



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

DRAFT

NOTICE OF OPEN MEETING

The meeting will also be streamed live from the Department's website at:
dnr.mo.gov/videos/live.htm

**DEPARTMENT OF NATURAL RESOURCES
HAZARDOUS WASTE PROGRAM
HAZARDOUS WASTE MANAGEMENT COMMISSION
AGENDA**

October 20, 2016

**Department of Natural Resources, Hazardous Waste Program
Bennett Springs/Roaring River Conference Rooms
1730 E. Elm Street
Jefferson City, MO 65102**

Note: Persons with disabilities requiring special services or accommodations to attend the meeting can make arrangements by calling the commission assistant at (573) 751-2747 or writing to the Hazardous Waste Program, P.O. Box 176, Jefferson City, MO 65102. Hearing impaired persons may contact the Hazardous Waste Program through Relay Missouri at 1-800-735-2966.

9:45 A.M. EXECUTIVE (CLOSED) SESSION

In accordance with Section 610.022 RSMo, this portion of the meeting may be closed by an affirmative vote of the Commission to discuss legal matters, causes of action or litigation as provided by Subsection 610.021(1). RSMo.

10:00 A.M. GENERAL (OPEN) SESSION

The General (Open) Session will begin promptly at 10:00 a.m., unless an Executive (Closed) Session has been requested; after which, the General Session will start as specified by the Commission's chairman.

Commissioner Roll Call

1. Pledge of Allegiance – Commissioners
2. Approval of Minutes – General (Open) Session, August 18, 2016 – Commissioners

Public Hearing

3. Public Hearing Proposed Amendments to 10 CSR 26 – Underground Storage Tank Rulemaking – Heather Peters, Compliance and Enforcement, HWP

Information Only:

4. Rulemaking Update – Tim Eiken, Director’s Office, HWP
5. Legislative Update – Tim Eiken, Director’s Office, HWP
6. Drycleaning Environmental Response Trust (DERT) Fund Annual Report – Scott Huckstep, Chief, Brownfields/Voluntary Cleanup Program, HWP
7. Quarterly Report – Amy Feeler, Public Information, HWP
8. Legal Update – Brook McCarrick, Office of the Attorney General
9. Public Inquiries or Issues – Steve Sturgess, Director, HWP
10. Other Business – Steve Sturgess, Director, HWP
11. Future Meetings
Thursday, December 15, 2016 – to be held at the Bennett Springs/Roaring River Conference Rooms, 1730 E. Elm Street Conference Center, Jefferson City, MO

Adjournment

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
HAZARDOUS WASTE MANAGEMENT COMMISSION**

Meeting Date: October 20, 2016

ROLL CALL ROSTER

	In Person:	By Phone:	Absent
Chairman Elizabeth Aull	_____	_____	_____
Vice-Chairman Jamie Frakes	_____	_____	_____
Commissioner Charles Adams	_____	_____	_____
Commissioner Michael Foresman	_____	_____	_____
Commissioner Mark Jordan	_____	_____	_____

Missouri Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 1

Pledge of Allegiance

Missouri Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 2

Approval of Minutes

Issue:

Commission to review the General Session minutes from the August 18, 2016, Hazardous Waste Management Commission meeting.

Recommended Action:

Commission to approve the General Session minutes from the August 18, 2016, Hazardous Waste Management Commission meeting.

GENERAL

SESSION

MEETING

MINUTES

GENERAL SESSION
HAZARDOUS WASTE MANAGEMENT COMMISSION
August 18, 2016; 10:00 A.M.
1730 E. Elm Street
Bennett Springs/Roaring River Conference Rooms
Jefferson City, MO 65102

(Note: The minutes taken at Hazardous Waste Management Commission proceedings are just that, minutes, and are not verbatim records of the meeting. Consequently, the minutes are not intended to be and are not a word-for-word transcription.)

The meeting was streamed live from the Department's website at: dnr.mo.gov/videos/live.htm.

The phone line, for those Commissioners calling in to today's meeting, was opened at 9:30 a.m.

COMMISSIONERS PRESENT IN PERSON

Chairman Elizabeth Aull

COMMISSIONERS PRESENT BY PHONE

Commissioner Mark Jordan
Commissioner Michael Foresman

Chairman Aull called the General Session to order at approximately 10:01 a.m.

A roll call was taken of the Commissioners. Chairman Elizabeth Aull was present in person. Commissioner Michael Foresman and Commissioner Mark Jordan were present by phone. No quorum was established and there are no action items on the agenda for this meeting.

1. PLEDGE OF ALLEGIANCE

Chairman Aull led the recitation of the Pledge of Allegiance by the Hazardous Waste Management Commission (Commission) and guests.

2. APPROVAL OF MINUTES

- General Session minutes from the April 21, 2016, meeting:

Commissioner Jordan made a motion to approve the April 21, 2016, General Session minutes. Commissioner Foresman seconded the motion.

A vote was taken; all were in favor, none opposed. Motion carried. Minutes were approved.

3. RULEMAKING UPDATE

Mr. Tim Eiken, Director's Office, HWP, addressed the Commission and noted he had a couple of rulemaking items of interest he wished to share. Mr. Eiken began with the Underground Storage Tanks rulemaking that the Program was undertaking and noted that this rulemaking included amendments and updates to the Tanks Rules. He stated that these changes would bring Missouri's rules in line with the federal requirements which the states were required to adopt to run a tank program. He advised that the Regulatory Impact Report had been released on July 20th, starting the 60 day comment period that would end on September 19th. He noted that the proposed amendments were published on September 15th in the Missouri Register, would have a public hearing and testimony at the October 20th Hazardous Waste Management Commission meeting, and would have comments and changes incorporated following the end of the public comment period so as to go before the Commission for their recommendation at the December meeting.

Mr. Eiken then advised that the next rulemaking item of interest was the Federal Definition of Solid Waste. He noted that this was currently undergoing an internal review and that Program staff were waiting on input from legal staff before making any recommendations to adopt. He noted that the federal rule affects the Resource Recovery Program and it was being evaluated to see if it had any other effects on any other current rules.

He also stated that changes to the recently adopted Generator Fee Rule was also being reviewed as there were some outdated language that needed to be cleaned up.

Mr. Eiken went on to advise that the notice was in the Federal Register regarding the statutory 5 Year Review requirement. He stated that every 5 years a notice is published on July 1st, which opens up all rules to a 60 day comment period; whereas the Departments/Programs will have to prepare a report on each rule noting if it is necessary, continues to be necessary, is obsolete, overlaps other rules or has other conflicts. He advised that this review will allow the Department to clean up outdated references, etc., in the "No Stricter Than" rule updates. He also advised that this report must be filed with the Joint Committee on Administrative Rules by June 30, 2017.

No questions were posed by the Commission. This was provided as information only and required no other action on the part of the Commission.

4. LEGISLATIVE UPDATE

Mr. Tim Eiken, Director's Office, HWP, again addressed the Commission and he would like to inform the Commission of one or two bills before the legislature this session that contained subject matter that may be of interest. He stated that the first one was a bill regarding the funding for the Department/Program, and involved moving any dedicated fees or funds to General Revenue. He noted that this type of legislation had been seen several times the past several years but had gone to hearing and did not advance any further.

He went on to say that the second piece of legislation of interest was an offshoot of the "No Stricter Than" legislation and involved the Zinc Fertilizer Rule. He noted that the rule in question was rescinded in the most recent rule package and that Department staff were

considering changes to the federal rule to make it more protective. He stated that the request for reconsidering the rescission of the federal rule came from a stakeholder and that staff are working with the affected stakeholder to come up with a solution that does not require a rule change.

No questions were posed by the Commission. This was provided as information only and required no other action on the part of the Commission.

5. FINANCIAL RESPONSIBILITY

Ms. Kathy Flippin, Chief, Compliance and Enforcement Section, filled in for Michael Martin and provided the Commission with an update of the Hazardous Waste Program's (HWP's) progress on sites without a financial responsibility (FR) mechanism to cleanup releases from underground storage tanks (USTs), utilizing the expedited enforcement procedure.

She noted that in 2008 when the Commission approved the expedited enforcement procedure, of the 3,374 facilities required to have financial responsibility, 184 facilities lacked coverage; resulting in a 95% compliance rate. She went on to relate that under this expedited process, as of July 19, 2016, of the 3,438 facilities required to have financial responsibility, 53 are currently without verified coverage. This equates to a 99% compliance rate.

She then stated that as of July 19, 2016, of those 53 sites, 14 are currently at the Attorney General's Office for legal action, 20 are currently in the Enforcement Unit and 16 have had initial letters concerning their compliance. Of those 34 sites currently at the Attorney General's Office or in the Enforcement stage, 19 currently have pending applications with the Petroleum Storage Tank Insurance Fund.

She ended by noting that the expedited enforcement process is a valuable tool, allowing the Compliance and Enforcement Section (CES) to keep pace with the tasks and responsibilities of ensuring compliance with FR.

No questions were posed by the Commission. This was provided as information only and required no other action on the part of the Commission.

NOTE: "There is a date and a number correction to the information presented at the August Commission meeting in the Financial Responsibility Update. Rather than stating that "as of July 19, 2016, of the 3,438 facilities required to have financial responsibility that 184 lacked coverage," we should have reported that "as of July 19, 2015, of the 3,176 facilities required to have financial responsibility, 53 are currently without verified coverage." We had inadvertently reported the total number of UST sites we regulate as of July 1, 2016, rather than the number required to have financial responsibility, which equates to a 98.3% compliance rate.

6. RADIOACTIVE WASTE COMPACT AND RADIOACTIVE MATERIALS SHIPMENT FEE UPDATE

Ms. Tiffany Drake, Federal Facilities Section, HWP, addressed the Commission and provided a PowerPoint presentation on the radioactive waste compact and radioactive materials

shipment. She provided the Commission with an overview on what was the Low Level Waste Compact, what happened on the Annual Call, an overview of the new website for the Compact, an update on the Radioactive Materials Shipment Fee, and a brief talk on the Shipment Fee fiscal year trends and future plans.

Ms. Drake began by noting that Midwest Interstate Low-Level Radioactive Waste Compact Commission included six states; Indiana, Iowa, Minnesota, Missouri, Ohio and Wisconsin. She advised that the Compact was enacted in Missouri in 1983, could be found in the Missouri Revised Statutes Section 260.700, and was formed to address disposal of low-level radioactive waste from member states.

Ms. Drake described that there were 10 compacts across the country, which were created to handle low-level radioactive waste from member states. She stated that each state can appoint one voting commissioner and any alternates and that the Commissioner was appointed by the governor. She stated that under the current structure, the HWMC would then advise the Commissioner, if needed. She noted that the Department Director is the Commissioner and that staff participate on the call as an “observer.”

Ms. Drake relayed that in recent years, there has been very little activity for the compact as no waste repositories exist or are being proposed. She stated that the annual call is held to review the budget and approve officers and expenditures. She also noted that this call allowed participants to review the new website for the compact; which is located at <http://midwestcompact.org/>. A quick review of the website was provided with the presentation.

She went on to note that with regards to the fee, it covers the shipment of specific types of radioactive material and waste in and across Missouri including: high-level radioactive waste, transuranic radioactive waste, highway route controlled quantity (HRCQ) shipments, spent nuclear fuel, low-level radioactive waste and includes shipments via truck and train. She stated that the fee is currently assessed and charged on a per-train or per-truck basis. She advised that the fee was originally charged per-cask for truck HRCQ shipments, but was changed in 2012 to per-truck. She stated that this provided for a significant decrease in fees to the fund and that the fee was set to sunset on August 28, 2024.

Ms. Drake advised the Commission that the fees were currently used to reimburse the Missouri State Highway Patrol for escorts of HRCQ shipments, to provide for level six safety inspections of HRCQ shipments, for training and equipping of first responders, to assist in the coordination of emergency response and for administration of the fees and the fund.

Ms. Drake described the shipment trends and noted that with regards to the Low Level Waste: in State Fiscal Year (SFY) 2016 that fee collections were down approximately 20 percent from the previous year and that we anticipate a further decrease in shipments this year. She noted that this was mainly due to one in-state site finishing clean-up activities. She went on to note that in regards to HRCQ shipments: in SFY 2016, fee collections were down about 30 percent from previous year. She noted that the Program was unsure of reason for that decrease, but that it was within range of the previous years.

Ms. Drake finished with noting that the plans for the future included train additional staff to provide trainings, to re-engage on emergency responder trainings with a goal of a minimum of four refresher/new trainings across the state, continue to equip groups who meet requirements, calibrate equipment already in the field and to meet with other agencies involved with the fund.

No questions were posed by the Commission. This was provided as information only and required no other action on the part of the Commission.

7. 2016 PESTICIDE COLLECTION UPDATE

Mr. C.J. Plassmeyer, Compliance and Enforcement Section, HWP, addressed the Commission and provided a PowerPoint presentation with an update on the 2016 pesticide collection efforts. Mr. Plassmeyer began by providing some background noting that in 2012 the Pesticide Collection Program began with funding resulting from the Missouri/Walmart settlement for violations of Hazardous Waste Law. He noted that with that settlement, Walmart agreed to a Supplemental Environmental Project that included \$1,050,000 to sponsor pesticide collection events. He advised that this Project has funded 17 collections from 2012 through 2013.

Mr. Plassmeyer then noted that in 2013 there was a Federal settlement, for Federal Insecticide Fungicide and Rodenticide Act Violations. He noted that this included an \$11 million fine, along with an additional \$3 million “community service payment” to the Hazardous Waste Program. He stated that with this settlement the Department of Justice approved the use of funds for pesticide collection events and education outreach regarding pesticide use and disposal.

After giving a summary of how the Pesticide Collection Program began Mr. Plassmeyer gave a summary of each of the pesticide collection events in 2016. Mr. Plassmeyer indicated the first collection event in 2016 took place on March 12, at the University of Missouri – Fisher Delta Research Center, in Portageville, MO., which had 22 participants and yielded 32,659 pounds of pesticides. He noted that there were a couple of large quantities and that there were also several leaking containers collected at this event.

Mr. Plassmeyer advised that the second event, held in Poplar Bluff at the Baker Implement Company on March 26, had 28 participants and yielded 17,674 pounds of pesticides. He ~~advised~~ indicated that Baker Implement staff offered up their Dexter location for a future event.

The third event described by Mr. Plassmeyer, was held at the University of Missouri – Graves-Chapple Research Center in Fairfax on April 9, and had 13 participants, yielding 3,389 pounds and 43 empty containers. Mr. Plassmeyer indicated the Director of the Graves-Chapple Research Center invited him back for a future collection.

He stated the fourth event was in Canton at the Canton Recycling Center on May 21, collecting 4,450 pounds of waste pesticide and 110 empty pesticide containers from 31 participants.

Mr. Plassmeyer indicated the fifth event was held at the Montgomery County Road and Bridge Facility in Montgomery City on June 4. He noted that there were 21 participants yielding 4,274 pounds of waste pesticide and 75 empty pesticide containers.

Mr. Plassmeyer went on to report that the sixth event was held in Bolivar, at the C & C Farm & Home store on June 25. He stated that there were 45 participants, which dropped off 2,161 pounds of waste pesticide, including many containers of banned pesticide. Mr. Plassmeyer mentioned most of the participants were homeowners dropping off small containers of pesticide typically seen around the house. He stated that the store provided a great deal of support for the collection efforts including handing out mini-sized fliers printed out by the store to every customer that shopped there at least two weeks leading up to the event.

Mr. Plassmeyer summarized that the six collections in 2016 yielded 64,607 pounds of waste pesticide from 160 participants, and that there had been 252,857 pounds of waste pesticide collected from 924 participants since 2012. He noted the different advertising methods used for the collection events with newspapers being the most effective. He also displayed a bar graph showing the average collection amounts per year since 2012. He pointed out there was a much higher cost, per pound disposed of, when Walmart was coordinating these events prior to 2014 versus when the department began coordinating the events.

Mr. Plassmeyer then reviewed the container collection efforts that were new at this year's events. He noted that they had worked with Ag Container Recycling Council (ACRC) and had advertised the collection of containers for the 1st and 2nd pesticide collection event. He reported that only a few containers were brought in and stated that he believed it was too early in spraying season. He advised that they had received approximately 180 empty plastic containers (2.5 gallon) and were currently gathering data about container disposal. During the last five collections he indicated he surveyed the farmers on what they did with their empty pesticide containers. He displayed the results of the survey in a pie graph. He mentioned the most common way (41%) to dispose of empty pesticide containers was to triple rinse and recycle. Mr. Plassmeyer pointed out triple-rinsing and burning was the second most used option to dispose of empty pesticide containers. He advised that the ACRC was assisting them in preparing a fact sheet to hand out regarding disposal methods, as it was illegal to burn containers. He stated that they would be sharing information on the ACRC on the Pesticide Collection Program website and that the ACRC had provided information to hand out at events to promote the recycling of empty plastic pesticide containers. Mr. Plassmeyer went on to describe outreach efforts which included the Cole County Fair "Kid's Day," the State Fair and the Commercial Pesticide Applicator Training.

Mr. Plassmeyer ended his presentation by noting that plans were already being made for the 2017 events, which included five to seven events that would begin early March. He noted that the events would hopefully skip planting season and summer and would end in October. He stated that the events would mostly target minimally funded Solid Waste Districts and that the Program would team up with Research Farms when possible and would be held in select areas where we have not been. He noted that these possible locations for 2017 included Portageville, Benton or Sikeston, Lockwood, Chillicothe or Carrollton, St. Charles and Fairfax.

In response to questions asked by the Commission, Mr. Plassmeyer noted that there was approximately \$2.5 million left in the settlement fund and should support the collection efforts for approximately another 10 years. He also responded that the ACRC was a nationwide council and was not just in Missouri. He noted that updates to the program could be found on the collection program's web page located at www.dnr.mo.gov/env/hwp/pesticide.

Chairman Aull noted that the S&H Farm Supply site in Lockwood had been big on recycling projects in the past and also inquired if the Department kept any records on collections at permanent recycling facilities. Mr. Plassmeyer responded that records would really only be reflected in annual generator reports and that he may need to follow up with department's Solid Waste Program.

No other questions were posed by the Commission. This was provided as information only and required no other action on the part of the Commission.

8. QUARTERLY REPORT

Ms. Amy Feeler, Public Information Officer, addressed the Commission and presented the Quarterly Report for the period of Jan. through Mar. 2016. Ms. Feeler directed their attention to the article on the Minuteman II sites and asked if the Commission had any questions.

No questions were posed by the Commission. This was provided as information only and required no other action on the part of the Commission.

9. LEGAL UPDATE

Ms. Brook McCarrick addressed the Commission and advised that she had no new legal issues to discuss at that time. She thanked the Commission and ended her portion of the agenda.

No questions were posed by the Commission. This was provided as information only and required no action on the part of the Commission.

10. PUBLIC INQUIRIES AND ISSUES

The floor was opened to any public inquiries and Mr. Kevin Perry, REGFORM, requested to speak before the Commission. He extended an invitation to the Commissioners to attend the REGFORM 2016 Missouri Hazardous Waste Seminar on October 18, 2016, which was scheduled to be held at the Stoney Creek Inn in Columbia, MO.

No questions were posed by the Commission. This was provided as information only and required no action on the part of the Commission.

11. OTHER BUSINESS

Mr. Steve Sturgess, Director, HWP, addressed the Commission and provided a brief review of other issues that may be of interest to them. He noted that the Department/Program had been involved and attended the Missouri Waste Control Coalition Conference in July and that it went very well. He advised that he was very impressed with the success of the conference.

He went on to state that the Missouri Risk Based Corrective Action (MRBCA) workgroup was making progress with their review of vapor intrusion, which was a big issue in Missouri.

He then advised the Commission that Meramec Caverns had been shut down due to elevated TCE levels, but had finally reopened and that staff were working at other caves across the state, near Superfund sites, where contamination was also showing up.

Mr. Sturgess noted that the EPA has completed its review of the Tanks Program and of PSTIF and we were awaiting their report as it was expected in the fall.

Mr. Sturgess also reminded the Commission that the final hearing on the Tanks UST rules was to be held at the October meeting, with a vote on the rules scheduled for the December meeting.

No questions were posed by the Commission. This was provided as information only and required no action on the part of the Commission.

12. FUTURE MEETINGS

It was noted that the next meeting was scheduled for Thursday, October 20, 2016. Chairman Aull reiterated to the Commissioners that there was a public hearing scheduled for the next meeting and it was very important that they be available for the October and December meetings.

Chairman Aull adjourned the meeting at 11:02 a.m.

Respectfully Submitted,

Debra D. Dobson, Commission Assistant

APPROVED

Elizabeth Aull, Chairman

Date

Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 3

Public Hearing – Underground Storage Tank Rulemaking

Issue:

Today's hearing on the proposed changes to the underground storage tank rules is an opportunity for the Hazardous Waste Management Commission to hear testimony on the rules from the Department and other interested parties. The rules are found in Title 10, Division 26 of the Code of State Regulations (10 CSR 26). The following provides some background information on the nature of these proposed changes.

Information:

The 2005 Energy Policy Act included provisions for changes to the federal underground storage tank regulations. The Environmental Protection Agency (EPA) formalized those provisions into rules that were published in July 2016. However, because Missouri currently has State Program Approval (SPA) from EPA, the federal rules were not immediately effective here in Missouri. The Department must promulgate rules to adopt and implement these new federal changes. If the Department does not do so, and has not submitted a revised SPA application to EPA by the October 13, 2018, deadline, the EPA may begin to withdraw SPA. If the EPA did withdraw our SPA, the federal rules would become effective in Missouri.

Following several training and outreach efforts with tank owners and operators and their service providers, the Department proposed a group of new and amended rules, which were published in the September 15, 2016, *Missouri Register*. The proposed rules were drafted largely to incorporate the new federal requirements, or in some instances to provide Missouri specific options that are at least as protective of the environment as the federal regulations. The federal rules require secondary containment (double-walled tanks, double-walled piping, containment sumps and enhanced, interstitial monitoring) for new or replaced systems or equipment. The new federal rules also include new equipment testing requirements for spill buckets, overflow prevention equipment, and release detection equipment, and for routine walkthrough inspections. The new federal requirements also apply to previously deferred airport hydrant fuel distribution tank systems and field constructed tank systems.

While reviewing the regulations and drafting language to incorporate the federal language, the Department proposed some modifications to the federal rule language that allowed for Missouri-specific alternatives to the federal rules, specifically for lined underground storage tanks. In addition, the Department proposed some regulatory changes, including details on spill bucket repair options, amendments to the installation regulation, and we placed the definitions from state statutes and federal regulations together so they are easier to find and use.

When the public comment period closes, the Department will respond to comments received and prepare an Order of Rulemaking for each of the proposed new and amended rules, including any modifications made in response to comments. These Orders of Rulemaking and the final text for

rules changed in response to comments, will be brought before the Commission with a request for approval to file at the December 15, 2016, meeting.

Recommended Action:

The Commission to hear testimony on the proposed changes to the underground storage tank rules in Title 10, Division 26 of the Code of State Regulations (10 CSR 26).

- 10 CSR 26-2.010** Applicability
- 10 CSR 26-2.011** Interim Prohibition for Deferred Underground Storage Tank Systems
- 10 CSR 26-2.012** Definitions
- 10 CSR 26-2.013** UST Systems with Field-Constructed Tanks and Airport Hydrant Fuel Distribution Systems (New Rule)
- 10 CSR 26-2.019** New Installation Requirements
- 10 CSR 26-2.020** Performance Standards for New Underground Storage Tank Systems
- 10 CSR 26-2.021** Upgrading of Existing Underground Storage Tanks Systems
- 10 CSR 26-2.022** Notification Requirements
- 10 CSR 26-2.030** Spill and Overfill Control
- 10 CSR 26-2.031** Operation and Maintenance of Corrosion Protection
- 10 CSR 26-2.032** Compatibility
- 10 CSR 26-2.033** Repairs
- 10 CSR 26-2.034** Reporting and Record Keeping
- 10 CSR 26-2.035** Testing of Containment Sumps (New Rule)
- 10 CSR 26-2.036** Operation and Maintenance Walkthrough Inspections (New Rule)
- 10 CSR 26-2.040** General Requirements for Release Detection for All Underground Storage Tank Systems
- 10 CSR 26-2.041** Requirements for Petroleum Underground Storage Tank Systems
- 10 CSR 26-2.042** Requirements for Hazardous Substance Underground Storage Tanks Systems
- 10 CSR 26-2.043** Methods of Release Detection for Tanks
- 10 CSR 26-2.044** Methods of Release Detection for Piping

Page Three

- 10 CSR 26-2.046** Alternative Methods of Release Detection for Field-Constructed Tanks (New Rule)
- 10 CSR 26-2.047** Alternative Methods of Release Detection for Bulk Piping (New Rule)
- 10 CSR 26-2.048** Release Detection Record Keeping (Amendment – moves from 2.045)
- 10 CSR 26-2.050** Reporting of Suspected Releases
- 10 CSR 26-2.052** Release Investigation and Confirmation Steps

Presented by:

Ms. Heather Peters – UST Rule Coordinator, Compliance and Enforcement Section, HWP

Chairman Aulls'

**OPENING
STATEMENT**

**“Underground Storage Tank”
Rulemaking**

**Hazardous Waste Management Commission Meeting
October 20, 2016**

Opening Statement for the Public Hearing on the proposed amendments to the underground storage tank rules in Title 10, Division 26 of the Code of State Regulations (10 CSR 26).

I hereby call this public hearing to order. A public hearing is not typically a forum for debate of the issues. Rather, the purpose of this hearing is to provide the Department of Natural Resources and the public an opportunity to present testimony on the proposed changes to Chapter 2 of 10 CSR 26.

At the request of the Commission, the Department will first present testimony on the proposed amendments and new rules. Following their testimony, the public will be given the opportunity to comment on the proposed rulemaking. A sign-up sheet is provided at the back of the room for anyone in attendance at the hearing, in addition to comment forms for those who wish to make any oral comments. Please fill out a comment form if you wish to be heard. This will aid us in recognizing speakers and calling them to testify. Additionally, we ask anyone who approaches the Commission to testify to please state their name and affiliation, if any, for the record and provide a business card, if available, to the court reporter and to the commission secretary.

Written comments will also be accepted at this hearing. Please provide them to the Hazardous Waste Program's Director, Steve Sturgess. Following the conclusion of the hearing, comments may be submitted by mail to the Director of the Hazardous Waste Program, P.O. Box 176, Jefferson City, Missouri 65102. Comments submitted by mail must be postmarked on or before the end of the public comment period, on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov and must also be received no later than October 27, 2016.

Volume 41, Number 18
Pages 1123-1252
September 15, 2016

SALUS POPULI SUPREMA LEX ESTO

"The welfare of the people shall be the supreme law."



JASON KANDER
SECRETARY OF STATE

MISSOURI
REGISTER

personnel records;

12. Information Systems is responsible for providing and improving information and communication services used by employees of MoDOT through the operation and maintenance of local and statewide data networks and telephone services. Information Systems staff provide applications programming expertise to support the engineering, financial, operational, and general information needs of MoDOT;

13. Maintenance is responsible for assisting and supporting maintenance activities for the preservation and operation of the state highway system;

14. Motor Carrier Services provides information, credentials, and permits and enforces safety for businesses and individuals interested in commercial property and passenger-carrying operations on public highways in and through Missouri;

15. Multimodal Operations is responsible for administering state and federal programs that support and develop non-highway passenger and freight transportation, which include aviation, railroads, transit, and waterways. Major programs include capital improvements, operating support, technical assistance, safety outreach, and identifying freight efficiencies/opportunities;

16. Risk and Benefits Management is responsible for the management and implementation of medical and life insurance plans for department employees and retirees; administration of MoDOT's self-insurance operations, including workers' compensation, fleet liability, general liability, and property damage recovery; and administration of the safety and health programs;

17. Traffic and Highway Safety is responsible for the safe and efficient movement of people and goods on the state highway system. This includes supporting signing, striping, traffic signals, lighting, intelligent transportation systems (ITS), roadway access, and safety management programs throughout the state. Traffic and Highway Safety is responsible for the coordination of traffic management, incident management, traveler information services, and the radio and emergency communication systems; and is also responsible for planning, directing, and coordinating the solicitation, review, award, and monitoring of federal highway safety grant contracts and concentrates their efforts in the areas of education, enforcement, and engineering to prevent deaths and injuries from motor vehicle accidents; and

18. Transportation Planning is responsible for *collecting, managing, and analyzing data to provide a single source of information to support MoDOT's decision process related to maintenance, construction, and reconstruction of the state transportation system; developing and tracking the five- (5-) Year Highway and Bridge Construction Schedule and the Statewide Transportation Improvement Program; mapping; and developing/ planning and coordinating a long range, total transportation system for MoDOT. This includes developing the long range transportation plan; developing, coordinating, and tracking the five- (5-) year Statewide Transportation Improvement Program; mapping; collecting, managing, and analyzing data to provide a single source of information to support MoDOT's decision process related to maintenance, construction, and reconstruction of the state transportation system; leading organizational performance management, including the production of MoDOT's quarterly performance management document, Tracker; and facilitating process improvement, customer satisfaction, and problem solving teams to improve operational performance.*

(3) How to Obtain Information. The official residence of the commission, as well as the offices of the director, chief counsel, commission secretary, and divisions of MoDOT, is the Missouri Department of Transportation Building in Jefferson City, Missouri. Written inquiries by the public should be addressed to the Commission Secretary, Missouri Department of Transportation Building, PO Box 270, Jefferson City, MO 65102. The general information telephone number is (573) 751-2551. Inquiries may be made via email to com-

ments@modot.mo.gov. Information from any district office of the department may be obtained in person, by writing, or by telephoning the District Engineer, Missouri Department of Transportation: Northwest District, 3602 North Belt Highway, St. Joseph, MO 64506-1399, (816) 387-2350; Northeast District, 1711 South Highway 61, [PO Box 1067,] Hannibal, MO 63401, (573) 248-2490; Kansas City District, 600 NE Colbern Rd., Lee's Summit, MO 64086, (816) 622-6500; Central District, 1511 Missouri Boulevard, PO Box 718, Jefferson City, MO 65102, (573) 751-3322; St. Louis District, 1590 Woodlake Drive, Chesterfield, MO 63017, (314) 275-1500; Southwest District, 3025 East Kearney, PO Box 868, Springfield, MO 65801, (417) 895-7600; and Southeast District, 2675 N. Main Street, PO Box 160, Sikeston, MO 63801, (573) 472-5333.

AUTHORITY: section 536.023, RSMo Supp. 2013. Original rule filed Oct. 14, 1976, effective March 1, 1977. For intervening history, please consult the Code of State Regulations. Amended: Filed Aug. 4, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with the Missouri Department of Transportation, Pam Harlan, Secretary to the Commission, PO Box 270, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED AMENDMENT

10 CSR 26-2.010 Applicability. The commission is amending sections (2) and (3) and adding a new section (4) to this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, establish clearer and more detailed new system requirements, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(2) The following UST systems are excluded from the requirements of this chapter:

(A) Any UST system holding hazardous wastes listed or identified

in the Missouri Hazardous Waste Management Law, sections 260.350–260.434, RSMo, and the rules promulgated thereunder or a mixture of hazardous waste and other regulated substances, except for [waste] used oil as defined in 10 CSR 25-11.279;

(3) *[Deferrals]* **Partial Exclusions.** Rules 10 CSR 26-2.020–10 CSR 26-2.053 and closure requirements in 10 CSR 26-2.060–10 CSR 26-2.064 do not apply to any of the following types of UST systems:

(A) Wastewater treatment tank systems **not covered in subsection (2)(B) above**;

(C) Any UST system that is part of an emergency generator system at nuclear power generation facilities *[regulated]* **licensed** by the Nuclear Regulatory Commission *[under]* **and subject to the Nuclear Regulatory Commission requirements regarding design and quality criteria, including but not limited to**, 10 CFR Part 50*[, Appendix A]*;

(D) **Aboveground tanks associated with** *[A]*airport hydrant fuel distribution systems; and

(E) *[UST systems with]* **Aboveground tanks associated with field-constructed tanks.**

(4) **Previously deferred UST systems. Previously deferred airport hydrant fuel distribution systems, tank systems, and field constructed tanks systems must meet one (1) of the following options for compliance:**

(A) **Option 1. Owners and operators must document that the previously deferred UST is appropriate for continued use by providing proof of compliance with 10 CSR 26-2.020 through 10 CSR 26-2.048; or**

(B) **Option 2. Permanent closure of the UST system no later than July 1, 2019.**

(C) **New UST systems installed after July 1, 2017, must meet all requirements at installation.**

AUTHORITY: sections 319.100, 319.105, 319.107, 319.111, and 319.114, RSMo 2000, and sections 319.109 and 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.010. Original rule filed April 2, 1990, effective Sept. 28, 1990. Amended: Filed Jan. 2, 1996, effective Aug. 30, 1996. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov.

Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED AMENDMENT

10 CSR 26-2.011 Interim Prohibition for Deferred Underground Storage Tank Systems. The commission is proposing to delete sections (2) and (3) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the *Code of State Regulations* to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, establish clearer and more detailed new system installation requirements, outline the requirements for new USTs at marinas, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

[(2) Notwithstanding section (1) of this rule, a UST system without corrosion protection may be installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life. Owners and operators must maintain records that demonstrate compliance with the requirements of this section for the remaining life of the tank.]

[(3) The determination in section (2) of this rule should comply with the following recommended practice: NACE International RP 0285-2002, Corrosion Control of Underground Storage Tank Systems by Cathodic Protection, revised 2002. This document is incorporated by reference without any later amendments or modifications. To obtain a copy contact NACE International, Box 218340, Houston, TX 77218-8340, (713) 492-0535, www.nace.org.]

AUTHORITY: section 319.105, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.011. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private

entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED AMENDMENT

10 CSR 26-2.012 Definitions. The commission is proposing to amend section (1) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Many definitions relevant to this rule are set forth in the underground storage tank (UST) law in section 319.100, RSMo. [The regulations set forth in 40 CFR part 280.12, July 1, 2010, as published by the Office of the Federal Register, National Archives and Records Administration, Superintendent of Documents, Pittsburgh, PA 15250-7954, are incorporated by reference. This rule does not incorporate any subsequent amendments or additions. The definitions set forth in 40 CFR 280.12, are subject to the following additions, modifications, substitutions, or deletions in the subsections:]

(A) Definitions beginning with the letter A.

1. "Aboveground release" means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the aboveground portion of a UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from a UST system.

2. "Airport hydrant fuel distribution system" (also called

airport hydrant system) means a UST system which fuels aircraft and operates under high pressure that typically terminates into one (1) or more hydrants (fill stands). The airport hydrant system begins where fuel enters one (1) or more tanks from an external source such as a pipeline, barge, rail car, or other motor fuel carrier.

3. "Ancillary equipment" means any devices used to distribute, meter, or control the flow of regulated substances to and from a UST including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps.

[1.]4. "Annual" means recurring, done, or performed every three hundred sixty-five (365) days.

[2.]5. "Annually" means at least once every three hundred sixty-five (365) days[;].

(B) Definitions beginning with the letter B. [(Reserved);]

1. "Belowground release" means any release to the subsurface of the land or to groundwater. This includes, but is not limited to, releases from the belowground portions of a UST system and belowground releases associated with overfills and transfer operations as the regulated substances move to or from a UST.

2. "Beneath the surface of the ground" means beneath the ground surface or otherwise covered with earthen materials.

3. "Biannually" or "biannual" means recurring, done, or performed every six (6) months.

(C) Definitions beginning with the letter C.

1. "Cathodic protection" is a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.

2. "Cathodic protection tester" means a person who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. At a minimum, such persons must be certified by NACE International, the Steel Tank Institute, or the International Code Council.

[1.]3. [To the definition of] "CERCLA" [at 40 CFR 280.12, incorporated in this rule, add the words "] means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986[" after the words "as amended";].

4. "Compatible" means the ability of two (2) or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the tank system under conditions likely to be encountered in the UST.

5. "Connected piping" means all piping including valves, elbows, joints, flanges, and flexible connectors attached to a UST system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two (2) UST systems should be allocated equally between them.

6. "Consumptive use" with respect to heating oil means consumed on the premises for heating purposes, typically in the operation of heating equipment, boilers, and furnaces.

7. "Containment sump" means a liquid-tight container that protects the environment by containing leaks and spills of regulated substances from piping, dispensers, pumps, and related components in the containment area.

8. "Corrosion expert" means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified by NACE International as a CP Technologist, CP Specialist, or

Senior Corrosion Technologist, or for sti-P3® tanks, a Steel Tank Institute certified Cathodic Protection Inspector.

(D) Definitions beginning with the letter D.

1. “*De minimus*” means—

- A. Any volume of regulated substance(s) contained in a tank with a capacity of less than one hundred ten (110) gallons; or
- B. A very low concentration of regulated substances; or
- C. Any volume of regulated substance(s) contained in an emergency backup tank that holds regulated substances for only a short period of time and is expeditiously emptied after use. (Comment: *De minimus* tanks include: swimming pools, permitted wastewater treatment facilities, and chlorinated, potable water storage tanks. An oil-water separator is not a *de minimus* system unless the tank has a less than one hundred ten (110) gallon capacity.)

2. “Department,” unless otherwise stated, means the Missouri Department of Natural Resources[;].

3. “Dielectric material” means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate UST systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the UST system (e.g., tank from piping).

4. “Dispenser” means equipment located aboveground that dispenses regulated substances from the UST system.

5. “Dispenser system” means the dispenser and the equipment necessary to connect the dispenser to the underground storage tank system.

6. “Double-walled piping” is a pipe within a pipe, where the outer wall and inner walls are separated, the inner pipe is completely contained within the outer pipe, except for any single wall fittings or ends, which must be open to a leak-tight containment sump, and the space between the two (2) pipes can be used to monitor the integrity of both the inner and outer pipes.

(E) Definitions beginning with the letter E.

1. [In the definition for “existing tank system” in 40 CFR 280.12 incorporated in this rule, substitute the date “September 28, 1990” for the date “December 22, 1988”:] “Electrical equipment” means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

2. “Excavation zone” means the volume containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

(F) Definitions beginning with the letter F. [(Reserved);]

1. “Farm tank” is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank must be located on the farm property. Farm includes fish hatcheries, rangeland, and nurseries with growing operations.

2. “Field-constructed tank” means an underground tank constructed in the field or location where it will be used to store a regulated substance. For example, a tank constructed of concrete that is poured on-site or a steel erected tank. This does not include field modifications to a factory-built tank.

3. “Flow-through process tank” is a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

4. “Free product” refers to a regulated substance that is present as a non-aqueous phase liquid (e.g., liquid not dissolved in water).

(G) Definitions beginning with the letter G. [(Reserved);]

1. “Gathering lines” means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

(H) Definitions beginning with the letter H.

1. [This definition shall apply in lieu of the definition of “hazardous substance UST system” in 40 CFR 280.12 incorporated in this rule.] “Hazardous substance UST system” means a UST system that contains a hazardous substance defined in Section 101(14) of the CERCLA (but not including any substance regulated as a hazardous waste under the Missouri Hazardous Waste Management Law, sections 260.350–260.434, RSMo) or any mixture of these substances and petroleum, and which is not a petroleum [UST systems] storage tank[;].

2. “Heating oil” means petroleum that is No. 1, No. 2, No. 4—light, No. 4—heavy, No. 5—light, No. 5—heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one (1) of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.

3. “Hydraulic lift tank” means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

(I) Definitions beginning with the letter I.

[1. The definition for “implementing agency” in 40 CFR 280.12 is not incorporated into this rule.]

[2.]1. The term “in-operation” means input or output that occurs on a regular basis for the tank’s intended purpose.

[3.]2. The terms “in-service” and “in-use” are equivalent and mean that the tank system contains more than one inch (1”) of a regulated substance or residue or three-tenths percent (0.3%) by weight of the total capacity of the UST system of regulated substance. A tank is considered to be in-service and in-use beginning with the first input of a regulated substance into the tank system.

[4.]3. The term “installer” means any person, partnership, corporation, company, business, firm, society, or association that installs part or all of an underground storage tank system[;].

(J) Definitions beginning with the letter J. [(Reserved);].

(K) Definitions beginning with the letter K. [(Reserved);].

(L) Definitions beginning with the letter L. [(Reserved);]

1. “Liquid trap” means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

(M) Definitions beginning with the letter M.

1. “Maintenance” means the normal operational upkeep to prevent an underground storage tank system from releasing regulated substances.

[1.]2. “Month,” unless otherwise stated, means thirty (30) days.

[2.]3. “Monthly” means at least once every thirty (30) days[;].

4. “Motor fuel” means a complex blend of hydrocarbons typically used in the operation of a motor engine, such as motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any blend containing one (1) or more of these substances (for example: motor gasoline blended with alcohol).

(N) Definitions beginning with the letter N.

1. [In the definition for “new tank system” in 40 CFR 280.12 incorporated in this rule, substitute the date “September 28, 1990” for the date “December 22, 1988”:] “Noncommercial purposes” with respect to motor fuel means not for resale.

(O) Definitions beginning with the letter O.

1. “On the premises where stored,” with respect to heating oil, means UST systems located on the same property where the stored heating oil is used.

[1.]2. [In the definition for “operational life” in 40 CFR 280.12 incorporated in this rule, substitute] “Operational life” refers to the period beginning when installation of the tank

system has commenced until the time the tank system is properly closed under [“]10 CSR 26-2.060-10 CSR 26-2.064[“ for “Subpart G”].

2. The terms “out-of-service” and “out-of-use” are equivalent and mean that the tank system has been emptied so that no more than one inch (1”) of regulated substance or residue or three-tenths percent (0.3%) by weight of the total capacity of the UST system remains.]

3. [The definition for “owner” in 40 CFR 280.12 is not incorporated in this rule, and the definition in section 319.100(9) RSMo shall be used instead;] “Operator” means any person in control of, or having responsibility for, the daily operation of a tank.

4. The terms “out-of-service” and “out-of-use” are equivalent and mean that the tank system has been emptied so that no more than one inch (1”) of regulated substance or residue or three-tenths percent (0.3%) by weight of the total capacity of the UST system remains.

5. “Overfill release” is a release that occurs when a tank is filled beyond its capacity, resulting in the discharge of the regulated substance to the environment.

6. “Owner” means any person who owned an underground storage tank immediately before the discontinuation of its use if not in use on August 28, 1989, or any person who owns an underground storage tank in use on or after August 28, 1989, excluding secured interest or lienholders exempted under section 319.100(9) RSMo.

(P) Definitions beginning with the letter P.

1. [The definition for “person” in 40 CFR 280.12 is not incorporated in this rule and the definition in section 319.100(11), RSMo, shall be used instead;] “Person” means any individual, trust, firm, joint stock company, corporation, including a government corporation, partnership, association, the state and its political subdivisions, or any interstate body. “Person” also includes any consortium, joint venture, commercial entity, and the government of the United States.

2. “Petroleum” means gasoline, kerosene, diesel, lubricants, and fuel oil. This definition includes motor fuels, aviation gas, jet fuels, distillate fuel oils, residual fuel oils, and petroleum solvents.

3. “Petroleum storage tank,” in this chapter, means an underground storage tank system used to contain an accumulation of petroleum.

4. “Pipe or piping” means a hollow cylinder or tubular conduit that is constructed of non-earthen materials.

5. “Pipeline facilities” (including gathering lines) are new and existing pipe rights-of-way and any associated equipment, facilities, or buildings.

(Q) Definitions beginning with the letter Q. (Reserved);].

(R) Definitions beginning with the letter R.

1. [The definition for “regulated substance” in 40 CFR 280.12 is not incorporated in this rule and the definition in section 319.100(14), RSMo, shall be used instead.] “Regulated substance” includes:

A. Any substance defined in Section 101(14) of the federal Comprehensive Environmental Response, Compensation, and Liability Act (P.L. 96-510), as amended, but not including a substance regulated as a hazardous waste under Subtitle C of the federal Resource Conservation and Recovery Act of 1976 (P.L. 94-580), as amended; and

B. Petroleum, including crude oil or any fraction thereof, which is liquid at standard conditions of temperature and pressure, sixty degrees (60°) Fahrenheit and fourteen and seven-tenths (14 7/10) pounds per square inch absolute, respectively; and

C. Any substance adopted by rule in accordance with federal laws referenced by Section 101(14) of the federal Comprehensive Environmental Response, Compensation, and

Liability Act (P.L. 96-510).

2. [The definition for “release” in 40 CFR 280.12 is not incorporated in this rule and the definition in section 319.100(15), RSMo, shall be used instead.] “Release” includes, but is not limited to, any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from a petroleum storage tank into groundwater, surface water, or subsurface soils.

3. “Release detection” means determining whether a release of a regulated substance has occurred from the UST system into the environment or a leak has occurred into the interstitial space between the UST system and its secondary barrier or secondary containment around it.

4. “Repair” means to restore to proper operating condition a tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment, or other UST system component that has caused a release of product from the UST system or has failed to function properly.

5. “Replaced” or “replacement” means—

A. For a tank - to remove a tank and install another tank;

B. For piping - to remove fifty percent (50%) or more of piping and install other piping, excluding connectors, connected to a single tank or single compartment. For tanks with multiple piping runs, this definition applies independently to each piping run.

6. “Residential tank” is a tank located on property used primarily for dwelling purposes.

[3.7. “Routinely contains regulated substance” means that a regulated substance regularly passes through the piping, but does not necessarily mean that the piping must continuously hold a regulated substance. Satellite lines, gravity piping, and remote fill lines, including lines from aboveground storage tank(s) to underground storage tank(s), all routinely contain a regulated substance. Vapor lines, including vent lines and vapor recovery lines, are not included;].

(S) Definitions beginning with the letter S.

1. “SARA” means the Superfund Amendments and Reauthorization Act of 1986.

2. “Secondary containment” or “Secondarily contained” means a release prevention and release detection system for a tank and/or piping. This system has an inner and outer barrier with an interstitial space that is monitored for leaks. This term includes containment sumps when used for interstitial monitoring of piping.

[1.3. [In lieu of the definition for “septic tank” in 40 CFR 280.12, the definition for] “[s]Septic tank” [shall be] means any watertight, covered receptacle designed and constructed to receive the discharge of sewage, separate solids from liquid, digest organic matter, store liquids through a period of detention, and allow the clarified liquids to discharge to a soil treatment system;].

4. “Storm-water or wastewater collection system” means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

5. “Surface impoundment” is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is not an injection well.

(T) Definitions beginning with the letter T.

1. “Tank” is a stationary device designed to contain an accumulation of regulated substances and constructed of non-earthen materials (e.g., concrete, steel, plastic) that provide structural support.

[1.2. “Triennial” means recurring, done, or performed every

one thousand ninety-five (1,095) days.

[2.]3. “Triennially” means at least once every one thousand ninety-five (1,095) days.

(U) Definitions beginning with the letter U.

1. [In the definition of “upgrade” in 40 CFR 280.12 incorporated in this rule, substitute the words “regulated substance” for the word “product.”] “Under-dispenser containment” or “UDC” means a containment sump underneath a dispenser system designed to prevent dispenser system leaks from reaching soil or groundwater.

2. [The definition of “underground storage tank” or “UST” found in 40 CFR 280.12 is not incorporated in this rule, and the definition in section 319.100(16), RSMo, shall be used instead.] “Underground area” means an underground room, such as a basement, cellar, shaft, or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

3. “Underground release” means any belowground release.

4. “Underground storage tank” is defined in section 319.100, RSMo and means any one (1) or combination of tanks, including pipes connected thereto, containing regulated product, the volume of which is ten percent (10%) or more beneath the surface of the ground, except as exempted in section 319.100(16), RSMo.

5. “Upgrade” means the addition or retrofit of some systems such as cathodic protection, lining, spill and overfill controls to improve the ability of an underground storage tank system to prevent the release of regulated substance.

6. “UST system” or “Tank system” means an underground storage tank, all connected piping, ancillary equipment, and containment system, if any.

(V) Definitions beginning with the letter V. *(Reserved)*[:].

(W) Definitions beginning with the letter W. *[(Reserved)]*[:].

1. “Wastewater treatment tank” means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

(X) Definitions beginning with the letter X. *(Reserved)*[:].

(Y) Definitions beginning with the letter Y. *(Reserved)*[:].

(Z) Definitions beginning with the letter Z. *(Reserved)*.

AUTHORITY: sections 319.100, 319.105, 319.107, 319.111, and 319.114, RSMo 2000, and sections 319.109 and 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.012. Original rule filed April 2, 1990, effective Sept. 28, 1990. For intervening history, please consult the Code of State Regulations. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action.

Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED RULE

10 CSR 26-2.013 UST Systems with Field-Constructed Tanks and Airport Hydrant Fuel Distribution Systems

PURPOSE: This rule contains the new requirements for the previously deferred field-constructed tanks and airport hydrant fuel distribution systems.

(1) Applicability. This rule applies to owners and operators of field-constructed tanks and airport hydrant fuel distribution systems.

(2) Deadline for compliance. Owners and operators of existing underground storage tank (UST) systems with field-constructed tanks or airport hydrant fuel distribution systems must comply with all of the requirements of 10 CSR 26-2.010 through 10 CSR 26-2.083, the financial responsibility requirements in 10 CSR 26-3, and operator training in 10 CSR 100-6.

(A) Immediately upon installation for any new UST systems installed after July 1, 2017.

(B) By July 1, 2019, for existing systems, except where such requirements are specifically excluded or amended by this rule.

(3) Corrosion protection. UST system components that routinely contain product and are in contact with an electrolyte, including soil, backfill, or water, must meet one (1) of the following:

(A) Performance Standards for New UST Systems, as defined by 10 CSR 26-2.020; or

(B) Be constructed of metal and cathodically protected, with the cathodic protection system complying with 10 CSR 26-2.031. Unprotected metal tanks must pass an integrity test, in accordance with 10 CSR 26-2.021 and 10 CSR 26-2.031, prior to the addition of cathodic protection. Unprotected steel piping cannot be upgraded and must be replaced.

(4) Spill and overfill prevention equipment. UST systems must be upgraded with the installation of spill and overfill prevention, in accordance with 10 CSR 26-2.020 and 10 CSR 26-2.030, except where “delivery” occurs through a dedicated pipeline permanently connected to the UST system(s). For these systems, owners and operators must have an alarm system and/or an approved plan to prevent releases due to overfill.

(5) Walkthrough inspections. In addition to the walkthrough inspections in 10 CSR 26-2.036, owners and operators must inspect the following additional areas for airport hydrant fuel distribution systems at least once every thirty (30) days if confined space entry according to the Occupational Safety and Health Administration under 29 CFR Part 1910 is not required, or at least annually if confined space entry is required, and must keep documentation of these walkthrough inspections in accordance with 10 CSR 26-2.036:

(A) Hydrant pits—visually check for any damage, remove any liquid or debris, and check for any leaks; and

(B) Hydrant piping vaults—check for any hydrant piping leaks.

(6) Applicability of closure requirements to previously closed UST systems. The department may require that the owner and operator of a UST system with a field-constructed tank system or an airport hydrant fuel distribution system permanently closed before April 30, 2017, assess the excavation zone and close the UST system in accordance with 10 CSR 26-2.060 through 10 CSR 26-2.064 if releases from the UST system, in the judgment of the department, pose a current or potential threat to human health and the environment.

(7) Release detection. Owners and operators of existing UST systems must comply with the release detection requirements mandated in 10 CSR 26-2.040 through 10 CSR 26-2.048 no later than July 1, 2020.

AUTHORITY: sections 319.100, 319.103, 319.105, 319.107, 319.111, 319.114, 319.117, 319.120, and 319.123, RSMo 2000, and sections 319.109 and 319.137, RSMo Supp. 2013. Original rule filed Aug. 15, 2016.

PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed rule will not cost private entities more than \$500 in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.019 New Installation Requirements. The commission is amending sections (1), (4), (6) through (11) and adding new sections (6), (9), and (10) and renumbering the sections accordingly.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST reg-

ulations that need to be incorporated into state regulation. This rule-making will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, establish clearer and more detailed new system installation requirements, outline the requirements for new USTs at marinas, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Any installer who intends to install an underground storage tank (UST) or piping associated with a UST system for storage of a regulated substance must, at least [thirty (30)] **fourteen (14)** days before installing the tank or before piping replacement, notify the department by [letter or] approved form transmitted via email of intent to install a UST, except that this [thirty (30)] **fourteen (14)** day notice requirement may be waived by the department when a release is suspected or in other similarly urgent circumstances. The notification must provide the tank owner's name, installer name, the name and location of the facility where the UST or piping will be installed, the date that the installation is expected to commence, the date that the tank is expected to be brought in[-] use, UST system information, including tank material, size, manufacturer, piping material, piping type, and manufacturer, release detection equipment, and spill and overfill equipment. The installation notice is valid for one hundred eighty (180) days from receipt by the department and only for the UST system(s) listed on the notice. If installation does not commence within one hundred eighty (180) days of the date on which the department received the notice, a new installation notice must be submitted prior to commencing installation activities.

(4) Prior to installation of an [UST] **underground tank and/or UST system piping** intended to be used for storage of a regulated substance, the tank and/or [associated] piping must be tested, inspected, and measured in accordance with the manufacturer's requirements and in accordance with the pre-installation inspection, testing, and/or backfilling sections of either—

(6) When a new UST system is installed at a marina, the installer must comply with the Petroleum Equipment Institute's Recommended Practice 1000-2014, Recommended Practices for the Installation of Marina Fueling Systems, 2014 Edition or an alternative procedure approved by the department. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Petroleum Equipment Institute, Box 2380, Tulsa, OK 74101-2380, (918) 494-9696, www.pei.org.

[(7)](7) Should one (1) or more of a manufacturer's requirements contradict the recommended industry practice(s), the manufacturer's requirements shall be followed. Backfill materials must meet tank and piping manufacturers' specifications.

[(7)](8) The tank and piping system must pass a **one-tenth (0.1)** gallon/hour system tightness test before the system is brought in-operation. **The tank tightness test must be—**

(A) A tank tightness test method listed and conducted in accordance with the National Work Group on Leak Detection Evaluations certificate. To obtain a copy, download the appropriate certificate from www.nwglde.org; or

(B) A **one-tenth (0.1)** gallon/hour third party certified test conducted using the automatic tank gauge with the tank at least **ninety-five percent (95%)** full.

(9) For tank system installations on or after July 1, 2017, before

the UST system is brought in-operation—

(A) Spill and overflow prevention equipment must be tested in accordance with 10 CSR 26-2.030;

(B) Secondary containment sumps must be tested in accordance with 10 CSR 26-2.035; and

(C) All release detection equipment must be operability tested in accordance with 10 CSR 26-2.040 and 10 CSR 26-2.048.

(10) All new tanks must be tied down. Tie-down straps must meet the manufacturer's design specifications and be installed in locations and at a frequency prescribed by the manufacturer.

~~/(8)/~~**(11)** Until the installation is complete and the system is released by the installer to the owner/operator, the tank shall be monitored for leaks daily by using either—

(A) An approved release detection method, in accordance with 10 CSR 26-2.043; or

(B) Daily Inventory Liquid Measurements. Upon completion of initial post-installation tightness testing, daily measurements are based on the average of two (2) consecutive stick readings. A variation of no greater than twenty-six (26) gallons per week is allowed. Any suspected release, alarm, or inconclusive or failure result from these release detection methods must be reported and investigated in accordance with 10 CSR 26-2.050.

~~/(9)/~~**(12)** Upon the department's discovery of an installation that is not in compliance with the requirements of this rule, the department's authorized representative may require that the installation remain open and uncovered, or that no additional UST system work be conducted, until—

(A) The manufacturer approves the installation that deviates from their written guidelines, specifications, and instructions;

(B) The owner approves the installation; and

(C) The department approves the installation.

~~/(10)/~~**(13)** Any equipment repairs necessary during the installation must be manufacturer certified or approved, with supporting written documentation from the manufacturer.

~~/(11)/~~**(14)** Certification of Installation. All installers must ensure that one (1) or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with this rule by providing a certification of compliance:

(A) The installation has been inspected and approved by the department;

(B) All work listed in the manufacturer's installation checklists has been completed and submitted to the department; or

(C) The installer has complied with another method for ensuring compliance with this rule that is *[determined]* **pre-approved** by the department to be no less protective of human health and the environment.

AUTHORITY: sections 319.105, RSMo 2000. Original rule filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: The state changes in this rule are estimated to cost affected state agencies and political subdivisions six hundred seven dollars and fifty cents (\$607.50) annually to comply with the new requirements of this rule. A detailed fiscal note has been filed with the secretary of state. The public entity fiscal cost impacts for compliance with the federal standards that are being incorporated into this rule are accounted for in the federal rulemakings.

PRIVATE COST: The state changes in this rule are expected to cost private entities twenty-nine thousand seven hundred sixty-seven dollars and fifty cents (\$29,767.50) annually to comply with the new state requirements of this rule. A detailed fiscal note has been filed with the secretary of state. The private entity fiscal cost impacts for

compliance with the federal standards that are being incorporated into this rule are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

FISCAL NOTE

PUBLIC COST

I. RULE NUMBER

Rule Number and Name: 10 CSR 26-2.019 Applicability
Type of Rulemaking: Amendment

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Federal, State, County, City owned or affiliated underground storage tank owners	<p>Fewer than 15 new piping installations each year with a combined annual total less than \$375</p> <p>And</p> <p>Anticipate less than 15 tanks each year that will need to be tied down that would not have otherwise been tied down \$2,000 per tank for a total of \$30,000 annually</p> <hr/> <p>Combined annual rule total less than \$30,375 x 2% publically owned = \$607.50 annually</p>
Missouri Department of Natural Resources	\$0

III. Worksheet

See calculations in Section IV below.

IV. Assumptions

The Department is proposing to require installation notifications for piping installations. Currently the regulation requires notification for new tank system installations only. When discussed during stakeholder meetings, most stakeholders thought that this was already required or felt most situations in which piping is currently being replaced are situations in which the Department is already aware of the replacement (piping failures, leaks, other piping issues). The Department already receives 'courtesy notifications' on piping replacements. Installation problems are one of the top 2 causes of new leaks in Missouri. As such, oversight of

installations is a significant way to prevent environmental contamination. Once the piping is installed, it is buried underground, making finding problems and potential leaks practically impossible. Identifying potential problems at installation is one of the most effective ways to prevent future releases. The cost to notify the Department is minimal: 15 minutes to complete the form and email it to the Department. The information included is readily available. The requirements after the notification remain the same. As such, the cost for each notification for each piping install, of which there are fewer than 15 each year, is less than \$25, with a combined annual total of less than \$375.

Another proposed change is to require new marinas to comply with the Petroleum Equipment Institute's Recommended Practice 1000-2009, Recommended Practices for the Installation of Marina Fueling Systems. These tanks are in environmentally sensitive areas, where a leak would impact water ecosystems almost immediately. In addition, these systems are uniquely configured, with the tanks typically above the dispensers, which could allow the tank to be siphoned by the dispensers. These configurations can lead to significant leaks in environmentally sensitive areas. The Department has been recommending the use of this guidance document since its publication in 2009. The Missouri Department of Agriculture has been requiring compliance with almost all, if not all of its significant pieces as well. The Department is not aware of any marina UST installations that have not complied with this guidance document in the last four years. As such, we do not believe that compliance with this proposed change has a new cost associated with it, but do believe it will ensure clear requirements and environmental protection in the future.

The Department is also adding an option for post-installation tightness testing. Currently the regulations only provide one option for testing the tank after installation, a tank tightness test. The proposed regulation will add a second option, testing the tank using the automatic tank gauge with the tank 95% full. As this is a new, second option, it does not add a cost, but instead lowers the cost by creating a new, potentially less costly option for compliance.

The final proposed change in this regulation is to require all new tanks be tied down. In the last three years, we have typically seen less than 10% of the tanks that are not tied down at install. With an average of 155 new tanks installed each year, that means that typically 15 tanks are not tied down. These tanks can float, leak product, cause damage to the site, hinder property sales, cause safety issues, and be a general nuisance. Based on information from installation contractors, the cost of a contractor- manufactured tie-down system is approximately \$2,000. Please note, though, that the costs to address tanks that float are much higher than \$2,000 per tank. They must be removed and leaks addressed. In addition, a tank that has floated can pose a significant safety hazard: it juts out of the ground; they can be difficult to see; they may cause vehicular damage; there are often open holes associated with them.

Of the 386 tanks installed since January 1, 2014, 9 of them (or approximately 2%) were publically/government owned. The remaining 98% were privately owned. For the purposes of this fiscal note, we will use these percentages for the calculations of public and private shares of the costs to the underground storage tank owners.

Cost of proposed amendments to rule 10 CSR 20-10.010 to the Department of Natural Resources

The Department of Natural Resources' Hazardous Waste Program already tracks these facilities and inspects their entire tank system, including monitoring systems. As such, there would be no additional cost to the department.

FISCAL NOTE

PRIVATE COST

I. RULE NUMBER

Rule Number and Name 10 CSR 26-2.019 Applicability
Type of Rulemaking Amendment

II. SUMMARY OF FISCAL IMPACT

Classification by types of the business entities which would likely be affected:	Estimate of the number of entities by class which would likely be affected by the adoption of the proposed rule:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
Owners of emergency generator tanks <ul style="list-style-type: none"> • Hospitals • Nursing or Health Care facilities • Communication facilities and structures (e.g. cellular phone companies) • Banks • Food storage facilities • Data storage facilities • Other owners and operators of underground storage tank systems 	Fewer than 15 new piping installations each year Anticipate less than 15 tanks each year that will need to be tied down that would not have otherwise been tied down	Combined annual total less than \$375 \$2,000 per tank for a total of \$30,000 annually <hr/> Combined annual rule total less than \$30,375 x 98% privately owned – \$29,767.50 annually

III. Worksheet

See calculations in Section IV below.

Fiscal Note for Proposed Rule 10 CSR 26-2.076
Page 2 of 3

IV. Assumptions

The Department is proposing to require installation notifications for piping installations. Currently the regulation requires notification for new tank system installations only. When discussed during stakeholder meetings, most stakeholders thought that this was already required or felt most situations in which piping is currently being replaced are situations in which the Department is already aware of the replacement (piping failures, leaks, other piping issues). The Department already receives ‘courtesy notifications’ on piping replacements. Installation problems are one of the top 2 causes of new leaks in Missouri. As such, oversight of installations is a significant way to prevent environmental contamination. Once the piping is installed, it is buried underground, making finding problems and potential leaks practically impossible. Identifying potential problems at installation is one of the most effective ways to prevent future releases. The cost to notify the Department is minimal: 15 minutes to complete the form and email it to the Department. The information included is readily available. The requirements after the notification remain the same. As such, the cost for each notification for each piping install, of which there are fewer than 15 each year, is less than \$25, with a combined annual total of less than \$375.

Another proposed change is to require new marinas to comply with the Petroleum Equipment Institute’s Recommended Practice 1000-2009, Recommended Practices for the Installation of Marina Fueling Systems. These tanks are in environmentally sensitive areas, where a leak would impact water ecosystems almost immediately. In addition, these systems are uniquely configured, with the tanks typically above the dispensers, which could allow the tank to be siphoned by the dispensers. These configurations can lead to significant leaks in environmentally sensitive areas. The Department has been recommending the use of this guidance document since its publication in 2009. The Missouri Department of Agriculture has been requiring compliance with almost all, if not all of its significant pieces as well. The Department is not aware of any marina UST installations that have not complied with this guidance document in the last four years. As such, we do not believe that compliance with this proposed change has a new cost associated with it, but do believe it will ensure clear requirements and environmental protection in the future.

The Department is also adding an option for post-installation tightness testing. Currently the regulations only provide one option for testing the tank after installation, a tank tightness test. The proposed regulation will add a second option, testing the tank using the automatic tank gauge with the tank 95% full. As this is a new, second option, it does not add a cost, but instead lowers the cost by creating a new, potentially less costly option for compliance.

The final proposed change in this regulation is to require all new tanks be tied down. In the last three years, we have typically seen less than 10% of the tanks that are not tied down at install. With an average of 155 new tanks installed each year, that means that typically 15 tanks are not tied down. These tanks can float, leak product, cause damage

Fiscal Note for Proposed Rule 10 CSR 26-2.076
Page 3 of 3

to the site, hinder property sales, cause safety issues, and be a general nuisance. Based on information from installation contractors, the cost of a contractor-manufactured tie-down system is approximately \$2,000. Please note, though, that the costs to address tanks that float are much higher than \$2,000 per tank. They must be removed and leaks addressed. In addition, a tank that has floated can pose a significant safety hazard: it juts out of the ground; they can be difficult to see; they may cause vehicular damage; there are often open holes associated with them.

Of the 386 tanks installed since January 1, 2014, 9 of them (or approximately 2%) were publically/government owned. The remaining 98% were privately owned. For the purposes of this fiscal note, we will use these percentages for the calculations of public and private shares of the costs to the underground storage tank owners.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.020 Performance Standards for New Underground Storage Tank Systems. The commission is proposing to amend section (1) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the *Code of State Regulations* to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, establish clearer and more detailed new system requirements, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the underground storage tank (UST) system is used to store regulated substances, all owners and operators of new UST systems must meet the following requirements:

(A) Tanks. Each tank must be properly designed and constructed, and any portion underground that routinely contains a regulated substance must be protected from corrosion, in accordance with a code of practice developed by a nationally-recognized association or independent testing laboratory as [follows:] **specified in paragraphs 1. through 5. of this subsection. In addition, all new or replaced tanks where installation began on or after July 1, 2017, must be double-walled in accordance with paragraph 5. of this subsection—**

1. The tank is constructed of fiberglass-reinforced plastic and complies with—

A. Underwriters' Laboratories Standard 1316, *Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohol and Alcohol-Gasoline Mixtures*, revised 2006. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Underwriters' Laboratories, 333 Pfingsten Road, Northbrook, IL 60062-2096, (847) 272-8800, www.ul.com; or

B. Other standards or publications approved by the department; or

2. The tank is constructed of steel and cathodically protected in the following manner:

A. The tank is coated with a suitable dielectric material;

B. Field-installed cathodic protection systems are designed by a corrosion expert;

C. Impressed current systems are designed to allow determination of current operating status as required in 10 CSR 26-2.031(1)(C);

D. Cathodic protection systems are operated and maintained in accordance with 10 CSR 26-2.031 or according to guidelines established by the department; and

E. The following codes and standards may be used to comply

with paragraph (1)(A)2. of this rule:

(I) Steel Tank Institute *Specification for STI-P3 System of External Corrosion Protection of Underground Steel Storage Tanks*, revised 2010. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047, (708) 438-8265, www.steeltank.com;

(II) Steel Tank Institute Standard F841, *Standard for Dual Wall Underground Steel Storage Tanks*, revised 2006. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047, (708) 438-8265, www.steeltank.com;

[[III]](III) Underwriters' Laboratories Standard 1746, *Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks*, revised 2007. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Underwriters' Laboratories, 333 Pfingsten Road, Northbrook, IL 60062-2096, (847) 272-8800, www.ul.com;

[[III]](IV) NACE International RP 0285-2002, *Corrosion Control of Underground Storage Tank Systems by Cathodic Protection*, revised 2002. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact NACE International, Box 218340, Houston, TX 77218-8340, (713) 492-0535, www.nace.org;

[[IV]](V) Underwriters' Laboratories Standard 58, *Standard for Steel Underground Tanks for Flammable and Combustible Liquids*, revised 1998. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Underwriters' Laboratories, 333 Pfingsten Road, Northbrook, IL 60062-2096, (847) 272-8800, www.ul.com; or

3. The tank is a composite tank with a steel inner tank and a non-metallic external thick film coating or the tank is a steel inner tank constructed with a non-metallic external jacket forming a secondary wall. Either of these tanks shall comply with one (1) of the following industry codes:

A. Underwriters' Laboratories Standard 1746, *Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks*, revised 2007. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Underwriters' Laboratories, 333 Pfingsten Road, Northbrook, IL 60062-2096, (847) 272-8800, www.ul.com;

B. Steel Tank Institute's ACT-100, *Specification for External Corrosion Protection of FRP Composite Steel USTs (F894)*, revised June 2010. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047, (708) 438-8265, www.steeltank.com;

C. Underwriters' Laboratories Standard 58, *Standard for Safety for Steel Underground Storage Tanks for Flammable and Combustible Liquids*, revised 1998. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Underwriters' Laboratories, 333 Pfingsten Road, Northbrook, IL 60062-2096, (847) 272-8800, www.ul.com; [or]

D. Steel Tank Institute's ACT-100-U, *Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks*, F961, June 2010. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047, (708) 438-8265, www.steeltank.com; or

E. Steel Tank Institute's Specification F922, *Steel Tank Institute Specification for Permatank*, revised 2013. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047, (708) 438-8265, www.steeltank.com; or

[4. The tank is constructed of metal without additional corrosion protection measures provided that—

A. The tank is installed at a site that is determined by a corrosion expert to not be corrosive enough to cause it to have a release due to corrosion during its operating life; and

B. Owners and operators maintain records that demonstrate compliance with the requirements of subparagraph (1)(B)4.A. of this rule for the remaining life of the tank; or;

[5.]4. The tank construction and corrosion protection are determined by the department to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than paragraphs (1)(A)1.–[4]3. of this rule;

5. Tanks installed on or after July 1, 2017, must be double-walled. A double-walled tank is a tank within a tank, where the outer walls and inner walls are separated, the inner tank is contained within the outer tank to a minimum of ninety-five percent (95%) containment and has an interstitial space capable of being monitored;

(B) Piping. The piping that routinely contains regulated substances and is in contact with an electrolyte, including but not limited to, soil, backfill, and/or water, must be properly designed, constructed, and protected from corrosion [in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as follows:] as specified in paragraphs 1. through 4. of this subsection. In addition, all new piping systems where installation began on or after July 1, 2017, must be double-walled in accordance with paragraph 5. of this subsection. If more than fifty percent (50%) of any tank system's piping is replaced within any twelve (12) month period, the entire piping run must be double-walled in accordance with paragraph 5.

1. The piping is constructed of [fiberglass reinforced plastic] an approved, non-corrodible material[.];

2. The following codes and standards may be used to comply with paragraph (1)(B)1. of this rule:

A. Underwriters' Laboratories Standard 971, *UL Listed Nonmetallic Underground Piping for Flammable Liquids*, revised 2006. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Underwriters' Laboratories, 333 Pfingsten Road, Northbrook, IL 60062-2096, (847) 272-8800, www.ul.com; and

B. Underwriters' Laboratories Standard 567, *Emergency Breakaway Fittings, Swivel Connectors and Pipe Connection Fittings for Petroleum Products and LP-Gas*, revised 2003. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Underwriters' Laboratories, 333 Pfingsten Road, Northbrook, IL 60062-2096, (847) 272-8800, www.ul.com[.];

3. After July 1, 2017, metal piping may not be installed unless it is completely enclosed within a containment sump, except existing flexible connectors may be replaced without a containment sump if the new flexible connector is protected from corrosion by isolating it from the backfill using a manufacturer-approved isolation boot or protecting the connector from corrosion in accordance with this paragraph. For existing piping, [T]the piping is constructed of steel and cathodically protected in the following manner:

A. The piping is coated with a suitable dielectric material;

B. Field-installed cathodic protection systems are designed by a corrosion expert;

C. Impressed current systems are designed to allow determination of current operating status as required in 10 CSR 26-2.031(1)(C);

D. Cathodic protection systems are operated, inspected, and maintained in accordance with 10 CSR 26-2.031; and

E. The [following] codes and standards in 10 CSR 26-2.031(2) may be used to comply with paragraph (1)(B)3. of this

rule[.];

(I) National Fire Association Standard 30, *Flammable and Combustible Liquids Code*, revised 2008. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA 02269-9101, (617) 770-3000, www.nfpa.org;

(II) American Petroleum Institute's Recommended Practice 1615, *Installation of Underground Petroleum Storage Systems*, fifth edition, 2011. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/;

(III) American Petroleum Institute Publication 1632, *Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems*, revised 2002. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/;

(IV) NACE International SP-0169-2007, *Control of External Corrosion on Submerged Metallic Piping Systems*, revised 2007. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact NACE International, Box 218340, Houston, TX 77218-8340, (713) 492-0535, www.nace.org; and

(V) Steel Tank Institute's Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems (R892), revised 2006. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047, (708) 438-8265, www.steel tank.com;

4. The piping is constructed of metal without additional corrosion protection measures provided that—

A. The piping is installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life; and

B. Owners and operators maintain records that demonstrate compliance with the requirements of subparagraph (1)(A)4.A. of this rule for the remaining life of the tank;

5. The following codes may be used to comply with paragraph (1)(B)4. of this rule:

A. National Fire Protection Association Standard 30, *Flammable and Combustible Liquids Code*, revised 2008. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA 02269-9101, (617) 770-3000; www.nfpa.org; and

B. NACE International SP-0169-2007, *Control of External Corrosion on Submerged Metallic Piping Systems*, revised 2007. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact NACE International, Box 218340, Houston, TX 77218-8340, (713) 492-0535, www.nace.org; or

[6.]4. The piping construction and corrosion protection are determined by the department to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in paragraphs (1)(B)1.–[5.]3. of this rule[.];

5. After July 1, 2017, new or replaced piping must be double-walled piping, except for any single wall fittings or ends,

which must be open to a leak-tight containment sump(s), except for safe suction piping that meets the requirements of 10 CSR 26-2.041(1)(B)2.A. through E.;

(C) Spill and Overfill Prevention Equipment.

1. Except as provided in paragraph (1)(C)2. of this rule, to prevent spilling and overfilling associated with product transfer to the UST system, owners and operators must use the following spill and overfill prevention equipment:

A. Spill prevention equipment that will prevent release of product to the environment when the transfer hose is detached from the fill pipe (for example, a spill catchment basin). All delivery hose-fill pipe connections must be tight, lock-on connections; and

B. Overfill prevention equipment that will—

(I) Automatically shut off flow into the tank when the tank is no more than ninety-five percent (95%) full;

(II) Alert the transfer operator with a high-level alarm at least one (1) minute before overfilling with an alarm audible in the delivery area; or

(III) Alert the transfer operator when the tank is no more than ninety percent (90%) full by restricting flow into the tank.

(a) Ball float valves may only be used in tank systems with gravity deliveries, in suction systems if there are no check valves, except those contained within a building, and the tank system is tight so that it does not allow vapors to be released during a delivery after the ball float valve has closed.

(b) Ball float valves are not approved for use as overfill prevention equipment in new tank systems installed after December 31, 2011. *[Ball float valves may still be used in systems equipped with manifolded vent lines and vapor recovery equipment if the ball valve is installed no lower than ninety-eight percent (98%) full and the functioning overfill equipment is installed no higher than ninety-five percent (95%) full.]*

(c) When an overfill prevention device is replaced after July 1, 2017, a ball float valve may not be used.

(IV) For pressurized deliveries, overfill prevention equipment must be compatible and approved for use with pressurized deliveries[.];

C. All spill and overfill prevention equipment must be installed, inspected, maintained, and replaced in accordance with 10 CSR 26-2.030.

2. Owners and operators are not required to use the spill and overfill prevention equipment specified in paragraph (1)(C)1. of this rule if—

A. Alternative equipment is used that is determined by the department to be no less protective of human health and the environment than the equipment specified in subparagraph (1)(C)1.A. or B. of this rule; or

B. The owner or operator submits a written explanation that the equipment cannot be used for the UST system and their detailed fuel-delivery plan, documenting that their delivery procedures prevent spills and overfills; or

C. The UST system is filled by transfers of no more than twenty-five (25) gallons at one (1) time[.];

(D) *[All new tank systems installed after December 31, 2011, must be installed with containment sumps at each tank top suction piping or submersible turbine pump connection, each piping transition/ball valve location, and under each dispenser. The containment sumps must be designed to contain any leak from the primary UST piping system; and] For new or replaced tanks or piping systems installed after July 1, 2017, containment sumps must be installed at each tank top suction piping or submersible turbine pump connection, each piping transition, ball valve, or single-walled fitting location, and under each dispenser. The containment sump must be liquid-tight on its sides, bottom, and at any penetrations, with interstitial monitoring in accordance with 10 CSR 26-2.043(1)(H) and sump testing in accordance with 10 CSR 26-2.035;*

(E) Dispenser Systems. Any new dispenser system installed after July 1, 2017, must have a containment sump beneath it.

1. A dispenser system is considered new when both the dispenser and the equipment needed to connect the dispenser to the underground storage tank system are installed or replaced at a UST facility. The equipment necessary to connect the dispenser to the UST system includes check valves, shear valves, unburied risers and flexible connectors, and other transitional components that are underneath the dispenser and connect the dispenser to the underground UST system piping.

2. Under-dispenser containment must be liquid-tight on its sides, bottom, and at any penetrations and must allow for visual inspection and access to the components in the containment sump and be tested or monitored for leaks from the dispenser system in accordance with 10 CSR 26-2.035;

[(E)](F) Installation. All tanks and piping must be properly installed in accordance with a code of practice developed by a nationally-recognized association or independent testing laboratory, in accordance with all manufacturers' instructions, and in accordance with 10 CSR 26-2.019. Tank and piping system installation practices and procedures described in the following codes of practice may be used to comply with the requirements of this rule:

1. American Petroleum Institute Publication 1615, *Installation of Underground Petroleum Storage System*, revised 2011. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/; or

2. Petroleum Equipment Institute Publication RP100, *Recommended Practices for Installation of Underground Liquid Storage Systems*, revised 2011. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Petroleum Equipment Institute, Box 2380, Tulsa, OK 74101-2380, (918) 494-9696, www.pei.org.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.020. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov.

Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.021 [Upgrading of Existing] Upgraded Underground Storage Tank Systems. The commission is proposing to change the title and amend the purpose statement of this rule, as well as sections (3) through (6) and also adding a new section (6) and renumbering the other sections accordingly.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rule-making will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

PURPOSE: [This rule contains the options for upgrading existing underground storage tanks for continued operation after December 22, 1998.] This rule contains requirements for UST systems that were in use on December 22, 1998, and were upgraded with release prevention equipment.

(3) Tank Upgrading Requirements. Tanks must be upgraded to meet one (1) of the following requirements in accordance with a code of practice developed by a nationally-recognized association or independent testing laboratory:

[(A) Interior lining. A tank may be upgraded by internal lining if—

1. The lining is installed in accordance with the requirements of 10 CSR 25-2.033 and the following:

A. Lining manufacturer installation requirements; and
B. An approved national code or standard, including those listed in section (6) of this rule; and either

C. For steel tanks, structural integrity determinations are required and must include actual steel tank thickness readings. Approved integrity test methods are included in section (6) of this rule; or

D. For fiberglass-reinforced plastic tanks, all linings must be approved by the tank manufacturer and installed in accordance with the tank manufacturer's requirements.

2. Within ten (10) years after the initial lining, and every five (5) years after that, whether relined or not, the lined tank is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications; and

3. A tank may only be relined and/or the lining may only be repaired—

A. If the fiberglass-reinforced plastic tank meets all tank manufacturer standards for repair or relining of the tank; or

B. If the steel tank passes an integrity test, including actual steel shell thickness readings. Approved integrity test methods are included in section (6) of this rule;]

(A) Interior lining or Tank Retrofit. A tank may be upgraded by internal lining or retrofit if—

1. The lining is installed in accordance with the requirements of 10 CSR 26-2.033 and the lining or retrofit meets the following additional requirements:

A. All linings installed or repaired on or after January 1, 2020, must meet the design specifications of Underwriters Laboratories (UL) 1856 Outline of Investigation for Underground Fuel Tank Internal Retrofit Systems requirements;

B. Inspections and repairs must be conducted by a technician who is properly certified by NACE International or International Code Council (ICC);

C. The lining or retrofit is installed according to manufacturer installation requirements;

D. An approved national code or standard, including those listed in section (7) of this rule, is followed;

E. For fiberglass-reinforced plastic tanks, all linings must be approved by the tank manufacturer and installed in accordance with the tank manufacturer's requirements. If the tank manufacturer is no longer available or willing to repair the tank, the tank may be lined in accordance with—

(I) The manufacturer's requirements, or

(II) The Fiberglass Tank & Piping Institute T-95-1. Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks, Revised 1995. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Fiberglass Tank and Piping Institute, <http://www.fiberglassstankandpipe.com>; and

(III) By a technician who is properly certified by NACE International, International Code Council (ICC), or the American Composites Manufacturers Association;

F. All linings must be installed, inspected, repaired, and maintained in accordance with one (1) of the following:

(I) For UL 1856 Lining systems, single-walled, co-structural systems and linings installed prior to January 1, 2020:

(a) A lining may only be repaired if the steel tank passes an integrity test, including actual steel shell thickness readings. Approved integrity test methods are included in section (7) of this rule;

(b) A replacement lining may only be installed if the new lining meets the UL 1856 specifications and the steel tank passes an integrity test, including actual steel shell thickness readings. Approved integrity test methods are included in section (7) of this rule;

(c) The lining must be internally inspected at least every five (5) years and found to be structurally sound with the lining still performing in accordance with the original design specifications;

(II) For UL 1856 Upgrade systems, double-walled, co-structural systems:

(a) A lining may only be installed or repaired if the steel tank passes an integrity test, including actual steel shell thickness readings. Approved integrity test methods are included in section (7) of this rule; and

(b) The lining must be internally inspected at least every five (5) years and found to be structurally sound with the lining still performing in accordance with the original design specifications; or

(c) The interstitial lining space is electronically monitored, with passing sensor status reports for the most recent twelve (12) months, in accordance with 10 CSR 26-2.043 subsection (1)(H);

(III) For UL 1856 Structural systems, double-walled, self-structural systems—

(a) The lining must be internally inspected at least every five (5) years and found to be structurally sound with the lining still performing in accordance with the original design specifications; or

(b) The interstitial lining space is electronically monitored, with passing sensor status reports for the most recent twelve (12) months, in accordance with 10 CSR 26-2.043 subsection (1)(H);

G. All interior lining inspection reports must include photographs of the tank bottom, a representative tank side wall and a representative tank end, and documentation of the interior lining hardness and thickness readings, in accordance with the evaluation guidance document used;

(B) Cathodic Protection. A tank may be upgraded by cathodic protection if the cathodic protection system meets the requirements of the performance standards for new UST systems in 10 CSR 26-2.020(1)(A)2.B.–D. and the integrity of the tank is ensured using one (1) of the following methods:

1. The tank is internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes prior to installing the cathodic protection system. Structural integrity evaluations must include steel shell thickness readings and confirmation that the steel shell does not have any holes or perforations. Approved integrity test methods are included in section *[(6)] (7)* of this rule;

2. The tank has been installed for less than ten (10) years and is monitored monthly for releases in accordance with release detection methods in 10 CSR 26-2.043(1)(E)–(I);

3. The tank has been installed for less than ten (10) years and is assessed for corrosion holes by conducting two (2) tightness tests that meet the requirement of release detection method in 10 CSR 26-2.043(1)(D). The first tightness test must be conducted prior to installing the cathodic protection system. The second tightness test must be conducted between three and six (3–6) months following the first operation of the cathodic protection system; or

4. The tank is assessed for corrosion holes by a method that is determined by the department to prevent releases in a manner that is no less protective of human health and the environment than paragraphs (3)(B)1.–3. of this rule; and

(4) Piping Upgrading Requirements. Metal piping that routinely contains regulated substances and is in contact with an electrolyte, including but not limited to, soil, backfill, and/or water, must be cathodically protected *[in accordance with a code of practice developed by a nationally-recognized association or independent testing laboratory]* and must meet the requirements of 10 CSR 26-2.020(1)(B)3.B.–[D.].E.

(5) Spill and Overfill Prevention Equipment. To prevent spilling and overfilling associated with product transfer to the UST system, all existing UST systems must comply with new UST system spill and overfill prevention equipment requirements specified in 10 CSR 26-2.020(1)(C) and 10 CSR 26-2.030.

(6) Dispenser Systems. Any new dispenser installed after July 1, 2017, must have a containment sump beneath it, in accordance with 10 CSR 26-2.020(1)(E).

[(6)](7) The following codes and standards may be used to comply with this rule:

(A) American Petroleum Institute Standard 1631, *Interior Lining and Periodic Inspection of Underground Storage Tanks*, revised 2001. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/;

(B) NACE International RP 0285-2002, *Corrosion Control of*

Underground Storage Tank Systems by Cathodic Protection, revised 2002. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact NACE International, Box 218340, Houston, TX 77218-8340, (713) 492-0535, www.nace.org;

(C) American Petroleum Institute Publication 1632, *Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems*, revised 2002. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/;

(D) American Society for Testing and Materials G158-98 (2010) *Standard Guide for Three Methods of Assessing Buried Steel Tanks*, revised 2010, Method B only. Methods A and C may not be used to evaluate the integrity of a steel tank. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, (610) 832-9500, www.astm.org; *[and]*

(E) National Leak Prevention Association Standard 631, *Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection*, revised 1999. This standard may only be used for interior lining application and inspection, not for inspection of the steel tank integrity. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the National Leak Prevention Association, (815) 301-2785, [www.nlpa-online.org/.; and](http://www.nlpa-online.org/)

(F) Ken Wilcox Associates Recommended Practice, *Recommended Practice for Inspecting Buried Lined Steel Tanks Using a Video Camera, September 28, 1999*. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact Ken Wilcox Associates, 1125 Valley Ridge Drive, Grain Valley, MO 64029, (816) 443-2494, www.kwaleak.com.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.021. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: The state changes in this rule are expected to cost state agencies or political subdivisions five hundred sixty dollars (\$560) one (1) time and one hundred twenty-six dollars (\$126) annually thereafter to comply with the new requirements of this rule. A detailed fiscal note has been filed with the secretary of state. The public entity fiscal cost impacts for compliance with the federal standards that are being incorporated into this rule are accounted for in the federal rulemakings.

PRIVATE COST: The state changes in this rule are expected to cost private entities seven thousand four hundred forty dollars (\$7,440) one (1) time and one thousand six hundred seventy-four dollars (\$1,674) annually thereafter to comply with the new requirements of this rule. A detailed fiscal note has been filed with the secretary of state. The private entity fiscal cost impacts for compliance with the federal standards that are being incorporated into this rule are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the

Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

FISCAL NOTE

PUBLIC COST

I. RULE NUMBER

Rule Number and Name: 10 CSR 26-2.021 Applicability
Type of Rulemaking: Amendment

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Federal, State, County, City owned or affiliated underground storage tank owners	\$630 (every 5 years) or \$126 (annual) for the documentation requirements \$560 one-time cost split between all owners (7% of the one-time cost to one contractor)
Missouri Department of Natural Resources	\$0

III. Worksheet

See calculations in Section IV below.

IV. Assumptions

The Department is proposing changes to old, lined tanks that are typically beyond their warranty and life-expectancy. These regulations are being changed to ensure that these tanks are being inspected and repaired in a way that confirms that they remain leak-free as long as they are operational. EPA's UST regulation changes include modifications to the interior lining regulations. Specifically, their regulations require interior lined tanks be closed/replaced if the interior lining fails. The Department's proposed alternative requirements for interior linings, include:

- (1) Linings must meet the new UL 1856 installation standard,
- (2) Technicians must be certified (technicians must be certified to do work in almost every other aspect of UST service),
- (3) Documentation must include photographs,
- (4) An additional, less costly inspection option,
- (5) A new technology that allows repair of a lined tank that might otherwise, under the federal regulations, have to be closed.

While pieces of this regulation may be more costly than the new regulation, the proposed interior lining rule must be considered in its entirety as an alternative to the EPA federal regulation, including the closure requirement.

Furthermore, the Department is only aware of four companies that conduct interior lining installation and repair work in Missouri. Of those four companies, three of them already comply or are in the process of complying with the proposed regulations. As such, the proposed regulations have no associated increased costs to three of the four (including the two predominant companies) in Missouri. As the cost to permanently close a tank can be around \$15,000-\$20,000, the cost for the alternative interior lining rule package, which includes more detailed interior lining requirements, but doesn't require permanent closure in the event of a failure, is a less costly requirement than the federal version of the same rule package.

The one contractor that does not already meet the proposed regulations indicated that it would cost approximately \$8,000 total to comply with the training and certification requirements. This is a one-time cost, which we assume will be passed down to the tank owners (split between privately public owners). He indicated that he believed his product is already tested to be certified under UL1856; as such, there would be no additional costs to comply with this requirement for his company.

As for the additional documentation requirements, he indicated that he already does the additional documentation at some of the sites where he conducts interior lining inspections and installations. According to state records, he conducted approximately 13% of the interior lining inspections and installation; as he already complies with the additional documentation requirements at some of his sites, the Department used 10% of the lined tanks requiring additional documentation for the purposes of this RIR. The company that would need the additional documentation indicated that this would likely cost around \$250 per *facility* report. As we have about 900 active lined steel tanks at approximately 355 facilities, this would leave approximately 35 lined tank facilities that would need additional documentation for the lining inspections and installations. With an expected 36 facilities needing additional documentation, costing \$250 per facility report, we expect a total cost every five years (the interior lining inspection cycle) of \$9,000, so the average *annual* cost is \$1,800.

Based on our data, it appears that 93% of the sites are privately owned; the remaining 7% are publically owned.

Please note, the federal alternative would likely require permanent closure of some of these tanks, which could cost \$15,000-\$20,000 per tank.

Also included in this proposed rule is an additional, alternative interior lining inspection option. Some facilities opt to use interstitial monitoring to comply with tank release detection requirements. This monitoring could be used to meet the interior lining inspection. If a site is using interstitial monitoring, the Department could accept 12 months of interstitial monitoring records in lieu of the standard interior lining inspection. As an interior lining inspection can cost \$2,000-\$5,000 per tank, this is a potential significant cost savings per lined tank.

Cost of proposed amendments to rule 10 CSR 20-10.010 to the Department of Natural Resources
The Department of Natural Resources' Hazardous Waste Program already tracks these facilities and inspects their entire tank system, including monitoring systems. As such, there would be no additional cost to the department.

FISCAL NOTE

PRIVATE COST

I. RULE NUMBER

Rule Number and Name 10 CSR 26-2.021 Applicability
Type of Rulemaking Amendment

II. SUMMARY OF FISCAL IMPACT

Classification by types of the business entities which would likely be affected:	Estimate of the number of entities by class which would likely be affected by the adoption of the proposed rule:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
Owners of emergency generator tanks <ul style="list-style-type: none"> • Hospitals • Nursing or Health Care facilities • Communication facilities and structures (e.g. cellular phone companies) • Banks • Food storage facilities • Data storage facilities • Other owners and operators of underground storage tank systems 	Approximately 900 tanks at 425 facilities 93% are privately owned Only one contractor indicated he did not meet the training requirements	\$8,370 (every 5 years) or \$1,674 (annually) \$7,440 one-time cost split between all owners (93% of the one-time cost to one contractor)

III. Worksheet

See calculations in Section IV below.

Fiscal Note for Proposed Rule 10 CSR 26-2.076
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IV. Assumptions

The Department is proposing changes to old, lined tanks that are typically beyond their warranty and life-expectancy. These regulations are being changed to ensure that these tanks are being inspected and repaired in a way that confirms that they remain leak-free as long as they are operational. EPA's UST regulation changes include modifications to the interior lining regulations. Specifically, their regulations require interior lined tanks be closed/replaced if the interior lining fails. The Department's proposed alternative requirements for interior linings, include:

- (1) Linings must meet the new UL 1856 installation standard,
- (2) Technicians must be certified (technicians must be certified to do work in almost every other aspect of UST service),
- (3) Documentation must include photographs,
- (4) An additional, less costly inspection option,
- (5) A new technology that allows repair of a lined tank that might otherwise, under the federal regulations, have to be closed.

While pieces of this regulation may be more costly than the new regulation, the proposed interior lining rule must be considered in its entirety as an alternative to the EPA federal regulation, including the closure requirement.

Furthermore, the Department is only aware of four companies that conduct interior lining installation and repair work in Missouri. Of those four companies, three of them already comply or are in the process of complying with the proposed regulations. As such, the proposed regulations have no associated increased costs to three of the four (including the two predominant companies) in Missouri. As the cost to permanently close a tank can be around \$15,000-\$20,000, the cost for the alternative interior lining rule package, which includes more detailed interior lining requirements, but doesn't require permanent closure in the event of a failure, is a less costly requirement than the federal version of the same rule package.

The one contractor that does not already meet the proposed regulations indicated that it would cost approximately \$8,000 total to comply with the training and certification requirements. This is a one-time cost, which we assume will be passed down to the tank owners (split between privately public owners). He indicated that he believed his product is already tested to be certified under UL1856; as such, there would be no additional costs to comply with this requirement for his company.

As for the additional documentation requirements, he indicated that he already does the additional documentation at some of the sites where he conducts interior lining inspections and installations. According to state records, he conducted approximately 13% of the interior lining inspections and installation; as he already complies with the additional documentation requirements at some of his sites, the Department used 10% of the lined tanks requiring additional documentation for the purposes of this RIR. The

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company that would need the additional documentation indicated that this would likely cost around \$250 per *facility* report. As we have about 900 active lined steel tanks at approximately 355 facilities, this would leave approximately 35 lined tank facilities that would need additional documentation for the lining inspections and installations. With an expected 36 facilities needing additional documentation, costing \$250 per facility report, we expect a total cost every five years (the interior lining inspection cycle) of \$9,000, so the average *annual* cost is \$1,800.

Please note, the federal alternative would likely require permanent closure of some of these tanks, which could cost \$15,000-\$20,000 per tank.

Also included in this proposed rule is an additional, alternative interior lining inspection option. Some facilities opt to use interstitial monitoring to comply with tank release detection requirements. This monitoring could be used to meet the interior lining inspection. If a site is using interstitial monitoring, the Department could accept 12 months of interstitial monitoring records in lieu of the standard interior lining inspection. As an interior lining inspection can cost \$2,000-\$5,000 per tank, this is a potential significant cost savings per lined tank.

Based on our data, it appears that 93% of the sites are privately owned; the remaining 7% are publically owned.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED AMENDMENT

10 CSR 26-2.022 Notification Requirements. The commission is proposing to amend sections (1) and (2) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the *Code of State Regulations* to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Any owner who brings an underground storage tank (UST) system in-operation must, within thirty (30) days of bringing the tank [into] in-operation, register the completed UST system on forms provided by the department. Note: Owners and operators of UST systems that were in the ground on or after May 8, 1986, unless taken out-of-use on or before January 1, 1974, were required to notify the state in accordance with the Hazardous and Solid Waste Amendments of 1984, P.L. 98-616, on a form published by Environmental Protection Agency (EPA) on November 8, 1985 (50 FR 46602), unless notice was given pursuant to section 103(c) of Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). Owners and operators who have not complied with the notification requirements [may] **must** use a form/s *provided* **approved** by the department.

(2) [Notices required to be submitted under section (1) of this rule must provide all of the information requested in a form approved by the department for each UST.] **No later than July 1, 2019, owners of previously deferred UST systems must register their UST system(s) on forms approved by the department.**

AUTHORITY: sections 319.103, 319.105, 319.107, 319.111, 319.114, and 319.123, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.022. Original rule filed April 2, 1990, effective Sept. 28, 1990. For intervening history, please consult the *Code of State Regulations*. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COM-

MENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED AMENDMENT

10 CSR 26-2.030 Spill and Overfill Control for In-Use Underground Storage Tank Systems. The commission is proposing to amend the title of this rule, adding new sections (3) through (8), and renumbering accordingly.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the *Code of State Regulations* to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, establish clearer and more detailed new system installation requirements, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(3) Owners and operators must meet one (1) of the following requirements to ensure their spill prevention equipment is operating properly and will prevent releases to the environment:

(A) Have double-walled spill prevention equipment and monitor the space between the walls at least once every thirty (30) days; or

(B) The spill prevention equipment is tested at least triennially to ensure the spill prevention equipment is liquid tight by using vacuum, pressure, or liquid testing in accordance with one (1) of the following:

1. Requirements developed by the manufacturer (Note: This option may only be used if the manufacturer has developed testing requirements. Self-testing apparatus may only be used if pre-approved by the department as a valid functionality test.); or

2. Interstitial test (for double-walled spill basins only) or spill containment test listed by the National Work Group on Leak

Detection Evaluations. To obtain copies of equipment certifications, contact the National Work Group for Leak Detection Evaluations, www.nwglde.org; or

3. Petroleum Equipment Institute RP 1200-12, *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities*. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Petroleum Equipment Institute, Box 2380, Tulsa, OK 74101-2380, (918) 494-9696, www.pei.org; or

4. Other methods approved by the department, which may include a code of practice developed by a nationally recognized association or independent testing laboratory, determined to be no less protective of human health and the environment than the requirements listed in paragraphs 1. through 3. of this subsection.

(4) Spill basins may not be repaired with a partial or spot, field-applied repair kit, or product. Repairs must either be a manufacturer-designed replacement insert or a complete factory-built, field-installed complete spill basin repair kit. Other repairs may be approved by the department if they are determined to be no less protective of human health and the environment.

(5) Owners and operators must ensure their overfill prevention equipment is operating properly and will prevent releases to the environment. Overfill prevention equipment must be inspected or tested at least triennially. At a minimum, the test or inspection must ensure that overfill prevention equipment is set to activate at the correct level specified in 10 CSR 26-2.020 and will activate when the regulated substance reaches that level. Tests or inspections must be conducted in accordance with one (1) of the following criteria:

(A) Requirements developed by the manufacturer, but only if the test or inspection confirms that all portions of the overfill device are intact and functional. (Note: This option may be used if the manufacturer has developed testing requirements. Self-testing apparatus may only be used if approved by the department as a valid functionality test); or

(B) Petroleum Equipment Institute RP 1200-12, *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities*. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Petroleum Equipment Institute, Box 2380, Tulsa, OK 74101-2380, (918) 494-9696, www.pei.org; or

(C) Other methods approved by the department, which may include a code of practice developed by a nationally recognized association or independent testing laboratory, determined to be no less protective of human health and the environment than the requirements listed in paragraphs 1. through 3. of subsection (3)(B).

(6) The first test of the spill equipment and the first test or inspection of the overfill prevention equipment required by this rule is due no later than January 1, 2020.

(7) If a tank has been out of use for more than twelve (12) months, equipment must be confirmed operational with a test of the spill prevention equipment and an inspection or test of the overfill prevention equipment, prior to bringing it back in-use.

(8) Owners and operators must maintain the following records, in accordance with 10 CSR 26-2.034, for spill and overfill prevention equipment:

(A) Test and/or inspection records must be maintained for three (3) years; and/or

(B) When using interstitial monitoring, records must be main-

tained for twelve (12) months.

[(3)](9) Guidance on spill and overfill prevention appears in the—

(A) American Petroleum Institute Publication 1621, *Recommended Practice for Bulk Liquid Stock Control at Retail Outlets*, revised 2001. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/; [and]

(B) National Fire Protection Association Standard 30, *Flammable and Combustible Liquids Code*, revised 2008. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA 02269-9101, (617) 770-3000, www.nfpa.org/;

(C) Petroleum Equipment Institute RP 1200-12, *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities*. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Petroleum Equipment Institute, Box 2380, Tulsa, OK 74101-2380, (918) 494-9696, www.pei.org;

(D) National Fire Protection Association Standard 385, *Standard for Tank Vehicles for Flammable and Combustible Liquids*, revised 2012. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA 02269-9101, (617) 770-3000, www.nfpa.org; and

(E) American Petroleum Institute Recommended Practice 1007, *Loading and Unloading of MC 306/DOT Cargo Tank Motor Vehicles*, revised 2011. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.030. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To

be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.031 Operation and Maintenance of Corrosion Protection. The commission is proposing to amend sections (1), (2), and (3) of the rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) All owners and operators of *[steel] metal* underground storage tank (UST) systems with corrosion protection must comply with the following requirements to ensure that releases due to corrosion are prevented *[for as long as the UST system is used to store regulated substances] until the system is permanently closed or has an out-of-use site assessment conducted in accordance with 10 CSR 26-2.060 through 10 CSR 26-2.064.*

(D) For UST systems using cathodic protection, records of the operation of the cathodic protection system must be maintained *[[in accordance with 10 CSR 26-2.034]]* to demonstrate compliance with the performance standards in this rule. These records must provide the following:

1. The results of the last three (3) inspections required in subsection (1)(C) of this rule; and

2. The results of testing from the last two (2) inspections required in subsection (1)(B) of this rule.

(2) The following codes and standards may be used to comply with this rule:

(A) NACE International RP 0285-2002, *Corrosion Control of Underground Storage Tank Systems by Cathodic Protection*, revised 2002. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact NACE International, Box 218340, Houston, TX 77218-8340, (713) 492-0535, www.nace.org; *[or]*

(B) NACE International TM0101-2001, *Standard Test Method, Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Tank Systems*, 2001 edition. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact NACE International, Box 218340, Houston, TX 77218-8340, (713) 492-0535, www.nace.org; *[or]*

(C) NACE International SP-0169-2007, *Control of External Corrosion on Submerged Metallic Piping Systems*, revised 2007. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact NACE International, Box 218340, Houston, TX 77218-8340, (713) 492-0535, www.nace.org;

(D) NACE International TM0497-2012, *Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems*, revised 2012. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact NACE International, Box 218340, Houston, TX 77218-8340, (713) 492-0535, www.nace.org;

[(C)](E) *Steel Tank Institute Cathodic Protection Testing Procedures for sti-P3 USTs, R051*, January 2006. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047, (708) 438-8265, www.steeltank.com; *[or]*

[(D)](F) *Steel Tank Institute Recommended Practice for the Addition of Supplemental Anodes to sti-P3 USTs, R972*, December 2010. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047, (708) 438-8265, www.steeltank.com; *[or]*

(G) *Steel Tank Institute Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems, R892, Revised January 2006.* To obtain a copy, contact the Steel Tank Institute, 944 Donata Court, Lake Zurich, IL 60047, (708) 438-8265, www.steeltank.com.

(3) If cathodic protection is being used to protect all or part of a UST system from corrosion, and the electric system energizing the cathodic protection has been off, unhooked, or damaged for more than ninety (90) days, the owner/operator must—

(A) Conduct *a/n/ tank* integrity test, documenting adequate tank shell integrity and thickness, as required in 10 CSR 26-2.021(3)(B); and

(B) Have a corrosion expert or design engineer re-evaluate the UST system, cathodic protection system, and surrounding structures and design and/or make changes to the existing cathodic protection system to meet the standards in 10 CSR 26-2.020(1)(A)2.B.-D.;

(C) **Replace metal piping components;**

[(C)](D) The owner/operator may request an additional ninety (90) days to repair the systems by submitting a request, including the justification for the extension; or

[(D)](E) Permanently close the tank, in accordance with 10 CSR 26-2.060 through 10 CSR 26-2.064.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.031. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: *The Missouri Hazardous Waste Management Commission*

will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.032 Compatibility. The commission is proposing to add new sections (2) and (3) and renumbering accordingly.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the *Code of State Regulations* to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(2) Owners and operators must notify the department at least thirty (30) days prior to switching to a regulated substance containing greater than ten percent (10%) ethanol and/or greater than twenty percent (20%) biodiesel.

(3) Owners and operators may use one (1) or more of the following methods to demonstrate UST system compatibility with the regulated substance stored:

(A) Certification or listing of UST system components by a nationally recognized, independent testing laboratory for use with the regulated substance stored; or

(B) Equipment or component manufacturer approval. The manufacturer's approval must be in writing, indicate an affirmative statement of compatibility and functionality, specify the range of product blends with which the component is compatible, and be from the equipment or component manufacturer; or

(C) Another method determined by the department to be no less protective of human health and the environment than the methods listed in subsection (A) or (B) of this section.

[(2)](4) Owners and operators storing alcohol blends may use the following codes to comply with this rule:

(A) American Petroleum Institute [Publication] **Recommended Practice 1626, Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations, [revised 2001] 2010 Edition with 2012 Addendum.** This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/; or

[(B)](B) American Petroleum Institute Publication 1627, *Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service stations, revised 2001.* This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/; or]

[(C)](B) Other standards or publications approved by the department.

AUTHORITY: section 319.105, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.032. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

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Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.033 Repairs Allowed. The commission is proposing to

amend section (2) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rule-making will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, help provide better repairs, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(2) The repairs must meet the following requirements:

(A) Repairs to UST systems must be properly conducted in accordance with a code of practice developed by a nationally-recognized association or an independent testing laboratory.

1. The following codes and standards may be used to comply with subsection (2)(A) of this rule:

A. National Fire Protection Association Standard 30, *Flammable and Combustible Liquids Code*, revised 2008. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA 02269-9101, (617) 770-3000, www.nfpa.org;

B. National Fire Protection Association Standard 326, *Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair*, revised 2015. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA 02269-9101, (617) 770-3000, www.nfpa.org;

[B.]C. American Petroleum Institute Publication 2200, *Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines*, revised 2001. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/;

[C.]D. American Petroleum Institute Standard 1631, *Interior Lining and Periodic Inspection of Underground Storage Tanks*, revised 2001. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005, (202) 682-8000, www.api.org/standards/; *and*

[D.]E. National Leak Prevention Association Standard 631, *Spill Prevention, Minimum 10-Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection*, revised 1999. This standard may only be used for interior lining application and inspection, not for integrity testing of the steel shell. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the National Leak Prevention Association, (815) 301-2785, www.nlpa-online.org; *and*

F. Fiberglass Tank and Piping Institute T-95-1, *Remanufacturing of Fiberglass Plastic (FRP) Underground Storage Tanks*, Revised 1995. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Fiberglass Tank and Piping Institute, <http://www.fiberglasstankandpipe.com>;

(C) Metal pipe sections and fittings that have released a regulated

substance as a result of corrosion or other damage must be replaced. For cathodically protected metal piping, the entire length of electrically-continuous metal pipe must be replaced. *[Fiberglass] Non-corrodible* pipes and fittings may be repaired in accordance with the manufacturer's specifications;

(E) Repaired tanks and/or piping must be tightness tested in accordance with release detection methods listed in 10 CSR 26-2.043(1)(D) and 10 CSR 26-2.044(1)(B) within thirty (30) days following the date of the completion of the repair, *[except as provided in the following paragraphs:] unless tested using another method that is determined by the department to be no less protective of human health and the environment;*

[1. The repaired tank is internally inspected in accordance with a code of practice developed by a nationally-recognized association or an independent testing laboratory;

2. The repaired portion of the UST system is monitored monthly for releases by one (1) of the release detection methods listed in 10 CSR 26-2.043(1)(B) and (E)-(I); or

3. Another test method is used that is determined by the department to be no less protective of human health and the environment than those listed in paragraphs (2)(E)1. and 2. of this rule;]

(F) Repairs of UST systems, or any portion of a UST system, required to be double-walled, must be tested to confirm the integrity of both walls of the repaired tank or piping system within thirty (30) days following the completion of any repair;

(G) Repairs to any required containment sumps must be tested using a method specified in 10 CSR 26-2.035(1)(B) within thirty (30) days following the completion of any repair;

(H) Within thirty (30) days following any repair to spill or prevention equipment, the repaired spill or overfill prevention equipment must be tested in accordance with 10 CSR 26-2.030 to ensure it is operating properly;

[(F)](I) Within six (6) months following the repair of any cathodically protected UST system, the cathodic protection system must be tested with the methods of operation and maintenance of corrosion protection in 10 CSR 26-2.031(1)(B) and (C) to ensure that it is operating properly. Repair may include, but is not limited to, adjustments, maintenance, replacement, or changes to cathodic protection equipment and/or tank repairs; *[and]*

[(G)](J) If a tank is repaired by installation of an interior lining, the lining must be properly maintained and inspected, in accordance with 10 CSR 26-2.021(3)(A), for the life of the tank; and

[(H)](K) UST system owners and operators must maintain records *[of] demonstrating compliance with this rule* for each repair for the remaining operating life of the UST system *[that demonstrate compliance with the requirement of this rule]*.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.033. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning

at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.034 Reporting and Record Keeping. The commission is proposing to amend section (1) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the **Code of State Regulations** to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, outline the requirements for recordkeeping in the new rules, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Owners and operators of underground storage tank (UST) systems must cooperate fully with inspections, monitoring, and testing conducted by the department, or the department's authorized representative, as well as requests for document submission, testing, and monitoring [by the owner or operator].

(A) Reporting. Owners and operators must submit the following information to the department:

1. Notification for all UST systems [by] **subject** to the notification requirements in 10 CSR 26-2.022;
2. Reports of all releases including suspected releases (10 CSR 26-2.050), spills and overfills (10 CSR 26-2.053), and confirmed releases (10 CSR 26-2.071);
3. Corrective actions planned or taken including initial abatement measures (10 CSR 26-2.072), initial site characterization (10 CSR 26-2.074), free product removal (10 CSR 26-2.075), investigation of soil and groundwater cleanup (10 CSR 26-2.078), and corrective action plan (10 CSR 26-2.082); and
4. A notification before permanent closure or change in service (10 CSR 26-2.061).

(B) Record Keeping. Owners and operators must maintain the fol-

lowing information:

1. [A corrosion expert's analysis of site corrosion potential if corrosion protection equipment is not used (10 CSR 26-2.020(1)(A)4. and (1)(B)4.);] **Installation records for secondary containment of double-walled equipment, including tanks, piping, containment sumps, and spill basins, installed after July 1, 2017;**

2. Documentation of operation of corrosion protection equipment (10 CSR 26-2.031);

3. **Documents demonstrating compatibility of UST systems, including tanks, piping, release detection equipment, and all other ancillary equipment with the regulated substance being stored (10 CSR 26-2.032);**

[3.]4. Documentation of UST system repairs (10 CSR 26-2.033[(2)(H)]);

5. **Documentation demonstrating spill and overflow prevention equipment is being properly maintained, inspected, and tested (10 CSR 26-2.030);**

6. **Documentation of containment sump testing results (10 CSR 26-2.035);**

7. **Documentation of periodic walk-through inspections (10 CSR 26-2.036);**

[4.]8. Recent compliance with release detection requirements (10 CSR 26-2.04[5]8); [and]

[5.]9. Results of the site investigation conducted at permanent closure (10 CSR 26-2.064)[.]; and

10. **Documentation demonstrating compliance with the operator training rule (10 CSR 100-6).**

AUTHORITY: sections 319.107 and 319.111, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.034. Original rule filed April 2, 1990, effective Sept. 28, 1990. Amended: Filed Aug. 3, 1993, effective April 9, 1994. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

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Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED RULE

10 CSR 26-2.035 Testing of Containment Sumps

PURPOSE: This rule contains the requirements for testing the newly required containment sumps associated with underground storage tank systems.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Owners and operators of underground storage tank (UST) systems with containment sumps required by 10 CSR 26-2.020 and/or 10 CSR 26-2.021, must ensure the continued integrity of required containment sumps by meeting one (1) of the following requirements:

(A) The containment sump has two (2) walls and the integrity of both walls is monitored annually; or

(B) The containment sump primary wall is tested at least triennially to ensure the equipment is liquid-tight by using vacuum, pressure, or liquid testing in accordance with one (1) of the following criteria:

1. Requirements developed by the manufacturer (Note: Owners and operators may use this option only if the manufacturer has developed testing requirements.);

2. An interstitial test or containment sump test listed by the National Work Group on Leak Detection Evaluations. To obtain copies of equipment certifications, contact the National Work Group for Leak Detection Evaluations, www.nwglde.org; or

3. Petroleum Equipment Institute RP 1200-12, *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities*. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Petroleum Equipment Institute, Box 2380, Tulsa, OK 74101-2380, (918) 494-9696, www.pei.org; or

4. Another method approved by department, including code(s) of practice developed by a nationally recognized association(s) or independent testing laboratory(ies), determined to be no less protective of human health and the environment than the requirements listed in paragraphs 1. through 3. of this subsection.

(2) Owners and operators must maintain record(s) of the required containment sump monitoring for twelve (12) months or test(s) required by this rule until the next test is performed.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. 2015. Original rule filed Aug. 15, 2016.

PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

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Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED RULE

10 CSR 26-2.036 Operation and Maintenance Walkthrough Inspections

PURPOSE: This rule contains the new requirements for walkthrough inspections of underground storage tank systems.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) To properly operate and maintain underground storage tank (UST) systems, owners and operators must ensure the following requirements are met by the timeframes outlined in section (2):

(A) Conduct a walkthrough inspection that, at a minimum, checks the following equipment as specified below:

1. Every thirty (30) days, owners and operators must—

A. For spill prevention equipment - visually check for any damage; remove liquid or debris; check for and remove obstructions in the fill pipe, check the fill cap to make sure it is securely on the fill pipe; and for double-walled spill prevention equipment with interstitial monitoring, check for a leak in the interstitial area;

B. For release detection systems - check to make sure the release detection system is operating with no alarms or other unusual operating conditions present; and ensure records of release detection testing are reviewed monthly and are current;

2. Annually, owners and operators must—

A. For containment sumps required in 10 CSR 26-2.020 or 10 CSR 26-2.021, including tank top or submersible turbine pump, under-dispenser, and transition or intermediate sumps - visually check for any damage, leaks to the containment sump area, or releases to the environment; remove any liquid or debris; and for double-walled containment sumps, check for a leak in the interstitial area;

B. For hand held release detection equipment - check devices such as tank gauge sticks for operability and serviceability.

- (2) The first walkthrough inspections in section (1) are due—
 (A) Immediately upon installation for new UST systems installed after July 1, 2017; or
 (B) No later than January 1, 2020, for existing UST systems.

(3) Owners and operators may use the following codes to comply with this rule:

(A) Petroleum Equipment Institute RP 500-11, *Recommended Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment*. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Petroleum Equipment Institute, Box 2380, Tulsa, OK 74101-2380, (918) 494-9696, www.pei.org;

(B) Petroleum Equipment Institute RP 900-08, *Recommended Practices for Inspection and Maintenance of UST Systems*. This document is incorporated by reference without any later amendments or modifications. To obtain a copy, contact the Petroleum Equipment Institute, Box 2380, Tulsa, OK 74101-2380, (918) 494-9696, www.pei.org.

(4) Owners and operators must maintain records (in accordance with 10 CSR 26-2.034) of operation and maintenance walkthrough inspections for one (1) year. The record must include a listing of each area checked, whether each area checked was acceptable or needed to have any action taken, and a description of any actions taken to correct an issue.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. 2015. Original rule filed Aug. 15, 2016.

PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

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Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.040 General Requirements for Release Detection for

All Underground Storage Tank Systems. The commission is proposing to amend sections (1) and (2) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Owners and operators of underground storage tank (UST) systems that are in use must use a method, or combination of methods, [or] of release detection that—

(B) Is installed, calibrated, operated, tested, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition; and. If manufacturer's test methods are not available, the annual operability test may be conducted in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory or a method approved by the department. Operability test reports must, at a minimum, include facility name and address, components tested, model and serial number (if legible), testing date, test method, technician name and affiliation, and a certification of results;

(C) For existing sites, the first test is due not later than January 1, 2020. Electronic and mechanical release detection equipment must be tested annually for proper operation, in accordance with subsection (B) of this section. A test of the proper operation must be performed at least annually and, at a minimum and as applicable to the facility, cover the following components and criteria:

1. Automatic tank gauge and other controllers: test alarm; verify system configuration; test battery backup;

2. Probes and sensors: inspect for residual buildup; ensure floats move freely; ensure shaft is not damaged; ensure cables are free of kinks, bends, and breaks; test alarm operability and communication with controller; and

3. Vacuum pumps and pressure gauges: ensure proper communication with sensors and controller;

[(C)](D) Meets the performance requirements for tanks in 10 CSR 26-2.043 or 10 CSR 26-2.046 for field constructed tanks, or for piping in 10 CSR 25-2.044 or 10 CSR 26-2.047 for bulk piping, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer. In addition, all release detection methods must be capable of detecting the leak rate or quantity specified for [that tank] the method in 10 CSR 26-2.043, [or piping method in] 10 CSR 26-2.044, 10 CSR 26-2.046, or 10 CSR 26-2.047, as appropriate, with a probability of detection of ninety-five percent (95%) and a probability of false alarm of five percent (5%); and

[(D)](E) All release detection methods and equipment must be conducted and operated in accordance with the applicable National Work Group on Leak Detection Evaluations [(NWGLDE) certification] listing, unless otherwise approved by the department. To obtain copies of equipment [certifications] listings, contact the National Work Group [for] on Leak Detection Evaluations, www.nwglde.org.

(2) When a release detection method for tanks in 10 CSR 26-2.043 or 10 CSR 26-2.046 or for piping in 10 CSR 26-2.044 or 10 CSR 26-2.047 indicates a release may have occurred, owners and operators must notify the department in accordance with 10 CSR 26-2.050–10 CSR 26-2.053.

AUTHORITY: sections 319.105, 319.107, and 319.111, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.040. Original rule filed April 2, 1990, effective Sept. 28, 1990. Amended: Filed Aug. 3, 1993, effective April 9, 1994. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

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Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.041 Requirements for Petroleum Underground Storage Tank Systems. The commission is proposing to amend sections (1) and (2) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Owners and operators of petroleum underground storage tanks (UST) systems that are in use must provide release detection for tanks and piping as follows:

(A) Tanks. Tanks must be monitored at least every thirty (30) days for releases using one (1) of the methods listed in 10 CSR 26-2.043(1)(B)–(I), except that—

1. UST systems that meet new or upgraded standards in 10 CSR 26-2.020 or 10 CSR 26-2.021 and the monthly inventory control requirements in 10 CSR 26-2.043(1)(A) may use tank tightness testing (10 CSR 26-2.043(1)(D)) at least every five (5) years until December 22, 1998, or until ten (10) years after the tank is installed or upgraded under 10 CSR 26-2.021(3), whichever is later;

2. Tanks with a capacity of [five hundred fifty (550)] two thousand (2,000) gallons or less may use manual tank gauging (10 CSR 26-2.043(1)(C)); [and]

3. Field-constructed tanks greater than fifty thousand (50,000) gallons may use the alternative release detection requirements in 10 CSR 26-2.046;

4. Groundwater monitoring (10 CSR 26-2.043 subsection (1)(G)) will no longer be valid to monitor for releases after July 1, 2020;

5. Vapor monitoring (10 CSR 26-2.043 subsection (1)(F)) will no longer be valid to monitor for releases after July 1, 2020, if used with an added tracer chemical and listed by the National Work Group on Leak Detection Evaluations as a tank tightness test; and

6. Tanks installed after July 1, 2017, must be monitored for leaks at least every thirty (30) days in accordance with 10 CSR 26-2.043(H);

(B) Piping. Underground piping that routinely contains regulated substances must be monitored for releases in a manner that meets one (1) of the following requirements:

1. Pressurized piping. Underground piping that conveys regulated substances under pressure must—

A. Be equipped with an automatic line leak detector in 10 CSR 26-2.044(1)(A); [and]

B. Have an annual line tightness test conducted in accordance with 10 CSR 26-2.044(1)(B) or have monthly monitoring conducted in accordance with 10 CSR 26-2.044(1)(C); and

C. New or replaced piping installed after July 1, 2017, must be monitored for releases at least every thirty (30) days in accordance with 10 CSR 26-2.043 subsection (1)(H);

2. Suction piping. Underground piping that conveys regulated substances under suction must either have a line tightness test conducted at least every three (3) years and in accordance with 10 CSR 26-2.044(1)(B) or use a monthly monitoring method conducted in accordance with 10 CSR 26-2.044(1)(C). New or replaced piping installed after July 1, 2017, must be monitored for releases at least every thirty (30) days in accordance with 10 CSR 26-2.043 subsection (1)(H). No release detection is required for suction piping that is designed and constructed to meet the following standards:

A. The below-grade piping operates at less than atmospheric pressure;

B. The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;

C. Only one (1) check valve is included in each suction line;

D. The check valve is located directly below and as close as practical to the suction pump; and

E. A method is provided that allows compliance with subparagraphs (1)(B)2.A.–D. of this rule to be readily determined (for

example, the check valve can be visually inspected); and

3. Gravity piping and remote fill piping are exempt from the piping line leak detection requirements in this section./.; and

4. **Underground bulk piping associated with airport hydrant fuel distribution systems and field-constructed tanks must meet one (1) of the following release detection requirements:**

A. The requirements in subsection (B) of this section; or

B. The alternative release detection requirements in 10 CSR 26-2.047;

C. **Underground bulk piping installed after July 1, 2017, must meet the requirements in paragraph 1. or 2. of this subsection.**

(2) High-throughput Facilities. In addition to the requirements outlined in section (1) of this rule, any owner of a tank or a multi-tank connected or manifolded system that dispenses more than eight hundred thousand (800,000) gallons of any regulated substance in one (1) calendar month must use at least one (1) of the following tank system release detection methods:

(B) Vapor monitoring, including introduced chemical marker monitoring, [approved] listed by the National Work Group [for] on Leak Detection Evaluations (NWGLDE) for the substance stored at least once every fifteen (15) days. To obtain copies of equipment [certifications] listings, contact the National Work Group [for] on Leak Detection Evaluations, www.nwglde.org; or

(C) Continuous in-tank release detection, which must include continual reconciliation of tank system inventory. Standard statistical inventory control is not acceptable. The method used must meet criteria established by the National Work Group [for] on Leak Detection Evaluations (NWGLDE) for continuous in-tank leak detection methods. To obtain copies of equipment [certifications] listings, contact the National Work Group [for] on Leak Detection Evaluations, www.nwglde.org; or

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.041. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules

Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED AMENDMENT

10 CSR 26-2.042 Requirements for Hazardous Substance Underground Storage Tank Systems. The commission is proposing to amend section (1) of this rule and adding a new section (3).

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the *Code of State Regulations* to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rule-making will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Owners and operators of in-use hazardous substance underground storage tank (UST) systems must use a release detection method that meets the requirements of 10 CSR 26-2.041 and **10 CSR 26-2.043 subsection (1)(H), except for the electronic monitoring requirement in 10 CSR 26-2.043 paragraph (1)(H)2. with approval from the department.**

(3) **All new or replaced hazardous substance UST systems installed after July 1, 2017, must also comply with the containment sump testing requirements in 10 CSR 26-2.035.**

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.042. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

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required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

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Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

10 CSR 26-2.043 Methods of Release Detection for Tanks. The commission is proposing to amend section (1) of this rule and add a new section (2).

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, establish clearer and more detailed leak detection system requirements, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Methods of release detection for underground storage tanks (USTs) used to meet the requirements in 10 CSR 26-2.041 must be conducted as follows:

(B) Statistical Inventory Reconciliation (SIR), which is a statistical inventory analysis method that tests for the loss of a regulated substance. SIR must meet the following requirements:

1. Report a quantitative result with a calculated leak rate;

[1.]2. Be able to detect a two-tenths (0.2) gallon-per-hour leak rate from any portion of the tank system that routinely contains a regulated substance;

[2.]3. Must be conducted for each independent tank system;

[3.]4. Be done in conjunction with inventory control that meets the requirements in 10 CSR 26-2.043(1)(A); *[and]*

5. Use a threshold that does not exceed one-half (1/2) the minimum detectible leak rate;

[4.]6. Be conducted in accordance with the National Work Group on Leak Detection Evaluations *[certification]* listing and the manufacturer's requirements. To obtain copies of equipment *[certifications]* listings, contact the National Work Group *[for]* on Leak Detection Evaluations, www.nwglde.org; **and**

[5.] Owners and operators must maintain all supporting data, including regulated substance and water stick read-

ings, for at least twelve (12) months.]

[6.]7. The SIR analysis report must *[be completed and sent to the owner or operator within fifteen (15) days of the end of each calendar month;]* include the daily data, inventory measurements of the regulated substance and water, delivery data, and analysis or reporting date;

(C) Manual Tank Gauging. Manual tank gauging must meet the following requirements:

1. Tank liquid level measurements are taken at the beginning and ending of a period of at least thirty-six (36) hours during which no liquid is added to or removed from the tank;

2. Level measurements are based on an average of two (2) consecutive stick readings at both the beginning and ending of the period;

3. The equipment used is capable of measuring the level of regulated substance over the full range of the tank's height to the nearest one-eighth inch (1/8");

4. A leak is suspected and subject to the requirements of 10 CSR 26-2.050–10 CSR 26-2.053 if the variation between beginning and ending measurements exceeds the following weekly or monthly standards:

A. Tanks of five hundred fifty (550)-gallon capacity or less are allowed a weekly standard of ten (10) gallons per reading and a monthly average of five (5) gallons per reading, **with a minimum test duration of thirty-six (36) hours;**

B. Five hundred fifty-one to one thousand (551–1,000)-gallon capacity tanks are allowed a difference of thirteen (13) gallons per week and a monthly average of seven (7) gallons, **with a minimum test duration of thirty-six (36) hours, and when combined with a tank tightness test in accordance with subsection (D) of this section;**

C. One thousand one to two thousand (1,001–2,000)-gallon capacity tanks are allowed a difference of twenty-six (26) gallons per week and a monthly average of thirteen (13) gallons, **with a minimum test duration of thirty-six (36) hours, and when combined with a tank tightness test in accordance with subsection (D) of this section;**

D. Five hundred fifty-one to one thousand (551–1,000)-gallon capacity tanks with *[dimensions]* a diameter no greater than sixty-four inches (64") *[by seventy-three (64"x73")]* are allowed a difference of nine (9) gallons per week and monthly average of four (4) gallons, provided that a period of at least forty-four (44) hours during which no liquid is added to or removed from the tank is allowed to pass between tank liquid level measurements, **without requiring an additional tank tightness test;** and

E. *[One thousand (1,000)-gallon capacity tanks with dimensions of]* Five hundred fifty-one to one thousand (551–1,000)-gallon capacity tanks with a diameter no greater than forty-eight inches *[by one hundred twenty-eight inches (48"x28")]* (48") are allowed a difference of twelve (12) gallons per week and a monthly average of six (6) gallons, provided that a period of at least fifty-eight (58) hours during which no liquid is added to or removed from the tank is allowed to pass between tank liquid level measurements, **without requiring an additional tank tightness test;** and

[5.] Use of manual tank gauging must comply with the following size restrictions:

A. Tanks of five hundred fifty (550) gallons or less nominal capacity may use this as the sole method of release detection;

B. Tanks of five hundred fifty-one to one thousand (551–1,000)-gallon capacity with dimensions no greater than sixty-four by seventy-three inches (64"x73") and tanks of one thousand (1,000)-gallon capacity with dimensions of forty-eight inches by one hundred twenty-eight inches (48"x128") may use this as the sole method of release detection;

C. Tanks of five hundred fifty-one to two thousand

(551-2,000) gallons may use the method in place of inventory control in 10 CSR 26-2.043(1)(A); and

[D./F. Tanks of greater than two thousand (2,000) gallons nominal capacity may not use this method for release detection;

(E) Automatic Tank Gauging. Equipment for automatic tank gauging that tests for the loss of regulated substance and conducts inventory control must meet the following requirements:

1. The automatic regulated substance level monitor test can detect a two-tenths (0.2)-gallon-per-hour leak rate from any portion of the tank that routinely contains a regulated substance; *[and]*

2. The test must be performed with the system operating in one of the following modes:

A. In-tank static testing conducted at least once every thirty (30) days; or

B. Continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the system to gather incremental measurements to determine the leak status of the tank at least once every thirty (30) days; and

[2./3. Inventory control (or equivalent test) meeting the requirements in 10 CSR 26-2.043(1)(A) is conducted;

(F) Vapor Monitoring. Testing or monitoring for vapors within the soil gas of the excavation zone must meet the following requirements:

1. The materials used as backfill are sufficiently porous and permeable (for example, gravel, sand, or crushed rock) to readily allow diffusion of vapors from releases into the excavation area;

2. The stored regulated substance, or a tracer compound placed in the tank system, is sufficiently volatile (for example, gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank;

3. The measurement of vapors by the monitoring device is not rendered inoperative by the groundwater, rainfall, or soil moisture or other known interferences so that a release could go undetected for more than thirty (30) days;

4. The level of background contamination in the excavation zone will not interfere with the method used to detect releases from the tank;

5. The vapor monitors are designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the tank system, a component(s) of that substance, or a tracer compound placed in the tank system;

6. In the UST excavation zone, the site is assessed to ensure compliance with the requirements in paragraphs (1)(F)1.-4. of this rule and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the tank that routinely contains a regulated substance; *[and]*

7. Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering; **and**

8. After July 1, 2020, use a tracer chemical and the method is listed by the National Work Group on Leak Detection Evaluations as a tank tightness test;

(G) Groundwater Monitoring. Testing or monitoring for liquids on the groundwater **may only be used as a release detection method until July 1, 2020, and** must meet the following requirements:

1. The regulated substance stored is immiscible in water and has a specific gravity of less than one (1);

2. The groundwater is within twenty feet (20') from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is at least one hundredth centimeter per second (0.01 cm/sec) (for example, the soil should consist of gravels, coarse to medium sands, coarse silts, or other permeable materials);

3. The slotted portion of the monitoring well casing must be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low groundwater conditions;

4. Monitoring wells shall be sealed from the ground surface to the top of the filter pack;

5. Monitoring wells or devices shall intercept the excavation

zone or are as close to it as is technically feasible;

6. The continuous monitoring devices or manual methods used can detect the presence of at least one-eighth inch (1/8") of free product on top of the groundwater in the monitoring wells;

7. The site is assessed within and immediately below the UST system excavation zone to ensure compliance with the requirements in paragraphs (1)(G)1.-5. of this rule. The site assessment also establishes the number and positioning of monitoring wells or devices that will detect releases from any portion of the tank that routinely contains a regulated substance; and

8. Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering;

(H) Interstitial Monitoring. Interstitial monitoring *[between the UST system and a secondary barrier immediately around or beneath it may be used, but only if the system is designed, constructed, and]* **must monitor between the walls of a double-walled tank or, for piping, is designed to detect a release from the primary piping, including all fittings, and contain it until it can be detected. The entire piping secondary containment must be leak tight. Interstitial monitoring must be installed to detect a leak from any portion of the tank that routinely contains a regulated substance and also meets [one (1) of] the following requirements:**

[1. For double-walled UST systems, the sampling or testing method can detect a release through the inner wall in any portion of the tank that routinely contains a regulated substance;

2. For UST systems with a secondary barrier within the excavation zone, the sampling or testing method used can detect a release between the UST system and the secondary barrier.

A. The secondary barrier around or beneath the UST system consists of artificially constructed material that is sufficiently thick and impermeable (less than one millionth centimeter per second (10^{-6} cm/sec) for the regulated substance stored) to direct a release to the monitoring point and permits its detection.

B. The barrier is compatible with the regulated substance stored so that a release from the UST system will not cause a deterioration of the barrier allowing a release to pass through undetected.

C. For cathodically protected tanks the secondary barrier must be installed so that it does not interfere with the proper operation of the cathodic protection system.]

[D.]1. The groundwater, soil moisture, or rainfall will not render the testing or sampling method used inoperative so that a release could go undetected for more than thirty (30) days;

[E. The site is assessed to ensure that the secondary barrier is always above the groundwater and not in a twenty-five (25)-year flood plain, unless the barrier and monitoring designs are for use under these conditions.

F. Monitoring wells are clearly marked and secured to avoid unauthorized access tampering;

3. For tanks with an internally fitted liner, an automated device can detect a release between the inner wall of the tank and the liner is compatible with the substance stored; and

4. The provisions outlined in the Steel Tank Institute's Standard for Dual Wall Underground Storage Tanks may be used as guidance for aspects of the design and construction of underground steel double-walled tanks; and]

2. For new UST systems installed after July 1, 2017, interstitial monitoring must be conducted electronically by a system with a report-generating capability; and

3. For UST systems using continuous vacuum, pressure, or liquid-filled methods of interstitial monitoring, the method must be capable of detecting a breach in both the inner and outer walls of the tank and/or piping; and

(2) Owners and operators of field-constructed or airport hydrant fuel distribution system tanks may not use vapor monitoring or groundwater monitoring, described in subsections (F) and (G) of this rule as their sole method of detection, but may use them in conjunction with 10 CSR 26-2.046.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.043. Original rule filed April 2, 1990, effective Sept. 28, 1990. Amended: Filed Aug. 3, 1993, effective April 9, 1994. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: *The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.*

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**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED AMENDMENT

10 CSR 26-2.044 Methods of Release Detection for Piping. The commission is proposing to amend section (1) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the Code of State Regulations to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The

proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, establish clearer and more detailed release detection system requirements, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Each method of release detection for piping used to meet the requirements of release detection for underground storage tanks (USTs) in 10 CSR 26-2.041 must be conducted in the following manner:

(A) Automatic Line Leak Detectors. Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of three (3) gallons per hour at ten (10) pounds per square-inch line pressure within one (1) hour and are [certified] listed by the National Work Group on Leak Detection Evaluations. To obtain copies of equipment [certifications] listings, contact the National Work Group [for] on Leak Detection Evaluations, www.nwglde.org. A test of the operation of the leak detector must be conducted at least annually. The annual test must be conducted in accordance with the manufacturer's approved testing procedures[.] and simulate a leak of at least three (3) gallons per hour at ten (10) pounds per square inch pressure, or equivalent, in the system under normal operating conditions.

1. Line leak detectors must monitor all pressurized piping, including pressurized piping beyond the first or master dispenser but not including other piping above the shear valve inside the dispenser or dispenser hoses to the nozzle[.];

[2. Line leak detector operability test reports must include facility name and address, line leak detector manufacturer, model and serial number, if legible, testing date, test method, technician name and affiliation, and a certification of results;]

(C) Applicable Tank Methods. Any of the methods in 10 CSR 26-2.043(1)(B) and (F)-(I) may be used if they are designed to detect a release from any portion of the underground piping that routinely contains regulated substances[; and] except—

1. Owners and operators of piping greater than fifty thousand (50,000) gallons associated with field-constructed tanks or airport hydrant fuel distribution system tanks may comply with 10 CSR 26-2.074 in lieu of the methods of piping leak detection in this rule;

2. Groundwater monitoring (10 CSR 26-2.043 subsection (1)(G)) can no longer be used after July 1, 2020; and

3. Vapor monitoring (10 CSR 26-2.043 subsection (1)(F)) can no longer be used after July 1, 2020, unless with an added tracer chemical and listed by the National Work Group on Leak Detection Evaluations as a tightness test; and

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.044. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: *The Missouri Hazardous Waste Management Commission*

will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

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Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations

PROPOSED AMENDMENT

[10 CSR 26-2.045] **10 CSR 26-2.048 Release Detection Record Keeping.** The commission is proposing to move the rule and amend section (1) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the *Code of State Regulations* to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, incorporate new technologies and update the release detection recordkeeping requirements. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) All underground storage tank (UST) system owners and operators must maintain records in 10 CSR 26-2.034 demonstrating compliance with applicable release detection requirements in 10 CSR 26-2.040–10 CSR 26-2.04/5/8. These records must include the following:

(A) All written performance claims of any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, must be *[maintained] retained* for five (5) years from the date of equipment installation or for another reasonable period of time determined by the department *[from the date of installation]*;

(B) The results of any sampling, testing, or monitoring must be *[maintained] retained* for at least one (1) year, or for another reasonable period of time determined by the department, except that—

1. *[t]*The results of tank tightness testing conducted in accordance with 10 CSR 26-2.043(1)(D) must be retained until the next test is conducted; and

2. The results of annual operability tests of release detection

equipment must be retained until the next test is performed; and

(C) Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on-site must be *[maintained] retained* for at least one (1) year after the servicing work is completed. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer must be retained for five (5) years from the date of installation.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.045. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

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Title 10—DEPARTMENT OF NATURAL RESOURCES
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PROPOSED RULE

10 CSR 26-2.046 Alternative Methods of Release Detection for Field-Constructed Tanks

PURPOSE: This rule contains the new options for release detection for the previously deferred field-constructed tanks and airport hydrant fuel distribution systems.

(1) Owners and operators of field-constructed tanks with a capacity greater than fifty thousand (50,000) gallons may use one (1) or a combination of the following alternative methods of release detection:

(A) Conduct an annual tank tightness test that can detect a one-half (0.5) gallon per hour leak rate;

(B) Use an automatic tank gauging system to perform release

detection at least every thirty (30) days that can detect a leak rate less than or equal to one (1) gallon per hour. This method must be combined with a tank tightness test that can detect a two-tenths (0.2) gallon per hour leak rate performed at least every three (3) years;

(C) Use an automatic tank gauging system to perform release detection at least every thirty (30) days that can detect a leak rate less than or equal to two (2) gallons per hour. This method must be combined with a bulk tank tightness test that can detect a two-tenths (0.2) gallon per hour leak rate performed at least every two (2) years;

(D) Perform vapor monitoring, with an added tracer chemical, conducted in accordance with 10 CSR 26-2.043 subsection (1)(F), capable of detecting a one-tenth (0.1) gallon per hour leak rate at least every two (2) years;

(E) Perform inventory control, conducted in accordance with Department of Defense Directive 4140.25; *ATA Airport Fuel Facility Operations and Maintenance Guidance Manual*, at least every thirty (30) days that can detect a leak equal to or less than one-half percent (0.5%) of flow-through. When using this method, the following must also be met:

1. Perform a tank tightness test that can detect a one-half (0.5) gallon per hour leak rate at least every two (2) years; or

2. Perform vapor monitoring or groundwater monitoring in accordance with 10 CSR 26-2.043 subsection (1)(F) or (G), respectively, at least every thirty (30) days; and

(F) Another method approved by the department if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in subsections (A) through (C) of this section. In comparing methods, the department shall consider the size of release that the method can detect and the frequency and reliability of detection. If the method is approved, the owner and operator must comply with any conditions imposed by the department on its use.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. 2015. Original rule filed Aug. 15, 2016.

PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on June 16, 2011, at the Elm Street Conference Center, 1738 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on June 23, 2011. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on June 23, 2011. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1738 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED RULE

10 CSR 26-2.047 Alternative Methods of Release Detection for Bulk Underground Piping

PURPOSE: This rule contains the new options for release detection for the previously deferred field-constructed tanks and airport hydrant fuel distribution piping systems.

(1) Owners and operators of bulk underground piping associated with any airport hydrant fuel distribution systems and field-constructed tanks greater than fifty thousand (>50,000) gallons may use one (1) or a combination of the following alternative methods of release detection:

(A) Perform a biannual or annual bulk line tightness test at or above operating pressure in accordance with the table below. Bulk piping segments greater than or equal to one hundred thousand (≥100,000) gallons not capable of meeting the maximum three (3.0) gallons per hour leak rate for the biannual test may be tested at a leak rate up to six (6.0) gallons per hour:

Maximum Detectable Leak Rate Per Test Section Volume		
Test Section Volume (Gallons)	Biannual Test Maximum Detectable Leak Rate (Gallons Per Hour)	Annual Test Maximum Detectable Leak Rate (Gallons Per Hour)
< 50,000	1.0	0.5
≥ 50,000 to < 75,000	1.5	0.75
≥ 75,000 to < 100,000	2.0	1.0
≥ 100,000	3.0	1.5

(B) Perform vapor monitoring, with an added tracer chemical, conducted in accordance with 10 CSR 26-2.043(F), capable of detecting a one-tenth (0.1) gallon per hour leak rate at least every two (2) years;

(C) Perform inventory control, conducted in accordance with Department of Defense Directive 4140.25; *ATA Airport Fuel Facility Operations and Maintenance Guidance Manual*, at least every thirty (30) days that can detect a leak equal to or less than one-half percent (0.5%) of flow-through. When using this method, the following must also be met:

1. Perform a line tightness test in accordance with the biannual test threshold in subsection (A) of this section at least every two (2) years; or

2. Perform vapor monitoring or groundwater monitoring in accordance with 10 CSR 26-2.043 subsection (1)(F) or (G), respectively, at least every thirty (30) days;

(D) Another method approved by the department if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in subsections (A) through (C). In comparing methods, the department shall consider the size of release that the method can detect and the frequency and reliability of detection. If the method is approved, the owner and operator must comply with any conditions imposed by the department on its use.

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and section 319.137, RSMo Supp. 2015. Original rule filed Aug. 15, 2016.

PUBLIC COST: This proposed rule will not cost state agencies or

political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

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Any person may submit written comments on this rule action. be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on June 23, 2011. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1738 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED AMENDMENT

10 CSR 26-2.050 Reporting of Suspected Releases. The commission is proposing to amend section (1) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the *Code of State Regulations* to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rulemaking will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Owners and operators of underground storage tank (UST) systems must report to the department within twenty-four (24) hours and follow the procedures for release investigation and confirmation in 10 CSR 26-2.052 upon discovery of one (1) or more of the following conditions:

(B) Unusual operating conditions observed by owners and operators (such as the erratic behavior of product dispensing equipment, the sudden loss of a regulated substance from the UST system, an unexplained presence of water in the tank, **liquid in the interstitial space of secondarily contained systems**, or visible leaks from aboveground piping or ancillary equipment connected to a UST), unless system equipment is found to be defective but not *[leaking]*

releasing regulated substance from the UST system and is immediately repaired or replaced; or

(C) Monitoring results, including investigations of leak alarms, from a release detection method required under 10 CSR 26-2.041 [and] through 10 CSR 26-2.042/7 that indicate a release may have occurred unless—

1. The monitoring device is found to be defective and is immediately repaired, recalibrated, or replaced and additional monitoring does not confirm the initial result; or

2. The leak alarm was investigated and determined to have been caused by an event other than a release (for example, a power surge or delivery to the tank during release detection testing); or

[2.]3. In the case of inventory control, a second month of data does not confirm the initial result.

AUTHORITY: section 319.109, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.050. Original rule filed April 2, 1990, effective Sept. 28, 1990. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rulemakings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 26—Petroleum and Hazardous Substance
Storage Tanks
Chapter 2—Underground Storage Tanks—Technical
Regulations**

PROPOSED AMENDMENT

10 CSR 26-2.052 Release Investigation and Confirmation Steps. The commission is proposing to amend section (1) of this rule.

PURPOSE: There are two (2) primary purposes for this rulemaking. The first is to open UST rules in Title 10, Division 26 of the *Code of State Regulations* to make the necessary changes required by the U.S. Environmental Protection Agency (EPA). The 2005 Energy

Policy Act required either financial responsibility for UST installers and manufacturers or secondary containment for all new systems. In addition, last October, EPA adopted changes to the federal UST regulations that need to be incorporated into state regulation. This rule-making will make the necessary changes to comply with these EPA grant requirements and to incorporate the changes made to the federal regulations.

The second reason is to incorporate state-specific changes. The proposed changes would better ensure that old tanks are still functional enough to remain in use. The changes would better prevent and detect leaks, outline the requirements for responding to suspected releases, and incorporate new technologies. The department will also take this opportunity to clarify ambiguous or confusing language and update industry standard referenced in the regulations.

(1) Unless corrective action is initiated in accordance with 10 CSR 26-2.070–10 CSR 26-2.083, owners and operators must immediately investigate and confirm all suspected releases of regulated substances requiring reporting under 10 CSR 26-2.050 within seven (7) days or another reasonable time period specified by the department using either the following steps or another procedure approved by the department:

(A) System Test. Owners and operators must conduct tests *[(tightness testing of tanks in 10 CSR 26-2.043(1)(D) and piping in 10 CSR 26-2.044(1)(B))]* appropriate for the suspected release, using tightness tests listed by the National Work Group on Leak Detection Evaluations and/or approved by the department, or for containment sumps, a test method included in 10 CSR 26-2.035, to determine whether a leak exists in that portion of the tank system that routinely contains a regulated substance *[or the attached delivery piping]* or *[both]* a breach of the interstitial space has occurred. To obtain copies of equipment listings, contact the National Work Group on Leak Detection Evaluations, www.nwglde.org.

1. If the system test confirms a leak into the interstice or a release, *[O]*owners and operators must repair, replace, *[or]* upgrade, or close the underground storage tank (UST) system, *[and]*. Owners and operators must begin a site check in accordance with subsection (1)(B) and corrective action in accordance with 10 CSR 26-2.070–10 CSR 26-2.083 if the test results for the system, tank, or delivery piping indicate that a *[leak] release [exists] has occurred*.

2. Further investigation is not required if the test results for the system, tank, and delivery piping do not indicate that a *[leak] release* exists and if environmental contamination is not the basis for suspecting a release.

3. Owners and operators must conduct a site check as described in subsection (1)(B) of this rule if the test results for the system, tank, and delivery piping do not indicate that a leak exists but environmental contamination is the basis for suspecting a release; or

AUTHORITY: sections 319.105 and 319.107, RSMo 2000, and sections 319.109 and 319.137, RSMo Supp. [2010] 2013. This rule originally filed as 10 CSR 20-10.052. Original rule filed April 2, 1990, effective Sept. 28, 1990. Amended: Filed Aug. 3, 1993, effective April 9, 1994. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011. Amended: Filed Aug. 15, 2016.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate. The public entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate. The private entity fiscal cost impacts for compliance with the federal standards are accounted for in the federal rule-makings.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Hazardous Waste Management Commission will hold a public hearing on this rule action and others beginning at 10:00 a.m. on October 20, 2016, at the Elm Street Conference Center, 1730 East Elm Street, Jefferson City, Missouri. Any interested person will have the opportunity to testify. Advance notice is not required. However, anyone who wants to make arrangements to testify may do so prior to the hearing by contacting the secretary of the Hazardous Waste Management Commission at (573) 751-2747.

Any person may submit written comments on this rule action. Interested persons, whether or not heard, may submit a written or email statement of their views until midnight on October 27, 2016. Written comments shall be sent to the director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments must be postmarked by midnight on October 27, 2016. Email comments shall be sent to heather.peters@dnr.mo.gov. Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program, at 1730 E. Elm, Jefferson City, MO 65102, telephone (573) 751-3176.

Title 13—DEPARTMENT OF SOCIAL SERVICES Division 70—MO HealthNet Division Chapter 10—Nursing Home Program

PROPOSED AMENDMENT

13 CSR 70-10.030 Prospective Reimbursement Plan for Nonstate-Operated Facilities for ICF/[MR]/IID Services. The division is amending sections (1)–(7) and adding new subparagraphs (4)(A)1.O. and (4)(A)1.P.

PURPOSE: This amendment changes the terminology of the services addressed in this regulation from “nonstate-operated intermediate care facility/mentally retarded (ICF/MR) services” to “nonstate-operated intermediate care facility for individuals with intellectual disabilities (ICF/IID) services” and provides for trend factors to be applied to adjust per diem rates for nonstate-operated ICF/IID facilities participating in the MO HealthNet program.

PURPOSE: This rule establishes a payment plan for nonstate-operated intermediate care facility/mentally retarded] for individuals with intellectual disabilities services. The plan describes principles to be followed by Title XIX intermediate care facility/mentally retarded] for individuals with intellectual disabilities providers in making financial reports and presents the necessary procedures for setting rates, making adjustments, and auditing the cost reports.

(1) Objectives. This rule establishes a payment plan for nonstate-operated intermediate care facility/*mentally retarded]* for individuals with intellectual disabilities (ICF/[MR]/IID) services.

(2) General Principles.

(A) The MO HealthNet program shall reimburse qualified providers of ICF/[MR]/IID services based solely on the individual MO HealthNet participant’s days of care (within benefit limitations) multiplied by the facility’s Title XIX per diem rate less any payments made by participants.

(B) Effective November 1, 1986, the Title XIX per diem rate for all ICF/[MR]/IID facilities participating on or after October 31, 1986, shall be the lower of—

1. The average private pay charge;
2. The Medicare per diem rate, if applicable;

3. The rate paid to a facility on October 31, 1986, as adjusted by updating its base year to its 1985 fiscal year. Facilities which do not have a full twelve- (12-) month 1985 fiscal year shall not have their base years updated to their 1985 fiscal years. Changes in ownership, management, control, operation, leasehold interests by whatever form

Missouri Hazardous Waste Management Commission

Public Hearing on Proposed
Underground Storage Tank Rule
Additions and Amendments

Oct. 20, 2016

Heather Peters

Background - Why the change?

- Energy Policy Act- 2005
- Environmental Protection Agency (EPA) promulgated federal rules 2015
- State Program Approval (SPA)
 - Federal rules are not yet effective here
 - Must re-apply for SPA by Oct. 13, 2018
 - SPA renewal must include “new” EPA approved rules

Overview of Changes

- 23 Rules Added or Changed
 - 20 amended rules
 - Three new rules
 - 10 CSR 26-2.013 - Field-constructed (FCT)/Airport Hydrant Fuel Distribution system (AHS) tanks
 - 10 CSR 26-2.035 - Testing of Containment Sumps
 - 10 CSR 26-2.036 - Walkthrough Inspections

Overview of Changes

- Will have hearing on Nov. 3, 2016
 - Typo in Sept. 15, 2016, *Missouri Register*
 - Correction in Oct. 3, 2016, *Missouri Register*
 - Comment period closes Nov. 10, 2016
 - Two new rules
 - 10 CSR 26-2.046 - Release Detection (FCT/AHS)
 - 10 CSR 26-2.047 - Release Detection for Bulk Piping

10 CSR 26-2.010

Applicability

- Removed deferrals
 - FCTs
 - AHS
- Show compliance, upgrade or close by July 1, 2019
- New FCTs and AHS tanks at install as of July 1, 2017



10 CSR 26-2.011

Interim Prohibition for Deferred Underground Storage Tanks (USTs)

- Removed language not used
 - When you can opt not to protect a metal tank

10 CSR 26-2.012

Definitions

- Added definitions from statute
 - 319.100 Revised Statutes of Missouri
- Added from federal regulations (not incorporated by reference)
- Minor clarifications in language for clarity

10 CSR 26-2.012- Definitions

- Cathodic protection tester
 - Federal definition
 - Included 2011 rule changes that applied
- Corrosion expert
 - Federal definition
 - Included 2011 rule changes that applied
- Double-walled piping - Missouri specific

10 CSR 26-2.013 (New)

UST Systems with Field-Constructed Tanks and Airport Hydrant Fuel Distribution Systems

- Existing sites must comply with:
 - Financial Responsibility by July 1, 2019
 - Operator Training by July 1, 2019
 - Corrosion Protection by July 1, 2019
 - Spill and Overfill Prevention by July 1, 2019
 - Walkthrough Inspections by July 1, 2019
 - Release Detection by July 1, 2020
- Existing sites must meet compliance dates or close

10 CSR 26-2.013 (New)

UST Systems with FCTs and AHSs

- New Sites installed after July 1, 2017 must comply at install
- May ask previously closed FCT/AHS sites to conduct site assessment if pose threat



10 CSR 26-2.019

New Installation Requirements

- Reduce notice from 30 days to 14 days
- Provide notice for piping replacement
- Require tank tie-down at installation
- Requirements for marinas
- Allowed alternative tightness testing
- Included new federal testing requirements (that begin at installation)



10 CSR 26-2.020

- Requirements for ‘Secondary Containment’
 - Double-walled piping installed after July 1, 2017
 - Double-walled tanks installed after July 1, 2017
 - Containment sumps for new equipment July 1, 2017
 - Dispenser replacement - when sub-dispenser containment sumps are required after July 1, 2017

10 CSR 26-2.020

- No metal piping outside of containment
 - Except properly installed replacement flexible connectors
- Bans ball float valve replacement after July 1, 2017
- Ties together this rule and spill and overflow rule (10 CSR 26-2.030)
- Updated industry standards

10 CSR 26-2.021

- Interior Linings
 - New technology options- UL1856
 - More stringent inspection and reporting language
 - Certified technicians
 - Detailed reports, including photo or video support
 - Can conduct interstitial monitoring (12 months on file) in lieu of traditional five year inspections
- Dispenser replacement - when sub-dispenser containment sumps are required after July 1, 2017



10 CSR 26-2.022

- Notification Requirements
- Previously deferred tanks must register by July 1, 2019
 - Airport hydrant fuel distribution (AHS) systems
 - Field-constructed tanks (FCT) systems

10 CSR 26-2.030

- Spill Prevention Equipment
 - Test every three years *or*
 - Monthly interstitial (double-walled)
 - Outlines testing options
- Spill bucket repair options
 - ✗ Field repairs - epoxy, caulk
 - ✓ Pre-manufactured kits (inserts)
 - ✓ Manufacturer's replacement kit - double walled spill buckets



10 CSR 26-2.030

- Overfill Prevention Equipment
 - Inspect/ test every three years
 - Outlines testing options
- Tests first due by Jan. 1, 2020 (*need to be conducted in 2019*)
- Test prior to re-opening out of use tanks
- Recordkeeping

10 CSR 26-2.031

- Corrosion Protection Rule
- Maintain until closure or out-of-use site assessment
- Clarify metal piping must be replaced if not maintained
- Updated Industry Standards

10 CSR 26-2.032

- Compatibility
- Must notify 30 days prior to switching to store alternative fuel
 - >10% ethanol
 - > 20% biodiesel
- Provided options for how to document compatibility
- Updated Industry Standards

10 CSR 26-2.033

- Repairs
- How to test repaired double-walled systems
- Post-repair testing of containment sumps
- Post-repair testing of spill and overflow prevention containment sumps
- Updated Industry Standards

10 CSR 26-2.034

- Recordkeeping
- Installation documentation for new systems
- All the new/changed regulations
 - Spill and overflow prevention equipment tests
 - Containment sump tests
 - Walkthrough inspection documentation
- Operator training records

10 CSR 26-2.035

- Containment sump testing
- Test every three years *or*
- Interstitial annually
(double-walled sumps)
- Only applies to new,
required containment
sumps



10 CSR 26-2.036

- Walkthrough Inspections
- Every 30 days
 - Spill buckets checked
 - Release Detection Equipment
- Annually
 - Tank top, transition and sub-dispenser containment sumps
 - As drafted, only applies to new systems



10 CSR 26-2.036

- Walkthrough Inspections
- First due by Jan. 1, 2020 (*need to be conducted in 2019*)
- Must document (may be simple)
- Provides industry standards that can be used

10 CSR 26-2.040

- Release Detection
- Annual operability test of release detection equipment
- First due by Jan. 1, 2020 (*need to be conducted in 2019*)
- Lists report requirements (previously found only in piping release detection rule)

10 CSR 26-2.040



- Release Detection
- Outlined minimum test requirements
 - More stringent than manufacturer’s testing
- PSTIF Advisory Committee members requested alternative
 - Proposed alternative to EPA
 - Follow manufacturer’s procedures
 - Denied

10 CSR 26-2.041

- Petroleum System Release Detection
- Alternatives for AHS and FCT systems
- Groundwater and Vapor Monitoring sunset July 1, 2020
- New systems after July 1, 2017, must use interstitial monitoring

10 CSR 26-2.042

- Hazardous Substance Tank System Release Detection
- Interstitial monitoring does not have to be electronic
- Clarifies sump testing required for new systems

10 CSR 26-2.043

- Statistical Inventory Reconciliation (SIR)
 - Must be quantitative
 - Clarified SIR method requirements
 - Cannot give 15 days for report in rule
 - Policy will allow 10 days
- Manual Tank Gauging
 - Clarification language from EPA

10 CSR 26-2.043

- Automatic Tank Gauging
 - Outlined acceptable test “modes”
 - Included required monthly check for water
- Vapor Monitoring
 - Sunsets July 1, 2020, unless using tracer chemical
- Groundwater Monitoring
 - Sunsets July 1, 2020

10 CSR 26-2.043

- Interstitial Monitoring
 - Secondary tightness required
 - Electronic for new systems
 - Outlined requirements for non-traditional interstitial (pressure, vacuum, liquid-filled)
- Alternative monitoring option for AHS and FCT systems

10 CSR 26-2.044

- Operability testing for line leak detector
 - Must simulate appropriate leak
- Vapor Monitoring
 - Sunsets July 1, 2020, unless using tracer chemical
- Groundwater Monitoring
 - Sunsets July 1, 2020
- Alternative monitoring option for AHS and FCT system piping

10 CSR 26-2.045 (now 2.048)

- Release Detection Recordkeeping
- Moved regulation to end of all release detection rules
- Clarifications on record retention
- Added requirement to retain records for new operability tests

10 CSR 26-2.046 & 2.047

- Description of alternatives for release detection for AHSs and FCTs
- **NOT COVERED TODAY**
- Typo in announcement
- Hearing on Nov. 3, 2016, at 9:30 a.m.

10 CSR 26-2.050

- Suspected Release requirements
- New language to clarify double-walled, interstitial monitoring applications
- Added “leak” to alarms that must be investigated and reported
- Clarification language

10 CSR 26-2.052

- Release Investigation requirements
- New language to clarify double-walled, interstitial monitoring applications
- New options for tightness testing
- Clarification leak vs. release

Rulemaking Schedule

- Sept. 15, 2016 - Proposed amendments published in *Missouri Register*
 - Oct. 20, 2016 - Public Hearing with HWMC
 - Oct. 27, 2016 - End of Public Comment period
-
- Nov. 3, 2016 - Public Hearing with HWMC for two separate rules (10 CSR 26-2.046 and 2.047)
 - Nov. 10, 2016 - End of Public Comment period for two separate rules (10 CSR 26-2.046 and 2.047)

Rulemaking Schedule

- Dec. 15, 2016 - Final adoption of rules by HWMC
- Dec. 23, 2016 - Orders of Rulemaking to JCAR
- Jan. 25, 2017 - Filed with Sec. Of State
- March 1, 2017 - Orders of Rulemaking published in *Missouri Register*
- April 30, 2017 - Rulemaking effective

QUESTIONS ?

Missouri Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 4

Rulemaking Update

Information:

The Hazardous Waste Management Commission to be provided an update on recent rulemaking activities.

Recommended Action:

Information Only.

Presented by:

Mr. Tim Eiken – Rule Coordinator, HWP

Missouri Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 5

Legislative Update

Information:

The Commission to be provided an overview of recent legislation, which may impact the Missouri Department of Natural Resources, the Hazardous Waste Program or the Commission.

Recommended Action:

Information Only

Presented by:

Mr. Tim Eiken – Director's Office, HWP

Missouri Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 6

Drycleaning Environmental Response Trust (DERT) Fund Annual Report

Issue:

Presentation of the 2015 Drycleaning Environmental Response Trust (DERT) Fund annual report.

Recommended Action:

Information Only.

Presented by:

Scott Huckstep – Chief, Brownfields/Voluntary Cleanup Program, HWP

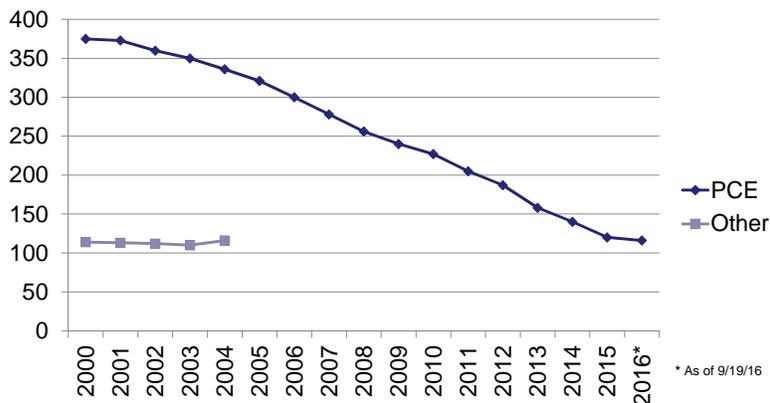


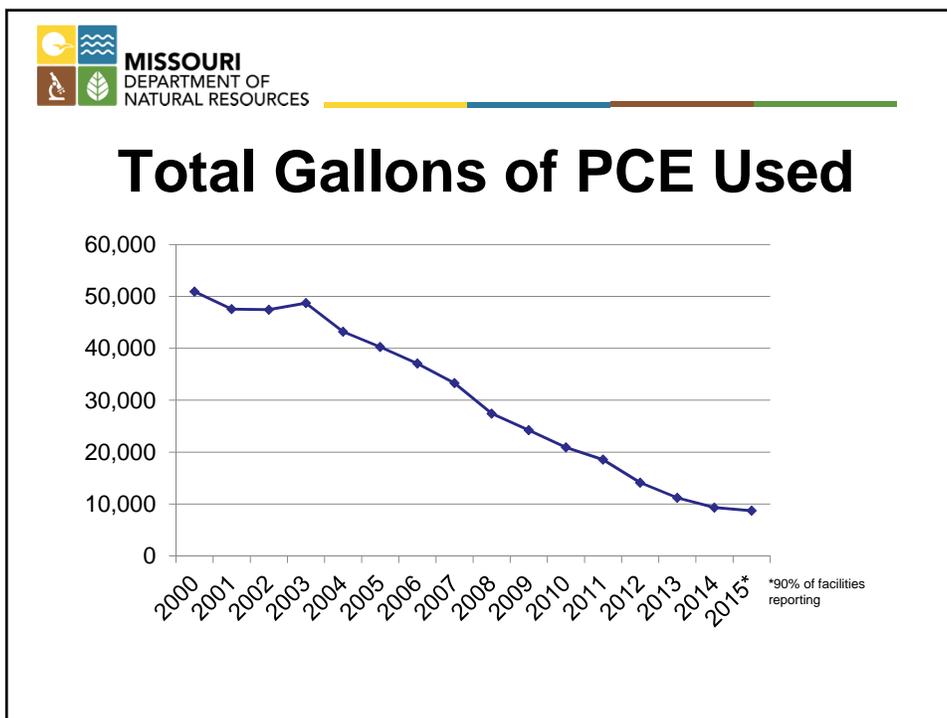
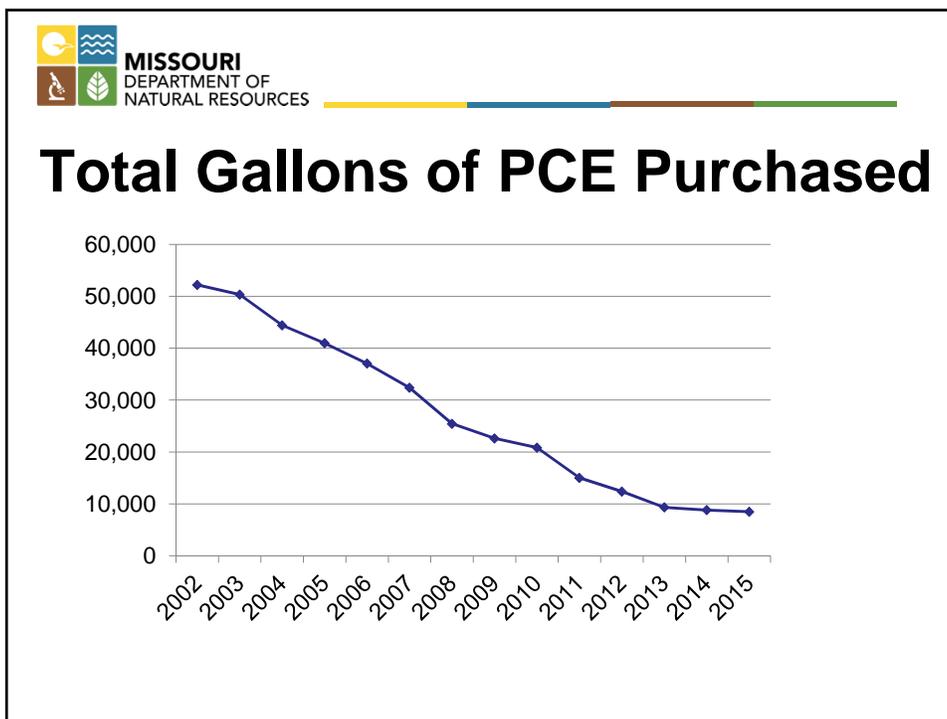
Drycleaning Environmental Response Trust (DERT) Fund Update

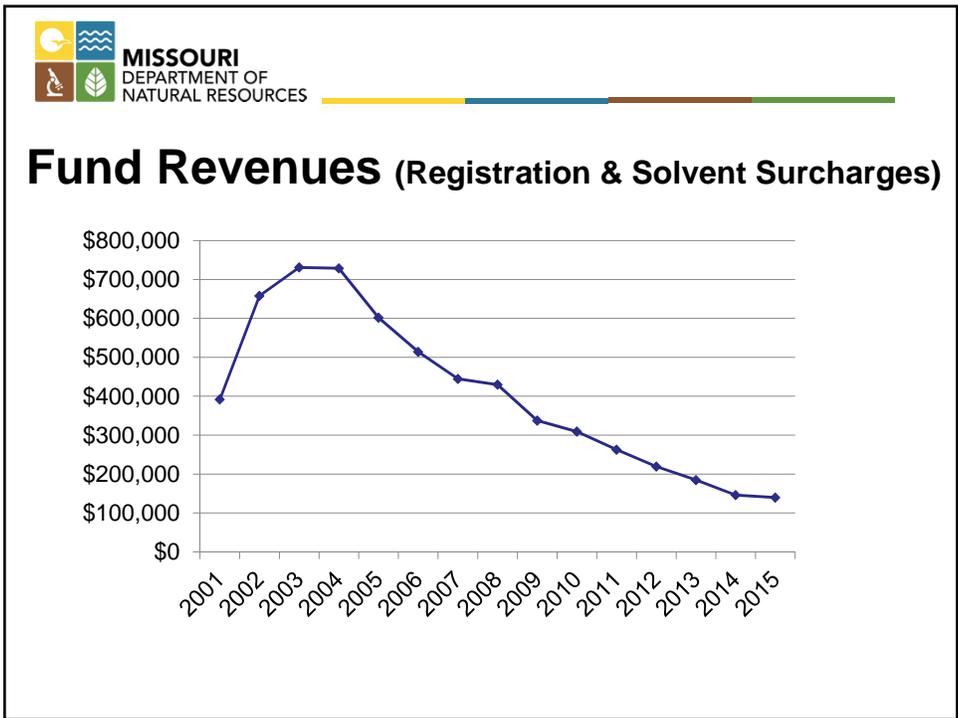
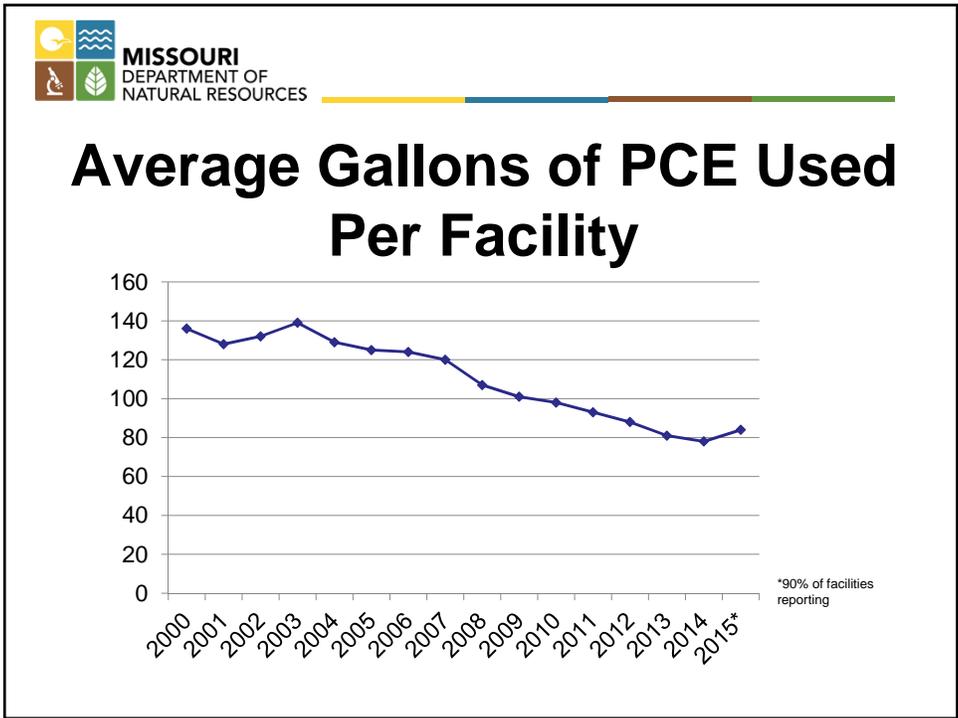
Scott Huckstep
Brownfields/Voluntary Cleanup Section
Oct. 20, 2016



Active Drycleaners









General Information

- 19 active sites (most are idle due to revenue issues)
- 16 sites have received a certification of completion letter
- \$2,941,490 – reimbursed (as of 9/19/16)
- **\$228,243** – fund balance (as of 8/31/16)



Questions?

DEERT FUND

DRYCLEANING ENVIRONMENTAL RESPONSE TRUST FUND

2015 ANNUAL REPORT





HISTORY

In 2000, Senate Bill 577 established the Drycleaning Environmental Response Trust Fund (DERT Fund) and Section 260.920 Revised Statutes of Missouri (RSMo) authorized it. The DERT Fund provides funding for the investigation, assessment and cleanup of releases of chlorinated solvents from dry cleaning facilities. The DERT Fund is a state fund and is administered by the Missouri Department of Natural Resources' Hazardous Waste Program (HWP) according to rules published by the Hazardous Waste Management Commission. The laws and regulations governing the DERT Fund are found in Sections 260.900 to 260.965 RSMo and 10 Code of State Regulations (CSR) 25-170.010 to 10 CSR 25-17.170 respectively. In 2011, Senate Bill 135 extended the expiration date of the DERT Fund from Aug. 28, 2012, to Aug. 28, 2017.

Operators of active dry cleaning facilities are required to register with the department, as outlined in Section 260.915 RSMo. Each active and operating dry cleaning facility, including coin operated dry cleaning facilities, is required to pay an annual registration surcharge based upon the number of gallons of chlorinated solvents used during the calendar year, as outlined in Section 260.935 RSMo. Laundry facilities located in prisons, government entities, hotels, motels and industrial laundries are specifically exempt from the requirements of this statute. All solvent suppliers selling or providing chlorinated solvent to a dry cleaning facility are required to pay the solvent surcharge fees to the department.

Section 260.955 RSMo requires the department to provide an annual report to the General Assembly and the governor regarding:

- Receipts of the fund during the preceding calendar year and the sources of the receipts.
- Disbursements from the fund during the preceding calendar year and the purposes of those disbursements.
- The extent of corrective action taken during the preceding calendar year.
- The prioritization of the sites for expenditures from the fund.

DISBURSEMENTS FROM THE DERT FUND

Expenditures from the fund are used to:

1. Reimburse participants for the costs of addressing releases of chlorinated solvents from dry cleaning facilities. Participants are liable for the first \$25,000 of eligible cleanup related costs as a deductible.
2. Administer the program by collecting the surcharges and guiding and assisting the cleanup activities.

Table 1 describes the expenditures from the fund, which were prohibited until, on or after July 1, 2002, by Section 260.925 RSMo. Reimbursements for eligible environmental cleanup costs were not made until the regulations went into effect on May 30, 2006.

TABLE 1: EXPENDITURES OF THE DERT FUND

Calendar Year ⁽¹⁾	Salaries & Wages	Expense & Equipment	Fringe, etc. ⁽⁴⁾	Reimbursements ⁽⁵⁾	Total Costs
2000 ⁽²⁾	\$0	\$0	\$0	\$0	\$0
2001 ⁽²⁾	\$0	\$0	\$0	\$0	\$0
2002 ⁽²⁾	\$1,163	\$0	\$2,350 ⁽³⁾	\$0	\$3,513
2003	\$77,271	\$14,995	\$35,655	\$0	\$127,921
2004	\$106,083	\$59,642	\$73,437	\$0	\$239,162
2005	\$99,583	\$63,909	\$92,528	\$0	\$256,020
2006	\$187,488	\$145,789	\$140,850	\$176,031	\$650,158
2007	\$186,019	\$64,858	\$155,026	\$258,785	\$664,688
2008	\$192,387	\$25,814	\$171,884	\$140,000	\$530,085
2009	\$183,108	\$9,316	\$200,064	\$456,733	\$849,221
2010	\$178,337	\$8,450	\$172,540	\$303,651	\$662,978
2011	\$137,229	\$8,210	\$143,355	\$284,689	\$573,483
2012	\$104,777	\$4,086	\$158,751	\$495,468	\$763,082
2013	\$83,249	\$3,729	\$128,112	\$306,376	\$521,466
2014	\$86,177	\$4,795	\$91,410	\$244,173	\$426,555
2015	\$31,680	\$2,327	\$51,872	\$118,200	\$204,079
Totals	\$1,654,551	\$415,920	\$1,617,834	\$2,784,106	\$6,472,411

(1) Source: SAM II Data Warehouse Information.

(2) RSMo, Section 260.925 prohibited expenditures from the DERT Fund until on or after July 1, 2002.

(3) House Bill 1115, Section 15.220, RSMo, authorized a transfer of \$1,289 out of the State Treasury on May 6, 2002, chargeable to various funds, such amounts as are necessary for allocation of costs to other funds in support of the state's central services, to the General Revenue Fund.

(4) Fringe amount includes OASDI, Retirement Sys, Deferred Comp, MCHCP, Cost Allocation Plan (OA), Cost Allocation (DNR), State Office Bldg M&R, etc.

(5) Reimbursements were not made until the regulations went into effect on May 30, 2006.

RECEIPTS TO THE DERT FUND

HWP is responsible for the collection of all applicable surcharges from dry cleaning facilities and solvent suppliers. There are two main sources of revenue for the fund. The first is a dry cleaning facility annual registration surcharge paid by owners and operators of dry cleaning facilities (\$500, \$1,000 or \$1,500 based on chlorinated solvent used during the calendar year). The second is a solvent surcharge paid by the solvent suppliers on a quarterly basis of \$8 per gallon of perchloroethylene, trichloroethylene and other chlorinated solvents sold.

TABLE 2: 2015 DRY CLEANER FACILITY ANNUAL REGISTRATION SURCHARGE

Size of Facility	Facilities Registering by 5/1/16	Gallons of Solvent Used	Annual Registration Fee
Small	83	0 to 140	\$500
Medium	5	141 to 360	\$1,000
Large	3	>360	\$1,500

Table 3 describes the surcharge collections. The collection of the registration surcharges began on April 1, 2001. The collection of the solvent surcharge began with the April 1, 2001, to June 30, 2001, quarter.

TABLE 3 - RECEIPTS TO THE DERT FUND⁽¹⁾

Calendar Year	Registration Surcharge	Solvent Surcharge	Interest & Penalties	Totals
2000	\$0	\$0	\$0	\$0
2001	\$221,500	\$170,208	\$5,995	\$397,703
2002	\$222,150	\$435,859	\$17,886	\$675,895
2003	\$303,126	\$427,880	\$26,892	\$757,898
2004	\$319,488	\$409,293	\$43,178	\$771,959
2005	\$234,150	\$367,598	\$73,595	\$675,433 ⁽²⁾
2006	\$204,993	\$308,678	\$121,077	\$635,248 ⁽³⁾
2007	\$185,371	\$259,175	\$138,931	\$583,477
2008	\$191,888	\$237,874	\$132,377	\$562,139
2009	\$154,991	\$182,459	\$54,143	\$391,598 ⁽⁴⁾
2010	\$135,573	\$173,448	\$28,387	\$337,408
2011	\$131,706	\$130,997	\$17,575	\$280,312 ⁽⁵⁾
2012	\$113,415	\$105,978	\$13,029	\$233,442 ⁽⁶⁾
2013	\$141,214	\$43,334	\$13,708	\$198,256
2014	\$76,385	\$68,847	\$7,692	\$153,637 ⁽⁷⁾
2015	\$64,680	\$36,985	\$4,196	\$145,083 ⁽⁸⁾
Totals	\$2,700,630	\$3,358,613	\$698,661	\$6,799,489

⁽¹⁾ Source: SAM II Data Warehouse Information

⁽²⁾ 2005 total includes a \$90 refund to the fund

⁽³⁾ 2006 total includes a \$500 transfer in

⁽⁴⁾ 2009 total includes a \$5 vendor refund to the fund

⁽⁵⁾ 2011 total includes a \$34 overpayment

⁽⁶⁾ 2012 total includes a \$1,020 transfer in

⁽⁸⁾ 2014 total includes \$713 in recovery costs

⁽⁷⁾ 2015 total includes \$39,222 refund to the DERT Fund

PRIORITIZATION OF SITES FOR EXPENDITURES FROM THE FUND

10 CSR 25-17.140 allocates DERT Fund monies to prioritized sites in the following proportions:

High Priority Sites	Medium Priority Sites	Low Priority Sites
60%	30%	10%

In any fiscal year, if the funding allocation in any priority category is not used, those funds may be reallocated to other priority categories, starting with any high priority sites, followed by medium and then low priority sites.

Sites applying to the program must submit the results of one soil, groundwater or surface water sample exhibiting contamination of dry cleaner solvent that is in excess of the department cleanup levels. The initial assessment will allow the department to determine the eligibility of the site in the fund. Some sites will provide enough information during the application process to receive a ranking score. Other sites will require additional information before a ranking score can be determined.

If the site has not provided enough information to have a ranking score determined, the department will direct the owner or operator to conduct the necessary assessments to determine a ranking score. The ranking score is based on such factors as environmental contamination, potential economics, potential receptors, risk based cleanup parameters, site history, threat to drinking water sources, threat to off-site properties, etc. A copy of the prioritization form is available on the department's DERT Fund website at <http://dnr.mo.gov/env/hwp/dert/hwpvcp-dryclean.htm>.

On May 30, 2006, the DERT Fund began accepting applications for enrollment into the fund for oversight and reimbursement of investigation and cleanup activities. By the end of 2015, the fund had received applications for 42 sites. Five of these sites received a certification of completion letter from the Brownfields/Voluntary Cleanup Program (BVCP) and enrolled into the fund for reimbursement of eligible costs. Fourteen of the 42 sites transferred from the BVCP to the DERT Fund during 2006.



PRIORITIZATION OF SITES FOR EXPENDITURES FROM THE FUND (CONTINUED)

By the end of 2015, the DERT Fund had issued 16 Certification of Completion letters and reimbursed \$2,784,106 in eligible costs to participants (See Table 1).

Annual revenues to the DERT fund continue to decline from a high of \$771,959 during calendar year 2004 to a low of \$145,083 collected during calendar year 2015. The fund's ending balance as of Dec. 31, 2015, was \$327,122. Given the continued decline in revenues, the possibility exists the fund may become insolvent before its sunset date of Aug. 28, 2017. This decline in revenues can be attributed to several factors including; facilities switching to non-chlorinated solvents therefore, facilities not being required to register and pay surcharges; newer drycleaning equipment/machines are more efficient and use less solvent; facilities are consolidating cleaning operations to one location; and facilities have gone out of business.

During calendar year 2012, a liability analysis was conducted on the DERT Fund. From that analysis, the department determined reimbursement of future costs for the investigation and remediation of contaminated dry cleaning sites may be limited or impossible. Reimbursement funds are not guaranteed for any work plans approved after Sept. 3, 2012, and the DERT Fund is not accepting any new applications for enrollment to the DERT fund as of Sept. 3, 2012. Notices regarding the DERT Fund status were mailed in September 2012 to the DERT Fund participants and their consultants, the DERT Fund stakeholder group and all active dry cleaners in Missouri using chlorinated solvents.

TABLE 4 - DERT FUND SITES

Site Name and City	Priority			Amount Reimbursed	Comments
	High	Med.	Low		
AG Cleaners, Kirkwood			X	\$18,187	Completion letter issued on 12/2/13
Ambassador Cleaners, Ellisville			X		
American Cleaners, Ballwin		X			
American Cleaners - Dorsett Road, Maryland Heights			X	\$5,090	Completion letter issued 5/21/09
American Cleaners - Fenton Plaza, Fenton		X		\$108,037	Completion letter issued on 4/22/13
American Cleaners - Mid Rivers Mall, St. Peters*		X		\$144,486	Reimbursements completed
American Cleaners - Natural Bridge, Bridgeton		X		\$12,264	Completion letter issued 11/29/10
American Cleaners - Southroads, St. Louis		X		\$53,547	Completion letter issued 6/11/09
American Cleaners, University City		X		\$61,173	
A to Z Auto Center - Crestwood			X		
Bright and Free Laundry & Dry Cleaners - St. Louis			X	\$26,703	Completion letter issued 7/29/13
Busy Bee Laundry, Rolla	X			\$391,594	
Charter Dry Cleaning - Ellisville		X		\$18,477	Completion letter issued 4/9/13
Clayton Cleaners, St. Louis	X			\$60,089	
Colonial Cleaners - Arsenal St., St. Louis	X			\$30,400	
Colonial Cleaners - Brentwood Blvd., St. Louis	X				Completion letter issued 7/2/08
Community Laundromat, Ava	X				Terminated by DERT
Cypress Village Shopping Center, St. Ann*		X		\$366,200	Reimbursements completed
Davis Cleaners, Columbia					Withdrew
First Capitol Cleaners, St. Charles	X			\$43,764	
Foster's Cleaners, Blue Springs			X	\$17,353	Completion letter issued 6/18/09
Frontenac Cleaners - West End, St. Louis		X			Completion letter issued 5/14/08
Grandview Plaza, Grandview			X	\$20,050	
Kingshighway Retail Center, Sikeston		X		\$44,498	
Ma Ma Bessie's Cleaners, Columbia					
McDonald's State Line, Kansas City		X			Completion letter issued 7/26/12
Mission River/Antioch Cleaners, Kansas City		X		\$45,011	
Paramount Cleaners, Florissant*		X		\$42,035	Reimbursements completed
Park Lane Cleaners, Chillicothe			X	\$21,837	
Plaza Ford Ideal Laundry & Dry Cleaners Inc., Kansas City	X			\$40,197	
Premier Dry Cleaners of KC, Kansas City			X	\$22,797	Completion letter issued 9/22/11
Regal Cleaners, University City		X		\$8,375	
Shamrock Cleaners, Kansas City					
Stanford Saper Cleaners, Kansas City*			X		No claims filed
Staten Island Cleaners, Florissant	X			\$203,562	Completion letter issued 12/30/08
Tri-States Service Company - Boonville Ave., Springfield	X			\$391,528	
Tri-States Service Company - East Trafficway, Springfield		X		\$509,221	
U.S. Cleaners, St. Louis					
VIP Cleaners, St. Peters			X		Completion letter issued on 1/13/10
West Gate Cleaners, St. Louis		X			Completion letter issued on 10/19/07
Yorkshire Cleaners, Marlborough	X			\$70,309	
Zehrt Printing, St. Louis*		X		\$7,352	Reimbursements completed

*Reimbursement only, site received certification of completion letter from BVCP



TABLE 5: CORRECTIVE ACTION CONDUCTED IN 2015

Site Name and City	Corrective Action Conducted
Ambassador Cleaners, Ellisville	Groundwater monitoring to determine plume stability.
American Cleaners, Ballwin	Remediation via in-situ chemical oxidation.
Tri-States Service Company-Boonville Ave., Springfield	Installation of additional wells and sampling to determine extent of contamination.
Tri-States Service Company – E. Trafficway, Springfield	Down-hole geophysical testing of industrial water supply well, reconstruction of monitoring well.
U.S. Cleaners, St. Louis	Groundwater monitoring. Certification of completion letter issued.
Yorkshire Cleaners, Marlborough	Groundwater monitoring

COMPLIANCE WITH SURCHARGES

The two main sources of revenue for the fund are the dry cleaning facility annual registration surcharge and the solvent surcharge. State law requires that owners and operators of dry cleaning facilities pay the annual registration and the solvent suppliers to pay the solvent surcharge on quarterly basis.

When a facility or solvent supplier is not in compliance with the law, the DERT Fund uses the department's conference, conciliation and persuasion process to return them to compliance. In 2006, HWP began referring facilities and solvent suppliers that continued to fail compliance to the Attorney General's Office.

Active and abandoned dry cleaners eligible for the fund must be in compliance with all applicable environmental laws in order to receive funding for environmental cleanup from the fund. Consequently, it is in everyone's interest to assist businesses in returning to compliance with the law so they are covered by the fund.

On Sept. 1, 2008, the DERT Fund began notifying the registered solvent suppliers of the active dry cleaning facilities not having paid their required registration surcharges. According to 10 CSR 25-17.030(2)(G), "a solvent supplier shall not provide dry cleaning solvents to an active dry cleaning facility that has not paid its annual dry cleaning facility registration surcharge."

A solvent supplier who knowingly supplies solvent to a dry cleaning facility not in compliance with payment of the surcharges will be in violation of the above regulation. The DERT Fund also posts a listing of these dry cleaning facilities on its webpage similar to that for solvent suppliers who do not pay the required solvent surcharges.

Table 6 indicates the compliance rate for annual dry cleaning facility registration surcharges. Failure to pay the registration surcharges represents approximately 90 percent of the violations that occur in the DERT Fund.

TABLE 6: DRY CLEANING FACILITY REGISTRATION COMPLIANCE

Calendar Year	No. of Active Facilities	Facilities Submitting Registration Form and Surcharges by 5/1/16	Percent Compliance with Annual Registration
2015	123	91	74%

TABLE 7: COMPLIANCE/ENFORCEMENT ISSUES WITH DRY CLEANING FACILITIES

Calendar Year	Facilities Issued a NOV	Facilities Referred to Compliance/ Enforcement	Facilities Referred to AGO	Facilities Returned to Compliance
2015	15	15	0	110

TABLE 8: SOLVENT SUPPLIERS QUARTERLY REPORTING COMPLIANCE

Calendar Year	No. of Active Solvent Suppliers	Suppliers Submitting Quarterly Reports and Surcharges on Time	Percent Compliance Quarterly Reporting
2015	11	6	55%

TABLE 9: COMPLIANCE/ENFORCEMENT ISSUES WITH SOLVENT SUPPLIERS

Calendar Year	Suppliers Issued a NOV	Suppliers Referred to Compliance/Enforcement	Suppliers Referred to AGO	Suppliers Returned to Compliance
2015	0	0	0	5





OUTREACH ACTIVITIES

The department has additional information, publications, forms and answers to questions about the fund available on the department's website at www.dnr.mo.gov/env/hwp/dert/hwpcp-dryclean.htm.

The department is a member of the State Coalition for the Remediation of Drycleaners. The coalition is comprised of states that have formal dry cleaner cleanup programs. The U.S. Environmental Protection Agency's Technology Innovation Office funds this coalition. The coalition conducts conference calls every other month and holds an annual meeting to discuss issues related to dry cleaner program administration and technical site investigation or cleanup topics. The coalition serves as an invaluable asset for Missouri as the department manages the fund and provides oversight of assessments and cleanup of dry cleaner sites.

REFERENCES

State Program To Clean Up Drycleaners. Schmidt, Robin, R. DeZeeuw, L. Henning and D. Tripler. June 2001. State Coalition for Remediation of Drycleaners. www.drycleancoalition.org/survey/

Departmental Missouri Risk-Based Corrective Action (MRBCA) Technical Guidance. April 2006. Missouri Department of Natural Resources. <http://dnr.mo.gov/env/hwp/mrbcadocument.htm>

CONTACT INFORMATION

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Missouri Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 7

Quarterly Report

Issue:

Presentation of the April through June 2016, Quarterly Report.

Recommended Action:

Information Only.

Presented by:

Amy Feeler – Public Information, Division of Environmental Quality

Hazardous Waste Management Commission Report

April - June 2016

Quarterly Report



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Hazardous Waste Management Commissioners

Elizabeth Aull, Chair

James "Jamie" Frakes, Vice Chair

Charles "Eddie" Adams

Michael Foresman

Mark E. Jordan

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

For more information:

Missouri Department of Natural Resources

Hazardous Waste Program

P.O. Box 176, Jefferson City, MO 65102-0176

dnr.mo.gov/env/hwp/index.html

Phone: 573-751-3176

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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.



Missouri Department of Natural Resources
Hazardous Waste Program

Letter from the Director

Dear Commissioners:

This edition of the quarterly covers the second quarter of the year from April 1st through June 30th. As spring gave way to the summer months, this quarter also brought with it a number of other changes as the program continued its efforts to protect the environment.

The quarter saw the departure of David J. Lamb as the Staff Director, and my certification as the new Staff Director. I am sure you will join me in thanking Dave for his service. I look forward to working with each of you on the many issues that are faced by the Hazardous Waste Program (HWP) and the Hazardous Waste Management Commission. Although I have worked with the program in the past, much has changed in the last fifteen years; but, I am confident we will continue the good work this program does, with a smooth transition.

This quarter also saw a change within the structure of the commission itself, with the election of Commissioner Elizabeth Aull to the position of chairman, and the election of Commissioner James Frakes to the position of vice-chairman. I wish to personally extend my thanks to Commissioner Charles Adams as he steps down from the position of chairman, and am confident he will continue to support the mission of the commission as a member.

The culmination of the past couple of years' efforts was reached this quarter with the finalization of the Generator Fee Rule. With the end of the 60 day legislative review period, the rule cleared its final hurdle and will go into effect with its publication in the Code of State Regulations.

Staff has also been working diligently on the new Underground Storage Tank (UST) rule package, which is the state's counterpart to the new U.S. Environmental Protection Agency (EPA) regulations. The Regulatory Impact Report will soon be published, initiating a 60 day comment period. As always, staff will address all comments and make any appropriate changes to rule language.

Our Pesticide Collection Program is in full swing for 2016, with four collection events taking place in Fairfax, Canton, Montgomery City and Bolivar. These are the final four scheduled for this year. Planning for the 2017 events will start soon.

I look forward to working with each of you as you bring your individual knowledge and experience to bear on the issues brought before you; and I want to thank all of you again for everything you do as commissioners and for your continued service to the state of Missouri.

Sincerely,



Steve Sturgess
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 17 certificates of completion (COCs) for various sites from April through June 2016. This brings the total number of COCs issued to 821.

Crown Cork & Seal Company, Inc. (former) - St. Louis

The Crown Cork & Seal Company Inc. (former) site is located at 7140 N. Broadway in St. Louis. The site was previously regulated by the tanks section. Past letters from the Tanks Section indicated since toluene is a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) substance, the site did not belong with Tanks. Subsequently, Crown Cork & Seal Company Inc.’s consultant requested the site be moved from the Tanks Section to the BVCP. The site is approximately 17.5 acres in size. The current size of the site’s building is approximately 456,000 square feet. Crown Cork & Seal Company Inc. manufactured three-piece steel cans for commercial clients. A variety of varnishes, lacquers, enamels and solvents were historically used in the can manufacturing process. According to past reports there were nine USTs at the site in four separate UST pits. After removal of the USTs, one of the pits had soil levels above applicable guidelines. The soil was removed from the pit and disposed. Eight monitoring wells were installed after the UST excavation, and two additional wells were installed later. The groundwater was found to be impacted with toluene at concentrations up to 450 parts per million. A groundwater pump and treat system was installed in 1993 and continues to operate to this date. The system treats approximately 150,000 to 500,000 gallons of impacted water every six months.

Stability analysis indicated the remaining contamination was either stable or decreasing below default target levels (DTLs). Additionally, the memorandum of agreement between the department and the city of Saint Louis restricts the domestic use of any groundwater within city limits. The site therefore qualifies for unrestricted use.

The BVCP oversight for work at this site pertains only to the tank release related to “Tank Pit B” and does not address activities for other UST removals addressed by the tanks section at the time of closure in the early 1990’s. The department determined the site is safe for its intended use.

Cabool Wood Treating Site - Cabool

The Cabool Wood Treating site is located at 14233 Highway 60 in Cabool. It is a family-owned business with roots in southern Missouri dating back to the 1920s. The site was used for wood treating with pentachlorophenol (PCP) and copper naphthenate between 1970 and 1988. PCP and polychlorinated dibenzodioxins (dioxins, trace contaminants in PCP products) were detected in soil during a site investigation in 2002, and PCP was detected in groundwater.

Site investigations revealed the presence of PCP, diesel fuel (total petroleum hydrocarbons and diesel range organics [TPH-DRO]) and dioxins in soil and/or groundwater resulting from historic wood treating operations at the site. Contaminated soil, totaling 900 cubic yards, was excavated and bio-remediated onsite. Levels of PCP and TPH-DRO in the treated soil were below the department’s standards for surface soil for unrestricted (residential) use. The treated soil contained dioxin toxic equivalents totaling 1.2 µg/kg, exceeding the department’s target level of 1.0 µg/kg for surface soil for unrestricted use. The

soil was returned to the onsite excavation, covered with a clean soil cap, and revegetated. Groundwater investigations in soil and shallow bedrock determined contamination was not migrating offsite at levels exceeding domestic use target levels, and the residual groundwater plume was stable or shrinking. The facility's deep water supply well was properly abandoned.

An environmental covenant was filed in the property chain of title to prohibit residential use of the soil repository area of the site, require inspection and maintenance of the soil cap, and to make certain requirements on drilling and use of groundwater at the site. A site management plan was attached to the covenant to guide inspection and maintenance of the site.

A risk assessment was performed using the Missouri Risk-Based Corrective Action (MRBCA) guidance. The department determined the site is safe for its intended use.

West Pine Lofts - St. Louis

The West Pine Lofts site is located at 4050 W. Pine Blvd., in St. Louis. Originally, this site was comprised of over 150,000 square feet of floor space, serving as various warehouses and manufacturing facilities from the 1930s through the 1970s. The site first enrolled in the BVCP, in 1999, as "Beverage Concepts," to address fuel oil tanks on the site, and received a certificate of completion, with no restrictions, on March 1, 2002. Gasoline tanks were removed from the site in 1998, under the purview of the tanks section. With a No Further Action (NFA) letter issued by the Tanks Section on June 26, 1998. Current recognized environmental conditions (RECs) for the site were remaining impacted soil and groundwater from the former fuel oil tanks, and urban fill containing polynuclear aromatic hydrocarbons.

Petroleum contamination was limited to a small area in the eastern half of the building near the north wall. Representative concentrations of soil and groundwater contamination were below the residential indoor-air inhalation pathway target levels. In addition, a soil gas sample taken in this area showed no vapors in excess of residential levels. Engineered hard surfaces and soil caps have eliminated the exposure pathways for polynuclear aromatic hydrocarbons in the surficial soil. An environmental covenant is in place to ensure the integrity of these caps is maintained. The original buildings on site have been razed and an apartment building has been erected. The department determined the site is safe for its intended use.



Dollar General, Troost Ave. - Kansas City

The Dollar General - Troost Ave. site is located at 4229 Troost Ave., in Kansas City. The 0.98 acre site served as a former gas station and auto repair station since the late 1930s. Two single story buildings and a dilapidated wood shed exist on the property. A UST removal was completed through the Tanks section in August of 2013.

A 2014 Phase II investigation identified arsenic and lead impact to soil in relation to past site use. The site was subsequently graded as a part of development and excess soil was sampled prior to proper disposal. In December 2014, the site was resampled to determine the impact of site grading on both contaminant concentration and depth. A Tier I Risk Assessment was conducted in January 2015 using MRBCA. The risk assessment found one previously sampled area along the eastern parking lot border contained contamination above residential target levels. This area was excavated in May-June 2015

with the removal and proper disposal of approximately 9.83 tons of soil. The site therefore qualifies for unrestricted use under the BVCP.

Certain areas of this site were remediated under the purview of the tanks section. This work was not subject to BVCP oversight and therefore any qualifications under the BVCP do not excuse the site from the conclusions stated in the 2014 NFA letter issued by Tanks, which limit the site to non-residential use. The department determined the site is safe for its intended use.

The site is currently unoccupied however, the owner intends to develop the site for use as a Dollar General store.

Solar Transport Tanker Release - Brookline

The Solar Transport Tanker Release - Brookline site is located at 2804 N. Brookline Ave., in Brookline. On Nov. 29, 2014, a tanker truck hauling 7,204 gallons of gasoline and 801 gallons of ethanol overturned into a roadside ditch within Missouri Department of Transportation (MoDOT) right-of-way. The amount of gasoline and ethanol released onto the east shoulder of Highway MM totaled 2,505 gallons. The released fuel pooled directly beneath the tanker and traveled 100 feet to the north and south of the point of release. The release was reported to the department.



Site investigation activities included the installation of soil borings and groundwater monitoring wells within the highway right-of-way. Soil sample results indicated chemicals of concern (unleaded gasoline consisting of benzene, toluene, ethylbenzene and xylene [BTEX]), did not exceed MRBCA. Groundwater samples also did not exceed the MRBCA delineation criteria protective of the construction worker. The extent of petroleum impact has been delineated to site specific criteria and the release area is delineated within the MoDOT right-of-way. No chemicals of concern were noted above the applicable Risk-Based Target Levels (RBTLs). The department determined the site is safe for its intended use.

Two Light Luxury Apartments - Kansas City

The Two Light Luxury Apartments site is located at 150 E. Truman Road in Kansas City. The site is currently utilized as a municipal parking lot with an unmanned metal security booth and self-pay kiosk. Based on prior environmental reports by the city, the property, identified as Block 140, was part of a larger area referred to as Kansas City (KC) Live, which consisted of multiple adjoining blocks. The KC Live area underwent environmental assessment and remediation activities under the direction of the city in the late 1990s and early 2000s. The subject property is referred to as Block 140 in the historical records prepared for the city and generally encompasses the entire block.

Benzene and naphthalene have been detected in the groundwater above the DTL, but there were no soil detections above the DTL. Groundwater monitoring and a Tier 1 Risk Assessment were performed to address the chemicals of concern in accordance with a department-approved risk management plan. The groundwater analytical results remain below the residential MRBCA Target Levels. The department determined that the site is safe for its intended use.

The proposed Two Light Luxury Apartment Development of a 24-story, 296-unit multi-family apartment building is planned for the southern half of the block.

Ford St. Louis Assembly Plant - Hazelwood

The Ford St. Louis Assembly Plant site is located at 6250 N. Lindbergh Blvd., in Hazelwood. The Ford St. Louis Assembly Plant site consists of 119 acres, with three million square feet under roof. Numerous RECs included aboveground storage tanks, USTs, painting facilities, chemical and waste storage areas, asbestos and lead paint building components, polychlorinated biphenyl electrical transformers, buried solid paint sludges and other solid wastes.

Remedial actions included removal and offsite disposal of building debris; testing and disposal or reuse of concrete and masonry; excavation and disposal of contaminated soil; and treatment and disposal of wastewater and wastewater treatment sludge. Trace levels of groundwater contamination were detected and no remediation of groundwater was determined to be necessary. The site meets target levels suitable for non-residential use according to MRBCA. The department determined the site is safe for its intended use.



East Locust Creek Reservoir - Milan

The eight East Locust Creek Reservoir Sites are located in Milan. Multiple parcels of land are being addressed and are located along the East Locust Creek in Sullivan County. The sites have historically been used for residential, agricultural and commercial purposes and currently are vacant. The site was enrolled in the BVCP to address the contamination in the structures at the site including asbestos, lead-based paint, metals and household hazardous waste (HHW).

Site investigations indicated the presence of asbestos-containing materials and HHW in the structures. Asbestos abatement included the removal of floor tile with associated mastic, ceiling texture and window caulk from these structures. The HHW was packaged and transported off-site for proper disposal or recycling. Demolition of the buildings is required by the department prior to the construction of the reservoir.

Analysis of the results indicate gasoline range organics, DROs, oil range organics, BTEX, poly-nuclear aromatic hydrocarbons and lead were detected in soil and groundwater below DTLs. This conclusion does not dismiss or overrule any determinations stated in the tanks section NFA letter issued regarding cleanup activities related to the previously unknown UST. The department determined the sites are safe for their intended use.

This land is expected to be part of the future 2,235-acre East Locust Creek Reservoir. The East Locust Creek Reservoir will be designed to address an acute water shortage in north central Missouri, as well as provide for flood prevention and mitigation, recreational opportunities and economic development. The reservoir, to be owned and operated by the North Central Missouri Regional Water Commission, will cost approximately \$49 million to construct.

Bond Farm Release - Columbia

The Bond Farm Release site is located at 7301 E. Turner Farm Road in Columbia. In 1973, a mixed petroleum product release occurred from a pipeline located five miles east of Columbia. The release area now includes a house and two storage buildings. Initial recovery operations captured 105 barrels out of an estimated 150 barrels released from the pipeline. An initial site assessment confirmed the presence of BTEX, naphthalene and TPH in soil and groundwater.

Groundwater, soil and soil vapor were sampled and the contaminants found were BTEX; naphthalene; fuel additives 1,2-dichloroethane and 1,2-dibromoethane; and TPH - gasoline range. These contaminants were delineated on the former Bond Farm Property and on adjacent properties to the north and east. Groundwater monitoring was conducted from 1998 to 2014, and recovery of light, non-aqueous phase liquid (LNAPL) from near the pipeline was conducted on a monthly basis. Bailing, sorbent socks and high vacuum extraction were used to recover LNAPL until it was determined all the LNAPL that was practicable to recover had been recovered. Tier 1 and Tier 2 risk assessments were conducted for soil, groundwater, soil vapor and LNAPL in accordance with the 2006 MRBCA guidance. It was determined that the site met risk targets for current and future potential receptors. Although some LNAPL may still be present in the subsurface, it is not considered a risk due to the depth of groundwater and the anticipated depth of construction in the event pipeline repairs are required. BVCP determined the site is safe for its intended use.

Altus Office Building, Ladue Road - St. Louis

The Altus Office Building - Ladue Road site is located at 8820 Ladue Road in St. Louis. The site is currently developed as paved parking lot with an associated two-story office building. Historical use included a gas station along the northern boundary of the property and an asphalt plant on the southern extent of the property. A 2015 Limited Phase II report did not reveal the presence of any USTs; however, petroleum impact was detected in soil within the vicinity of the former gas station.

Maintenance activities in the late 1990s revealed the presence of a previously unknown UST. Environmental assessments following this discovery identified the historical presence of a gas station and asphalt plant within the boundaries of the current site. The tanks section issued an NFA letter following the removal of the previously unknown UST.

Additional investigations were conducted in 2014 to identify other areas of potential contamination not addressed by the tanks section. Initial soil and groundwater investigations revealed petroleum and lead impact to soil and groundwater down gradient of the former tank pit. Additional investigations were conducted in January 2016 to further delineate areas of impact and evaluate the former asphalt plant. Analysis of the results indicate gasoline range organics, DROs, oil range organics, BTEX, poly-nuclear aromatic hydrocarbons and lead were detected in soil and groundwater below DTLs. The site therefore qualifies for unrestricted use.

This conclusion does not dismiss or overrule any determinations stated in the tanks section NFA letter issued regarding cleanup activities related to the previously unknown UST. The department determined the site is safe for its intended use.

Sites in Brownfields/Voluntary Cleanup Program

Month	Active	Completed	Total
April 2016	212	816	1028
May 2016	213	817	1030
June 2016	217	821	1038

New Sites Received: 17

April

- North Incinerator and Maintenance Garage Site (former), St. Louis
- Warsaw Maintenance Shed, Warsaw
- Troostwood Auto Repair, Kansas City
- BIA Air Cargo Site, Hazelwood
- CVS Pharmacy #10334, Kirkwood
- CVS Pharmacy #10171, Florissant
- Hallmark Cards (former), Kansas City

May

- Lee’s Summit Hospital (former), Lee’s Summit
- Puleo Holding Company, Richmond Heights

June

- Negro Leagues Baseball Museum (former Paseo YMCA), Kansas City
- United Methodist North Parking Lot, Kansas City
- Harcros Chemicals Inc., St. Louis
- Gerbes - Eldon, Eldon
- Tip Top Cleaners - Market Street, St. Louis
- International Shoe Building - St. Louis, St. Louis
- South Kingshighway Warehouse, St. Louis
- Dial Dry Cleaner (former), Sappington

Sites Closed: 17

April

- Bond Farm Release, Columbia
- Ford St. Louis Assembly Plant, Hazelwood
- Dollar General - Troost Avenue, Kansas City
- Solar Transport Tanker Release - Brookline, Brookline
- P Grgurich Parcel Building 3E17-A, Milan
- B Campbel Parcel Residence Building 1W07-A, Milan
- B Jensen Building 1W02-B, Milan
- L Stewart Parcel Building 1W12-A, Milan
- C Kain Parcel Buildings 2E02-A and B, Milan
- D Smith-Elder Parcel Building 3E02-A, Milan
- J Harrelson Parcel Building 3E03-A and B, Milan
- E J Smith Parcel Building 3E16-A, Milan

May

- West Pine Lofts, St. Louis

June

- Cabool Wood Treating, Cabool
- Crown Cork & Seal Company, Inc. (former), St. Louis
- Altus Office Building - Ladue Road, St. Louis
- Two Light Luxury Apartments, Kansas City

Drycleaning Environmental Response Trust Fund

HWP’s 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 2016	122	59	47.97%
April - June 2016	122	102	83.61%

Calendar Year 2016	Active Solvent Suppliers	Suppliers Paid	Suppliers in Compliance
January - March 2016	11	8	72.73%
April - June 2016	12	8	66.67%

Cleanup Oversight

Calendar Year 2016	Active Sites	Completed Sites	Total
January - March 2016	19	16	35
April - June 2016	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.

Month	Received	Under Review	Processed
April	4	3	0
May	0	9	3
June	0	2	1

Month	Received	Under Review	Processed
April	\$32,533.00	\$27,380.50	\$0.00
May	\$0.00	\$77,020.00	\$49,227.42
June	\$0.00	\$15,456.85	\$14,659.70

Three reimbursement claims were processed during this period:

A G Cleaners	Kirkwood	\$12,780.50
Bright and Free Laundry & Dry Cleaners	St. Louis	\$2,681.25
U.S. Cleaners (Lindbergh Blvd.)	St. Louis	\$48,425.37

Total reimbursements as of June 30, 2016: \$2,925,691.77

DERT Fund Balance as of June 30, 2016: \$241,815.75

Plume Stability

Background

It is an unfortunate reality that industrial and commercial activities often result in the release of contaminants into the environment. Dumping, leaking or spilling contaminants was common before the advent of modern environmental regulations. Nowadays, most businesses utilize practices to minimize new releases, although problems still arise. The department has different programs that respond to both old and new contaminant releases, depending on site risk, contaminant type, and facility type. However, the issues confronted in each remediation program often are similar. Assessing the stability of contaminant plumes is a major issue at hazardous waste treatment, storage and disposal (TSD) facilities, and the balance of this article will focus on this issue from a TSD perspective; however, many of the basic concepts apply to other remediation programs.

Hazardous waste or chemicals released to the ground can move through soil and rock, either on its own or with the help of infiltrating precipitation, and can end up in the groundwater. Contaminated, shallow groundwater can then migrate to deeper groundwater aquifers, which may supply groundwater to wells and springs. Groundwater aquifers offering a sufficient amount and quality of water, if not impacted by contamination, are often the main source of drinking water for humans and can be used for irrigation. When hazardous waste or chemicals contaminate an aquifer, the contaminated groundwater can potentially harm human health and the environment.

According to the Resource Conservation and Recovery Act of 1976 (RCRA) and the Missouri Hazardous Waste Management Law, owners or operators of hazardous waste TSD facilities are required to investigate and remediate releases of hazardous waste and hazardous constituents to the environment at their facility, regardless of when those releases occurred. These activities, known as corrective action, are designed to investigate and ultimately take actions to reduce risks to human health and the environment.

What is a groundwater contamination plume?

When hazardous waste or chemicals enter groundwater due to a release, it can form a plume, similar to when smoke rises out of an industrial smokestack into the atmosphere. The smoke can be viewed spreading out in a shape similar to a feather. The contamination concentration is the greatest at the point where it enters into the environment, whether into the atmosphere or the groundwater, and lessens as it spreads downward and outward from the point of entry. Factors such as the structure of the soil and bedrock, rate of groundwater flow, groundwater chemistry and the amount and type of contaminant affect the shape and movement of the groundwater contamination plumes. These factors also affect the rate at which the contaminants degrade, or break down in toxicity, and attenuate in concentration.

What is plume stability?

Evaluating the rate contamination degrades in the groundwater, either naturally or with help from corrective action activities, helps us understand whether the plume is stable, expanding or shrinking. A plume is “stable” when it is no longer expanding in size (mass or area) and the overall contaminant concentrations are not increasing. An “expanding” plume is where either the plume size or contaminant concentrations are increasing. A “shrinking” plume is where the plume size and contaminant concentrations are decreasing.

Why analyze plume stability?

Facilities must know whether the corrective action activities they are performing are effectively removing or controlling the migration of the contamination. Determining a plume’s stability is a way of measuring that effectiveness and the related remedial progress. An expanding plume indicates ongoing contaminant

migration, which could lead to human or environmental exposure, beyond those associated with a stable or shrinking plume.

The department also analyzes plume stability as a way to meet the RCRA Corrective Action Environmental Indicator CA 750 - Migration of Contaminated Groundwater Under Control. EPA and the states jointly developed the environmental indicator evaluation process as a way to measure short-term progress in protecting human health and the environment and to meet the performance and results objectives of the 1993 Government Performance and Results Act.

How to determine plume stability?

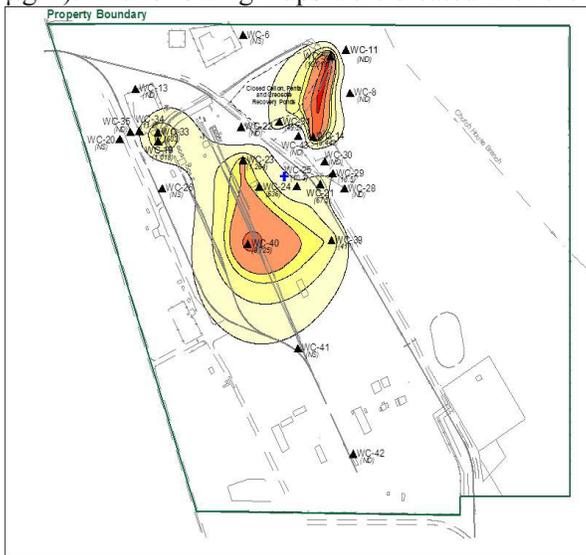
There are several methods available to determine plume stability:

- *Qualitative Methods:* This method uses graphs to plot the contaminant concentration against time or distance. The graphs provide visual evidence of increasing, decreasing or stable concentration trends. Concentration contour maps plotted for several sampling events can also be used to visually compare the plume over several sampling events.
- *Statistical Methods:* This method uses statistical calculations to evaluate data trends and if the trends are increasing or decreasing. Two popular methods used by many statisticians are the Linear Regression and Mann-Kendall Trend. Linear Regression evaluates the contaminant concentrations over time. Mann Kendall assesses the stability of contaminant concentrations against time.
- *Plume-Based Methods:* This method analyzes the plume area, plume mass, plume center of mass and mass flux of the contaminant.
 - The contaminant plume area, or footprint, is calculated using contour maps from several sampling events. Trends in the plume area are assessed to determine if the plume area is increasing or decreasing.
 - Plume mass is calculated using dissolved contaminant concentration contour maps. Changes in plume mass are analyzed over time, which is then used as an indicator of plume stability.
 - Plume center of mass is calculated using contour maps or other techniques such as Monitoring and Remediation Optimization System or MAROS. The plume's center of mass location along the plume centerline can change over time. This change can be used to make inferences regarding the plume's stability.
 - Mass flux is assessed across a plume or a recovery well and calculated across several transects. Plume stability can then be determined by comparing the calculated mass flux across each transect.
- *Ricker Plume Stability Analysis Method:* This method evaluates trends in plume characteristics using visual and statistical methods to calculate the average concentration, area, mass, location of plume center of mass and mass flux. The analysis is performed with established groundwater monitoring well networks and several years of groundwater chemistry data. Computational software, such as Golden Software Surfer and Microsoft Excel, are used to eliminate any human bias or error in the analysis. This analysis can be used to support reduction, modification or termination of groundwater remediation programs, including sites using a monitored natural attenuation approach. However, this method cannot be used at sites where groundwater contamination is present in karst or fractured bedrock settings. This method also does not account for the presence of NAPLs that may be present in addition to dissolved phase contamination.

Case Study

The Ricker Plume Stability Analysis Method has been used to evaluate plume stability at a large wood treating facility. A contaminant-by-contaminant, well-by-well analysis was performed. The main contaminants of concern at the site were chlorophenols and polynuclear aromatic hydrocarbons (PAHs). For this analysis, naphthalene was selected as the compound most representative of the contaminant plume. The average concentration of naphthalene was tabulated from 1992 to 2004. Grid files were created for each well using Surfer software. These grid files were then used to create concentration contour maps.

The plume area was calculated using the volume calculation utility in Surfer. A grid volume report was created, which included the plume volume and the planar area. Values were entered for the aquifer thickness (30 feet), effective porosity (20% or 0.20) and contaminant clean-up level for naphthalene (10 µg/L). The plume center of mass was calculated in order to provide a better understanding of the overall plume shape while evaluating the stability of the plume. The grid files used to calculate the center of mass were filtered to include values greater than the specified contaminant clean-up level for naphthalene (10 µg/L). The following maps were created with the X and Y coordinates of the center of plume.



1992 Naphthalene Plume Map



2004 Naphthalene Plume Map

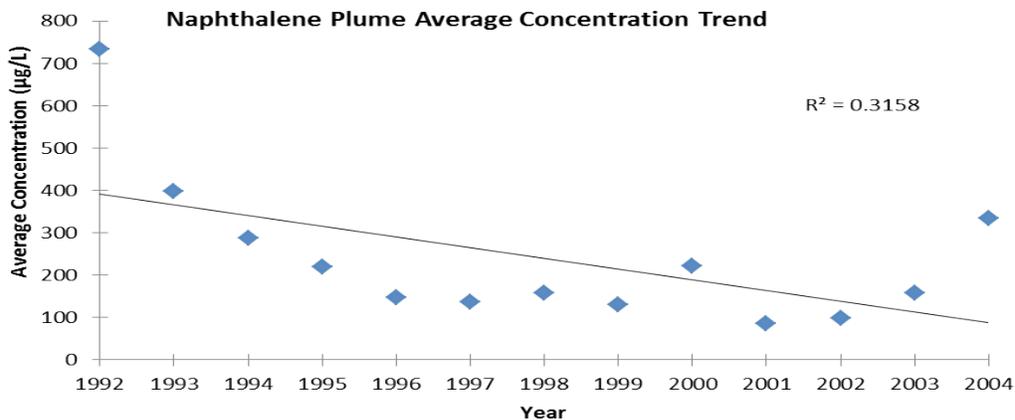
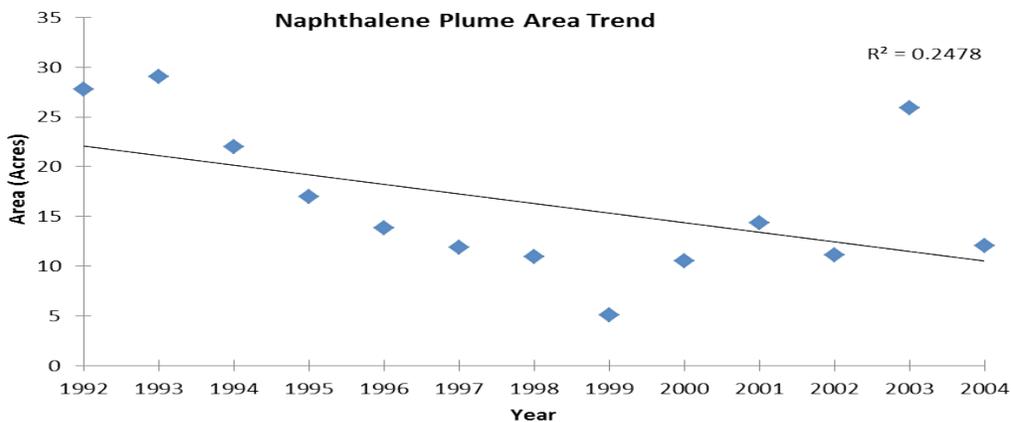
The calculated naphthalene plume characteristics from 1992 to 2004 are shown in the table below.

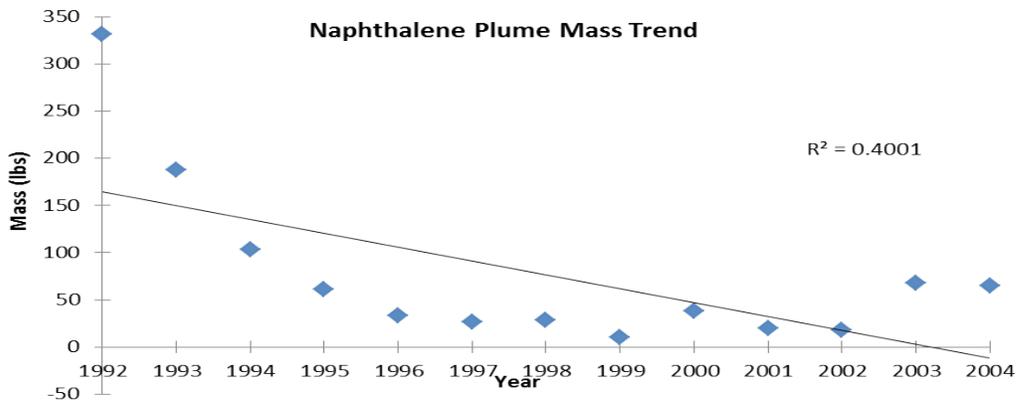
Naphthalene Plume Characteristics

Year	Area	Average Concentration (µg/L)	Mass (lbs)
1992	27.8	733	332
1993	29.0	398	188
1994	22.0	287	103
1995	17.0	219	60.7
1996	13.8	147	33.0
1997	11.9	137	26.7
1998	10.9	159	28.2

Year (cont.)	Area (Acres) (cont.)	Average Concentration (µg/L) (cont.)	Mass (lbs) (cont.)
1999	5.1	130	10.7
2000	10.5	221	37.9
2001	14.3	85.6	19.9
2002	11.1	99.4	18.0
2003	25.9	159	67.4
2004	12.0	334	65.3

Trend graphs were created for the size of the impacted area versus the year, average naphthalene concentration versus the year, and dissolved mass of naphthalene versus the year. The trend analyses were conducted using the regression analysis utility in Excel. It appears the plume characteristics have a decreasing trend.

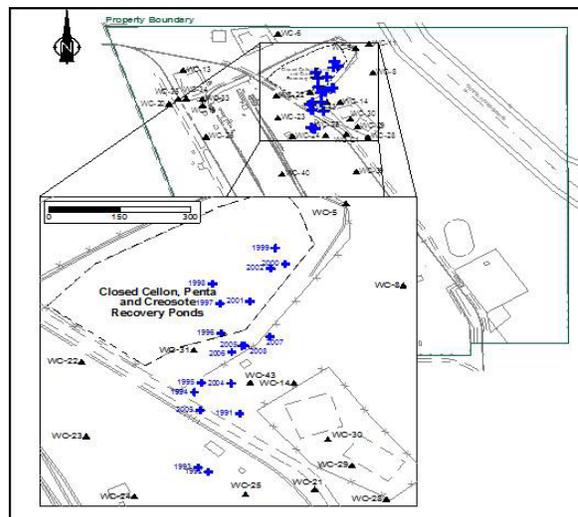




Summary of Linear Regression Analysis

Parameter	R ²	Regression Line Slope	Conclusion
Area	0.25	1.0	Decreasing trend
Average Concentration	29.0	398	Decreasing trend
Mass	22.0	287	Decreasing trend

The center of the plume mass was also analyzed as a final means of evaluating the stability of the naphthalene plume. The figure below shows the location of the plume center of mass over several years. The plume center migrated approximately 558 ft upgradient from 1991 to 2000, 422 ft downgradient from 2000 to 2003, and 234 ft upgradient in 2004. It appears the naphthalene plume has not migrated significantly between 1992 and 2004.



Overall, the plume stability analysis indicates the naphthalene plume is stable. The trends show a significant decrease in concentration, area and mass.

Conclusion

In summary, many approaches can be used to evaluate contaminated groundwater plume stability. Each approach has its strengths and limitations. The choice and application of each approach should consider the geologic and hydrologic setting of the facility to be evaluated, as well as the contaminant- and time-specific factors associated with the release(s) that caused the groundwater to be impacted. Ultimately, plume stability evaluations should be supported by the use of several approaches to reach the best technically defensible conclusion.

Regional Office Hazardous Waste Compliance Efforts

- Conducted 123 hazardous waste generator compliance inspections:
 - 21 large quantity generators
 - 54 small quantity generators
 - 32 conditionally exempt small quantity generators
 - Four focused compliance inspections
 - Seven E-waste facilities
 - Five resource recovery facilities
- Issued 46 letters of warning and four notices of violation requiring actions to correct violations cited during the 123 inspections conducted
- Conducted four compliance assistance visits at hazardous waste generators
- Received 58 citizen concerns regarding hazardous waste issues and conducted field investigations on 46 citizen concerns

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

Federal rule changes – In 2011, EPA proposed significant changes to the UST regulations. The final version of those federal rules was published in July 2015 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 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.

The UST/CTU staff met with the regulated community to discuss these upcoming rule changes at the Missouri Petroleum Marketers and Convenience Store Association Board meeting on June 13, 2016 and the Petroleum Storage Tank Insurance Fund’s (PSTIF) advisory committee meeting on June 14, 2016. The UST/CTU will host a public outreach meeting on July 21, 2016, about the rule changes. In addition, information will be presented about these rules at the Missouri Waste Control Coalition (MWCC) Conference, at Tan-Tar-A, on July 12, 2016.

For updates and information on these upcoming rule changes, please visit our webpage: dnr.mo.gov/env/hwp/ustchanges.htm.

Operator Training – Operator training is available online. Class A/B operator training and Class C operator training are both available, as well as a “test only” option. The 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 may be found on the Fund’s webpage: optraining.pstif.org/intro/.

Tank inspections – State Fiscal Year (FY) 2016 contract inspections are complete. The department inspections continue, especially the new installation inspections during this busy construction time of year. 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/CTU staff and the AGO, the number of facilities without a verified financial responsibility mechanism is 1.6 percent.

Enforcement Efforts - In this time period, one case was referred to the Attorney General’s Office for enforcement action.

The following enforcement actions were taken in this quarter:

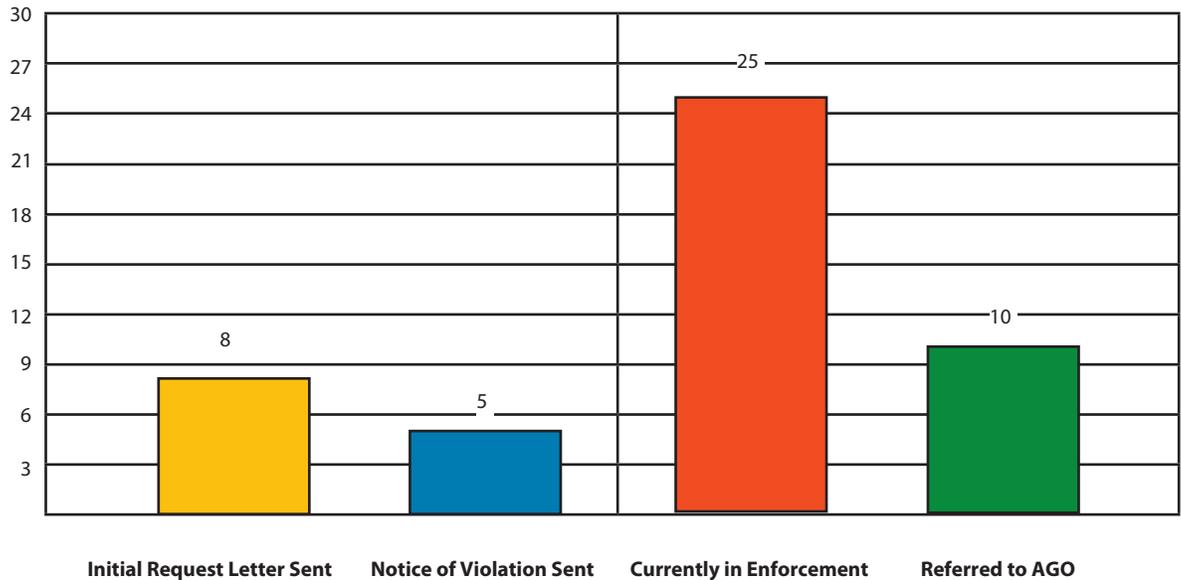
Facility/Responsible Party	Summary of Violation	Resolution Summary and Compliance Status
AALIM Inc. (formerly US Oil) 200 S. Connecticut King City, Mo	Failure to have financial responsibility assurance, failure to comply with registration requirements, and failure to pay registration fees.	Consent judgment entered May 13, 2016. Civil penalty of \$10,000 assessed with \$5,000 suspended pending five years compliance. Case transferred to AGO’s Financial Services Division for collection of penalty.
CITGO Service Station 2609 Dunn Road St. Louis, Mo	Failure to have financial responsibility assurance.	Consent judgment entered on Oct. 19, 2015. Civil penalty of \$1,500 assessed. Case transferred to AGO’s Financial Services Division for collection of penalty.
Claire’s Market 101 Boone St. Ash Grove, Mo	Failure to have financial responsibility assurance and failure to comply with registration requirements.	Case referred to AGO for legal pursuit on April 15, 2016. Summons and petition served to a facility representative.
East Prairie Location (former Winks) 826 W. Washington East Prairie, Mo	Failure to conduct permanent closure of USTs.	Consent judgment entered on Sept. 9, 2014. Civil penalty of \$50,000 assessed with \$45,000 suspended pending compliance with Injunctive Relief. Case transferred to AGO’s Financial Services Division for collection of penalty. Responsible party is out of state and site remains out of compliance with completion of remedial actions.
Jefferson CITGO 505 Jefferson St. Charles, Mo	Failure to conduct permanent closure of USTs.	Consent judgment on entered May 13, 2016. Civil penalty of \$10,000 assessed with \$5,000 suspended pending five years compliance. Case transferred to AGO’s Financial Services Division for collection of penalty.
Jefferson CITGO 505 Jefferson St. Charles, Mo	Failure to permanently close.	Consent judgment entered on Sept. 10, 2003. Civil penalty of \$16,000 assessed with \$8,000 suspended pending compliance with closure. USTs closed and NFA letter issued by the department.

Facility/Responsible Party (cont.)	Summary of Violation (cont.)	Resolution Summary and Compliance Status (cont.)
Natural Bridge Phillips 8835 Natural Bridge Road St. Louis, Mo	Failure to have financial responsibility assurance.	Settlement agreement entered on April 28, 2016. Civil penalty of \$4,000 assessed with \$3,000 suspended pending two years compliance. Case transferred to AGO's Financial Services Division for collection of penalty.
CITGO Service Station 2609 Dunn Road St. Louis, Mo	Failure to have financial responsibility assurance.	Consent Judgment entered on Oct. 19, 2015. Civil penalty of \$1,500 assessed. Case transferred to AGO's Financial Services Division for collection of penalty.
Plaza Petroleum 11747 St. Charles Rock Road Bridgeton, Mo	Failure to have financial responsibility assurance.	Case closed by AGO due to change in ownership of facility.
Robison McIvor Grocery & Package 22249 Hwy 51 Qulin, Mo	Failure to have financial responsibility assurance.	Consent judgment entered on May 31, 2016. Civil penalty of \$5,000 assessed and paid in full. UST removed and NFA letter issued by department.
Vitran Express Inc. 4232 Planned Industrial Drive St. Louis, Mo	Failure to have financial responsibility assurance.	Consent judgment entered on May 31, 2016. Civil penalty of \$5,000 assessed and paid in full. UST removed and NFA letter issued by department.

Underground Storage Tank Facilities with Unknown Financial Responsibility Status Report

Financial Responsibility Status	Number of Facilities
Initial Request Letter Sent	8
Notice of Violation Sent	5
Currently in Enforcement	25
Referred to Attorney General's Office	10
Total Number of Facilities with Unknown Financial Responsibility	48

Number of Facilities in Each Financial Responsibility Step



Special Facilities Unit

Commercial facility inspectors - Special facilities’ inspectors conducted 13 inspections of commercial hazardous waste TSD facilities.

PCB inspector - The inspector conducted 27 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 transporters - More than 48 hazardous waste transporter license compliance background checks were completed. In addition, staff updated Missouri’s List of Licensed Hazardous Waste Transporters along with the key to services. The list includes transporters licensed to haul hazardous waste, infectious waste and used oil in Missouri and it can be accessed on our webpage: dnr.mo.gov/env/hwp/transporters.php.

Hazardous Waste Enforcement Unit

Enforcement Efforts

- Resolved one hazardous waste enforcement case
- Received 23 new enforcement cases

Pesticide Collection Program Events

The Pesticide Collection Program conducted the last four pesticide collection events of calendar year 2016. The third event of the year was on April 9, at the University of Missouri's Graves-Chapple Research Center, near Fairfax, collecting 3,389 pounds of waste pesticide from 13 participants. The fourth event was on May 21, at the Canton Recycling Center, in Canton, collecting 4,450 pounds of waste pesticide from 31 participants. The fifth event was on June 4, at the Montgomery County Road and Bridge Facility, in Montgomery City, collecting 4,274 pounds of waste pesticide from 21 participants. The sixth and final event for calendar year 2016 took place June 25, at C & C Farm & Home, in Bolivar, collecting 2,161 pounds of waste pesticide from 45 participants.

In looking ahead to 2017, the program plans to conduct another five to six free collection events for Missouri farmers and households.

Petroleum Storage Tank Statistics

During State FY16, the department accomplished the following work related to petroleum storage tanks:

- Regulated 3,427 facilities with 8,923 active USTs
- Properly closed 417 tanks
- Reviewed 132 closure reports
- Approved 122 closure notices
- Conducted 3 site investigations
- Responded to 16 emergencies involving petroleum releases
- Oversaw completion of 148 remediation sites
- Issued 657 certificates of registration
- A total of 101 new releases were reported
- Department staff was notified of 71 new installations at tank sites and received 57 new site registrations
- The Compliance and Enforcement Section staff resolved 54 cases involving violations
- At the end of FY16, there were 139 active enforcement cases.

Financial responsibility compliance was at 98.4 percent. This number reflects insurance coverage from both the Missouri Petroleum Storage Tank Insurance Fund and other private policies and statements. There were 52 state and federal exempt sites. This number does not include out-of-use tanks, which are not required to have financial responsibility.

Tanks Section Will Hold Workshop at the Missouri Waste Control Coalition Conference

The tanks section will hold a Tanks Workshop on July 12, 2016, as part of the MWCC Conference, at the Tan-Tar-A Resort, at the Lake of the Ozarks. This will be the ninth annual workshop in conjunction with MWCC events. This conference is targeted toward environmental consultants who provide services to tank owners and operators. The conference will provide consultants with information and training regarding free product recovery and LNAPL conceptual site models, groundwater plume stability evaluations, and investigating diving methyl tertiary butyl ether plumes in alluvium in the bootheel.

Missouri Department of Natural Resources - Hazardous Waste Program

TANKS

Petroleum Storage Tanks Regulation June 2016

Staff Productivity	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	TOTAL
Documents received for review	197	213	220	206	166	185	196	190	224	177	187	191	2,352
Remediation documents processed	152	146	151	156	98	211	152	140	223	115	173	111	1,828
Closure reports processed	16	7	15	17	11	13	22	8	11	3	5	4	132
Closure notices approved	12	13	12	12	7	7	6	9	12	11	7	14	122
Tank installation notices received	5	7	9	5	0	10	5	6	7	6	7	4	71
New site registrations	8	4	11	3	9	6	5	1	1	6	2	1	57
Facility Data	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	TOTAL
Total in use, out of use and closed USTs	40,929	40,950	40,963	40,971	41,003	41,022	41,042	41,064	41,084	41,103	41,113	41,135	
Total permanently closed USTs	31,970	31,979	32,014	32,040	32,061	32,084	32,134	32,150	32,179	32,182	32,194	32,212	
In use and out of use USTs	8,955	8,967	8,945	8,927	8,938	8,934	8,903	8,909	8,900	8,916	8,919	8,923	
Out of use USTs	664	668	681	685	681	680	664	659	654	703	703	707	
Total hazardous substance USTs	403	403	405	405	405	405	405	405	405	405	405	405	
Facilities with in use and out of use USTs	3,441	3,444	3,441	3,438	3,440	3,438	3,426	3,428	3,422	3,428	3,426	3,427	
Facilities with one or more tank in use	3,209	3,210	3,203	3,199	3,203	3,201	3,194	3,197	3,191	3,181	3,178	3,178	

Closures

Underground Storage Tanks	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	TOTAL	All Yrs
Closure Reports Reviewed	16	7	15	17	11	13	22	8	11	3	5	4	132	
Closure Notices Approved	12	13	12	12	7	7	6	9	12	11	7	14	122	
Number of Tanks Closed (Closure NFA)	32	23	38	22	20	45	51	39	74	22	26	25	417	

Cleanup

Underground Storage Tanks													TOTAL	All Yrs
UST release files opened this month	6	9	9	6	6	8	7	9	13	3	4	2	82	6,773
UST cleanups completed this month	9	6	13	7	6	14	9	14	21	9	11	11	130	5,978
Ongoing UST cleanups	831	833	833	833	833	827	826	824	816	811	805	795		
Aboveground Storage Tanks														
AST release files opened this month	0	0	0	1	2	4	3	1	1	0	0	1	13	487
AST cleanups completed this month	2	0	1	1	0	0	1	0	1	2	3	0	11	309
Ongoing AST cleanups	175	175	174	174	176	179	181	182	182	179	177	178		
Both UST and AST														
Total release files-both UST & AST	0	0	0	0	0	0	0	0	0	2	0	0	2	82
Cleanups completed-both UST & AST	0	0	0	0	0	0	0	0	2	0	0	0	2	54
Ongoing cleanups-both UST & AST	27	27	27	27	27	28	28	28	26	28	28	28		
Unknown Source														
Total release files-unknown source	1	0	0	2	0	0	1	0	0	0	0	0	4	228
Cleanups completed-unknown source	1	0	0	1	1	0	1	0	0	1	0	0	5	214
Ongoing cleanups-unknown source	18	18	17	18	17	17	17	15	16	15	14	14		
Documents Processed	152	146	151	156	98	211	152	140	223	115	173	111	1,828	
*Reopened Remediation Cases	0	0	0	1	0	2	0	0	0	0	0	0	3	83

* 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.

Missouri Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 8

Legal Update

Issue:

Routine update to the Commission on legal issues, referrals, filings, appeals, and any pending Administrative Hearing Commission cases.

Information:

Information Only.

Presented by:

Ms. Brook McCarrick, Office of the Attorney General

Missouri Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 9

Public Inquiries or Issues

Issue:

Opportunity for participants to speak to the Commission on relevant issues or matters before them.

Information:

Information Only.

Presented by:

Mr. Steve Sturgess – Director, HWP

Missouri Hazardous Waste Management Commission Meeting

**October 20, 2016
Agenda Item # 10**

Other Business

Issue:

Update to the Commission on Program matters and other relevant issues.

Information:

Information Only.

Presented by:

Mr. Steve Sturgess – Director, HWP

Missouri Hazardous Waste Management Commission Meeting

October 20, 2016

Agenda Item # 11

Future Meetings

Information:

Meeting Dates:

Date	Time	Location
Thursday, November 3, 2016 This will be a special public hearing.	9:30 A.M.	Roaring River Conference Room 1730 East Elm Jefferson City, Missouri 65101
Thursday, December 15, 2016	9:45 A.M.	Bennett Spring / Roaring River Room 1730 East Elm Jefferson City, Missouri 65101
Thursday, February 16, 2017	9:45 A.M.	Bennett Spring / Roaring River Room 1730 East Elm Jefferson City, Missouri 65101
Thursday, April 20, 2017	9:45 A.M.	Bennett Spring / Roaring River Room 1730 East Elm Jefferson City, Missouri 65101
Thursday, June 15, 2017	9:45 A.M.	Bennett Spring / Roaring River Room 1730 East Elm Jefferson City, Missouri 65101
Thursday, August 17, 2017	9:45 A.M.	Bennett Spring / Roaring River Room 1730 East Elm Jefferson City, Missouri 65101
Thursday, October 19, 2017	9:45 A.M.	Bennett Spring / Roaring River Room 1730 East Elm Jefferson City, Missouri 65101

Recommended Action:

Information Only.