

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY  
OF THE STATE OF MONTANA

In the matter of the amendment of ARM	)	NOTICE OF PUBLIC HEARING ON
17.56.506, 17.56.507, 17.56.607, 17.56.608)	)	PROPOSED AMENDMENT
pertaining to reporting of confirmed	)	
releases, adoption by reference, and	)	(UNDERGROUND STORAGE
release categorization	)	TANKS)

TO: All Concerned Persons

1. On February 3, 2010, at 9:30 a.m., the Department of Environmental Quality will hold a public hearing in Room 122, 1100 North Last Chance Gulch, Helena, Montana, to consider the proposed amendment of the above-stated rules.

2. The department will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, please contact Elois Johnson, Paralegal, no later than 5:00 p.m., January 25, 2010, to advise us of the nature of the accommodation that you need. Please contact Elois Johnson at Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2630; fax (406) 444-4386; or e-mail ejohnson@mt.gov.

3. The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:

17.56.506 REPORTING OF CONFIRMED RELEASES (1) Upon confirmation of a release in accordance with ARM 17.56.504, or after a release from the PST or UST system is identified in any other manner, owners and operators, any person who installs or removes an UST, or who performs subsurface investigations for the presence of regulated substances, and any person who performs a tank tightness or line tightness test pursuant to ARM 17.56.407 or 17.56.408, must report releases to the department and the implementing agency within the specified timeframes and in the following manner:

(a) remains the same.

(b) When a release is confirmed from laboratory analysis of samples collected from a site, the release must be reported to the department and implementing agency by a method that ensures the department or the implementing agency receives the information within seven days of release confirmation. The date of release confirmation, for purposes of this rule, is the date the owner, operator, installer, remover, or person who performs subsurface investigations for the presence of regulated substances received notification of the sample results from the laboratory. Laboratory analytical results that exceed the following values confirm that a release has occurred:

(i) remains the same.

(ii) ~~preliminary remediation goals or soil~~ regional screening levels published in the United States Environmental Protection Agency, Regional ~~9 Preliminary~~

~~Remediation Goals Screening Level (RSL) Table~~ for soil analyses of contaminants in soil that are not listed in RBCA; or  
(iii) remains the same.

AUTH: 75-11-319, 75-11-505, MCA  
IMP: 75-11-309, 75-11-505, MCA

17.56.507 ADOPTION BY REFERENCE (1) For purposes of this subchapter, the department adopts and incorporates by reference:

- (a) remains the same.
- (b) Montana Tier 1 Risk-Based Corrective Action Guidance for Petroleum Releases (RBCA) (~~October 2007~~ September 2009);
- (c) U.S. Environmental Protection Agency, "~~Region 9 Preliminary Remediation Goals~~" Regional Screening Level (RSL) Table (~~February 10, 2003~~ May 2009); and
- (d) Reportable Quantities for Hazardous Substances under section 102(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) published at 40 CFR Part 302 (~~2004~~ 2009).

(2) and (3) remain the same.

AUTH: 75-11-319, 75-11-505, MCA  
IMP: 75-11-309, 75-11-505, MCA

REASON: It is necessary to adopt this amendment to incorporate by reference the current version of Montana Tier 1 Risk-Based Corrective Action Guidance for Petroleum Releases (RBCA), which provides risk-based screening levels relied upon by the department to confirm the existence of a release of petroleum. RBCA sets soil screening levels using input modeling parameters representative of estimated statewide conditions. These levels are based on both direct contact with contaminated soil and leaching to ground water. The levels are also based on residential, industrial, or construction/excavation exposure and various depths to ground water and take into account multiple pathways and cumulative exposure. These screening levels are based on a  $10^{-6}$  screening level for carcinogens, which allows the department to ensure that cumulative carcinogenic risk at sites does not exceed the  $10^{-5}$  cumulative risk level. This is the risk level established by the Montana Legislature for adoption of water quality standards except for arsenic. For non-carcinogenic contaminants, the guidance uses a cumulative hazard index of 1, which represents the value indicating that no adverse non-cancer human health effects are expected to occur. It is the department's policy to periodically review RBCA to determine if changes to methods and toxicity information warrant updating the guidance. In 2008, the U.S. Environmental Protection Agency (EPA) released its Regional Screening Levels (RSLs) tables (EPA, September 2008) that represent a consensus throughout the EPA regions regarding toxicity data and methods for calculating screening levels based upon protection of human health. In January 2009, EPA released its Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment) (EPA, January 2009). The

department has determined that it is appropriate to change its risk-based screening levels (RBSLs) in RBCA to more closely follow the EPA's approach. Changes from the 2007 to the 2009 version of RBCA are summarized at: [http://deq.mt.gov/statesuperfund/rbca\\_guide.asp](http://deq.mt.gov/statesuperfund/rbca_guide.asp). Following is a description of changes from the 2007 version of RBCA:

1. The beneficial use based RBSLs for soils were removed and replaced with a qualitative evaluation. The beneficial use based RBSLs for ground water were retained because taste and odor thresholds for drinking water are more quantifiable.
2. The ethylbenzene and Methyl tertiary-butyl ether (MTBE) toxicity data were updated to be consistent with EPA's approach.
3. The method for evaluating inhalation exposure risk was made consistent with the EPA's approach presented in Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment) (EPA, January 2009). This approach involves the use of reference concentrations (RfCs) and inhalation unit risks (IURs) in the equations without adjusting for body weight and inhalation rate.
4. The particulate emission factor was updated to be consistent with the EPA's Regional Screening Levels User's Guide and Tables (EPA, September 2008).
5. A method of evaluating inhalation exposure risk to polynuclear aromatic hydrocarbons (PAHs) was added using the IURs provided in EPA's RSL Table for Chemical Contaminants at Superfund Sites (September 2008).
6. Both the noncarcinogenic toxicity data and the carcinogenic IUR provided in EPA's RSL Table for Chemical Contaminants at Superfund Sites (September 2008) were evaluated and the more conservative of the two concentrations for each scenario was incorporated.
7. The PAH calculation was changed to reflect the mutagenic mode of action method based upon current EPA guidance.
8. Inhalation route calculations made by extrapolating oral toxicity have been removed.
9. The commercial skin adherence factor was increased.
10. Volatilization factors for the target analytes were changed.
11. Risk analysis for dermal exposure was removed for volatile contaminants.
12. Saturation concentrations were removed from the Master Table because petroleum compounds are mixtures and these concentrations are not necessarily indicative of free product. Therefore, the department did not use these concentrations in its analyses of risk for decision-making.
13. The 75-year lifetime for carcinogenicity was retained instead of changing to 70 years to be consistent with EPA, because the slope factors and IURs for the target analytes are not adjusted for a 70-year lifetime and the department determined that 75 years is still appropriate.
14. Soil leaching RBSLs for petroleum fractions were recalculated based upon new ground water RBSLs.
15. Screening levels for Resource Conservation and Recovery Act (RCRA) metals were added.
16. The text of the document was revised and updated to make it more

understandable.

This amendment is also necessary to incorporate EPA regional screening levels (RSLs) that have superseded EPA Region 9 preliminary remediation goals (PRGs). The department has changed its RBSLs in RBCA, as described above, to more closely follow the EPA's approach. RSLs are being used by various states and EPA in much the same way as PRGs were used. RSLs will be used by the department as conservative screening values that provide the same levels for protection for non-petroleum compounds as RBCA provides for petroleum. The RSLs reflect the current state of the science of toxicology and risk assessment. RSLs are based on ingestion, inhalation, and dermal contact and include residential and industrial exposure. The department will use RSLs to evaluate risk, and to confirm the existence of a release that requires corrective action, for contaminants that are not listed in RBCA.

Finally, this amendment is necessary to incorporate the reference to the current version of 40 CFR Part 302, which lists reportable quantities for hazardous substances under CERCLA. To be consistent with RCRA and other sections in CERCLA, EPA revised paragraph (b) of 40 CFR 302.5 to delete references to extraction procedure "EP" toxicity. This change does not affect any substantive aspect of DEQ's release reporting requirements.

17.56.607 RELEASE CATEGORIZATION (1) through (3) remain the same.

(4) The department may categorize a release as resolved if the department has determined that all cleanup requirements have been met and that conditions at the site ensure present and long-term protection of human health, safety, and the environment. The following requirements must also be met before a release may be categorized as resolved:

(a) remains the same.

(b) risks to human health, safety, and the environment from residual contamination at the site have been evaluated using methods listed in (4)(b)(i) or (ii) and the evaluation indicates that unacceptable risks do not exist and are not expected to exist in the future. The department considers a total hazard index that does not exceed 1.0 for noncarcinogenic risks, and a total cancer risk that does not exceed  $1 \times 10^{-5}$ , to be an acceptable risk level. Owners or operators, or other persons may, with department approval, use either of the following methods to evaluate risks from a release:

(i) remains the same.

(ii) a site-specific risk assessment method approved by the department for evaluation of risks to human health, safety, and the environment associated with contamination, or likely contamination, ~~of surface water or aquatic sediments, or for evaluation of risks associated with contaminant vapors,~~ that demonstrates to the department's satisfaction that current and potential future exposure pathways are incomplete;

(c) through (9)(g) remain the same.

AUTH: 75-11-319, 75-11-505, MCA

IMP: 75-11-309, 75-11-505, MCA

REASON: The current rule allows a site-specific risk assessment to evaluate only risks associated with surface water, aquatic sediments or vapors. It is necessary to adopt the proposed amendment to ARM 17.56.607(4)(b)(ii) to eliminate these limitations and allow owners or operators to employ a site-specific risk assessment method to evaluate risks associated with contamination when a site-specific risk assessment is appropriate and approved by the department.

17.56.608 ADOPTION BY REFERENCE (1) For purposes of this subchapter, the department adopts and incorporates by reference:

- (a) remains the same.
- (b) Drinking Water Maximum Contaminant Levels published at 40 CFR Part 141 (~~2004~~ 2009);
- (c) Montana Tier 1 Risk-based Corrective Action Guidance for Petroleum Releases (RBCA) (~~October 2007~~ September 2009); and
- (d) through (3) remain the same.

AUTH: 75-11-319, 75-11-505, MCA

IMP: 75-11-309, 75-11-505, MCA

REASON: This amendment is necessary to update the reference to Drinking Water Maximum Contaminant Levels (MCLs), published at 40 CFR Part 141, to the 2009 version. The drinking water MCLs are applicable environmental laws associated with petroleum releases that must be met in order to categorize a release as resolved. The 2009 version of the MCLs, listed in 40 CFR Part 141, contains revised MCL goals for disinfection byproducts (DBPs) such as chloroform, monochloroacetic acid, and trichloroacetic acid. This change could affect those releases that impact drinking water supplies that contain disinfectants. Most drinking water disinfectants react with organics in the water to produce DBPs. This MCL change provides increased protection against potential risks for cancer and reproductive and developmental health effects that are associated with DBPs.

This amendment is also necessary to adopt the current version of Montana Tier 1 Risk-Based Corrective Action Guidance for Petroleum Releases (RBCA) which provides risk-based screening levels relied upon by the department to confirm the existence of a release of petroleum and to evaluate whether concentrations of listed contaminants pose an unacceptable risk to human health, safety, or the environment. These levels are necessary to assist owners, operators and the department in evaluating potential risk posed by a release without the necessity of a site-specific risk assessment. The changes incorporated within the September 2009 version of RBCA are described in detail in the reasons statement for ARM 17.56.507.

4. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; or e-mailed to [ejohnson@mt.gov](mailto:ejohnson@mt.gov), no later than February 11, 2010. To be

guaranteed consideration, mailed comments must be postmarked on or before that date.

5. Kirsten Bowers, attorney, has been designated to preside over and conduct the hearing.

6. The department maintains a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supplies; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; e-mailed to [ejohnson@mt.gov](mailto:ejohnson@mt.gov); or may be made by completing a request form at any rules hearing held by the department.

7. The bill sponsor contact requirements of 2-4-302, MCA, do not apply.

Reviewed by: DEPARTMENT OF ENVIRONMENTAL  
QUALITY

/s/ James M. Madden  
JAMES M. MADDEN  
Rule Reviewer

BY: /s/ Richard H. Opper  
RICHARD H. OPPER, Director

Certified to the Secretary of State, January 4, 2010.