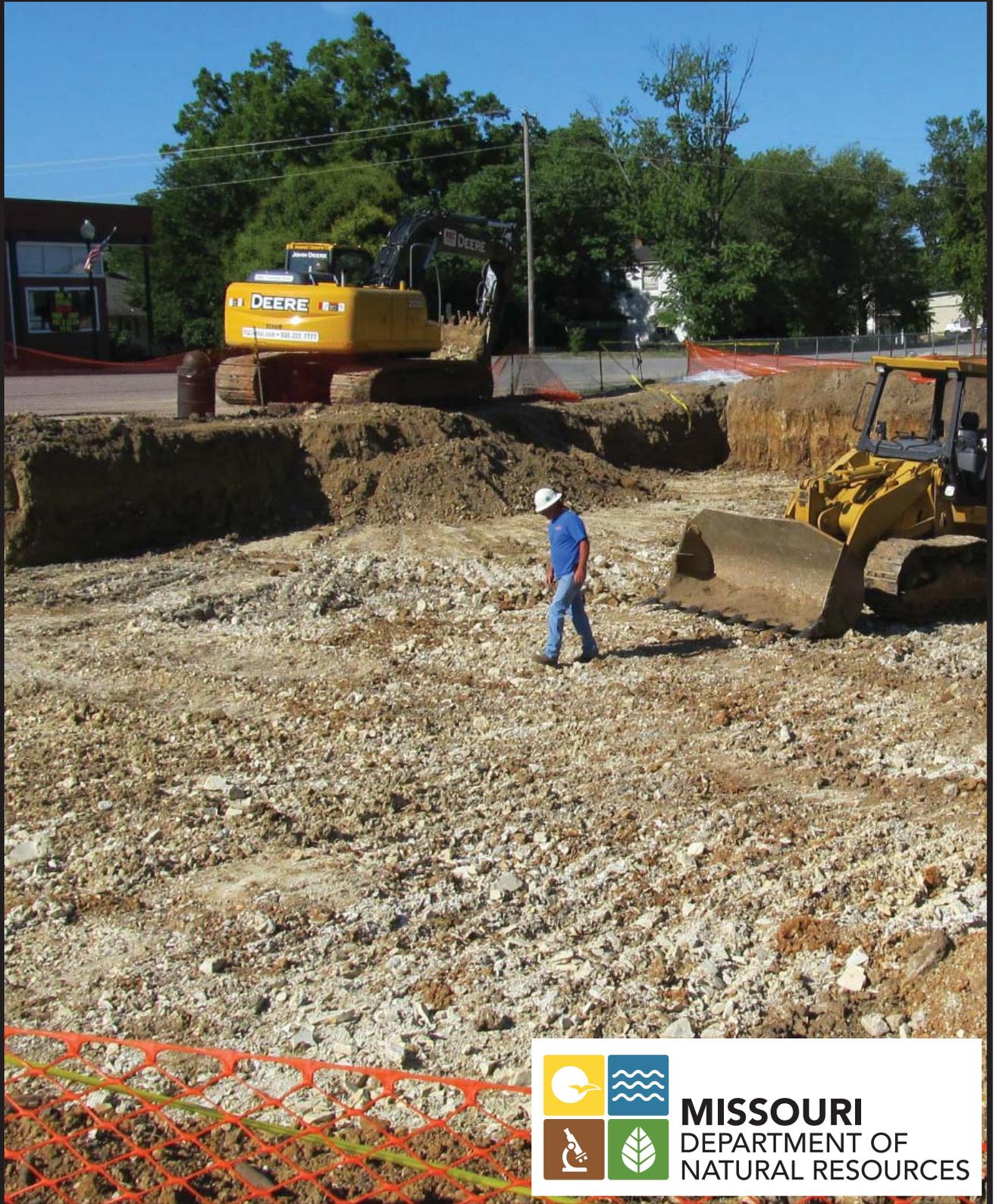


Hazardous Waste Management Commission Report

October to December 2014

Quarterly Report



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Hazardous Waste Management Commissioners

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"The goal of the Hazardous Waste Program is to protect human health and the environment from threats posed by hazardous waste."

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Past issues of the Hazardous Waste Management Commission Report are available online at www.dnr.mo.gov/env/hwp/quarterlyreport.htm.



Missouri Department of Natural Resources
Hazardous Waste Program

Letter from the Director

Dear Commissioners:

This edition of the commission quarterly report covers the time period of Oct. 1 through Dec. 31, 2014. This timeframe normally marks the onset of winter weather and the transition from performing a lot of outdoor work to performing more indoor activities. So while the pace of field work typically slows during this time of year, program staff has still been very busy working on several other important issues during this quarter.

One of the program's big efforts this quarter was the start of fee stakeholder discussions. As you are aware, 2013 and 2014 brought several changes to the Hazardous Waste Management Law with the passage and enactment of HB 28, HB650 and SB642. The changes made to the law provide the department with the authority to conduct a comprehensive review of certain fees and to propose changes to the fee structure through the rulemaking process. The law also requires that this effort include a stakeholder process. The program held the first two of these stakeholder meetings in November and December. These first two meetings were primarily informational in nature to help ensure that stakeholders understood the new process for changing the fees; and had the background information they needed about the program, and our financial situation, to understand the need for a fee increase. We have had good participation from the regulated community and other interested parties in these meetings so far, and the goal is to have a consensus proposal for a fee structure change to present to the commission at your April 2015 meeting.

Also during this quarter the department hosted the Governor's Conference on Natural Resources, which was themed "Exploring Our Legacy, Charting Our Future." The conference was held on Nov. 12-13, 2014, in Springfield, and focused on celebrating the department's 40th anniversary and to looking toward Missouri's natural resource future. A half day commissioners training was also held in conjunction with the conference. There were several dynamic speakers at the conference and the event was very well received by those who attended.

During this timeframe, there were also several significant rulemaking actions taken by the U.S. Environmental Protection Agency (EPA). The EPA released its "Definition on Solid Waste" rule, as well as its long anticipated rule on coal combustion residuals. Staff is currently reviewing these rules to determine their potential impact for the program.

As you can see from the articles included in this report, the program continues to stay very busy performing inspections, ensuring compliance with the regulations and overseeing the cleanup of sites impacted by releases of hazardous substances and petroleum. We hope you enjoy reading about these efforts.

Sincerely,



David J. Lamb
Director

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Brownfields/Voluntary Cleanup Program Certificates of Completions

Brownfields are real property where the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant. Through this program, private parties agree to clean up a contaminated site and are offered some protection from future state and federal enforcement action at the site in the form of a “no further action” letter or “certificate of completion” from the state.

The Brownfields/Voluntary Cleanup Program (BVCP) issued eight certificates of completion for various sites from October through December 2014. This brings the total number of certificates of completions to 749.

Odessa Meat Market (former) – Kansas City

The Odessa Meat Market (former) is located at 3849 Park Ave., Kansas City. The site is a former commercial property which is currently vacant. It was used for grocery stores and residential property from 1917 to 1939. From 1941 to 1965, the site was occupied by the Odessa Meat Market.

Lead and arsenic contaminated soil were removed and monitoring of the groundwater determined that the site is safe for unrestricted use. The site is part of the Ivanhoe Neighborhood Model Blocks Program, in which vacant lots will be improved and marketed to responsible developers.

Northwest Plaza Mall – St. Ann

The Northwest Plaza Mall site is located at North Lindbergh Boulevard and St. Charles Rock Road in St. Ann. This 122-acre site has been residentially and commercially developed since 1912. In 1967 the area was developed into the Northwest Plaza Mall, which was composed of multiple buildings, including a 12-story office building. Recognized environmental concerns at the site include a leaking underground storage tank (UST), several hydraulic lifts, suspect asbestos containing material (ACM), an oil-water separator and stained areas.



Site investigations revealed the presence of ACM throughout the site. Floor tile, thermal system insulation and transite siding accounted for the bulk of ACM. All outlying structures and the a large portion of the mall underwent demolition. ACM was removed from each area in compliance with St. Louis County regulations prior to conducting demolition. Only the office tower and adjacent structures remain. Select ACM will remain in these areas under an operation and maintenance plan specific to each material and location.

An inspection of the building prior to demolition identified 3 transformer pads with polychlorinated biphenyl (PCB) contamination. Two of the pads tested below 50 ppm and were therefore disposed in a Subtitle D landfill as special waste. The third pad exceeded 50 ppm and was disposed at a Toxic Substances Control Act waste disposal facility. The Environmental Protection Agency issued a no further action letter for the PCB remediation in April 2014. The department determined that the site is safe for its intended use.

Cheshire Inn Restaurant (former) – St. Louis

The Cheshire Inn Restaurant (former) site is located at 6300 Clayton Road in St. Louis. This site has been developed since approximately 1926, with the current building constructed in 1933. Past uses of



the property include residences, a gas station, an apartment building, commercial buildings; and, most recently, the bar and restaurant/banquet facility for the Cheshire Inn hotel complex.

Phase I and II Assessments detected heavy metals in soil and groundwater, and ACM and lead-based paint (LBP) were also confirmed inside the building. The metals in soil and groundwater were determined to not be a risk according to the Missouri Risk Based Corrective Action (MRBCA) guidance document. Further, the ACM and LBP

abatement reports indicate that these materials were completely removed. The department determined that the site is safe for its intended use.

The site will continue to be used for restaurant and banquet space.

Horace Mann School – Kansas City

The Horace Mann School site is located at 2008 E. 39th St., in Kansas City. The 2.6-acre site includes a single 70,000-square-foot, four-story building with a basement level.

The four-story building was constructed to operate as the Horace Mann School around 1892. The building was expanded with one addition to the northeast (the gymnasium/auditorium) in 1921, and operated as the Horace Mann School until 1975. After a period of vacancy, the school was occupied by different schools from 1985 through 1998. The building has been vacant since 1998. The Ivanhoe Neighborhood Council purchased the site in April 2008.

ACM and LBP sampled during abatement activities were removed prior to demolition of the building. During demolition of the building an UST was discovered containing heating oil. 1,844 gallons of heating oil were removed from the UST and the waste was properly disposed. The department determined that the site is safe for its intended use.

Alliance Medical Warehouse - Russellville

The Alliance Medical Warehouse site is located at 13206 Railroad Ave. in Russellville. The former use of the facility was a service station. Previous assessments identified that USTs are located on-site and soil and groundwater have been impacted by petroleum from the USTs.

In June 2012, three USTs were removed, cleaned and properly disposed off-site, along with petroleum hydrocarbon contaminated soil. An unregistered water well containing approximately 20 feet of light, non aqueous phase liquid (LNAPL) was also discovered at the site. The LNAPL was removed from the well and the well was properly plugged and permanently closed. Groundwater monitoring and sampling activities were conducted from August 2012 to September 2014, and the subsequent results were below the MRBCA Domestic Use of Groundwater Target Levels. The department determined that the site is safe for its intended use.



The City of Russellville has turned the site into a city park.

FMC Spill Site - Conway

The FMC Spill Site is located at Mile Marker 115 on Interstate 44 in Conway. On Feb. 28, 2009, a transporter truck, pulling a petroleum tank trailer, was involved in a six-vehicle collision in the east bound lane of Interstate 44 at Mile Marker 115 north of Conway, resulting in a spill of approximately 3,000 gallons of gasoline. The accident was documented by the Missouri Department of Natural Resources' Environmental Emergency Response Section.

Under the BVCP's oversight, site investigation activities indicated no water supply wells were affected; water in a nearby stream no longer contained any petroleum residue and the soils and shallow groundwater adjoining the streambanks were not affected by petroleum migration. One streambank sample had detected petroleum, but was well below the MRBCA default target levels (DTLs). The department determined that the site is safe for its intended use.

Cupples Station Building 9 - St. Louis

The Cupples Station Building 9 site is located at 900-920 Spruce St. and 421 S. Ninth St. in St. Louis. This site is part of the historic Cupples Warehouse complex and has been developed since approximately 1875. It consists of an approximately 175,000 square ft, seven-story building with basement, and an adjacent parking lot. The building has been historically used for warehousing. The building previously enrolled in the BVCP for oversight of abatement of ACM and LBP, but re-enrolled in the BVCP to address lingering issues.



In accordance with an approved remedial action plan, the remaining window frames containing LBP were encapsulated in place with new aluminum window frames, and the lead-dust coated floors were cleaned, and then encapsulated with concrete. Post-encapsulation dust wipe samples from each floor ultimately met the clearance criteria. An operations and maintenance plan to prevent exposure to the encapsulated LBP and lead dust was approved by the BVCP and filed in the property's chain of title. The department determined that the site is safe for its intended use.

The site has been developed for mixed commercial use, including office space and a restaurant.

North Sarah - St. Louis

The North Sarah site is located at 1003 Vandeventer Ave. and 1035 N. Sarah St., in St. Louis. The site is composed of two disconnected parcels of property. Past site uses and adjacent property uses have included: a cosmetic warehouse, a photography business, a furniture repair shop, a dry cleaners, a tire shop, a mortuary, various retail businesses and a former laundry company. Adjacent properties also included three USTs and two brownfield sites. Investigations at the site identified polycyclic aromatic hydrocarbons (PAHs), heavy metals and ACM contaminants typically found in urban areas.

Site investigations showed elevated levels of arsenic in groundwater and in soil and fill in one location on the property; elevated levels of lead and PAHs in soil and fill throughout the property; an isolated hot spot of lead in one location and ACM in another location. Approximately 231 tons of lead-contaminated soil in the hot spot was removed and properly disposed of off-site. The area of buried ACM was excavated and properly disposed of off-site and ACM was abated from the former structures before

demolition. All hazardous materials were removed from former structures and properly disposed of. A UST was removed and disposed of off-site and no soil contamination above the MRBCA DTLs was found in the UST excavation. Property-wide surficial soil contamination, consisting primarily of PAHs and lead, was addressed by placing an exposure barrier over the entire property. This barrier consists of either a building slab, parking area, or sidewalk, or placing a brightly colored “witness barrier” over contaminated soil and then placing a minimum of one-foot of clean soil over this barrier. No exceedences of RBTLs for protection of construction workers remain on the property. A soil operation and maintenance plan was created that will govern any future disturbance of soils at the property. The department determined that the site is safe for its intended use.

The site has been redeveloped into a multi-family, mixed-used development with residential, community and commercial space.

Sites in Brownfields/Voluntary Cleanup Program

Month	Active	Completed	Total
October 2014	230	744	974
November 2014	231	744	975
December 2014	226	748	974

New Sites Received: 4

October

Chevrolet Auto Storage, Columbia
 Rinker Materials (former), Riverside

November

Eagle Bluffs TCS Historical Release Site, Columbia

December

Winchell’s Donut House (former), Kansas City

Sites Closed: 8

October

Odessa Meat Market (former), Kansas City
 Cheshire Inn Restaurant (former), St. Louis
 Horace Mann School, Kansas City
 Northwest Plaza Mall, St. Ann

December

Alliance Medical Warehouse, Russellville
 FMC Spill Site - Conway, Conway
 Cupples Station Building 9, St. Louis
 North Sarah, St. Louis

Drycleaning Environmental Response Trust Fund

The Department of Natural Resources' Drycleaning Environmental Response Trust (DERT) Fund provides funding for the investigation, assessment and cleanup of releases of chlorinated solvents from drycleaning facilities. The two main sources of revenue for the fund are the drycleaning facility annual registration surcharge and the quarterly solvent surcharge.

Registrations

The registration surcharges are due by April 1 of each calendar year for solvent used during the previous calendar year. The solvent surcharges are due 30 days after each quarterly reporting period.

Calendar Year 2014	Active Drycleaning Facilities	Facilities Paid	Facilities in Compliance
January - March 2014	146	76	52.05%
April - June 2014	146	125	85.62%
July - September 2014	146	130	89.04%
October - December 2014	146	136	93.15%

Calendar Year 2014	Active Solvent Suppliers	Suppliers Paid	Suppliers in Compliance
January - March 2014	11	11	100.00%
April - June 2014	11	11	100.00%
July - September 2014	11	10	90.91%
October - December 2014			

Cleanup Oversight

Calendar Year 2014	Active Sites	Completed Sites	Total
January - March 2014	21	15	36
April - June 2014	21	15	36
July - September 2014	21	15	36
October - December 2014	21	15	36

New Sites Received: 0

Sites Closed: 0

Reimbursement Claims

The applicant may submit a reimbursement claim after all work approved in the work plan is complete and the DERT Fund project manager has reviewed and approved the final completion report for that work. The DERT Fund applicant is liable for the first \$25,000 of corrective action costs incurred.

Month	Received	Under Review	Paid/Processed
October	0	1	0
November	0	1	0
December	0	0	0

Month	Received	Under Review	Paid/Processed
October	\$0.00	\$12,401.70	\$0.00
November	\$0.00	\$14,184.10	\$0.00
December	\$0.00	\$0.00	\$0.00

Total reimbursements as of Dec. 31, 2014: \$2,665,906.80

DERT Fund Balance as of Dec. 31, 2014: \$386,073.68

2014 - A Year in Review

Each year, the Permits Section coordinates with the U.S. Environmental Protection Agency to prioritize activities at hazardous waste facilities subject to the section's oversight. Together, the section and EPA agree on general activity goals. The Performance Partnership Grant Work Plan, an overarching plan that covers the department's air, water and hazardous waste programs, lists our section's general activity goals. The Permits Section and EPA's hazardous waste staff also agree to specific current and future goals, which are contained in a related document called the Multi-Year Facility Planning Strategy. Together these two documents guide the section in planning resources and performing activities for the current and future federal fiscal years (FFY).

The Multi-Year Facility Planning Strategy includes goals the section and EPA anticipate accomplishing if all the section's staff positions are filled and all projects go relatively smoothly. The Multi-Year Facility Planning Strategy is a "living" document. Projected tasks and project completion dates are routinely updated for a variety of reasons, such as staff turnover and resources, facility bankruptcy, permit appeals, corrective action dispute resolution, investigation findings leading to additional work, public comments and intervening short-term priorities. The section routinely updates EPA about the status of the section's goals based on the most recent information available and coordinates new projected completion dates with EPA for any delayed goals.

At the end of each FFY, the section prepares a report for the EPA, documenting progress on all planned and unplanned activities during that fiscal year. The report focuses mainly on permitting, corrective action and groundwater inspection and evaluation activities. The following summary information is from the 2014 FFY report, which summarizes section activities from Oct. 1, 2013 through Sept. 30, 2014.

Hazardous Waste Permitting Activities

The section coordinated, both internally and with EPA, on the priority of individual projects and tasks as dictated by the National Corrective Action Prioritization System and Overall Priority Ranking System ranking for each facility, as well as goals established by the federal Government Performance and Results Act of 1993. Facility rankings are occasionally adjusted to reflect current environmental and section/EPA project priorities. During 2014, the section did not adjust any facility rankings, but did adjust certain priorities in response to the Government Performance and Results Act goals and the needs of the regulated facilities.

During FFY 2014, the section accepted clean closure certification for all remaining regulated units at WM Lampracker. No post-closure care was required. The section also completed the following permitting-related activities:

- Two class 2 permit modifications: one to Lone Star Industries Inc. and one to Eaton Hydraulics Inc.
- 16 class 1 permit modifications with prior director approval.
- Eight class 1 permit modifications without prior director approval.
- One temporary authorization: In FFY 2013, The Doe Run Co. submitted a class 2 permit modification that the section determined to be a class 3 permit modification. The section re-issued a temporary authorization for this modification while it processes the class 3 permit modification.

During FFY 2014, the section made progress on the reissuance of 15 hazardous waste management facility permits and completion of three closures. Though not complete, the section is also working on the following permitting-related activities:

- Four class 3 permit modification requests.
- Five class 2 permit modification requests.
- 23 class 1 permit modification with prior director approval.
- Nine class 1 permit modification without prior director approval.

Corrective Action Activities

During FFY 2014, progress was made on many corrective action activities related to site investigation, monitoring and remediation. These activities are too numerous to list here in their entirety, but following are some of the highlights.

During FFY 2014, the section worked closely with EPA in an effort to improve the national Resource Conservation and Recovery Act (RCRA) corrective action process through the application of LEAN, which is a collection of principals and methods that focus on identifying and eliminating non-value added activity in any process. EPA and selected states, including Missouri, are currently applying the LEAN framework to the corrective action process as a “pilot activity” in order to identify and eliminate process inefficiencies and barriers to success and reduce costs without compromising human health and the environment. The section initiated two LEAN pilot projects, one at the former Zenith facility in Springfield and one at the Omnium facility in St. Joseph. A corrective action framework document for the Zenith facility was finalized in early FFY 2015 and the section is currently reviewing its investigation work plan. The corrective action framework for Zenith was shared with Omnium as a “go by.” Similar framework development for Omnium is pending.

EPA and the states developed the Environmental Indicator evaluation process together as a way to show progress in protecting human health and the environment and meet the performance and results objectives. The two environmental indicators, “Current Human Exposures Under Control” and “Migration of Contaminated Groundwater Under Control,” evaluate current environmental conditions, whether people are currently being exposed to environmental contamination at unacceptable levels and whether any existing plumes of contaminated groundwater are expanding, stable or shrinking. The section did not complete any new Environmental Indicator evaluations in FFY 2014, but these evaluations remain a national goal. Preparation of several new evaluations is pending. More information regarding the overall nature and scope of the environmental indicator evaluations is available in the September 2007 Hazardous Waste Management Commission Report, located online at www.dnr.mo.gov/env/hwp/commission/docs/hwmc-qt-rpt-2007-4th.pdf.

During FFY 2014, the department did not impose any new agency-mandated interim measures on facilities; however, BFI and Holcim did implement facility-proposed interim measures, with the section’s approval, to control releases to the environment at their sites. The section also approved other work plans and reports for incremental/phased work done in support of longer-term corrective action investigation and cleanup goals at several facilities. BASF completed final remedy construction, a high-priority national performance and results goal. The section also completed two final remedy decisions, another performance and results goal, for Nestle Purina PetCare and River Cement Co.

Together, EPA and the states previously developed a format for facility ready for anticipated use (RAU) determinations to show environmental progress at facilities. EPA requested the section incorporate RAU documentation of preparation goals in the current Performance Partnership Grant Agreement. The commitment to prepare RAU documentation at appropriate times was included in the Performance Partnership Grant Work Plan but not the Multi-Year Facility Planning Strategy. The section continues to track RAU status and prepare RAU documentation for facilities during the corrective action process. The RAU determinations are one of several ongoing EPA initiatives that are essentially unfunded federal mandates.

Groundwater Activities

As part of the Performance Partnership Grant Work Plan, the state’s EPA hazardous waste program authorization requires the state to conduct periodic groundwater evaluations at selected hazardous waste facilities. The section conducts these evaluations at post-closure and corrective action facilities with active groundwater monitoring programs and facilities with active and closed land disposal units, such as landfills

and surface impoundments, where groundwater contamination is present or needs monitoring to detect releases. These evaluations come in two forms, the comprehensive groundwater monitoring evaluation (CME) and the operation & maintenance (O&M) inspection. The CME is an overarching evaluation of the facility's groundwater monitoring systems and programs. The O&M inspections, periodically performed as a follow-up to the CME, are focused on examining groundwater sampling plans, procedures and monitoring well maintenance issues. In each case, the section assesses compliance with the applicable groundwater monitoring regulations and permit or order conditions.

The section continues to coordinate these evaluations with the department's Missouri Geological Survey and Environmental Services Program. Each evaluation includes the collection of split groundwater samples to compare and verify the results of samples collected and analyzed by the facility. The section has been providing split sampling results and other information relevant to the groundwater monitoring system adequacy (e.g., monitoring well structural integrity issues) to the facility before completing the O&M report, so necessary well repairs, changes to sampling methodologies and/or resolution of data quality issues can be discussed and resolved before the next scheduled sampling event.

The section typically schedules five O&M reports for each FFY. During FFY 2014, no CMEs were scheduled. All fieldwork for the five O&M reports scheduled for FFY 2014 was completed; however, the associated reports were not finalized during the federal fiscal year. The section completed the 2012 Solutia-Queeney O&M report during FFY 2014, the 2014 International Paper O&M report on Oct. 1, 2014, and the 2012 BASF O&M report on Oct. 2, 2014. The delays in report finalization are largely the result of management and staff turnover and competing priorities. Fifteen O&M reports from FFY 2010-2014 are carryovers to FFY 2015.

In addition to O&M reports and CMEs, the section routinely performs a detailed review of groundwater monitoring reports submitted by the facilities, using an internal checklist developed by the section. These reviews identify both minor and potentially significant deficiencies with report content or project issues. The section sends significant issues that might influence the representative nature of groundwater samples, data validity, regulatory compliance or project progress, to the facility when discovered, rather than waiting until the next O&M report or CME. The section handles regulatory compliance issues of major concern promptly through appropriate enforcement actions. Since there has been a long history of these reviews, any deficiencies from current reviews are usually minor and the section includes the findings in the facility's next O&M report or CME. During FFY 2014, the section completed 13 groundwater monitoring report reviews.

Data Management Activities

The section tracks, both internally and externally, all section activities and accomplishments. The section uses its Master Task List database and the Division of Environmental Quality's Permit Action Management System database for all internal tracking. The section and EPA use EPA's Resource Conservation and Recovery Act Information (RCRAInfo) database for external tracking. EPA relies almost exclusively on the information entered into RCRAInfo to assess project progress and achievement of regional and national Government Performance and Results Act goals. The section enters permitting, corrective action, financial assurance, inspection, enforcement, institutional control and geographic information system (GIS) information into RCRAInfo for all state- and joint-lead activities. The section negotiates additional data entry obligations with EPA and outlines them in the Performance Partnership Grant Work Plan.

The section typically enters data into RCRAInfo as soon as a milestone or goal is achieved, but in no case more than 30 days after the event has occurred or documentation regarding the event is received. As new entries are made, the section assesses the accuracy of historical state and EPA data. The section corrects errors for state and joint database entries and forwards potential corrections to EPA's database entries to EPA's Missouri State Coordinator for reconciliation. The section also worked with EPA's RCRAInfo Team on the RCRAInfo Data Quality Initiative to resolve issues brought to our attention by the team.

Financial Assurance Activities

Owners and operators of facilities actively handling hazardous waste as an interim status or permitted treatment, storage or disposal facility, and facilities with post-closure care or corrective action obligations under other regulatory instruments (e.g., consent orders), are required to meet certain financial assurance and third party liability requirements. This ensures they will have enough funds set aside to close their facility, clean up any releases and compensate third parties for bodily injury or property damage resulting from those releases, even if the facility declares bankruptcy.

The facility owners and operators submit closure, post-closure or corrective action plans, as applicable, cost estimates based on those plans and financial assurance instrument documents to the department. The section monitors the facility's financial health and conducts annual financial assurance reviews to make sure enough funding is available to cover the cost estimates for their activities. During FFY 2014, the section conducted 104 RCRA financial reviews. This number includes eight Resource Recovery financial assurance reviews, three of which are also TSD facilities. More information concerning financial assurance requirements is available in the March 2009 Hazardous Waste Management Commission Report, located online at www.dnr.mo.gov/env/hwp/commission/docs/hwmc-qt-rpt-2009-1st.pdf.

Other Activities

The Multi-Year Facility Planning Strategy document does not capture the many "unplanned" activities that come about during the year, including facility-proposed permit modifications; incremental/phased work done in support of the listed Multi-Year Facility Planning Strategy goals; facility-proposed interim measures; newly-identified Solid Waste Management Unit and area of concern investigations; financial reviews, public notice and outreach activities; ongoing involvement in national permitting and corrective action initiatives; and state Resource Recovery certification and modification activities. The section can substitute completion of some of the unplanned work for equivalent planned work, to address federal grant requirements for formal Multi-Year Facility Planning Strategy goals that the section could not complete as planned.

During FFY 2014, the section provided technical support to other Hazardous Waste Program sections on several occasions, regarding six different sites. Tasks included activities such as document review and site characterization, conceptual model, plume stability, monitoring system adequacy, remedy design and groundwater data interpretation. Technical support was also provided to the department's Missouri Geological Survey Program with review and comments for proposed changes to the state monitoring well regulations; along with providing technical assistance to the Missouri Department of Transportation for the I-70 bridge construction project in Kansas City, which includes piers placed on the Beazer permitted hazardous waste facility.

The section spent considerable time and resources on several activities related to the DOE/GSA-Bannister Federal Complex. Activities included weekly issues reports, weekly EPA/state technical staff teleconferences and numerous website updates to make various documents available to the public. In the time since the entire federal complex was brought under the permit, the section has spent additional time reviewing documents required by the permit modification compliance schedule, including a revised Sampling and Analysis Plan; updated Long-Term Operation, Maintenance and Monitoring Plan; updated Spill Control/Emergency Plan and a Polychlorinated Biphenyl (PCB) Fate and Transport Study Work Plan.

The section spent considerable time and resources following up on facility bankruptcy issues. Tasks included review, approval and reconciliation of proposed expenditures of trust fund monies recovered during bankruptcy proceedings to perform facility maintenance and monitoring. Section staff also provided post-bankruptcy information and technical support to department managers, legal staff and the Missouri Attorney General's office regarding bankruptcy-related issues. These issues were related to the following companies:

- Exide Technologies - Forest City
- Greenfield Environmental Trust LLC (formerly Tronox) - Kansas City
- Greenfield Environmental Trust LLC (formerly Tronox) - Springfield

The section provided substantial technical support to the program's Natural Resources Damages (NRD) Section. Two Permits Section staff were assigned to the NRD Section on a part-time basis to perform NRD-related duties for several sites, in addition to performing core Permits Section functions. Tasks included reviewing reports, participating in scoping meetings, monthly technical conference calls, public meetings and creating GIS based maps and multiple habitat equivalency analyses. Staff completed these tasks to evaluate potential NRD claims. In addition to reviewing several claims, staff also reviewed existing site characterization files for the Sauget site (Sauget, IL), to begin claim preparation for the Mississippi River channel. Staff were also assigned to multiple Doe Run sites in southeast Missouri to support global NRD claims. Staff supported presentations, attended NRD Counsel meetings and reviewed the Southeast Missouri Regional Restoration Plan and the Springfield Plateau Regional Restoration Plan.

During FFY 2014, the section worked with EPA headquarters to assess workloads associated with permit modifications and steps to be taken to communicate the importance of permit modification work to EPA upper management and federal budget decision-makers. The section helped collect examples of beneficial permit modification work as part of EPA's RCRA messaging initiative. The section also participated in discussions and made recommendations regarding RCRAInfo redesign related to permit modifications, making permit modification data entry into RCRAInfo mandatory so states get national credit for permit modification work and support for continued RCRA program funding on the national level.

Section staff continued to routinely participate in monthly national EPA/State teleconferences including:

- EPA Groundwater Forum
- State Hazardous Waste Forum
- National Corrective Action Project Lean
- RCRA Financial Assurance Workgroup
- RCRA Permit Writers Workgroup
- RCRA Combustion Workgroup
- RCRA Reuse and Brownfields Prevention Workgroup
- RCRA/TSCA Remediation Workgroup
- RCRAInfo Change Management Process Financial Assurance Expert and Permitting/Closure groups
- RCRAInfo Data Workgroup.

During the early part of FFY 2014, section staff participated in two Association of State and Territorial Solid Waste Management Officials, or ASTSWMO, Task Forces under ASTSWMO's Hazardous Waste subcommittee. However, due to diminished federal grant funding, ASTSWMO decided to disband these Task Forces midway through FFY 2014:

- Program Operations Task Force
- Hazardous Waste Recycling Task Force

Permit Modifications List Available Online

Facilities or businesses that actively treat, store - for longer than 90 days - or dispose of hazardous waste in Missouri must get a hazardous waste permit. This permit lists how and what kinds of hazardous waste the facility is allowed to manage. It also contains the facility's operating conditions and closure, corrective action and financial assurance requirements.

The department or the facility can make changes to the hazardous waste permit throughout its life. The regulations label facility-initiated permit modifications as Class 1, 2 or 3, depending on how much they change the original permit conditions. The regulations do not break down department-initiated permit modifications by class. The department is inviting the public to review the list of all approved hazardous waste permit modifications for calendar year 2014. The permit modifications list is online at www.dnr.mo.gov/env/hwp/permits/publications.htm.

For more information or a hard copy of the list, contact the department's Hazardous Waste Program, Permits Section, at 800-361-4827. Hearing and speech impaired individuals may reach the department through Relay Missouri at 800-735-2966.

Regional Office Hazardous Waste Compliance Efforts

- Conducted 76 hazardous waste generator compliance inspections:
 - *Four at large quantity generators.*
 - *19 at small quantity generators.*
 - *49 at conditionally exempt small quantity generators.*
 - *One at E-waste recycling facilities.*
- Conducted three compliance assistance visits at hazardous waste generators.
- Issued 15 letters of warning and three notices of violation requiring actions to correct violations cited during the 76 inspections conducted.
- Received and investigated a total of four citizen concerns regarding hazardous waste generators.

Underground Storage Tank (UST) Compliance and Technology Unit (CTU)

Tank Inspections Contract: The request for proposal for the new tank inspection contract will be released soon. The inspection contractor conducts inspections of active underground and aboveground storage tanks for the Missouri Department of Natural Resources and the Missouri Petroleum Storage Tank Insurance Fund (PSTIF). Contact the Missouri Office of Administration for details.

Operator Training: Operator training is now available online. Class A/B operator training and Class C operator training are both available, as well as a “test only” option. The draft rule is also available online, which includes a compliance deadline of July 1, 2016. The department and PSTIF will also be accepting reciprocity from some of our neighboring states. The training program and draft rule may be found on PSTIF’s webpage: <http://optraining.pstif.org/intro/>

Federal Rule Changes: In 2011, EPA proposed significant changes to the UST regulations. The final version of those rules is expected to be announced shortly. The proposed rule includes new testing requirements for release detection equipment, overfill prevention equipment (e.g. flapper valves, ball float valves and alarms), spill buckets and containment sumps. Under the proposed changes, airport fuel hydrant systems, field constructed tanks and some oil water separators that were previously deferred, will now be regulated. Missouri must also include a new requirement for all systems installed after July 1, 2017, to be double walled with enhanced leak monitoring. For updates and information on these upcoming rule changes, please visit our webpage: <http://dnr.mo.gov/env/hwp/ustchanges.htm>

Tank Inspections: State Fiscal Year 2015 contracted inspections are complete. And as we have seen in previous years, Missouri owners, operators and contractors continue to demonstrate their proactive compliance by being responsive to issues when found, and by demonstrating a willingness to be a partner in ensuring all Missouri USTs are in compliance. The department is maintaining compliance with the EPA requirement of inspecting all regulated facilities at least every three years. The department must also demonstrate that all facilities are either in compliance or are moving to gain compliance. This goal is much easier to accomplish when owners, operators, contractors and regulators are all working together.

Financial Responsibility (FR): Efforts continue to resolve violations with facilities that did not maintain a financial responsibility mechanism to address releases and to protect third parties. Because of these efforts by UST CTU staff and the Attorney General’s Office, the number of facilities without a verified financial responsibility mechanism continues to remain less than 1.5 percent.

Special Facilities Unit

Commercial Facility Inspectors: Special facilities inspectors conducted 10 inspections of commercial hazardous waste treatment/storage/disposal facilities (TSDs).

Polychlorinated Biphenyl (PCB) Inspector: The PCB inspector conducted 20 compliance inspections at various types of facilities throughout the state. The inspector's reports are forwarded to EPA Region 7, which has authority for taking any necessary enforcement action regarding PCBs according to the Toxic Substances Control Act.

Hazardous Waste Enforcement Unit

Enforcement Efforts

- Resolved 17 hazardous waste enforcement cases.
 - Nine Drycleaner Environmental Response Trust (DERT) fees cases.
 - Four fees and taxes cases.
 - One small-quantity generator (SQG) case.
 - One conditionally exempt small quantity generator (CESQG) case.
 - Two used oil handler cases.
- Received four new enforcement cases.
- Sent two penalty negotiation offer letters.
- Issued one abatement order.
- Issued one letter of warning.
- Issued two notices of violation.
- Completed one settlement agreement.
- Completed one administrative order on consent.

Maaco Collision Repair & Auto Painting (AOC)

Maaco Collision Repair & Auto Painting is an auto body repair facility located in St. Peters. The facility did not register as a hazardous waste generator. They also failed to determine if their waste is hazardous; use a licensed hazardous waste transporter; use authorized hazardous waste TSD or resource recovery facilities; use the manifest system; mark hazardous waste containers with the beginning accumulation date; review operation and maintenance procedures to minimize the potential of an emergency or a release into the environment; and train employees to ensure that they are familiar with waste handling and emergency procedures.

As a result of the department's actions, the facility began properly identifying and managing their hazardous waste. The facility developed, implemented and keeps a record of a much more extensive training program in hazardous waste management for employees.

The cost recovery amount is \$1,524.16, which shall be paid in four quarterly payments to the Hazardous Waste Fund.

Red Wing Shoe Company (SA)

Red Wing Shoe Company, located in Potosi, manufactures safety shoes. The facility did not update notification as required; and did not store unbroken lamps in closed, non-leaking containers or packages that are structurally sound and adequate to prevent breakage, and label each lamp or lamp container as "Universal Waste Lamp(s)" or "Waste Lamp(s)" or "Used Lamp(s)," in violation of the Missouri Hazardous Waste Management Law and Regulations.

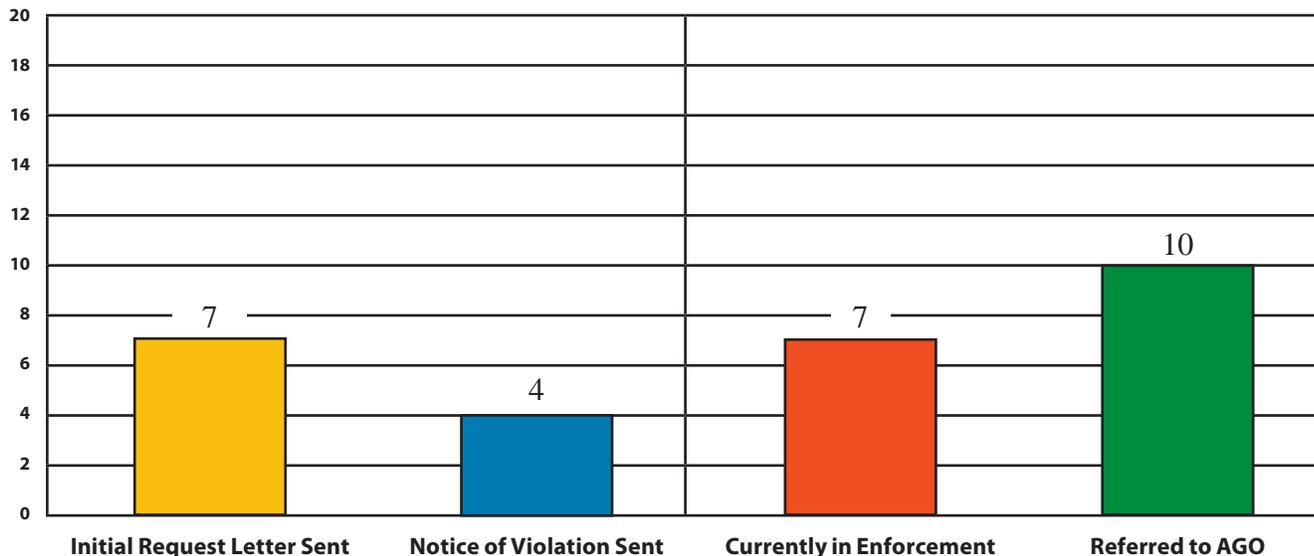
As a result of the department’s actions, the facility resolved all violations identified during the inspection. The actions taken by the facility will result in protection of the environment and adjoining property and persons and provide safer working conditions for employees.

The penalty was \$1,600, which was paid in one payment to the Washington County School Fund. The facility also agreed to complete a Missouri Supplemental Environmental Performance Project to develop a worksheet for documenting solid and hazardous waste stream determinations and a written procedure for conducting hazardous waste determinations within three months of the effective date of the settlement agreement.

Underground Storage Tank Facilities with Unknown Financial Responsibility Status Report

Financial Responsibility Status	Number of Facilities
Initial Request Letter Sent	7
Notice of Violation Sent	4
Currently in Enforcement	7
Referred to Attorney General's Office	10
Total Number of Facilities with Unknown Financial Responsibility	28

Number of Facilities in Each Financial Responsibility Step



*This semi-monthly report is derived directly from a copy of the UST Database and provides a “snapshot” of the status for each active underground storage tank facility not covered by a proper Financial Responsibility Mechanism.

Annual Underground Storage Tank, or UST, Sources and Causes Report

The Missouri Department of Natural Resources' Tanks Section's Annual Public Record Report for the period of Oct. 1, 2013, through Sept. 30, 2014, was completed in November 2014. The department has placed this report on the Tanks section webpage at dnr.mo.gov/env/hwp/tanks/tanks.htm. The report is located under the quick links. This report will also be made available by request to those that do not have Internet access.

Subsection (c) of Section 1526 of the Energy Policy Act amended Section 9002 in Subtitle I of the Solid Waste Disposal Act adds requirements for states to maintain, update and make available to the public a record of underground storage tanks regulated under Subtitle I. The Environmental Protection Agency requires each state receiving funding under Subtitle I to meet the public record requirements. Subsection (d) of Section 9002 in Subtitle I requires EPA to prescribe the manner and form of the public record and says the public record of a state must include:

1. The number, sources and causes of underground storage tank releases in the state.
2. The record of compliance by underground storage tanks in the state with Subtitle I or a state program approved under Section 9004 of Subtitle I.
3. Data on the number of underground storage tank equipment failures in the state.

The first section of the report describes the number of underground storage tank facilities, individual regulated tanks, compliance rates in Missouri and an individual breakdown of the sources and causes of releases opened in federal fiscal year 2014. A total of 94 releases were opened at underground storage tanks in federal fiscal year 2014. This included three instances of physical or mechanical damage to piping, two instances of physical or mechanical damage to a submersible turbine pump area, two additional physical mechanical damage releases, one spill at a dispenser, one corrosion related release, and 85 historical releases (unknown source). The unknown releases were discovered during tank closure, phase II investigations during property transactions, or other investigations, but a definitive source or cause of release was not able to be determined.

The website also includes reports on the sources and causes of UST leaks for previous years. The first report was completed in December of 2008.

Tanks Accomplishments for 2014

Held the 7th Annual UST workshop as part of the Missouri Waste Control Coalition Conference in July. The tanks workshop, held as a tract at the conference, featured department staff, along with private consultants providing training regarding the use of the Boss 200 product and the use of Ecovac extraction services for cleanup at sites in Missouri. In addition Missouri Geological Survey staff and Tanks staff provided guidance on how to evaluate the domestic use of groundwater in Green County. The workshop included departmental staff along with private consultants, private laboratories and others, conducting sessions on remediation technologies.

- Compliance and Enforcement staff gave a presentation at the ASTSWMO UST Compliance and Prevention Workshop in Manchester, N.H.
- Tanks staff are participating on a workgroup for the International Technology and Regulatory Council on Petroleum Vapor Intrusion.
- Compliance and Enforcement staff continue to be a member of the National Work Group on Leak Detection Evaluations.
- The Tanks Section continued participation on the Underground Storage Tank ASTSWMO Federal Rulemaking Group. This group is tasked with providing regulatory and state input into rulemaking involving federal UST regulations.

- The Tanks Section completed participation on the ASTSWMO Core Report Work Group. This work group was tasked with production of a report on the cost to run a UST program. This report was released in June of 2014.
- Compliance and Enforcement staff presented at the National Institute for Storage Tank Management's fifth annual Missouri Storage Tanks Conference.
- The Tanks, and Compliance and Enforcement sections provided technical assistance at the annual PACE convention in Kansas City in February. This is an annual trade show at which Missouri-owned marketers and convenience store officials participate.
- Continued an expedited review process ensuring that remediation reviews of high priority sites are completed in a timely manner.
- Continued an initiative on closing tank remediation sites that have been open for more than 20 years. The goal is to help provide additional information to the consultant to facilitate completion of these projects and help to achieve no further action status for these sites.
- The Compliance and Enforcement Section continued discussions on rulemaking for secondary containment. This included providing discussions at the PSTIF advisory meeting. This included discussions of equipment issues, common violations, alternative fuel issues and potential upcoming regulatory changes.
- The Compliance and Enforcement Section continued to participate in rulemaking and program development for UST operator training.
- The Tanks Section continues to investigate drinking water contamination in Portageville and is conducting additional investigation to determine the source of contamination.
- In Buffalo, the Tanks Section has bid out the private drinking water well replacement and well replacement.
- In Wasola, the department is conducting investigations of a drinking water impact and will be replacing a drinking water well that serves the Y-Store.
- The department conducted a drinking water well survey and sampled drinking water wells and a spring in the community of Doolittle. The town, located on historic Route 66, had several aboveground and underground storage tank sites. The department is conducting sampling and an investigation to determine the presence and source of contamination in drinking water wells in the area.
- The department is investigating the replacement of a private drinking water well in Marshfield. The affected well is on an adjacent property and currently has a filtration system on it. The release has cleanup funding through PSTIF; however, the well replacement is not considered an eligible expense as a third party claim.
- In Potosi, the Tanks Section is currently determining the source of the drinking water contamination. Public water has recently been made available to the residents, so no further use of filters on drinking water wells is necessary.
- The Tanks Section continued to use funding to provide some overtime to staff to reduce turn-around times on document reviews. We also hired one private contractor to provide state oversight of work on tanks sites. With these additional funds, we estimate that we can increase the number of cleanups using the Missouri Risk-Based Corrective Action (RBCA) Guidance and decrease turnaround times.
- The Tanks Section received a grant of \$175,000 to conduct investigation, cleanup or well replacement at abandoned drinking water impacted sites. The HWP will use the funding to provide alternative sources of drinking water at several sites where private drinking water wells have been affected by petroleum releases. Priority will be given to sites where there is no viable responsible party for the cleanup or funding available from other sources to provide safe drinking water.
- The Tanks Section received a new grant of \$125,000 that will be used to continue to provide some overtime to staff to reduce turn-around times on document reviews. We may also be able to assign additional state personnel or to hire one or more private contractors and provide state oversight of work on tanks sites. With these additional funds, we estimate that we can increase the number

- of cleanups using the Missouri Risk-Based Corrective Action (RBCA) Guidance and decrease turnaround times.
- The Budget and Planning Section continued to provide tracking of FR to identify all sites without FR. The Compliance and Enforcement Section continued to take actions to assure sites without FR would obtain coverage and to pursue penalties for sites that had not maintained FR. These actions helped maintain a high compliance rate of over 98-99% for facilities with acceptable FR.
 - Continued to update tanks GIS data to conform with department standards and work to add tank facilities and cleanup sites to the department's long-term stewardship mapper.
 - Generated, processed and mailed fee cycle invoices for 2015–2019. Extra effort was made to reach the facilities/owners. Out of 908 invoices, only 64 facilities still have a balance due, resulting in a success rate of revenue collection of 93 percent.
 - Continued development of database enhancements and tracking systems.
 - Remediation staff continued to add sites to the tracking system in 2014. This system helps to ensure correspondence is dealt with in a prompt and consistent manner. This tracking system is directly linked to the mail log so as soon as the mail is received and entered the project manager is immediately notified.
 - HWP continued an out-of-use tank initiative aimed at ensuring that tanks are not out of use beyond 12 months without conducting a site assessment. In addition, the initiative is requiring tanks that have been out of use for more than 5 years to be permanently closed. This has led to permanent closure at many of these sites and a reduction in out-of-use tanks.
 - The Tanks Section continues to participate in a historic highways revitalization project and has identified several opportunities in Missouri for EPA Targeted Brownfields Assessments (TBA). This effort led to the completion of a UST investigation and tank closure on a project with the St. Louis Development Corporation in the St. Louis area, and resulted in a proposal for the development of a planning proposal for brownfields planning and potential TBA work in 2014 with Kansas City.
 - The Tanks Section produced the 7th annual Public Record Report to the EPA in October 2014. This report includes the sources and causes of releases of tanks in Missouri.
 - HWP completed rulemaking on the Tanks RBCA guidance that was effective in February 2014.
 - The Tanks Section continued to maintain an average turn-around time of 29.6 days, meeting section goals.
 - The Tanks Section was able to maintain a reduced turn-around time on closures of less than 10 days throughout much of 2014.
 - Compliance and Enforcement staff helped resolve problems associated with vapor recovery equipment and its effect on release detection equipment. Compliance and Enforcement staff met with Air Pollution Control Program staff, as well as representatives of the Department of Agriculture, Missouri Petroleum Storage Tank Insurance Fund, Missouri Petroleum Marketers and Convenience Store Association, Missouri Petroleum Council, and tank owners, operators and contractors about this issue.
 - The Compliance and Enforcement Section inspection team conducted 136 new installation inspections. The inspection team also continues to maintain their training, often direct from the manufacturers, on proper installation of tanks, piping and other equipment.
 - During calendar year 2014, the department accomplished the following work related to petroleum storage tanks:
 - Properly closed 397 tanks
 - Reviewed 163 closure reports
 - Approved 140 closure notices
 - Conducted 32 closure inspections
 - Conducted four site investigations
 - Responded to 10 emergencies involving petroleum releases.
 - Oversaw completion of 140 remediation sites

- Issued 759 certificates of registration.
- A total of 115 new releases were reported during calendar year 2014.
- Remediation staff received 2,143 remediation documents and generated 2,192 response letters.
- Department staff were notified of 64 new installations at tank sites and received 41 new site registrations
- Compliance and Enforcement Section staff resolved 69 cases involving violations
- At the end of the 2014 calendar year, there were 129 active enforcement cases
- Financial responsibility compliance was at 99.0 percent. This number reflects insurance coverage from both PSTIF and other private policies and statements.
- The department currently regulates 3,455 facilities with 9,000 active underground storage tanks.

The Tanks Section finalized, routed for review and signature, copied and mailed 2,192 documents. Staff provided excellent customer service and helped other section, program and department staff when necessary, and continued to review and modify existing procedures to ensure accuracy and efficiency.

The Compliance and Enforcement Section inspection review team conducted and/or reviewed 2,100 inspections (including new installations, re-inspections, site visits, complaint and other investigations, as well as standard compliance inspections) and sent more than 1,362 letters (including letters of warning and notices of violation) on UST inspections. This team also answers many equipment and operational site questions via telephone and e-mail. The team also regularly provides technical assistance, public outreach, regulatory interpretations and equipment explanation to other department staff, other agencies, the regulated community, contractors, manufacturers and the general public.

Missouri Department of Natural Resources - Hazardous Waste Program

**Petroleum Storage
Tanks Regulation
June 2015**

Staff Productivity	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	TOTAL
Documents received for review	161	189	222	208	162	161							1,103
Remediation documents processed	140	123	146	171	166	113							859
Closure reports processed	9	10	14	24	8	12							77
Closure notices approved	9	9	10	10	8	5							51
Tank installation notices received	7	5	5	5	4	3							29
New site registrations	3	6	1	2	5	1							18
Facility Data	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	TOTAL
Total in use, out of use and closed USTs	40,756	40,773	40,789	40,807	40,827	40,839							
Total permanently closed USTs	31,676	31,703	31,777	31,806	31,819	31,837							
In use and out of use USTs	9,080	9,070	9,012	9,001	9,008	9,000							
Out of use USTs	739	746	709	702	693	701							
Total hazardous substance USTs	404	404	404	404	404	404							
Facilities with in use and out of use USTs	3,483	3,482	3,461	3,456	3,458	3,455							
Facilities with one or more tank in use	3,229	3,226	3,220	3,218	3,222	3,216							

Closures

Underground Storage Tanks	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	TOTAL	All Yrs
Closure Reports Reviewed	9	10	14	24	8	12							77	
Closure Notices Approved	9	9	10	10	8	5							51	
Number of Tanks Closed (Closure NFA)	14	17	43	46	22	12							154	

Cleanup

Underground Storage Tanks													TOTAL	All Yrs
UST release files opened this month	4	7	10	14	7	9							51	6,653
UST cleanups completed this month	8	6	15	7	11	9							56	5,788
Ongoing UST cleanups	865	866	863	869	864	863								
Aboveground Storage Tanks														
AST release files opened this month	1	0	0	2	5	1							9	475
AST cleanups completed this month	2	1	0	2	0	1							6	292
Ongoing AST cleanups	182	181	180	179	183	183								
Both UST and AST														
Total release files-both UST & AST	0	0	0	0	0	0							0	78
Cleanups completed-both UST & AST	0	0	1	1	0	0							2	51
Ongoing cleanups-both UST & AST	29	29	29	28	28	27								
Unknown Source														
Total release files-unknown source	0	1	0	0	0	0							1	227
Cleanups completed-unknown source	0	0	1	0	0	0							1	183
Ongoing cleanups-unknown source	20	21	19	19	20	19								
Documents Processed	140	123	146	171	166	113							859	
*Reopened Remediation Cases	0	1	0	0	0	0							1	79

** Reopened Remediation Cases was added Nov. 18, 2009 - the cumulative total has been queried and a running total will be tracked/reported with the FY 2010 Tanks Section Monthly Reports.*

Effective December 2008 tanks with unknown substance will be included in total figures. Some measures are re-calculated each month for all previous months to reflect items added or edited after the end of the previous reporting period.