 identified contamination needing cleanup. Additional site work will be completed using PTRCF.		\$9,838	\$9,838	PTRCF Eligible

Project Name	Location	Project Scope & Status	Cleanup	Assessment	Total	Other Leveraged Funds
Osterholm Residence LUST	Lewistown	Confirmation sampling completed in spring 2016. All results were below screening levels. Sale of the property will not be hindered by the potential threat of contamination. This release was resolved 08/2/16.		\$15,042	\$15,042	Potentially PTRCF Eligible
LaSalle Residence LUST	Helena	Confirmation sampling completed in summer 2016 with no screening level exceedances. Sale of the property will not be hindered by the potential threat of contamination. This release was resolved 11/4/16.		\$17,997	\$17,997	PTRCF Eligible
Wolfe Brothers Ranch LUST	Shelby	Confirmatory sampling completed October 2016. This release was resolved 03/13/17.		\$18,220	\$18,220	PTRCF Eligible
Montana Children's Center LUST	Twin Bridges	Confirmatory sampling completed in September 2016. The property is for sale and can now be sold without the stigma of an open petroleum release. This release was resolved 12/2/16.		\$10,532	\$10,532	PTRCF Eligible
Pepco Station LUST	Roundup	Monitoring wells were installed in June 2016 and additional contamination was identified. Future site work will include review of appropriate cleanup alternatives and cleanup selection. Site is ineligible for PTRCF. Additional work will be funded by LUST Trust based upon priority.		\$23,138	\$23,138	Ineligible for PTRCF. \$329,991 LUST Trust
Orelup Residence LUST	Billings	Confirmation sampling completed. This release was resolved 03/15/17.		\$9,700	\$9,700	Ineligible for PTRCF
Bud Hayes Exxon LUST	Great Falls	Confirmation sampling completed in August 2016 identified contamination needing cleanup. The local economic development authority is proposing to use Brownfields to complete additional site work.		\$17,327	\$17,327	Ineligible for PTRCF
Adsit Farm LUST	Decker	Confirmatory sampling completed December 2016. This release was resolved 03/15/17.		\$13,274	\$13,274	Potentially eligible for PTRCF
Hardin Auto LUST	Hardin	Confirmation sampling completed in August 2016 identified contamination needing cleanup. Additional site work will be completed using PTRCF.		\$23,904	\$23,904	PTRCF Eligible
Yellowstone Boys & Girls Ranch LUST	Billings	Confirmatory sampling completed in December 2016. This release was resolved 05/02/17.	\$2,400	\$8,057	\$10,456	PTRCF Eligible
Reinertson's Garage LUST	Hot Springs	Confirmation sampling completed in July 2016 identified contamination needing cleanup. Additional site work will be completed using funding from either the responsible party or PTRCF.		\$20,531	\$20,531	Potentially eligible for PTRCF
LeDuc Motors LUST	Kalispell	Confirmatory sampling completed September 2016. This release was resolved 03/22/17.		\$21,322	\$21,322	Potentially Eligible for PTRCF
Hoyt Residence LUST	Arlee	Confirmatory sampling completed September 2016. This release is projected to be resolved by June 30, 2017.		\$15,420	\$15,420	PTRCF Eligible
Laird Residence LUST	Zurich	Confirmatory sampling completed September 2016. This release was resolved 01/26/17.		\$9,677	\$9,677	Potentially eligible for the PTRCF
Shepherd's Garage LUST	Jackson	Confirmatory sampling completed September 2016. This release resolved 03/06/17.		\$25,799	\$25,799	Ineligible for PTRCF
TJ's Quick Stop LUST	Poplar	Confirmation sampling completed in August 2016 identified contamination needing cleanup. Additional site work will be completed funded by the responsible party.		\$15,614	\$15,614	Ineligible for PTRCF
School District 24 LUST	Worden	Confirmatory sampling completed September 2016. This release resolved 03/23/17.		\$9,650	\$9,650	Potentially eligible for PTRCF
Gardiner House LUST	Gardiner	Confirmation sampling completed Fall 2016. This release resolved 04/04/17.		\$4,980	\$4,980	PTRCF Eligible
Ostrem Farm LUST	Galata	Confirmatory sampling completed September 2016. This release resolved 10/28/16.		\$12,053	\$12,053	Potentially Eligible for PTRCF
Rocky Boy School LUST	Box Elder	Confirmatory sampling completed September 2016. This release resolved 03/10/17.		\$23,034	\$23,034	Potentially eligible for PTRCF

Project Name	Location	Project Scope & Status	Cleanup	Assessment	Total	Other Leveraged Funds
Bryans Auto Repair LUST	Shelby	Confirmatory sampling completed in October 2016. This release resolved 05/31/17.		\$12,159	\$12,159	PTRCF Eligible
Parkway Motel LUST	Billings	Confirmation sampling completed in July 2016 identified contamination needing cleanup. Additional site work will be completed funded by the responsible party or using PTRCF.		\$21,202	\$21,202	Potentially eligible for PTRCF
First Presbyterian Church LUST	Helena	Confirmatory sampling completed October 2016. This release resolved 11/15/16.		\$13,120	\$13,120	PTRCF Eligible
Project Mercantile LUST	Worden	Confirmatory sampling completed and results received 12-1-17. Unexpected gasoline contamination discovered that may not be related to this heating oil release. DEQ is investigating the additional contamination using LUST Trust funds. This facility is projected to be resolved in FY18-19 depending on identification of source of additional contamination.		\$13,689	\$13,689	Potentially eligible for PTRCF \$36,000 LUST Trust investigation to identify off-site source of gasoline
Powell County Shop LUST	Helmville	Confirmatory sampling completed October 2016. This release resolved 02/03/17.		\$6,788	\$6,788	Potentially Eligible for PTRCF
Walker Residence LUST	Lincoln	Confirmatory sampling completed October 2016. This release resolved 12/13/16.		\$7,866	\$7,866	Potentially eligible for PTRCF
Cattaneo Farm LUST	Culbertson	Confirmatory sampling completed in July 2016. Additional site work will be completed funded by the responsible party or using PTRCF.		\$12,339	\$12,339	Potentially eligible for the PTRCF
Bergeson Residence LUST	Dillon	Confirmatory sampling completed October 2016. This release resolved 10/11/16.		\$10,198	\$10,198	Potentially eligible for the PTRCF
M&W Service LUST	Forsyth	Confirmation sampling completed in October 2016. Additional site work will be completed funded by the PTRCF.		\$19,199	\$19,199	PTRCF Eligible
St. Labre Indian School LUST	Ashland	Confirmation sampling completed September 2016. This release resolved 03/22/17.		\$15,001	\$15,001	Potentially eligible for the PTRCF
Hakert Ranch LUST	Shepherd	Confirmatory sampling completed in August 2016. Additional site work will be completed funded by the responsible party or using PTRCF.		\$13,794	\$13,794	PTRCF Eligible
Qualley Farm LUST	Lambert	Confirmatory sampling completed December 2016. This release resolved 01/26/17.		\$11,574	\$11,574	Potentially Eligible for PTRCF
Nordwick Residence LUST	Poplar	Confirmatory sampling completed November 2016. This release resolved 11/15/17.		\$12,559	\$12,559	PTRCF Eligible
Johnson Residence LUST	Poplar	Confirmatory sampling completed November 2016. This release resolved 11/22/16.		\$14,933	\$14,933	Potentially eligible for the PTRCF
Split Diamond Ranch LUST	Whitehall	Confirmatory sampling completed in August 2016. This facility is projected to be resolved in FY18-19 depending on outcome of additional work.		\$14,898	\$14,898	Potentially eligible for the PTRCF
Ballard Residence LUST	Floweree	Confirmatory sampling completed October 2016. This release resolved 11/16/16.		\$15,088	\$15,088	Potentially eligible for the PTRCF
Christofferson Logliners LUST	Missoula	Confirmation sampling completed in Summer 2016. This release was resolved 08/5/16.		\$270	\$270	Potentially eligible for the PTRCF
Wilcox Residence LUST	Helena	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 01/12/16 .			\$0	PTRCF Eligible
Herman Property LUST	Hardin	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 10/13/16 .			\$0	Potentially PTRCF Eligible
Standard Oil LUST	Shelby	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 12/30/15.			\$0	PTRCF Eligible \$32,000 EPA Brownfields
Sparboe Property LUST	Billings	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 04/14/17			\$0	PTRCF Eligible

Project Name	Location	Project Scope & Status	Cleanup	Assessment	Total	Other Leveraged Funds
Unionville School LUST	Unionville	Tank and piping removed March 14, 2016 and soil borings were drilled in late March 2016. Laboratory results confirmed a release had occurred however Tier II screening levels were not exceeded. This release was resolved 09/27/16	\$30,136		\$30,136	Potentially eligible for PTRCF
Office Stop LUST	Butte	Health Clinic and Youth Center owned by North American Indian Alliance. Initial sampling identified petroleum vapors that may be originating from gasoline tanks formerly on site. The results of the indoor air investigation showed potential vapor intrusion results. These investigation costs were applied to the remainder of the PTRCF Co-pay. Continued investigation and cleanup will be funded by PTRCF.		\$23,284	\$23,284	PTRCF Eligible
Kembel Property LUST	Billings	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 11/29/16			\$0	Potentially eligible for the PTRCF
Wooden Residence LUST	Libby	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 05/16/17 .			\$0	Potentially eligible for the PTRCF
Highwood Service Center LUST	Highwood	Field work completed; release still impacting water quality. Site is not PTRCF eligible. Future work will be conducted using LUST Trust funding based upon priority.		\$33,123	\$33,123	Ineligible for PTRCF Potential future LUST Trust
Farm Bureau's Insurance LUST	Polson	Field work completed in March 2017 and data indicate more remedial actions are required. Release has now met its PTRCF copay, so additional work will be funded through PTRCF. This facility is projected to be resolved in FY18-19 depending on identification of source of additional contamination.		\$19,632	\$19,632	PTRCF Eligible
Ellis Cattle Co. LUST	Shepherd	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 03/15/17			\$0	Potentially PTRCF Eligible
Carbon County Shop LUST	Red Lodge	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 03/29/17			\$0	PTRCF Eligible
Dvorak Farm LUST	Worden	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 03/24/17			\$0	Potentially PTRCF Eligible
Shepherd High School LUST	Shephard	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 05/02/2017.			\$0	Potentially PTRCF Eligible
Nick Clauson LUST	Miles City	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 05/18/17			\$0	Potentially PTRCF Eligible
Shooting Star Ranch LUST	Gardiner	SB96 evaluation indicated the release could be resolved without further on-site work. This release was resolved 06/01/17.			\$0	Potentially PTRCF Eligible
Broadus City Shop LUST	Broadus	SB96 evaluation indicated the release could be resolved without further on-site work. This release is expected to close by June 30, 2017.			\$0	PTRCF Eligible
owder River County Shop LUST	Broadus	SB96 evaluation indicated the release could be resolved without further on-site work. This release is expected to close by June 30, 2017.			\$0	PTRCF Eligible
Dedrick Residence LUST	Libby	Vapor samples beneath the foundation and within the residence were sampled in January 2017, and showed that contamination from this release was not entering the home. This release is projected to be resolved by June 30, 2017.		\$874	\$874	Potentially eligible for PTRCF
Phillips Residence LUST	Three Forks	Confirmation sampling completed in Winter 2017. This release was resolved 04/28/17.		\$6,000	\$6,000	PTRCF Eligible
Inman Property LUST	Chinook	Excavation of contaminated soil was complete in March 2017, and discovered four previously unknown buried tanks. Preliminary results indicate soil contamination and tank removal successfully removed most of the source area contamination. Monitoring wells and future work will be completed using LUST Trust, Brownfields funds, or by the owner.	\$72,385		\$72,385	Ineligible for PTRCF \$133,000 LUST Trust Cost Recovery

Project Name	Location	Project Scope & Status	Cleanup	Assessment	Total	Other Leveraged Funds
Former Equity Co-op Petroleum AST	Harlem	High concentrations of petroleum contamination remain beneath US Highway 2 ROW. During fall 2016, a Remedial Alternatives Analysis was completed. In-situ chemical oxidation was identified as the best cleanup alternative. Additional cleanup will be required beyond this effort. Bear Paw Development Corporation is collaborating on this project by providing follow-up groundwater sampling and other work with their Brownfields grants.	\$224,561		\$224,561	Ineligible for PTRCF \$285,000 in RDG Grant funds \$100,000 Governor's Emergency Contingency Fund (1999) \$26,000 in Bear Paw Development Brownfields Assessment Grant (EPA funded) and potential future Brownfields Revolving Loan Fund (EPA Grant)
Miles City Packing LUST	Miles City	Confirmation sampling completed in Winter 2017. This release was resolved 05/17/16		\$20,851	\$20,851	None
Toole County Road Dept. LUST	Shelby	Field work completed in January 2017 indicates soil small soil excavation will potentially be required. Additional work will be funded through PTRCF.		\$6,420	\$6,420	PTRCF Eligible
Bolke Residence LUST WQA Cleanup	Plentywood	Confirmation sampling of groundwater, soil at landfarm, and indoor air was completed. Indoor air sampling in January 2017 revealed petroleum concentrations potentially entering through two sumps in the basement. DEQ sealed these sumps to protect the residents and Mrs. Diane Bolke has said that she especially appreciates the air sampling. If additional indoor air samples confirm vapors are no longer entering the basement, this release is expected to be resolved in FY18.		\$40,977	\$40,977	Ineligible for PTRCF
Meagher County Shop LUST WQA Cleanup	White Sulphur Springs	DEQ excavated almost 3,000 cubic yards of contaminated soil. Meagher County provided inkind contributions including removal of an on-site pole barn and hauling clean fill. Assuming the groundwater samples show groundwater meets DEQ's standards and screening levels, and Meagher County properly disposes of the pole barn debris, DEQ may be able to close the site FY18.	\$269,642		\$269,642	Ineligible for PTRCF Approximately \$15,000 for Meagher County to demo building and clean backfill material \$30,000 DNRC Planning Grant
Helena Solvent Site WQA Cleanup	Helena	Cleanup work in the winter of 2016-2017 included the installation of a soil vapor extraction (SVE) system around and beneath a building where dry-cleaning operations released chlorinated solvent into the soil and groundwater. Initial operation of the system has been very effective and by April 2017, an estimated 100 pounds of solvent vapors had already been removed from the subsurface. Subsequent indoor air sampling showed solvent concentrations at four businesses had significantly dropped below levels necessary to protect the occupants. The cleanup is expected to promote redevelopment of the property which is currently stalled by the contamination. DEQ will continue operation and maintenance of the system using funding from a legal settlement with the owner of the property.	\$396,084		\$396,084	\$12,676 DNRC (RDG) Passed through L&C County \$303,157 EPA (PPG-Groundwater grant)
Carriage Trade Cleaners WQA Cleanup	Great Falls	Groundwater was sampled twice in Spring 2017 to determine if monitored natural attenuation is reducing the solvents to meet water quality standards. Results revealed that the chlorinated solvent concentrations are not declining and the site cannot be closed at this time. The data gathered will help DEQ determine future remedial action requirements at the site.		\$14,886	\$14,886	None
Charles M Russell Refuge CECRA Cleanp	Roy	Geophysical work and test-pit sampling were completed in the fall 2015 and spring of 2016. No evidence of arsenic bait was found. On March 20, 2017, after a public comment period, MDEQ delisted the site from the Comprehensive Environmental Cleanup & Responsibility Act (CECRA) priorities list.		\$35,279	\$35,279	Backhoe and backhoe operator provided for the March 2016 excavation. This in-kind cost is estimated to be approximately \$2,000.
Chandelle Lane Barrel Site CECRA Cleanup	Black Eagle	Drums and broken barrels are still present with contamination in both surface and subsurface soils. Surface and Subsurface soil sampling completed March 2016. Drums appear to have originated from Malmstrom Air Force Base. DEQ and the Air Force will likely initiate cleanup activities in the Fall of 2017. This facility is projected to be delisted in FY18-19 depending on outcome of additional work.		\$20,112	\$20,112	DoD will conduct further work to cleanup site.

Project Name	Location	Project Scope & Status	Cleanup	Assessment	Total	Other Leveraged Funds
Milwaukee Roundhouse CECRA Cleanup	Deer Lodge	Cleanup included large excavations (40,188 tons) of soils heavily saturated with petroleum that were acting as a continuing source for groundwater contamination. Removal of metals contaminated soil was conducted at the Depot Church daycare playground, which has allowed for a clean play area for 13 children enrolled in daycare and 25 children in an after school program. This has also allowed Powell County to utilize other grant funds to move forward with development of a public park, trail system, public pavilion, and boat launch along the Clark Fork River. Eighteen residents were protected by removal of metals-contaminated soil from their yards. Soils known to be of concern for direct contact to humans and a number of subsurface soil source areas have been addressed at this site with this funding. Citizens and local governments have expressed appreciation of DEQ's open communication with local stakeholders. The City of Deer Lodge applied, but was not approved, for an RDG grant from the 2017 Legislature. DEQ is working with the local governments to identify additional funding to address remaining contamination.	\$2,606,541	\$19,082	\$2,625,623	\$4 million – EPA (Emergency Removal) \$400,000 EPA Brownfields (EPA TBA) \$320,864 - DEQ Brownfields \$690,000- DNRC (RDG) - Powell County \$1,333,891- DEQ (EQPF)
Diamond P Ranch CECRA Cleanup	West Yellowstone	Excavation and disposal of pentachlorophenol, petroleum, and dioxins completed. Overall, 44 cubic yards of hazardous waste-contaminated soil and 244 cubic yards of non-hazardous contaminated soil was removed. Ranch owner has expressed appreciation for the work being conducted. Follow-up groundwater monitoring was conducted in April 2017. Additional activities are necessary to determine if delisting can be considered and the property owner is evaluating funding options to conduct additional activities. If future groundwater samples show contaminant concentrations below water quality standards and institutional controls are placed, this facility could be delisted in FY18-19.	\$298,873		\$298,873	None
Roxy's Cleaners CECRA Cleanup	Havre	Soil vapor extraction system was successfully installed and enhanced bioremediation injections were completed. Indoor air samples collected from the overlying building in winter 2016 and winter 2017 have shown a reduction in contaminated vapor concentrations. The SVE system is continuing to remove contamination and is effective at ensuring protection of indoor air. Operation of the SVE system will continue until monitoring demonstrates that it is no longer needed or is not effective. DEQ is exploring funding options for continued cleanup.	\$410,602		\$410,602	\$100,000 - DEQ Environmental Rehabilitation and Response Account
Whitefish Solvent Site CECRA Cleanup	Whitefish	Cleanup activities included installation of a soil vapor extraction system and injection of 20,500 gallons of dilute 3.1% emulsified vegetable oil to enhance bioremediation of chlorinated solvent in the groundwater during the winter of 2016-2017. Initial results indicate cleanup technology is very effective. DEQ is working to identify sources of funding to continue operation and maintenance of the system and to complete future cleanup activities.	\$411,442	\$10,321	\$421,763	\$278,914 - EPA Preliminary Assessment Site Inspection \$100,000 - DEQ Environmental Rehabilitation and Response Account
Harlowton Round House CECRA Cleanup	Harlowton	Results from the free-product bail down test indicated that excavation in the former refueling area was the best remedial option. The laser induced florescence (LIF) investigation (leveraged with other funding) helped design this phase of SB96 work. A total of 10,000 cubic yards of contaminated soils were excavated and landfarmed in the fall of 2016. This is a large complex site with additional excavation and other potential cleanup necessary. The city has been approved to receive a \$300,000 DNRC RDG Cleanup Grant. This work will likely occur in the Spring and Summer of 2018. In addition DEQ will likely assist the city in applying for a \$200,000 Brownfields cleanup grant in the Fall of 2017. If awarded, these funds would become available in the Fall of 2018.	\$362,012		\$362,012	\$50,000 - DNRC Planning Grant \$300,000 - DNRC RDG approved for 2018/2019. Potential \$200,000 EPA Brownfields Cleanup Gant. \$82,030 LUST Trust Cost Recovery

Project Name	Location	Project Scope & Status	Cleanup	Assessment	Total	Other Leveraged Funds
Central Post &Treating Co CECRA Cleanup	Lewistown	Investigated former wood treating facility located on older dump site for pentachlorophenol and other contaminants in 2016. Majority of contamination identified in the upper 4 feet in the former wood treating area. An additional assessment and plan for cleanup was completed on 4/28/17. The City has been approved for a DNRC RDG Cleanup grant for \$475,000 to finalize the Voluntary Cleanup Plan and to conduct cleanup actions. This facility is projected to be delisted in FY18-19 depending on outcome of additional work.		\$291,169	\$291,169	\$35,000 in DNRC Planning Grant Approved \$475,000 DNRC/RDG Grant [2018/2019]
Developmental Technology CECRA Cleanup	Bozeman	Soil Samples and Groundwater monitoring wells completed in December 2015 do not indicate contamination present. DEQ is currently reviewing the Final Results Report. If all results are below screening levels, this facility is projected to be delisted in FY17-18.		\$36,760	\$36,760	\$3,900 - DEQ Brownfields
Lee Gordon House	Missoula	DEQ will remove lead contaminated soils along drip line of building after a non-profit abates and deconstructs building. This is time dependent as the building has to be removed from the property prior to demolition. If the project extends beyond June 30, Brownfields funds will be used to cover any remaining expenses. This site is projected to close in FY17-18.	\$3,702		. ,	\$70,000 Brownfields for the abatement and deconstruction of the building. City of Missoula Brownfields RLF loan, (EPA funded), DEQ Brownfields Cleanup grant, and Community Development Block Grant
Lily/Orphan Boy Abandoned Mine	Elliston	DEQ entered into a partnership with multiple entities to reclaim the abandoned Lilly/Orphan Boy mine. Waste removal began in July 2016 and hauled 9,157 cubic yards from over three acres, to the Luttrell Repository at Basin Creek Mine. Clean top soil was graded, seeded, fertilized at the site and erosion control was installed. Construction activities were completed without any damage to the fragile historic artifacts on site which included several cabins, a load-out and headframe. Following remediation, Trout Unlimited and their contractor restored 330 feet of Telegraph Creek, 0.5 acres of floodplain and wetland. The remainder of TU's restoration funds will complete annual weed spraying and ongoing maintenance. No further removal actions required at this site.	\$403,872			\$110,911 AML - for investigation, final design, and bid package. \$40,000 DNRC/RDG Through Trout Unlimited - for Engineering Evaluation/Cost Analysis and preliminary design. \$32,000 Clean Water Act (319) - for restoration efforts following removal action \$30,000 FWP Future Fisheries for restoration of Telegraph Creek and floodplain.
		Total Projected	\$5,686,079	\$1,313,921	\$7,000,000	