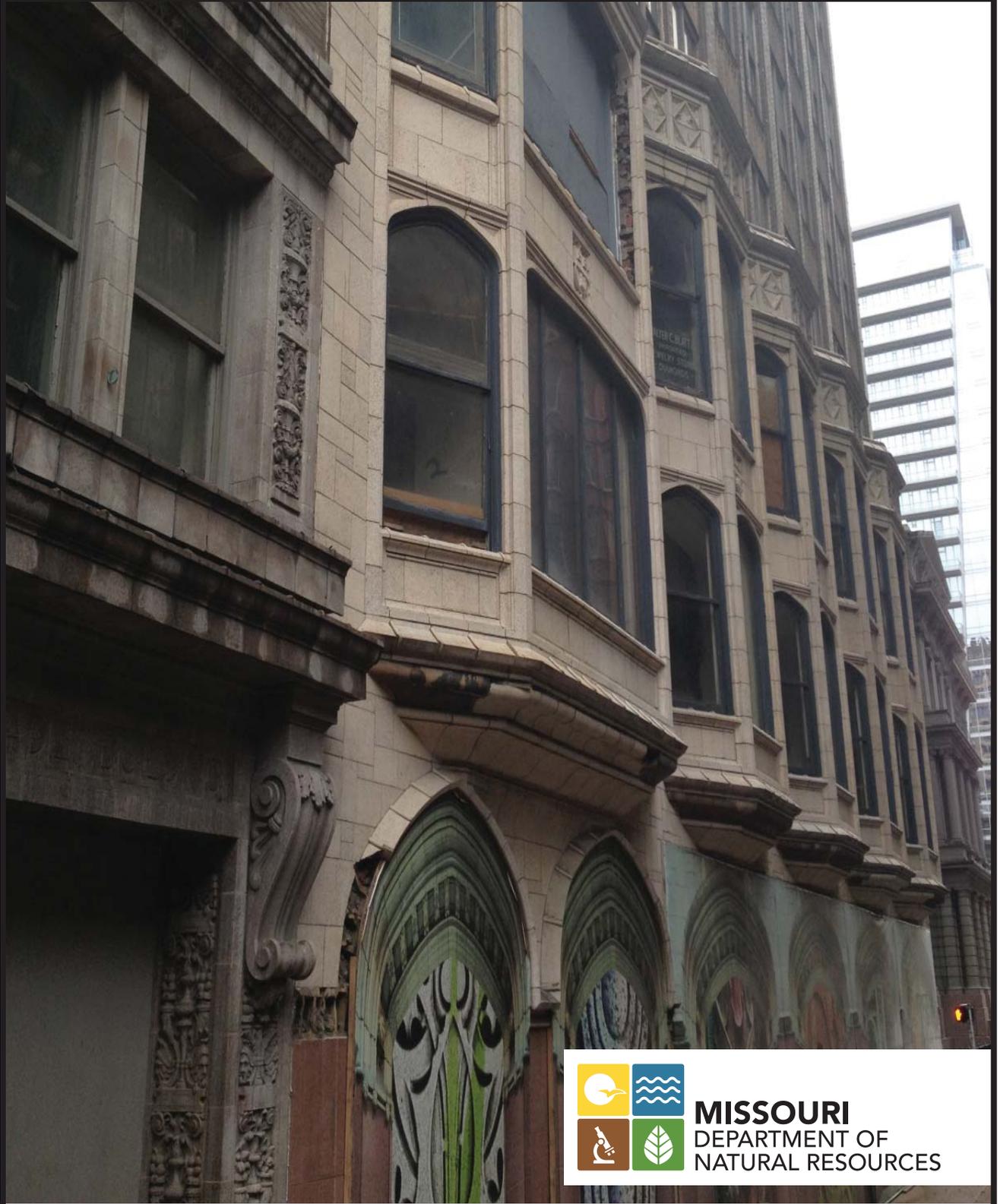


# Hazardous Waste Management Commission Report

October - December 2015

*Quarterly Report*



## Hazardous Waste Management Commissioners

Charles "Eddie" Adams, Chair

Elizabeth Aull, Vice Chair

Andrew Bracker

James "Jamie" Frakes

Michael Foresman

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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 [dnr.mo.gov/env/hwp/commission/quarterlyreport.htm](http://dnr.mo.gov/env/hwp/commission/quarterlyreport.htm).



Missouri Department of Natural Resources  
Hazardous Waste Program

### Letter from the Director

Dear Commissioners:

As this quarter closes out 2015, it means the legislative session is right around the corner, and it is time to start the planning for the Fiscal Year 2017 budget. The Budget and Planning Section has been working with the other sections to identify their budget needs and gather information for the department's budget request. The next step in the process will be the release of the governor's recommended budget in January.

This quarter also marks the time where we send out our annual invoicing for generator fees. In November, 2,638 invoices were sent out, totaling \$1,492,256.90 in anticipated revenue. These fees are essential funding for our program, and allow us to meet the matching requirements on several of our federal grants, which are needed to operate the program.

As you are aware, during this quarter, the commission also adopted the Order of Rulemaking for our fee rule package. The changes to the fee structure included in this rule are expected to generate an additional \$500,000 in revenue. This additional revenue is needed to maintain the program's existing operations, as we continue to see decreases in our federal grants in several areas. We appreciate the commission's approval of this rule package, as well as all of the efforts of the stakeholders who assisted us in getting this accomplished.

During this quarter staff have continued to diligently move forward with efforts to prepare for the implementation of the "No Stricter Than" rule provisions. This included training for our hazardous waste inspectors in October. This training included several EPA staff who were also educating themselves on our new requirements, as once we are authorized, they will be doing their inspections based on these new regulations as well.

Staff also held webinars in November and December to provide information to stakeholders. The webinars drew 227 registrants, some with multiple people viewing and/or listening in. In November, the program also participated in the annual REGFORM Seminar. This seminar provided another great forum for the department to reach out to the regulated community on these new requirements.

Additionally, staff continues to update our fact sheets and checklists to reflect these new requirements, both for the benefit of our inspectors and the regulated community. The fact sheets, checklists, webinars and other information can all be found on a new webpage that was specifically developed to help educate interested persons on these new regulatory changes.

We are fortunate to have a dedicated program staff who continue to do their best to protect the citizens and the environment of this great state from the dangers associated with hazardous waste and substances. We hope you enjoy reading about their activities in this addition of the quarterly.

Sincerely,



David J. Lamb  
Director

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## Brownfields/Voluntary Cleanup Program Certificates of Completion

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. Cleaning up and reinvesting in these properties protects the environment, reduces blight and takes development pressures off greenspaces and working lands. 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 14 certificates of completion for various sites from October through December 2015. This brings the total number of certificates of completion issued to 783.

### Kirksville FMGP – Dental School-Kirksville

The dental school site is located at 118 S. Wabash St. in Kirksville. A.T. Still University planned to construct a new dental school on the site of the Kirksville Former Manufactured Gas Plant. This site was enrolled in BVCP between 1999 and 2005. A.T. Still reenrolled the site in January 2012 to work with BVCP to determine requirements for ensuring the building and site were safe, while also complying with or appropriately modifying the existing covenant.

Construction of a new dental school building was proposed in the area controlled by the prior covenant, which included the footprint of the former manufactured gas plant property (the “core site”) plus a 100-foot buffer zone. Surface and subsurface soil sampling was performed in the proposed building footprint (located in the buffer zone) and elsewhere in the buffer zone. The results indicated soil in the area was not affected by contamination at levels exceeding current 2006 Missouri Risk Based Corrective Action (MRBCA) risk-based target levels (RBTLs) for unrestricted/residential land use. The department approved construction of the proposed building, and the buffer zone no longer requires activity and use limitations with regard to soil.

Surface and subsurface soil sampling was performed on the core site to further define the extent of previously detected shallow soil contamination exceeding non-residential RBTLs. The chemicals of concern in the soil included semi-volatile organic compounds, primarily naphthalene and benzo(a)pyrene. Soil was excavated from the core site to a depth of three to five feet below grade. A total of 2,780 tons of soil was disposed at a permitted landfill. Residual contamination in surface and subsurface soil in the core site meets non-residential target levels. The department determined the site is safe for its intended use.

### Pruitt-Igoe Parcels 1, 2, and 3--St. Louis

The Pruitt-Igoe Housing Project Parcels 1, 2 and 3, are located at 2300 Cass Ave. in St. Louis. This 34.45-acre property has been developed since the late 1800s as residential, commercial and industrial properties. Previous operations at the Pruitt-Igoe site included: a service station, auto repair facilities, chemical companies, a dry cleaner, a battery manufacturer, iron and steel companies, junkyards, a die-casting company, an electric manufacturing company, a lawn mower manufacturer, a shoe factory and a bottling facility. The Pruitt-Igoe housing complex, constructed at the site in the 1950s, was demolished in the early 1970s. The site has remained vacant since then and was covered with fill and debris.

Site investigations showed the main constituents of concern in soil and groundwater were metals, polycyclic aromatic hydrocarbons (PAHs), benzene and total petroleum hydrocarbons gasoline-range organics (TPH-GRO). A risk assessment in accordance with the 2006 MRBCA Guidance was conducted. No contaminants were found in groundwater above MRBCA residential use standards, although the detection limits of some laboratory samples were above drinking water standards. In surface soil, metals

and PAHs exceed the standards for residential use, but not non-residential use. An environmental covenant was implemented to restrict use of the site to non-residential use.

One area of the site has levels of lead that may pose a risk to construction workers. A Soil Management Plan is included in the environmental covenant to govern soil handling during construction activities. The property is being redeveloped to return the site to active use, which has not occurred since the Pruitt-Igou housing was demolished in the early 1970's. The department determined the site is safe for its intended use.

### Ennis Paint-Cuba

The Ennis Paint (former) site located at 102 Commerce Drive in Cuba is a 3.5-acre property with two buildings: a 12,000-square-foot main building and a 1,320-square-foot garage. The facility began operations as a paint and coatings manufacturing facility in 1989, ceasing its operation in 2005. In 2013, the U.S. Environmental Protection Agency (EPA) oversaw the voluntary removal of paint and paint-related wastes from the property, including materials categorized as hazardous waste, which was completed to the EPA's satisfaction.



Site characterization data indicated heavy metals and volatile organic compounds (VOCs) were detected in soil at the site. However, a risk assessment conducted in accordance with the MRBCA determined none of the concentrations detected exceeded the appropriate RBTLs. Shallow groundwater was not encountered at the site during site characterization activities. Based on the results of the site characterization activities, the site meets the criteria for unrestricted land use. The department determined the site is safe for its intended use.

Future use of the property is anticipated to be industrial/manufacturing.

### Midwest Block & Brick/Midwest Cement Company-Jefferson City

The Midwest Block & Brick site is located at 164 Katy Road in Jefferson City. The former Spectraglaze facility was an operation where glazing was applied to concrete block for use in architectural landscaping applications. Heat from a fire at the plant in 1999 caused expansion of contents inside a 55-gallon drum of trichloroethene (TCE). The pressure release valve on the drum allowed the release of TCE to the subsurface on the south side of the production building. A removal operation was conducted, with highly impacted soils being removed and properly disposed. Several monitoring wells were installed to characterize and monitor groundwater impacts. Monitoring showed groundwater was impacted and the plume had spread.

Following several years of monitoring the groundwater plume, it was determined site conditions were not conducive to adequately attenuate chlorinated solvents with some of the source remaining in the release area. A remedial action plan was approved to conduct enhanced bioremediation by injecting Hydrogen Release Compound and microbes at the release area. This injection was done in April 2009 and groundwater monitoring continued, showing concentrations of contaminants decreased. A analysis of contaminant degradation and plume stability, and a risk assessment in accordance with the 2006 MRBCA guidance was conducted. The conclusion was the likelihood of risk to off-site receptors was minimal, but on-site contamination posed a possible risk through the domestic use of groundwater. This risk will be

managed by an environmental covenant prohibiting the use of contaminated groundwater beneath the site. It also prohibits drilling for other purposes that could spread the contamination to deeper aquifers. The department determined that the site is safe for its intended use.

The property will continue to be used in the manufacture of masonry and landscape products.

## Harrison Education Center-St. Louis

The Harrison Education Center site is located at 3140 Cass Ave. in St. Louis. This is a four-acre vacant site that will be developed as an education center. The site was previously utilized as a gas station, dry cleaner and sheet metal works facility. Phase I and II investigations were performed and found lead and PAHs in surficial soil and naphthalene in groundwater.

Initial investigation identified soil and groundwater contaminants at concentrations exceeding MRBCA default target levels (DTLs). Lead and PAHs were present in surface urban fill and groundwater. After further site characterization, a risk assessment indicated PAHs in surface soil were above non-residential MRBCA RBTLs for ingestion, inhalation and dermal contact; benzene and TPH-GRO exceeded non-residential RBTLs for indoor inhalation and posed a risk to the proposed building; and a lead hot spot exceedance in the subsurface soil of non-residential MRBCA RBTLs. Subsequent remedial actions included: excavation of two lead hot spots, placement of a vapor barrier under the eastern portion of the building and placement of an engineered barrier (pavement or soil cap) over a portion of the site. During the excavation of one of the hot spots, two underground storage tanks (USTs) were encountered. One UST was removed and one was closed in place due to its location beneath an existing sidewalk. The final risk assessment (conducted using MRBCA 2006) indicated there were no exceedances of non-residential RBTLs. An environmental covenant with attached management plan was filed in the property chain of title. The department determined the site is safe for its intended use.

## HCI Properties LLC-Kansas City

The HCI Properties LLC site is located at 3100 Prospect Ave. in Kansas City. The half-acre site consists of an asphalt parking lot and a single story 2,380-square-foot structure. The site has served as a Popeye's fast food restaurant from 1987 to present. Previously, the site served as part of the St. Joseph's Hospital Complex from 1917 to the 1970s. Historical records show the northeast corner of the site served as a gas station from the 1940s-50s. A 2013 Phase II subsurface investigation revealed petroleum related contamination in soil and groundwater on the northeast portions of the site.

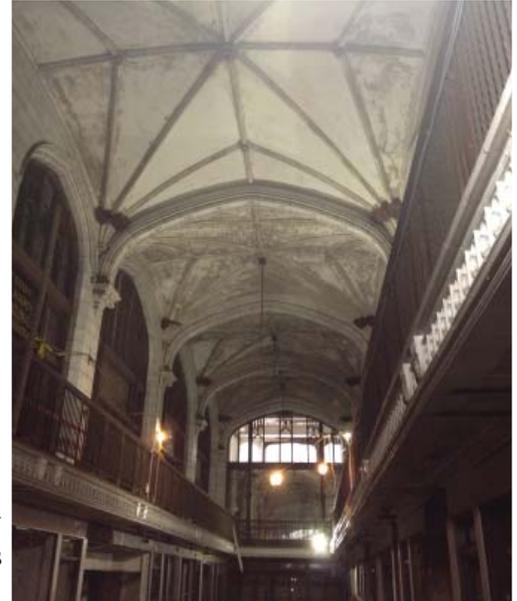
Site investigations revealed the presence of lead impact to soil and gasoline range organic (GRO) impact to groundwater related to past site use as a gas station. Historical aerial photos indicated the presence of several above ground storage tanks (ASTs) on the northeast portion of the property. A limited Phase II was conducted in 2013 to evaluate soil and groundwater in the area of the former gas station. Benzene, naphthalene, toluene and 1,2-dibromoethane were detected in groundwater above DTLs. Additional sampling was conducted in 2014 along with the installation of three monitoring wells to evaluate contaminant plume stability. A tier 1 risk assessment and hydraulic conductivity study were conducted according to the 2006 MRBCA guidance. The assessment found the domestic use pathway to be incomplete on site due to insufficient groundwater production. Vapor intrusion pathways were determined to be complete due to the existence of an active restaurant on the site. Further evaluation of groundwater contamination against 2006 MRBCA vapor intrusion target levels indicated contamination is present within safe levels for residential use. Lead impact to soil was also found to be below target levels for residential use. The department determined the site is safe for its intended use.

### Arcade Building-St. Louis

The Arcade Building site located at 800-814 Olive St. in St. Louis is an eight-tenths of an acre site including two interconnected high-rise buildings: the 18-story Wright Building and the 16-story Arcade Building. The buildings have 453,305 square feet of above-grade floor area. The site entered into the BVCP for cleanup of asbestos containing material (ACM), lead-based paint (LBP), Freon, possible hydraulic oil, possible ink and solvent associated with a former printing operation and other miscellaneous hazardous substances and petroleum products throughout the building.

Previous inspections identified the presence of LBP, ACM and various types of household-hazardous waste throughout the site. LBP was primarily located on window components, wood flooring, plaster walls and ceilings, and stairwell railings. ACM was found in roof flashing, window caulk, various insulations, tile and adhesive glue pucks. Household hazardous waste was found throughout the building in the form of light ballasts, florescent bulbs, exit signs, thermostats, etc.

All ACM was abated by removal from the site and properly disposed, and all household-hazardous waste was removed and properly disposed. The majority of LBP was addressed by structural demolition or component removal. Limited amounts of LBP in stairwells, on structural columns, historical ceilings and walls underwent wet scraping and encapsulation; these areas will remain in place under an operation and maintenance (O&M) plan. All LBP waste generated during site activities was properly disposed. The department determined the site is safe for its intended use.



### Winchell’s Donut House (former)-Kansas City

The Winchell’s Donut House (former) site is located at 626 E. 63rd. St. in Kansas City. The one-half acre site was historically divided into three lots known as Lots 1, 2 and 3. Lots 1 and 2 were developed in the 1930s with a gasoline filling station, including four gasoline tanks which operated through the late 1970s. Lot 3 was first developed as a drycleaner in the 1940s that continued operating in the early 1980s. Lot 3 was redeveloped in the 1980s as a Winchell’s Donut House and operated through 1994. All buildings on the site were demolished in late 1999 and the property was paved over for parking. Currently the site is being redeveloped into multi-family housing.

Soil borings were advanced on-site to determine the presence of contaminants related to dry cleaning operations and the former filling stations. Chemical analysis of soil and groundwater samples revealed the presence of residual gasoline impact on the southwest section of the property. No residual dry cleaner impact to the site was found.

Approximately 103 tons of contaminated soil was excavated from the southwest section of the property. In order to confirm the removal of contaminated soil, samples were collected and chemically analyzed. The results show that concentrations of contaminants were either not detect or below the 2006 MRBCA DTLs. The department determined the site is safe for its intended use.

## Post Office Redevelopment-St. Charles

The Post Office Redevelopment site located at 119 S. Main St. in St. Charles. The site is occupied by a vacant post office building built circa 1908. The site has previously served as a plumbing service, real estate offices and residential spaces. Lead based paint and asbestos containing materials were suspected throughout the site.

Investigations revealed the presence of LBP, ACM and various types of household hazardous waste throughout the building. LBP was primarily located on interior walls as well as interior and exterior window components. Asbestos was found in floor tile, ceiling tile and thermal system insulation throughout the first and second floors. A small amount of ACM was identified in roof materials. Household hazardous waste was primarily comprised of light ballasts along with florescent bulbs, thermostats and assorted household chemicals.

All ACM was abated by removal from the site. LBP was abated through wet scraping or component removal. Limited amounts of LBP were encapsulated and will remain on site under an O&M plan. Florescent lamps and ballasts and all remaining hazardous waste and abatement debris were properly disposed. The department determined the site is safe for its intended use.

## Energizer Battery Manufacturing Inc.-Maryville



Energizer opened the Energizer Battery Manufacturing Inc. site, located at 3131 E. First St. in Maryville, in 1971, for the production of AA, C and 9-volt batteries. The plant expanded from 132,000 square feet to 507,000 square feet in size. TCE was used to degrease cans and other parts from 1971 to 1997. It was also used as a carrier to apply sealant to some other cell types. A site assessment revealed low levels of TCE in the soil under the southeast corner of the production building. A groundwater investigation revealed TCE at levels above the EPA's maximum contaminant levels at the southeast corner of the property.

After delineation of TCE in the soil and groundwater, two in situ chemical oxidation injection events were conducted in the early 2000s to remediate the contamination. Groundwater monitoring since then has demonstrated a significant decrease in the concentrations of TCE, and the plume itself continues to decrease in area and concentration. The onsite cooling tower water wells have been properly closed, as their use had caused the contamination to migrate. An environmental covenant is being used to restrict the use of the site to non-residential land use and to prohibit the installation of groundwater wells. The department determined the site is safe for its intended use.

## Fulton State Hospital-Fulton

The Fulton State Hospital site is located at 600 E. Fifth St. in Fulton. This site is part of the Fulton State Hospital complex and consists of a former aboveground storage tank (AST) farm consisting of eight 18,000-gallon ASTs. The ASTs contained gasoline and diesel for on-site power generation and vehicle fueling.

Red diesel fuel released from a leaking pipe from the AST farm at the site infiltrated a storm sewer and contaminated a stormwater drainageway at the southern end of the site. Emergency response activities were conducted and successfully remediated the storm sewer and drainageway. The ASTs

were subsequently removed, and additional site characterization was conducted and indicated elevated concentrations of both gasoline and diesel in the soil and groundwater around the former AST farm. Remediation was conducted in accordance with an approved remedial action plan, including excavation of contaminated soil, recovery and removal of contaminated groundwater, and quarterly groundwater monitoring. After completion of remediation and groundwater monitoring, a risk assessment conducted in accordance with the 2006 MRBCA guidance indicated that the contamination was successfully remediated, and that the remaining contaminant concentrations in soil and groundwater meet cleanup criteria for unrestricted land use. The department determined the site is safe for its intended use.

The site will remain part of the Fulton State Hospital property. Construction is planned in the area for expansion and improvement of the hospital’s housing units.

**Sites in Brownfields/Voluntary Cleanup Program**

Month	Active	Completed	Total
October 2015	229	778	1007
November 2015	228	781	1009
December 2015	229	783	1012

**New Sites Received: 7**

**October**

Elpaco Coatings Corp., St. Louis  
 Liberty Commons, Liberty

**November**

Crestwood Court, Crestwood  
 Square Creek National Wildlife Refuge, Mound City

**December**

Tip Top Cleaners (former), St. Louis  
 Optimist Club (former), St. Louis  
 Calico Labs (former), Festus

**Sites Closed: 14**

**October**

Kirksville FMGP -- Dental School, Kirksville  
 Pruitt-Igoe Housing Project Parcel 1, St. Louis  
 Midwest Block & Brick, Jefferson City  
 Harrison Education Center, St. Louis  
 Ennis Paint (former), Cuba  
 Winchell’s Donut House (former), Kansas City  
 Pruitt-Igoe Housing Project Parcel 2, St. Louis  
 Pruitt-Igoe Housing Project Parcel 3, St. Louis  
 Midwest Cement Co., Jefferson City

**November**

Arcade Building, St. Louis  
 Post Office Redevelopment, St. Charles  
 HCI Properties LLC, Kansas City

**December**

Energizer Battery Manufacturing Inc., Maryville  
 Fulton State Hospital, Fulton

## 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 2015	Active Drycleaning Facilities	Facilities Paid	Facilities in Compliance
January - March 2015	134	62	46.27%
April - June 2015	134	113	84.33%
July-September 2015	134	118	88.06%
October-December 2015	134	119	88.81%

Calendar Year 2015	Active Solvent Suppliers	Suppliers Paid	Suppliers in Compliance
January - March 2015	11	9	81.82%
April - June 2015	11	8	72.73%
July-September 2015	11	10	90.91%
October-December 2015	11	8	72.73%

### Cleanup Oversight

Calendar Year 2015	Active Sites	Completed Sites	Total
January - March 2015	20	15	35
April - June 2015	20	15	35
July-September 2015	19	16	35
October-December 2015	19	16	35

**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. During this quarter, no claims were received, reviewed or processed.

Total reimbursements as of Dec. 31, 2015: \$2,784,107.05

DERT Fund Balance as of Dec. 31, 2015: \$327,121.91

### 2015 - A Year in Review

Each year, the Permits Section coordinates with the U.S. Environmental Protection Agency (EPA) 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 the 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 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 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 2015 FFY report, which summarizes activities from Oct. 1, 2014 through Sept. 30, 2015.

#### 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 (GPRA). Facility rankings are occasionally adjusted to reflect current environmental and section/EPA project priorities. During 2015, the section did not adjust any facility rankings, but did adjust certain priorities in response to the GPRA goals and the needs of the regulated facilities.

During FFY 2015, clean closure certification was accepted for all remaining regulated units at the University of Missouri - Columbia. No post-closure care was required. The following permitting related activities were also completed:

- One permit renewal: Missouri Pressed Metals (post-closure/corrective action)
- Seven class 2 permit modifications: one to AK Steel, Bayer CropScience, EBV Explosives Environmental, Exide Technologies and Solvent Recovery LLC and two to Doe Run Co.
- 12 class 1 permit modifications with prior director approval
- One class 1 permit modification with prior director approval - denied
- Five class 1 permit modifications without prior director approval
- One temporary authorization issued to BASF to approve the transfer of aqueous waste generated by the production of Chlorfenapyr insecticide at the Pyrrole facility to the South Incineration area ("D" incinerator) for treatment

During FFY 2015, the section completed two closures and made progress on the issuance of 16 hazardous waste management facility permits. Though not complete, the section is also working on the following permitting-related activities:

- Five class 3 permit modification requests
- Three class 2 permit modification requests
- 20 class 1 permit modification with prior director approval
- Seven class 1 permit modification without prior director approval

### Corrective Action Activities

During FFY 2015, 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 2015, the section continued to work closely with EPA in an effort to improve the national Resource Conservation and Recovery Act (RCRA) corrective action process through the development of its corrective action Project LEAN framework, now called RCRA Facility Investigation Remedy Selection Track (RCRA FIRST). The section worked with EPA to develop a RCRA FIRST “Tool Box,” which represents a collection of principles and approaches focusing on identifying and eliminating non-value added activities in the corrective action process. EPA and selected states, including Missouri, are currently applying the RCRA FIRST concepts to the corrective action process at several facilities in order to identify and eliminate process inefficiencies, barriers to progress and reduce costs without compromising human health and the environment. The facilities where the RCRA FIRST concepts are currently being applied include the former Zenith facility in Springfield, the Omnium facility in St. Joseph and former Amoco (now BP) Sugar Creek refinery in Kansas City. The RCRA FIRST Tool Box will reportedly be made available on a national basis through posting on the internet sometime during FFY 2016.

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 are “Current Human Exposures Under Control” and “Migration of Contaminated Groundwater Under Control.” These indicators 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.

During FFY 2015, the section, in coordination with EPA, completed four Environmental Indicator evaluations: two for the University of Missouri - Columbia and two for Hazmat - Kansas City. At both facilities, human exposures to contamination and contaminated groundwater migration were determined to be under control. The number of facilities with human exposures controlled is currently a cumulative total of 55 of 69 GPRA 2020 baseline facilities thru FFY 2015. The number of facilities with migration of contaminated groundwater controlled is currently a cumulative total of 52 of 69 GPRA 2020 baseline facilities thru FFY 2015. More information regarding the overall nature and scope of the environmental indicator evaluations is available in the 2007 Fourth Quarter Hazardous Waste Management Commission Report, located online at [www.dnr.mo.gov/env/hwp/commission/reports/2007-4th.pdf](http://www.dnr.mo.gov/env/hwp/commission/reports/2007-4th.pdf).

During FFY 2015, the department did not impose any new agency-mandated interim measures on facilities; however, facility-proposed measures were reviewed and approved for the closed BFI Missouri City landfill. The section 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. A final remedy decision, another performance and results goal, for Chemical Recovery Corp. – Kansas City was also completed this fiscal year. Final remedy construction, a high-priority national performance and

results goal was completed at Nexeo Solutions – St. Louis and Chemical Recovery Corp. – Kansas City. The number of facilities with final remedy construction is currently a cumulative total of 38 of 69 GPRA 2020 baseline facilities thru FFY 2015. One additional national performance and results goal, corrective action performance standards attained with controls, was achieved in FFY 2015 for Chemical Recovery Corp. – Kansas City. The number of facilities with corrective action performance standards attained is currently a cumulative total of 16 of 69 GPRA 2020 baseline facilities thru FFY 2015. One additional corrective action performance standard attained determination for Safety-Kleen Springfield was in process at the end of FFY 2015, but was not yet complete.

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 incorporation of 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. During FFY 2015, the section completed RAU determinations for Chemical Recovery Corp. – Kansas City and Hazmat - Kansas City.

### **Groundwater Activities**

As part of the Performance Partnership Grant Work Plan, the state negotiates preparation of groundwater evaluations at selected hazardous waste facilities with EPA. These evaluations are conducted 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. Evaluations come in two forms, the comprehensive groundwater monitoring evaluation (CME) and the operation and 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 (MGS) and Environmental Services Program (ESP). Five O&M reports are typically scheduled for each FFY. All fieldwork for the five O&M reports scheduled for FFY 2015 was completed; however, the associated reports were not all finalized during the federal fiscal year. In FFY 2015, the section carried out advanced planning for O&M reports scheduled for completion in FFY 2016. Following a review and selection of the facilities and appropriate wells for sampling, work plans were developed with ESP and MGS for these five facilities.

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. 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. Regulatory compliance issues of major concern are handled promptly through appropriate enforcement actions. During FFY 2015, the section completed six groundwater monitoring report reviews.

## Financial Assurance Activities

The section monitors the permitted facilities' financial health throughout the year and conducts annual financial assurance reviews to make sure enough funding is available to cover the cost estimates for their activities. During FFY 2015, the section conducted 99 RCRA financial reviews. This number includes three resource recovery financial assurance reviews, of which all are TSD facilities.

## 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 substitutes completion of some unplanned work for equivalent planned work, to address federal grant requirements for formal Multi-Year Facility Planning Strategy goals unable to be completed as planned.

During FFY 2015, the section provided technical support to other Hazardous Waste Program sections and the Division of Environmental Quality on several occasions, regarding multiple sites and issues. Tasks included activities such as document review and site characterization, conceptual model, plume stability, monitoring system adequacy, remedy design, groundwater data interpretation and natural resource damage evaluation.

Considerable time and resources were spent on several activities related to the DOE/GSA Bannister Federal Complex. Activities included weekly issues reports, weekly EPA/state technical staff teleconferences, monthly EPA/state/permittee/redeveloper meetings 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, additional time has been spent reviewing and approving 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, baseline risk assessment and a Polychlorinated Biphenyl (PCB) Fate and Transport Study Work Plan. The section has also spent additional time reviewing and approving multiple work plans and reports prepared by the preferred redevelopment partner, CenterPoint, and their consultants as part of their “due diligence” efforts aimed at future redevelopment of the federal complex.

Time and resources have also been spent 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, EPA and the Missouri Attorney General's office regarding bankruptcy-related issues. These issues were related to the following companies:

- City Environmental Inc. - Kansas City
- The Doe Run Co. Glover Smelter - Annapolis
- Greenfield Environmental Trust LLC (formerly Tronox) - Kansas City
- Greenfield Environmental Trust LLC (formerly Tronox) - Springfield
- Omnium LLC - St. Joseph
- West Star Environmental Inc. - Kingsville

The section provided substantial technical support to the department's Natural Resource Damage (NRD) efforts. Two staff are assigned NRD assistance duties on a part-time basis to perform NRD related tasks for several sites, in addition to performing core section functions. Tasks have periodically included reviewing reports, participating in scoping meetings, participating in monthly technical conference calls, public meetings, creating geographic information system based maps and preparing habitat equivalency analyses and damage claims.

During FFY 2015, the section worked with EPA headquarters to assess workloads associated with permit modifications and took steps to communicate the importance of permit modification work to EPA upper management and federal budget decision-makers. Staff helped collect examples of beneficial permit modification work as part of EPA's RCRA messaging initiative. They 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. These efforts helped EPA headquarters develop a report titled Permit Modifications Report: Safeguarding the Environment in the Face of Changing Business Needs, EPA 530-R-15-001, January 2016. The report was recently posted on EPA's website, located at <http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100O0MR.txt>. Staff provided several permit modification case history examples to EPA as part of development of this report, some of which are included in the final report version.

Staff continued to routinely participate in state and national work groups and teleconferences, including:

- EPA Groundwater Forum
- EPA RCRA Permit Modification Work Group
- State "No Stricter Than" Hazardous Rulemaking Work Group
- National Corrective Action Project LEAN Work Group
- RCRA Financial Assurance Work Group
- Monthly RCRA Permit Writers Teleconferences
- Monthly RCRA Combustion Teleconferences
- Monthly RCRA Reuse and Brownfields Prevention Teleconferences
- Monthly RCRA/TSCA Remediation Teleconferences
- Monthly RCRA Subpart X Teleconferences
- RCRAInfo Change Management Process Financial Assurance Expert and Corrective Action Work Groups
- RCRAInfo Data Work Group

### Permit Modifications List Available Online

Facilities or businesses actively treating, storing (for longer than allowed by the hazardous waste generator regulations) or disposing of hazardous waste in Missouri must get a hazardous waste permit. These permits contain hazardous waste management operating and closure requirements for facilities that are actively managing hazardous waste. If applicable, the permits also contain post-closure, corrective action and financial assurance requirements for facilities with previously closed hazardous waste management units that require continuing care for facilities with demonstrated releases to the environment.

The department or the facility can make changes to the hazardous waste permit throughout its life. The regulations identify 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 notifying the public of all hazardous waste permit modifications processed by Missouri for calendar year 2015. The permit modification list for calendar year 2015 (and previous years) is available online at [www.dnr.mo.gov/env/hwp/permits/publications.htm](http://www.dnr.mo.gov/env/hwp/permits/publications.htm).

### Regional Office Hazardous Waste Compliance Efforts

- Conducted 105 hazardous waste generator compliance inspections:
  - 17 at large quantity generators
  - 50 at small quantity generators
  - 24 at conditionally exempt small quantity generators
  - Five at E-waste recycling facilities
  - One at resource recovery facilities
  - One targeted reinspection
  - Five focused compliance inspections
  - Five E-waste inspections
- Conducted two compliance assistance visits at hazardous waste generators
- Issued 29 letters of warning and eight notices of violation requiring actions to correct violations cited during the 105 inspections conducted
- Received and investigated a total of 41 citizen concerns regarding hazardous waste issues

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

*Tank inspection contract* – During the reporting period, the tank inspection contractor conducted 303 inspections of active underground and aboveground storage tanks for the Missouri Department of Natural Resources and the Missouri Petroleum Storage Tank Insurance Fund.

*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 the insurance fund will also be accepting reciprocity from some of our neighboring states. The training program and draft rule may be found on the fund’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 was published in July and became effective Oct. 13, 2015. Please note, these rules are not yet effective in Missouri; they will not be effective in Missouri until the department promulgates Missouri’s regulations or until EPA follows its procedures for withdrawal of our state program approval. The 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. Previously deferred airport fuel hydrant systems and field constructed tanks will now be regulated. Missouri must also include a new requirement for all new 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 2016 contract inspections, as well as the department inspections continue. As seen in previous years, Missouri owners, operators and contractors continue to demonstrate their proactive compliance by being responsive to issues when found, 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 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* - Efforts continue to resolve violations with facilities not maintaining a financial responsibility mechanism to address releases and to protect third parties. Because of these efforts by the UST Compliance Technology Unit staff and the Attorney General's Office, the number of facilities without a verified financial responsibility mechanism is less than 1.5 percent.

## Special Facilities Unit

*Commercial facility inspectors* - Special facilities inspectors conducted seven inspections of commercial hazardous waste treatment, storage and disposal facilities (TSDFs).

*Polychlorinated biphenyl (PCB) inspector* - The inspector conducted 12 compliance inspections at various types of facilities throughout the state. The inspector's reports are forwarded to the U.S. EPA Region 7, which has authority for taking any necessary enforcement action regarding PCBs according to the Toxic Substances Control Act.

*Hazardous waste transporters* - 90 Hazardous Waste Transporter License compliance background checks were completed. In addition, staff updated Missouri's List of Licensed Hazardous Waste Transporters and added a key to services. The list includes transporters licensed to haul hazardous waste, infectious waste and used oil in Missouri and it can be accessed at <http://dnr.mo.gov/env/hwp/transporters.php>.

## Hazardous Waste Enforcement Unit

### Enforcement Efforts

- Resolved four hazardous waste enforcement cases.
- Received two new enforcement cases.

### Hazmat, Incorporated

Hazmat is a commercial hazardous waste treatment, storage and disposal facility located in Kansas City. The department conducted inspections of Hazmat on Feb. 14, 2013; April 16, 2013; and Jan. 30, 2014. The department issued four notices of violation which included violations of the containerization and storage requirements and violations of the universal waste requirements. All violations were corrected and the department and Hazmat negotiated a penalty of \$11,000 to be paid in one installment to the Jackson County School Fund. An administrative order on consent was finalized and sent to the company on Nov. 5, 2015.

### Bill Crawford

The department conducted a complaint investigation on Mr. Crawford's property, located at 3911 North Highway 67, Poplar Bluff, on Jan. 30, 2014. Bluff Honda formerly operated at the facility for approximately 13 years. During the investigation, the department observed used oil released to the environment in violation of the Missouri Hazardous Waste Management Laws and Regulations. On Feb. 13, 2014, the department issued a notice of violation to Mr. Crawford for these violations. By March 3, 2014, Mr. Crawford demonstrated he adequately addressed each of these violations.

Mr. Crawford signed an administrative order on consent and paid a one-time civil penalty and agreed to refrain from violations for all future inspections. The penalty was paid up-front. The \$1,000 penalty was paid to the Butler County School Fund.

### **Federal International Inc.**

Federal International Inc., Jefferson City, receives recyclable materials from the public directly, as well as through several business and government contracts. Federal sorts the materials and sells them to downstream vendors. Materials collected include ferrous and nonferrous metals, plastics, paper, cardboard and electronics.

The department conducted an inspection of Federal on June 11, 2013, during which it was determined Federal had mismanaged at least 198 cathode ray tubes (CRTs) resulting in violations of the Missouri Hazardous Waste Management Law and Regulations.

The department issued a notice of violation to document these violations. Federal had returned to compliance by Nov. 22, 2013, having adequately addressed the violations. The company agreed to amicably resolve all claims the department might bring against the company by signing an administrative order on consent. A penalty amount of \$4,800 was paid by the company, with \$3,200 suspended if there are no further violations for two years. The penalty is being paid to the Cole County School Fund.

### **Harmon Transport Inc. and Diesel Shop**

The department conducted an investigation of Harmon Transport Inc. and Diesel Shop in Cabool on Oct. 2, 2013. The investigation focused on management of used oil at the facility. The inspector observed approximately 27 55-gallon drums of used oil and five small drums of used oil located behind the facility. The inspector observed five 55-gallon drums with open bungs and the contents had spilled/leaked onto the ground. The violations cited included used oil not managed properly and disposed into the environment; failure to ensure containers/above-ground tanks are labeled or marked clearly as "Used Oil"; failure to ensure used oil containers which are exposed to rainfall are closed; and failure to cleanup leaks or spills of used oil.

The department issued a notice of violation for these violations on Oct. 3, 2013. On Nov. 8, 2013, Harmon Transport had returned to compliance, having adequately addressed these violations.

The company signed an administrative order on consent and paid a one-time civil penalty and agreed to refrain from violations for all future inspections. The penalty amount was \$2,000 (\$1,000 to be paid up-front with an additional \$1,000 suspended on condition of no further violations for two years). The penalty was paid to the Texas County School Fund.

### **Pesticide Collection Activities**

On Oct. 8, 2015, the Pesticide Collection Services Contract (B3Z15161) was awarded to Heritage Environmental Services, with the contract term running from Oct. 1, 2015, through Sept. 30, 2016.

On Dec. 9, 2015, the Pesticide Collection Program staff participated in the Green Industry Conference's Commercial Pesticide Applicator Training Track by providing a PowerPoint presentation on pesticide waste and disposal.

Pesticide Collection Program staff planned six pesticide collection events for 2016. These are:

- March 12 -- Portageville
- March 26 -- Poplar Bluff
- April 9 -- near Fairfax
- May 21 -- Canton
- June 4 -- Montgomery City
- June 25 -- Bolivar

New for 2016 the Pesticide Collection Program will be collecting empty triple-rinsed, plastic pesticide containers (up to 30 gallon in size) along-side the pesticide collections. Container Services Network will be providing the container collection service.

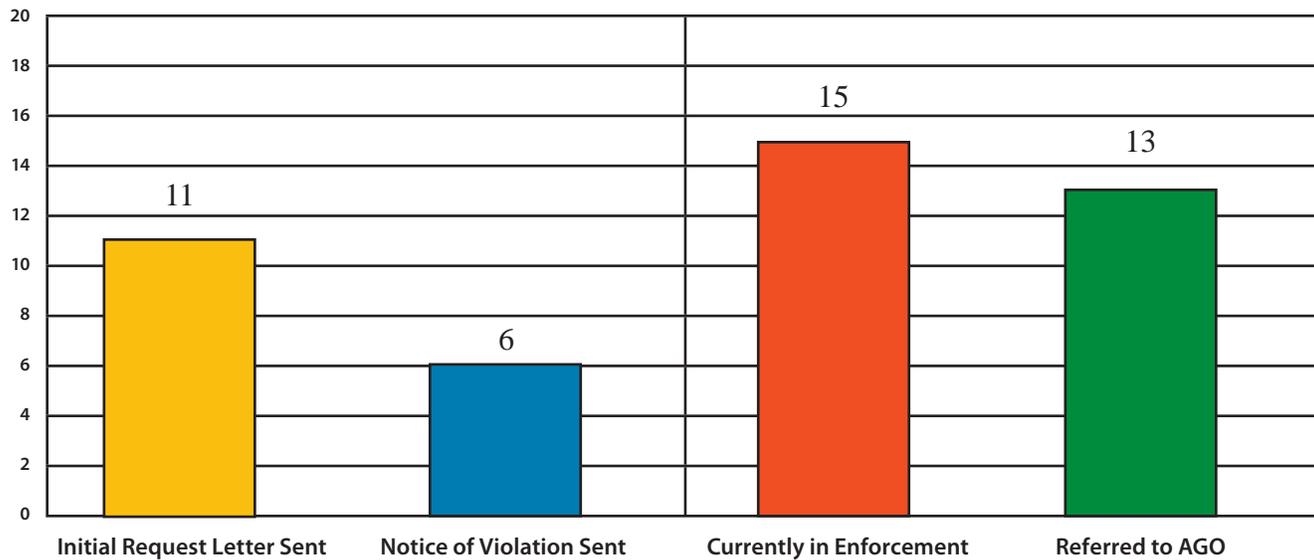
Pesticide Collection Program staff also prepared a training segment for commercial pesticide applicators to be given at several locations throughout the state in January 2016. A PowerPoint was developed to cover topics such as pesticide waste disposal, container cleaning and disposal and spill reporting.

Pesticide collection program staff drafted a fact sheet and a decision tree on pesticide disposal for businesses. The fact sheet will help businesses determine if the pesticide may be hazardous waste when the decision is made to discard the product and it will outline disposal options. Staff also drafted a trifold brochure to promote the pesticide collection program to distribute during outreach events.

### Underground Storage Tank Facilities with Unknown Financial Responsibility Status Report

Financial Responsibility Status	Number of Facilities
Initial Request Letter Sent	11
Notice of Violation Sent	6
Currently in Enforcement	15
Referred to Attorney General's Office	13
<b>Total Number of Facilities with Unknown Financial Responsibility</b>	<b>45</b>

### 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 Sources and Causes Report

In November, the Tanks Section completed the annual Sources and Causes of Releases Report for the period of Oct. 1, 2014, through Sept. 30, 2015. The department has placed this report online at <http://dnr.mo.gov/env/hwp/tanks/epasourceandcause.htm>. This report will also be made available by request to those without Internet access.

Subsection (c) of Section 1526 of the Energy Policy Act amended Section 9002 in Subtitle I of the Solid Waste Disposal Act to add requirements for states to maintain, update and make available to the public a record of USTs regulated under Subtitle I. EPA 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 three elements:

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

The first section of the report describes the number of UST facilities, individual regulated tanks, compliance rates in Missouri and an individual breakdown of the sources and causes of releases opened in federal fiscal year 2015. A total of 90 releases were opened at USTs in federal fiscal year 2015.

- Three instances of physical or mechanical damage to piping
- One instance of physical or mechanical damage to a submersible turbine pump area
- One physical mechanical damage releases to a dispenser
- One spill related to a delivery problem
- Three corrosion related releases
- Two installation problems
- Two other piping related issues
- Seventy-seven historical releases (unknown source). The unknown releases where a definitive source or cause of release was not able to be determined were discovered during:
  - Tank closure
  - Phase II investigations during property transactions
  - Other investigations

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 2015

Tanks staff continued an expedited review process ensuring remediation reviews of high priority sites are completed in a timely manner. They continued an initiative on closing tank remediation sites that have been open for more than 20 years with the goal of providing additional information to the consultant to help completion of these projects and achieve No Further Action status for these sites.

The section began Tanks Backlog Project II, which involves follow-up on 27 old remedial claims. If these sites do not maintain insurance on operational tanks, they will lose benefits for remediation on on-going cleanup projects. Three of these sites have been closed, and 23 remain moving forward. One site has an inability to pay and is not moving forward.

Tanks staff continued to reduce turn-around times on document reviews by using funding to provide overtime. The section also hired one private contractor to provide state oversight of work on tanks sites. With these additional funds, staff estimate they can increase the number of cleanups using the 2006 MRBCA Guidance and decrease turnaround times.

The program's Budget and Planning Section continued to identify sites without the required financial responsibility instruments in effect, allowing the Compliance and Enforcement Section to follow up and assure sites without FR obtain coverage and to pursue penalties for sites not maintaining FR. These actions helped maintain a compliance rate of more than 98 percent.

The Budget and Planning Section continued to update tanks geographic information system data to conform with department standards and work to add tank facilities and cleanup sites to the Hazardous Waste Program's Long Term Stewardship mapper. The section also 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.

The Compliance and Enforcement inspection team conducted 138 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 2015, the department accomplished the following work related to petroleum storage tanks:

- Properly closed 292 tanks
- Reviewed 126 closure reports
- Approved 125 closure notices
- Conducted 13 closure inspections
- Conducted four site investigations
- Responded to 20 emergencies involving petroleum releases
- Oversaw completion of 131 remediation sites
- Issued 891 certificates of registration
- Received 1852 remediation documents and generated 1744 response letters
- Notified of 82 new installations at tank sites and received 48 new site registrations
- Resolved 72 cases involving violations
- Conducted and/or reviewed 1090 inspections (including new installations, re-inspections, site visits, complaint and other investigations, as well as standard compliance inspections)
- Sent more than 1300 letters (including letters of warning and notices of violations) on UST inspections
- At the end of the 2015 calendar year, there were 125 active enforcement cases
- Financial responsibility compliance was at 98.5 percent reflecting insurance coverage from both PSTIF and other private policies and statements
- Currently regulating 3438 facilities with 8934 active underground storage tanks

### Drinking Water Accomplishments

- In Portageville, the Tanks Section completed the investigation of drinking water contamination.
- In Buffalo, the Tanks Section completed the private drinking water well replacement and well replacement.
- In Wasola, the department completed the replacement of a drinking water well serving the Y-Store.
- 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.
- In Marston, began an investigation into the drinking water impact in a city drinking water well.

The Tanks Section finalized, routed for review, signature, copied and mailed 2,200 documents. It helped section, program and department staff when necessary, and continued to review and modify existing procedures to ensure accuracy and efficiency.

The Compliance and Enforcement inspection review team 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  
December 2015**

<b>Staff Productivity</b>	<b>Jul-15</b>	<b>Aug-15</b>	<b>Sep-15</b>	<b>Oct-15</b>	<b>Nov-15</b>	<b>Dec-15</b>	<b>Jan-16</b>	<b>Feb-16</b>	<b>Mar-16</b>	<b>Apr-16</b>	<b>May-16</b>	<b>Jun-16</b>	<b>TOTAL</b>
Documents received for review	197	213	220	205	163	178	0	0	0	0	0	0	1,176
Remediation documents processed	153	146	151	156	93	208	0	0	0	0	0	0	907
Closure reports processed	16	7	15	17	11	12	0	0	0	0	0	0	78
Closure notices approved	12	13	14	12	7	7	0	0	0	0	0	0	65
Tank installation notices received	6	6	10	5	1	10	0	0	0	0	0	0	38
New site registrations	4	3	7	3	8	5	0	0	0	0	0	0	30
<b>Facility Data</b>	<b>Jul-15</b>	<b>Aug-15</b>	<b>Sep-15</b>	<b>Oct-15</b>	<b>Nov-15</b>	<b>Dec-15</b>	<b>Jan-16</b>	<b>Feb-16</b>	<b>Mar-16</b>	<b>Apr-16</b>	<b>May-16</b>	<b>Jun-16</b>	<b>TOTAL</b>
Total in use, out of use and closed USTs	40,929	40,950	40,963	40,971	41,003	41,022	0	0	0	0	0	0	
Total permanently closed USTs	31,970	31,979	32,014	32,040	32,061	32,084	0	0	0	0	0	0	
In use and out of use USTs	8,955	8,967	8,945	8,927	8,938	8,934	0	0	0	0	0	0	
Out of use USTs	664	668	681	685	681	680	0	0	0	0	0	0	
Total hazardous substance USTs	403	403	405	405	405	405	0	0	0	0	0	0	
Facilities with in use and out of use USTs	3,441	3,444	3,441	3,438	3,440	3,438	0	0	0	0	0	0	
Facilities with one or more tank in use	3,209	3,210	3,203	3,199	3,203	3,201	0	0	0	0	0	0	

**Closures**

<b>Underground Storage Tanks</b>	<b>Jul-15</b>	<b>Aug-15</b>	<b>Sep-15</b>	<b>Oct-15</b>	<b>Nov-15</b>	<b>Dec-15</b>	<b>Jan-16</b>	<b>Feb-16</b>	<b>Mar-16</b>	<b>Apr-16</b>	<b>May-16</b>	<b>Jun-16</b>	<b>TOTAL</b>	<b>All Yrs</b>
Closure Reports Reviewed	16	7	15	17	11	12	0	0	0	0	0	0	78	
Closure Notices Approved	12	13	14	12	7	7	0	0	0	0	0	0	65	
Number of Tanks Closed (Closure NFA)	32	23	38	22	20	21	0	0	0	0	0	0	156	

**Cleanup**

<b>Underground Storage Tanks</b>													<b>TOTAL</b>	<b>All Yrs</b>
UST release files opened this month	4	9	10	6	6	8	0	0	0	0	0	0	43	6,687
UST cleanups completed this month	9	6	13	7	6	14	0	0	0	0	0	0	55	5,846
Ongoing UST cleanups	831	833	833	833	833	827	0	0	0	0	0	0		
<b>Aboveground Storage Tanks</b>														
AST release files opened this month	0	0	0	1	2	4	0	0	0	0	0	0	7	481
AST cleanups completed this month	2	0	1	1	0	0	0	0	0	0	0	0	4	302
Ongoing AST cleanups	175	175	174	174	176	179	0	0	0	0	0	0		
<b>Both UST and AST</b>														
Total release files-both UST & AST	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Cleanups completed-both UST & AST	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Ongoing cleanups-both UST & AST	27	27	27	27	27	28	0	0	0	0	0	0		
<b>Unknown Source</b>														
Total release files-unknown source	2	0	0	2	0	0	0	0	0	0	0	0	4	230
Cleanups completed-unknown source	1	0	0	1	1	0	0	0	0	0	0	0	3	213
Ongoing cleanups-unknown source	18	18	17	18	17	17	0	0	0	0	0	0		
Documents Processed	153	146	151	156	93	208	0	0	0	0	0	0	907	
*Reopened Remediation Cases	0	0	0	1	0	0	0	0	0	0	0	0	1	81

*\* 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.*