



Missouri Petroleum Marketers & Convenience Store Association

205 East Capitol Avenue, Suite 200 • Jefferson City, Missouri 65101
Phone 573.635.7117 • Fax 573.635.3575 • www.mpca.org

To: Hazardous Waste Management Commission
From: Ronald J. Leone, Executive Director
Date: February 16, 2012
Re: Risk-Based Corrective Action

I. RBCA: Background and History.

▶ In 1989, the Legislature passed Missouri's first underground fuel storage tank (UST) law. In 1990, the Clean Water Commission enacted tank cleanup rules which were modeled after the EPA rules.

▶ In 1992, DNR issued a Guidance Document that included cleanup levels and standards. The 1992 Guidance Document was revised in 1996. From 1990 through 2003, the 1990 Clean Water Commission rules and the 1996 DNR Guidance Document were together applied to the cleaning up of motor fuel tank sites.

▶ Since 1989, 11,000+ tank sites have been cleaned up, received No Further Action (NFA) letters, and been returned to productive use.

▶ Every NFA letter ever issued by DNR gives DNR the continuing authority to reopen the site at a later date in the event new or additional contamination is discovered. *Please see the attached NFA letters.*

▶ DNR is required by state law - section 319.109, RSMo - to have risk-based corrective action - "RBCA" - cleanup standards. The purpose of RBCA is to tailor the clean-up to the particular risks posed by the petroleum leak or spill at the particular site where it occurs.

For example, a fuel tank site located in a residential area will require a different cleanup strategy than a fuel tank site located in the middle of an industrial center.

▶ Section 319.109, RSMo, first passed in 1989 and amended in 1995, 2004 and 2008, states in full:

"The department shall establish requirements for the reporting of any releases and corrective action taken in response to a release from an underground storage tank, including the specific quantity of a regulated substance, which if released, requires reporting and corrective action. *In so doing, the department shall use risk-based corrective standards which take into account the level of risk to public health and the environment associated with site-specific conditions and future land usage.* The hazardous waste management commission is authorized to promulgate

rules to implement this section, in accordance with section 319.137. *By February 13, 2009, the hazardous waste management commission shall propose rules to implement the provisions of this section.* To the extent there is a conflict between this section and section 644.143 or 644.026, this section shall prevail.” (emphasis added).

▶ When properly implemented, RBCA results in quicker cleanups and lower overall costs.

▶ It’s important to note that Missouri is not reinventing the wheel when it comes to RBCA. Several states have successfully implemented RBCA for fuel tank cleanups, and the EPA supports and encourages states to use RBCA.

▶ When the Legislature in 1995 explicitly required DNR to publish RBCA rules, the DNR responded by noting that it’s existing cleanup rules *were already risk-based*, which was true. The DNR chose not to change its cleanup requirements for 9 years.

▶ In 2001, employees of DNR’s Clean Water Program proposed a “universal risk-based cleanup rule” that would have applied to tank sites and would have imposed significant new costs on tank site owners and others. Broad opposition to the rule prompted the Clean Water Commission to withdraw the rule and direct DNR to “start over” and include interested parties in the rulemaking process.

▶ In 2004, Senate Bill 901 changed the jurisdiction over USTs from the Clean Water Commission to the Hazardous Waste Management Commission (HWMC).

▶ In 2004, after dozens of meetings and negotiations and thousands of man hours, the regulated community and DNR came together and reached a compromise contained in the 2004 Tanks RBCA Guidance Document.

▶ Guidelines are not rules and thus are subject to multiple and different interpretations. DNR failed to follow through on the agreement with the stakeholders that they would codify into rule the compromise 2004 Tanks RBCA Guidance Document.

▶ For the past 8 years, DNR has misapplied and tried to expand the 2004 Tanks RBCA Guidance Document resulting at times in motor fuel tank cleanups taking longer and costing more than ever before, the complete opposite of what RBCA was designed to accomplish.

▶ In 2008, the regulated community lead by MPCA felt compelled to pass Senate Bill 907 which forced DNR’s hand and added the following language to section 319.109, RSMo: “By February 13, 2009, the hazardous waste management commission shall propose rules to implement the provisions of this section.”

▶ On 2/5/09, the HWMC voted to publish draft RBCA rules authored by DNR. At that time, the Commission was provided with a copy of alternative draft RBCA rules authored by PSTIF and based primarily on the compromise 2004 Tanks RBCA Guidance Document.

▶ On 11/17/09, the Joint Committee on Administrative Rules (JCAR) voted to recommend disapproval of the Commission's RBCA rules. On 11/19/09, the Commission withdrew the RBCA rules.

▶ On 12/30/11, the 2004 Tanks RBCA Guidance Document plus several stakeholder-agreed-to amendments were finalized as rules. These RBCA rules will sunset on 12/31/12. *Please see the attached rulemakings.*

II. RBCA: Where We Are Today.

▶ As of 12/30/11, we have a RBCA rule in place that:

Protects Missouri's natural resources and the health of Missouri's citizens;
Is a compromise between DNR and the regulated community;
Has worked well in the real world since 2004; and
Sunsets on 12/31/12.

▶ It's critical to again stress that since 1989, 11,000+ tank sites have been cleaned up, received NFA letters, and been returned to productive use.

▶ It's also critical to again stress that every NFA letter ever issued by DNR gives DNR the continuing authority to reopen the site at a later date in the event new or additional contamination is discovered. This is the ultimate safe-guard that in the long run protects Missouri's natural resources and the health of Missouri's citizens.

III. RBCA: The Short Term.

With all due deference and respect, the HWMC should implement a common-sense, conservative "if it ain't broke don't fix it" strategy as follows:

1. Make a motion today that directs DNR to start the rulemaking process to delete the 12/31/12 sunset date in the current RBCA rules.

Again, there is no emergency or even urgency that requires any changes to the current RBCA rules; you have more than 11,000 sites that have been cleaned up and returned to productive use without any minor let alone major problems or health concerns; you have a tank program and PSTIF that are the envy of the other 49 states; you have compromise RBCA rules in place that have worked well in the real world since 2004; & you have NFA letters which give DNR continuing authority to reopen a site in the event any new or additional contamination is discovered.

2. Instruct DNR today that the current RBCA rules are the only starting point. We do not need to discard the current RBCA rules and start from scratch with a brand new, non-compromise "everything-but-the-kitchen-sink" proposed RBCA rules.

3. Instruct DNR to, when necessary, produce for the Commission a list of any problems with the current RBCA rules accompanied by empirical evidence, real world data and real world examples actually demonstrating the alleged problem.

4. Do nothing else unless and until the list detailed under # 3 above is received.

IV. RBCA: The Longer Term.

With all due deference and respect, the HWMC should:

1. If and when the HWMC receives the list detailed under # 3 above and is convinced a problem(s) exists with the current RBCA rules, instruct DNR to discuss the problem(s) with the stakeholder group in order to seek consensus on the existence of the problem(s).

2. Instruct DNR that if the stakeholder group agrees that a problem(s) exists with the current RBCA rules, they must work with the stakeholder group to find a compromise solution(s).

3. Instruct the DNR to keep the HWMC regularly and fully updated on any and all RBCA issues.

Respectfully presented and submitted,

Ronald J. Leone, Esq.

Executive Director

Missouri Petroleum Marketers and Convenience Store Association (MPCA)

205 E. Capitol Avenue, Suite 200, Jefferson City, MO 65101

C: 573.864.5189; W: 573.635.7117, ext. 16; F: 573.635.3575



STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

JAN 26 2012

Mr. Tim Mauntel
MRP Properties Company
5590 Havana Street
Denver, CO 80239

No Further Action Letter

RE: _____, Kansas City, Jackson County, MO
ST _____

Dear Mr. Mauntel:

Congratulations on the completion of this underground storage tank (UST) closure project! The Missouri Department of Natural Resources' Hazardous Waste Program, Tanks Section, thanks you for your efforts to responsibly address the permanent closure by removal of three, 10,000-gallon, steel, gasoline USTs at this facility.

The Department has reviewed the Missouri Risk-Based Corrective Action (MRBCA) closure report dated October 27, 2011, and updated risk assessment dated December 6, 2011, submitted by ATC Associates Incorporated for the above referenced facility. The closure report evaluates risks to human health and the environment resulting from a possible petroleum release from the tank system during its operation and summarizes corrective actions taken to address those risks.

The analytical data indicates that concentrations of chemicals of concern (COCs) in the vicinity of the tank pit, product lines, and dispensers do not exceed the MRBCA target levels for Tier 1, Soil Type 1, non-residential land use.

Based upon a review of the site information and the closure report, the Department has determined that 'No Further Action' is required regarding the COCs evaluated in the environmental site assessment conducted during the permanent closure of the tanks at this site.

Please be aware that 10 CSR 26-2.080 (3)(B) provides: *"if subsequent information becomes available to indicate that contamination may be present at the site at levels which may threaten human health or the environment, the Department may require additional investigation or site characterization and/or corrective action."*

Mr. Tim Mauntel
Page Two

The file for this site is maintained by the Department's Hazardous Waste Program, 1730 East Elm Street, Jefferson City, Missouri 65101. To view this file or obtain copies, please contact the Custodian of Records at (573) 522-1181, e-mail custodianofrecords@dnr.mo.gov, or visit our Web site for additional information at <http://www.dnr.mo.gov/sunshinerequests.htm>.

Thank you for your efforts to comply with Missouri's UST Law and Regulations. If you have any questions regarding this letter, please contact Mr. Rick Brown, of my staff, at the Hazardous Waste Program, P.O. Box 176, Jefferson City, Missouri 65102-0176, or at (573) 526-2738.

Once again, we appreciate your efforts to address the closure of the tanks at this site and for helping to protect our valuable natural resources.

Sincerely,

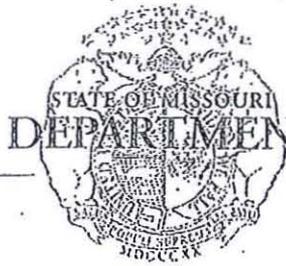
HAZARDOUS WASTE PROGRAM



Ken Koon, Chief
Tanks Section

KK: rbl

c: Ms. Janet Annan, ATC Associates Incorporated
Petroleum Storage Tank Insurance Fund



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

SEP 27 2011

Mr. _____

_____ Company

P.O. Box

Jefferson City, MO 65102

No Further Action Letter

RE: _____

ST _____

, I _____

(Easting: _____)

_____, Callaway County, MO

Dear Mr. _____

Congratulations on the completion of this remediation project! The Missouri Department of Natural Resources' Hazardous Waste Program, Tanks Section, thanks you for your efforts to responsibly address this petroleum release.

The Department has reviewed the July 18, 2011, groundwater monitoring report submitted by Midwest Environmental Consultants for the above referenced facility, received by the Department on July 20, 2011.

This document supports the November 2009 Missouri Risk-Based Corrective Action Tier 1/2 Risk Assessment Report for the above referenced site. The report and additional documents evaluate the risks to human health and the environment from one or more petroleum release(s) and summarize corrective actions taken to address those risks.

Based upon a review of the site information and these reports, the Department has determined that "No Further Action" is required related to the chemicals of concern identified in the environmental site assessment reports. The reports conclude that there is no unacceptable risk to human health and the environment for the exposure model presented in the risk assessment.

Please note that our decision is based on information contained in the Department's file for the site. If subsequent information becomes available to indicate that contamination may be present at the site at levels that may threaten human health or the environment, the Department may require additional investigation or site characterization and/or corrective action in accordance with 10 CSR-15.030.

Mr. _____
Page Two

The file for this site is maintained by the Department's Hazardous Waste Program, 1730 East Elm Street, Jefferson City, Missouri 65101. To view this file or obtain copies, please contact the Custodian of Records at (573) 522-1181, e-mail custodianofrecords@dnr.mo.gov, or visit our Web site for additional information at <http://www.dnr.mo.gov/sunshinerequests.htm>.

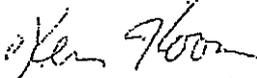
All monitoring wells associated with the site must be closed in accordance with well construction and abandonment regulations (10 CSR 23-4.080). If you have any questions regarding well abandonment, please contact Mr. Chris Thiltgen of the Department's Wellhead Protection Section at (573) 368-2100.

Please direct questions regarding the Petroleum Storage Tank Insurance Fund to the Fund Administrator at (573) 761-4060 or (800) 765-2765.

Again, we appreciate your efforts to address contamination at this site and for helping to protect our valuable natural resources. If you have any questions, please contact the project manager for this site, Ms. Vickie Olin at the Hazardous Waste Program, P.O. Box 176, Jefferson City, Missouri 65101. (573) 751-6555

Sincerely,

HAZARDOUS WASTE PROGRAM



Ken Koon, Chief
Tanks Section

KK: vol

c: Mr. Rick Elgin, Midwest Environmental Consultants
Petroleum Storage Tank Insurance Fund
Mr. Chris Thiltgen, Wellhead Protection Section

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Bob Holden, Governor • Stephen M. Mahfood, Director

DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

MAY 17 2001

Mr. _____
Total Petroleum, Incorporated
5590 Havana Street
Denver, CO 80239

RE: _____ Sedalia, MO
ST _____, R _____

Dear Mr. _____

The Missouri Department of Natural Resources' Hazardous Waste Program, Tanks Section, has received and reviewed the report submitted on February 2, 2001, documenting the final high vacuum extraction event and the permanent closure of MW-2, MW-5, and MW-7. The information contained in this report indicated that the former wells at this site have been closed in accordance with our regulations.

Therefore, based upon a review of the analytical data and other information submitted, the department finds that no additional investigation or remedial action is currently required with regard to these petroleum substances. However, the department's finding is based solely on the information contained in these reports, and this finding does not constitute a certification or guarantee of the quality of the remedial action conducted or with regard to the lack of contamination on the property.

In the event a future petroleum-related environmental problem arises in the vicinity of this property, the department reserves the right to require responsible parties to conduct additional investigation and/or remedial actions.

Your efforts to address the petroleum contamination at this site and to minimize the environmental effects of the vandalism activities are appreciated. If you have any questions regarding technical aspects of the work, please call me at (573) 751-6822.

Sincerely,

HAZARDOUS WASTE PROGRAM


Jim Growney, Chief
Remediation Unit

JG:vgg

c: Mr. David Dowdy, Jefferson City Regional Office
Mr. David Pate, Petroleum Storage Tank Insurance Fund
Mr. Alexander Walter, BE & K Terranext



10 CSR 26-2.062 Assessing the Site at Closure or Change in Service

PURPOSE: This rule describes the requirements of a site assessment to determine whether there has been a release from the underground storage tank system.

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.

AUTHORITY: section 319.111, RSMo 2000, and section 319.137, RSMo Supp. 2010. This rule originally filed as 10 CSR 20-10.072. 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.*

**Original authority: 319.111, RSMo 1989 and 319.137, RSMo 1989, amended 1993, 1995, 2004.*

(1) Before permanent closure or a change in service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the underground storage tank (UST) site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to groundwater, and other factors appropriate for identifying the presence of a release.

(2) If contaminated soils, contaminated groundwater, or free product as a liquid or vapor is discovered under section (1) of this rule, or by any other manner, owners and operators must begin site investigation and corrective action in 10 CSR 26-2.070-10 CSR 26-2.083.

(3) Owners and operators shall follow a written procedure.

(A) Until December 31, 2012, owners and operators may use the department's *Risk-Based Corrective Action for Petroleum Storage Tanks* guidance document dated February 2004, as amended March 8, 2005, by *Notice of Modifications to the Process and Interim Guidance Pertaining to Application of the New Soil Type Dependent Tier 1 Risk-Based Target Levels*; the March 18, 2005, *Soil Type Determination Guidelines*; the March 3, 2005, Table 3-1 *Default Target Levels*; the April 2005 Table 4-1 *Soil Concentration Levels to Determine the Need for Groundwater Evaluation During Tank Closure*; the February 2005 Tables 7-1(a) through 7-12(c) *Tier 1 Risk-Based Target Levels*; and the April 21, 2005, *Soil Gas Sampling Protocol*. The guidance and amendments were published by the Department of Natural Resources, PO Box 176, Jefferson City, MO 65102-0176, and are hereby incorporated by reference. This rule does not incorporate any subsequent amendments or additions.

(B) Other written procedures may be used with prior written approval of the department.



information collected under section (1) of this rule as soon as practicable or in accordance with a schedule established by the department.

(3) Owners and operators shall follow a written procedure.

(A) Until December 31, 2012, owners and operators may use the department's *Risk-Based Corrective Action for Petroleum Storage Tanks* guidance document dated February 2004, as amended March 8, 2005, by *Notice of Modifications to the Process and Interim Guidance Pertaining to Application of the New Soil Type Dependent Tier 1 Risk-Based Target Levels*; the March 18, 2005, *Soil Type Determination Guidelines*; the March 3, 2005, Table 3-1 *Default Target Levels*; the April 2005 Table 4-1 *Soil Concentration Levels to Determine the Need for Groundwater Evaluation During Tank Closure*; the February 2005 Tables 7-1(a) through 7-12(c) *Tier 1 Risk-Based Target Levels*; and the April 21, 2005, *Soil Gas Sampling Protocol*. The guidance and amendments were published by the Department of Natural Resources, PO Box 176, Jefferson City, MO 65102-0176, and are hereby incorporated by reference. This rule does not incorporate any subsequent amendments or additions.

(B) Other written procedures may be used with prior written approval of the department.

*AUTHORITY: sections 319.109 and 319.137, RSMo Supp. 2010. * This rule originally filed as 10 CSR 20-10.065. 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.*

**Original authority: 319.109, RSMo 1989, amended 1995, 2004, 2008 and 319.137, RSMo 1989, amended 1993, 1995, 2004.*

10 CSR 26-2.078 Investigations for Soil and Groundwater Cleanup

PURPOSE: This rule describes the procedures for soil and groundwater investigations.

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 must conduct investigations of the release, the release site, and the surrounding area to determine the full extent and location of soils contaminated by the release and the presence and concentrations of dissolved product contamination in the groundwater if any of the following conditions exist:

(A) There is evidence that groundwater wells have been affected by the release (for example, as found during release confirmation or previous corrective action measures);

(B) Free product is found to need recovery in compliance with 10 CSR 26-2.075;

(C) There is evidence that contaminated soils may be in contact with groundwater as found during the initial response measures or investigations required under 10 CSR 26-2.070–10 CSR 26-2.075; or

(D) The department requests an investigation based on the potential effects of contaminated soil or groundwater on nearby surface and groundwater resources.

(2) Owners and operators must submit 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 are responsible for submitting a plan that provides for adequate protection of human health and the environment, as determined by the department, after fulfilling the requirements for release reporting and investigation in 10 CSR 26-2.071-10 CSR 26-2.074. Owners and operators must modify their plan as necessary to meet this standard.

(A) The department may require owners and operators to submit additional information or to develop and submit a corrective action plan for responding to contaminated soils and groundwater at any point after reviewing the information submitted for release reporting and investigation in 10 CSR 26-2.071-10 CSR 26-2.074. If a plan is required, owners and operators must submit the plan according to a schedule and format established by the department.

(B) Owners and operators may choose to submit a corrective action plan for responding to contaminated soil and groundwater after fulfilling the requirements of 10 CSR 26-2.071-10 CSR 26-2.074.

(2) The department will approve the corrective action plan only after ensuring that implementation of the plan will adequately protect human health and safety and the environment. In making this determination the department should consider the following factors as appropriate:

(A) The physical and chemical characteristics of the regulated substance, including its toxicity, persistence and potential for migration;

(B) The hydrogeologic characteristics of the facility and the surrounding area;

(C) The proximity, quality, and current and future uses of nearby surface and ground water;

(D) The potential effects of residual contamination on nearby surface and ground water;

(E) An exposure assessment; and

(F) Any information assembled in 10 CSR 26-2.070-10 CSR 26-2.083.

10 CSR 26-2.082 Corrective Action Plan

PURPOSE: This rule lists the requirements for corrective action plans for cleanup of releases from underground storage tank sites.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the



(3) Upon approval of the corrective action plan, or as directed by the department, owners and operators must implement the plan including modifications to the plan made by the department. Owners and operators must monitor, evaluate and report the results of implementing the plan in accordance with a schedule and in a format established by the department.

15, 2011, effective Dec. 30, 2011.

**Original authority: 319.109, RSMo 1989, amended 1995, 2004, 2008 and 319.137, RSMo 1989, amended 1993, 1995, 2004.*

(4) Owners and operators, in the interest of minimizing environmental contamination and promoting more effective clean-up, may begin clean-up of soil and groundwater before the corrective action plan is approved provided that they—

(A) Notify the department of their intention to begin clean-up;

(B) Comply with any conditions imposed by the department, including halting clean-up or mitigating adverse consequences from clean-up activities; and

(C) Incorporate these self-initiated clean-up measures in the corrective action plan that is submitted to the department for approval.

(5) Owners and operators shall follow a written procedure.

(A) Until December 31, 2012, owners and operators may use the department's *Risk-Based Corrective Action for Petroleum Storage Tanks* guidance document dated February 2004, as amended March 8, 2005, by *Notice of Modifications to the Process and Interim Guidance Pertaining to Application of the New Soil Type Dependent Tier 1 Risk-Based Target Levels*; the March 18, 2005, *Soil Type Determination Guidelines*; the March 3, 2005, Table 3-1 *Default Target Levels*; the April 2005 Table 4-1 *Soil Concentration Levels to Determine the Need for Groundwater Evaluation During Tank Closure*; the February 2005 Tables 7-1(a) through 7-12(c) *Tier 1 Risk-Based Target Levels*; and the April 21, 2005, *Soil Gas Sampling Protocol*. The guidance and amendments were published by the Department of Natural Resources, PO Box 176, Jefferson City, MO 65102-0176, and are hereby incorporated by reference. This rule does not incorporate any subsequent amendments or additions.

(B) Other written procedures may be used with prior written approval of the department.

AUTHORITY: sections 319.109 and 319.137, RSMo Supp. 2010. This rule originally filed as 10 CSR 20-10.066. Original rule filed April 2, 1990, effective Sept. 28, 1990. Amended: Filed Aug. 3, 1993, effective April 9, 1994. Moved and amended: Filed April*