

# Bureau Update Reorganization, QAP and RBCA

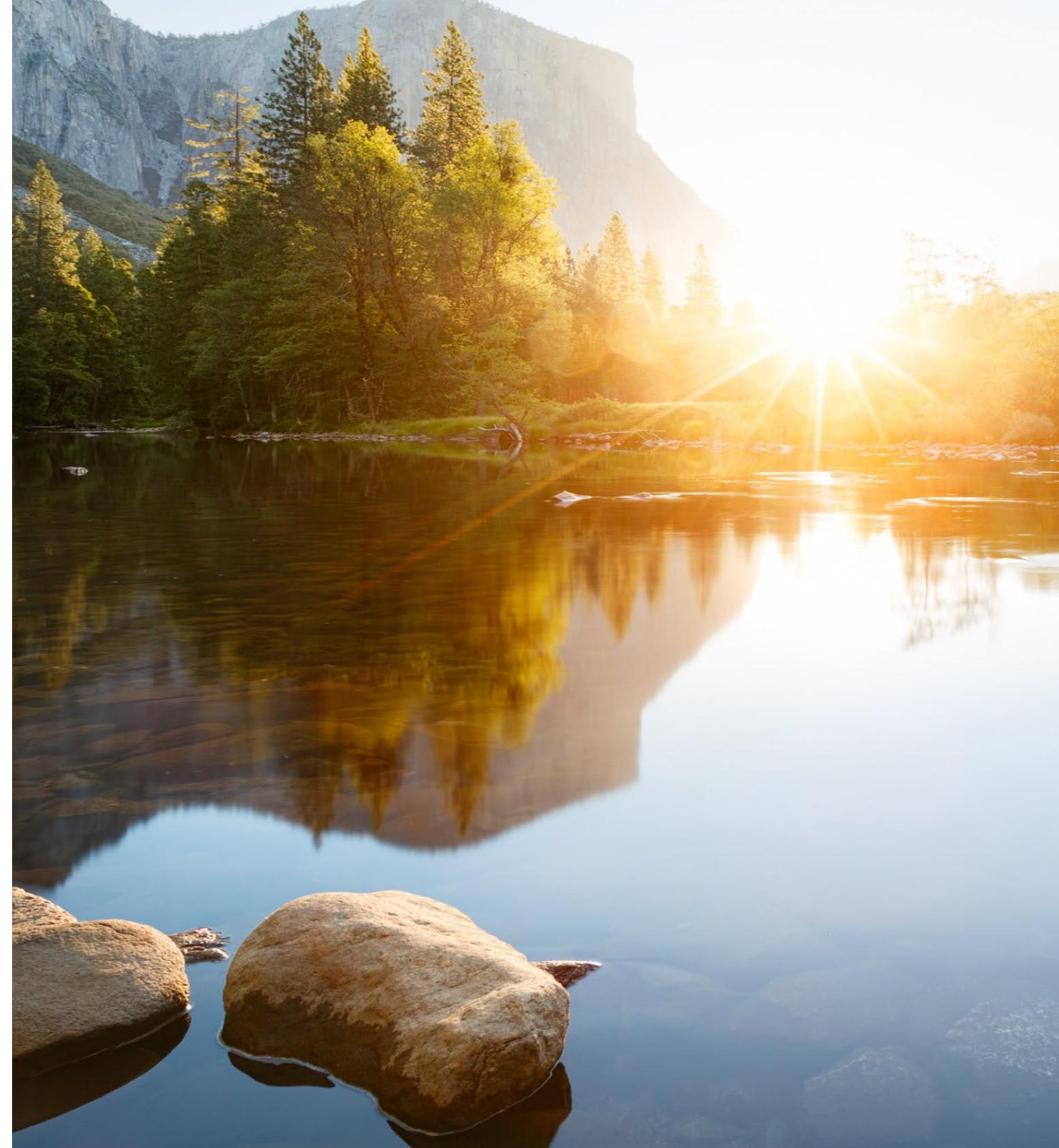
Consultant's Day, February 9, 2024

Terri Dorrington, PhD

Tanks Brownfields and Federal Facilities Bureau Chief

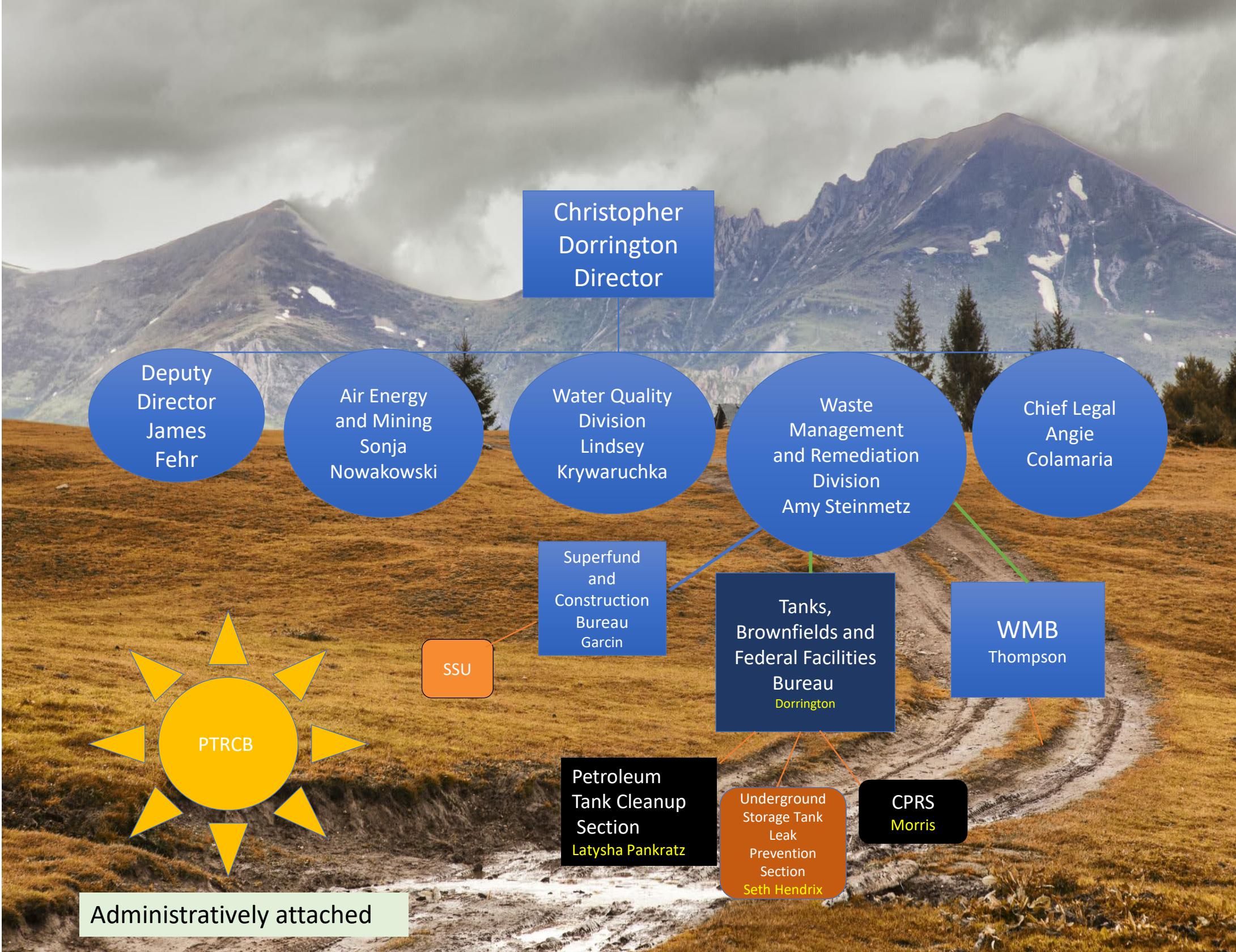
## Agenda

- Reorganization, updates
- Quality Assurance Plan
- Risk Based Corrective Action Guidance
  - and Incorporation by Reference Rulemaking



# Team Reorganization





# 2023 integration and 2024 Look ahead

- Shared mission and vision under one bureau
- Increased customer service with all DEQ “tanks” resources being housed in one functional unit
- leveraging of resources across sections
- Cross-training and cross-sectional assistance
- Stronger understanding of the needs and challenges of our “tanks” customers, leading to increased customer service
- Over the long-term, the programs will be better positioned to face the transition to a greater focus on release prevention.



# Quality Assurance Plan for Investigation of Underground Storage Tank Releases -Update



# What is the purpose of this QAP?

**Describe the quality system that applies universally to Petroleum sites**

**Ensures minimum data quality objectives are met (reliability)**

**Data is available for multiple uses**

## **Who uses a QAP?**

- **Anyone who wants to use the data**
  - **Decision makers**
  - **Field samplers**
  - **Project managers**
  - **labs**

# QAP referenced in Rule

ARM 17.56.504 and ARM 17.56.703 Release Investigation and Confirmation Steps and Assessing the Site at Closure or Change in Service, respectively.

“The Montana Quality Assurance Plan for Investigation of Underground Storage Tank Releases should be used as a guide for the collection, preservation, and analysis of field samples”

Last revision date, 2022





- Currently, we have a draft 2022 QAP available on the website
- We will update at the end of this year to reflect supervisor changes, bureau changes, RBCA updates, etc.

# RBCA Updates



The current RBCA guidance document can be found [here](#)

**PETROLEUM TANK CLEANUP CONTACTS**

Main Number: (406) 444-6444

Email: [DEQTanks@mt.gov](mailto:DEQTanks@mt.gov)

**Helena PTCS Office**  
1225 Cedar St.  
Helena, MT 59601

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Program Support Specialist  
[Tom Dodge](#) (406) 444-6434

Env Science Specialist  
[Daphne Ryan](#) (406) 444-6728

Env Science Specialist  
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Lead Env Science Specialist  
[Shannon Williams-Cala](#) (406) 444-6377

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Lead Env Science Specialist  
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(406) 444-6444  
Martel Building 4E-B, 220 West Lamme St.

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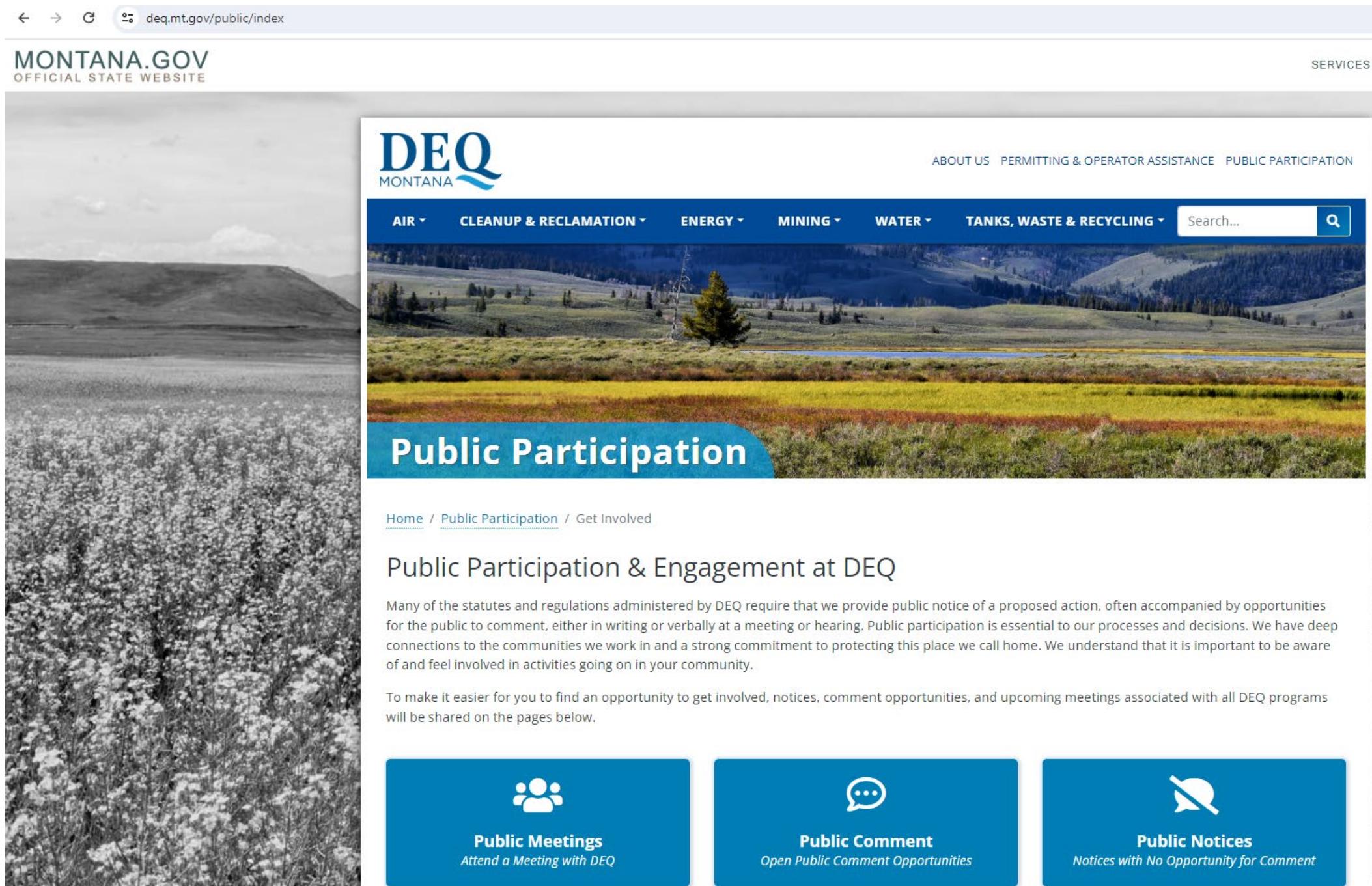
News

[Montana DEQ Launches MEPA Work Group to Enhance Public Engagement and Environmental Policy Implementation](#)

1/8/2024 | Tags: [Press Release](#)

The Montana Department of Environmental Quality (DEQ) is pleased to announce the formation of

# Public Notices with no opportunity for comment



The screenshot shows the DEQ Montana Public Participation page. The header includes the MONTANA.GOV official state website logo and a services menu. The main navigation bar features links for AIR, CLEANUP & RECLAMATION, ENERGY, MINING, WATER, and TANKS, WASTE & RECYCLING, along with a search bar. A large, scenic image of a mountain landscape serves as the background for the page. A prominent blue banner in the center reads "Public Participation". Below the banner, the page title is "Public Participation & Engagement at DEQ". A paragraph explains the importance of public participation in DEQ's processes. Three blue call-to-action boxes at the bottom provide links to "Public Meetings", "Public Comment", and "Public Notices".

[deq.mt.gov/public/index](http://deq.mt.gov/public/index)

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## Public Participation & Engagement at DEQ

Many of the statutes and regulations administered by DEQ require that we provide public notice of a proposed action, often accompanied by opportunities for the public to comment, either in writing or verbally at a meeting or hearing. Public participation is essential to our processes and decisions. We have deep connections to the communities we work in and a strong commitment to protecting this place we call home. We understand that it is important to be aware of and feel involved in activities going on in your community.

To make it easier for you to find an opportunity to get involved, notices, comment opportunities, and upcoming meetings associated with all DEQ programs will be shared on the pages below.

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Scroll down  
to date 1/12  
UST Draft  
Final RBCA  
Guidance

[Water Quality | Categorical Exclusion for the City of Harlem | Water System Improvements Project](#)

1/16/2024 | Tags: [MEPA](#), [Water](#), [Public Notice](#)

The Montana Department of Environmental Quality has reviewed the above named project for the City of Harlem, and based on this review, it has been determined that the proposed project meets the Categorical Exclusion criteria of the National Environmental Policy Act (NEPA) and the Montana...

[Air Quality | Phillips 66 - Billings Refinery](#)

1/12/2024 | Tags: [Air](#), [Public Notice](#)

The Department of Environmental Quality has prepared a Proposed Permit regarding a Montana Air Quality Permit, with conditions, for the above-named permittee.

[Underground Storage Tanks | Draft Final RBCA Guidance](#)

1/12/2024 | Tags: [MEPA](#), [Public Notice](#), [Tanks](#)

Draft FINAL - December 2023 Risk-based Corrective Action (RBCA) Guidance for Petroleum Releases

[Air Quality | Aldrich Pet Crematory](#)

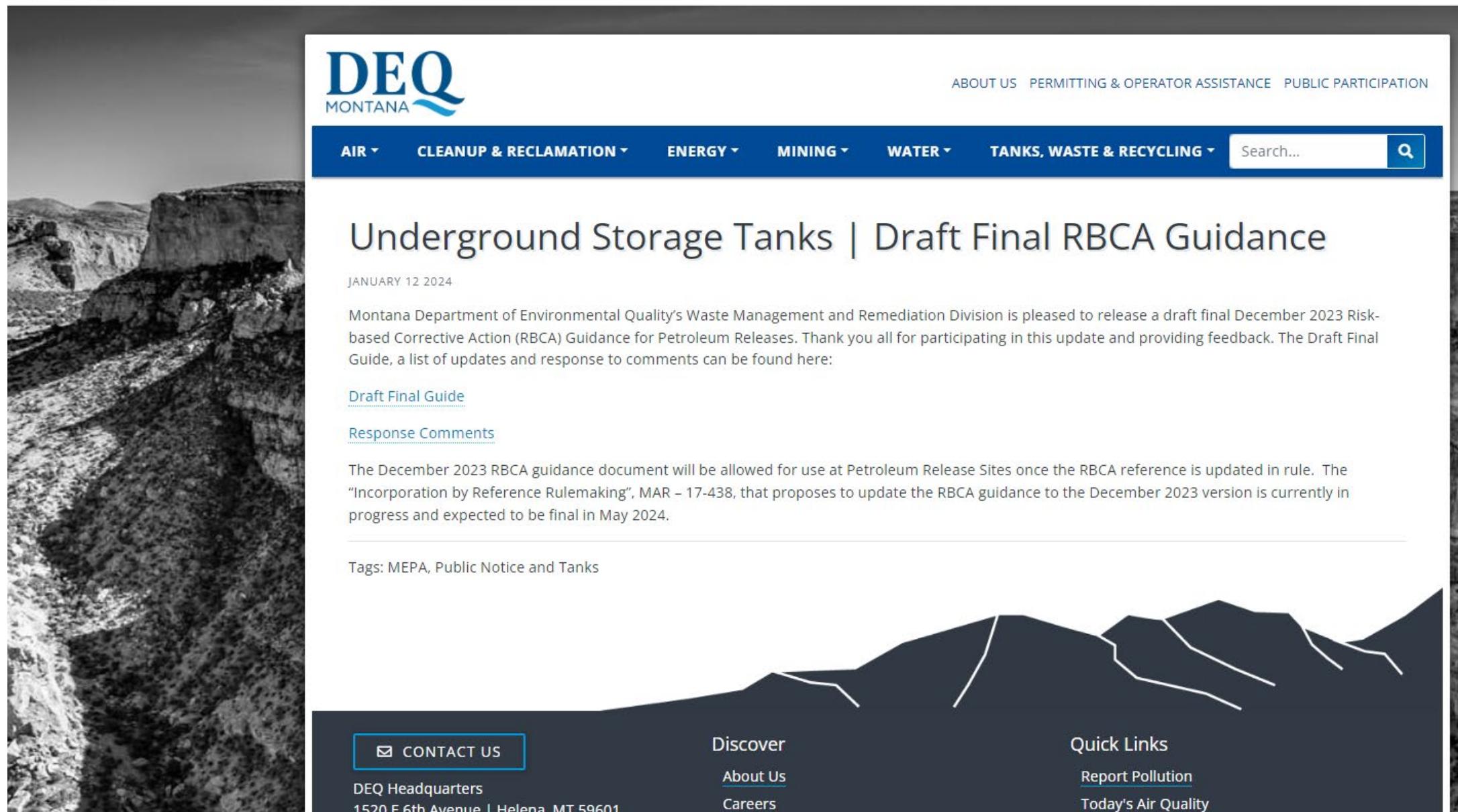
1/11/2024 | Tags: [MEPA](#), [Air](#), [Public Notice](#)

The Department of Environmental Quality has prepared a Department Decision regarding a Montana Air Quality Permit, with conditions, for the above-named permittee.

[Air Quality | Lightening Renewables](#)

1/10/2024 | Tags: [Air](#), [Public Notice](#)

The Department of Environmental Quality has prepared an Administrative Amendment regarding a



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## Underground Storage Tanks | Draft Final RBCA Guidance

JANUARY 12 2024

Montana Department of Environmental Quality's Waste Management and Remediation Division is pleased to release a draft final December 2023 Risk-based Corrective Action (RBCA) Guidance for Petroleum Releases. Thank you all for participating in this update and providing feedback. The Draft Final Guide, a list of updates and response to comments can be found [here](#):

[Draft Final Guide](#)

[Response Comments](#)

The December 2023 RBCA guidance document will be allowed for use at Petroleum Release Sites once the RBCA reference is updated in rule. The "Incorporation by Reference Rulemaking", MAR - 17-438, that proposes to update the RBCA guidance to the December 2023 version is currently in progress and expected to be final in May 2024.

Tags: MEPA, Public Notice and Tanks

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# Changes in 2023 Draft RBCA Guide- Risk Assessment Modifications

Construction worker Risk Based Screening Levels (RBSLs) re-calculated using subchronic toxicity values where available.

- Toxicity values that are protective for short term exposure (EPA: noncarcinogenic effects between 2 weeks – 7 years; ATSDR- <1 year)
- Since Construction worker exposure is less than 1 year, subchronic is used where available.

Residential and Commercial worker RBSLs re-calculated to incorporate the Montana State Exposure Frequencies.

- Currently being incorporated in a “Tier 3” on a site-specific basis. The 2023 draft incorporates the Mt state exposure frequencies at Tier 1, (Table 1) as they cover all of Montana.
- Exposure frequencies assume in Montana we have a minimum of 3 months of snow cover and a 2-week vacation vs. EPA screening values which do not assume snow cover.

Comprehensive review completed of all equation inputs; updates made, where needed. This and other equation changes led to either an increase or a decrease in the final RBSL, depending on the chemical and receptor.

# Changes in 2023 Draft RBCA Guide

All Direct Contact non-carcinogenic RBSLs were re-calculated to incorporate a Hazard Quotient 0.1 (instead of 0.125) to ensure protectiveness in the initial screening phase. This will allow up to 10 (instead of 8) non-carcinogenic compounds present in the initial screening (Tier 1).

You will see a greater change in the Tier 2 adjustments for non-carcinogens due to this change in the HQ.

Example: from 2018 RBCA, page 26

Compound	Cancer/ Non-Cancer	Adjustment mg/kg * adj. factor	Adjusted Tier 2 RBSL mg/kg	Cancer Risk Level	Hazard Quotient
Benzene	Cancer	1.3 * 10/3	4.3	$3.3 \times 10^{-6}$	NA
Toluene	Non-cancer	610 * 8/2	2440	NA	0.5
Ethylbenzene	Cancer	6.4 * 10/3	21	$3.3 \times 10^{-6}$	NA
C9-C12 Aliphatics	Non-cancer	77 * 8/2	308	NA	0.5
Naphthalene	Cancer	4.3 * 10/3	14	$3.3 \times 10^{-6}$	NA
<b>Totals</b>	--	--	--	<b><math>1 \times 10^{-5}</math></b>	<b>1</b>

# Changes in 2023 Draft RBCA Guide Clarifications

Layout changed, easier format to follow and find things.

New Table 4 series (4a, 4b, & 4c) added. These are Tier 2 RBSL tables walking the user through the Tier 2 RBSL adjustment along with instructions for use to determine the appropriate Tier 2 RBSL for each release.

Appendix D provides an expanded discussion on the derivation of groundwater RBSLs and a discussion on actions needed based on exceedances of water quality standards or screening levels.

2018 RBCA Section 3.4.3 updated: Discussion regarding the incorporation of old Total Petroleum Hydrocarbon data (DRO/GRO) has been expanded adding additional information on the adjustments.

# Changes in 2023 Draft RBCA Guide

## removal of redundant information

Table 4, Conceptual Site Model (CSM) table, removed from guidance. RBCA now refers readers to the Release Closure Plan to access the CSM and instructions on filling it out.

Tables 1 (Surface Soil RBSLs) & 2 (Subsurface Soil RBSLs) removed and replaced with one table (new Table 1) which provides the RBSLs used for release confirmation only and a new Table 2 that contains all Tier 1 RBSLs.

Metals Screening Table, Table F, deleted and recommendation to work with your program on metals screening levels added.

Vapor Intrusion, Section 4, has been deleted. RBCA now refers readers to DEQ Vapor Intrusion Guidance.

# Changes in 2023 Draft RBCA Guide lab/preservation method modifications

Order of compounds in screening Tables rearranged to be consistent with most common laboratory reports.

Massachusetts Method references for EPH and VPH updated to newest versions.

In field methanol preservation option added for VPH and VOCs. Airtight collection of VPH soils option retained but must be preserved in methanol by the lab within 48 hours.

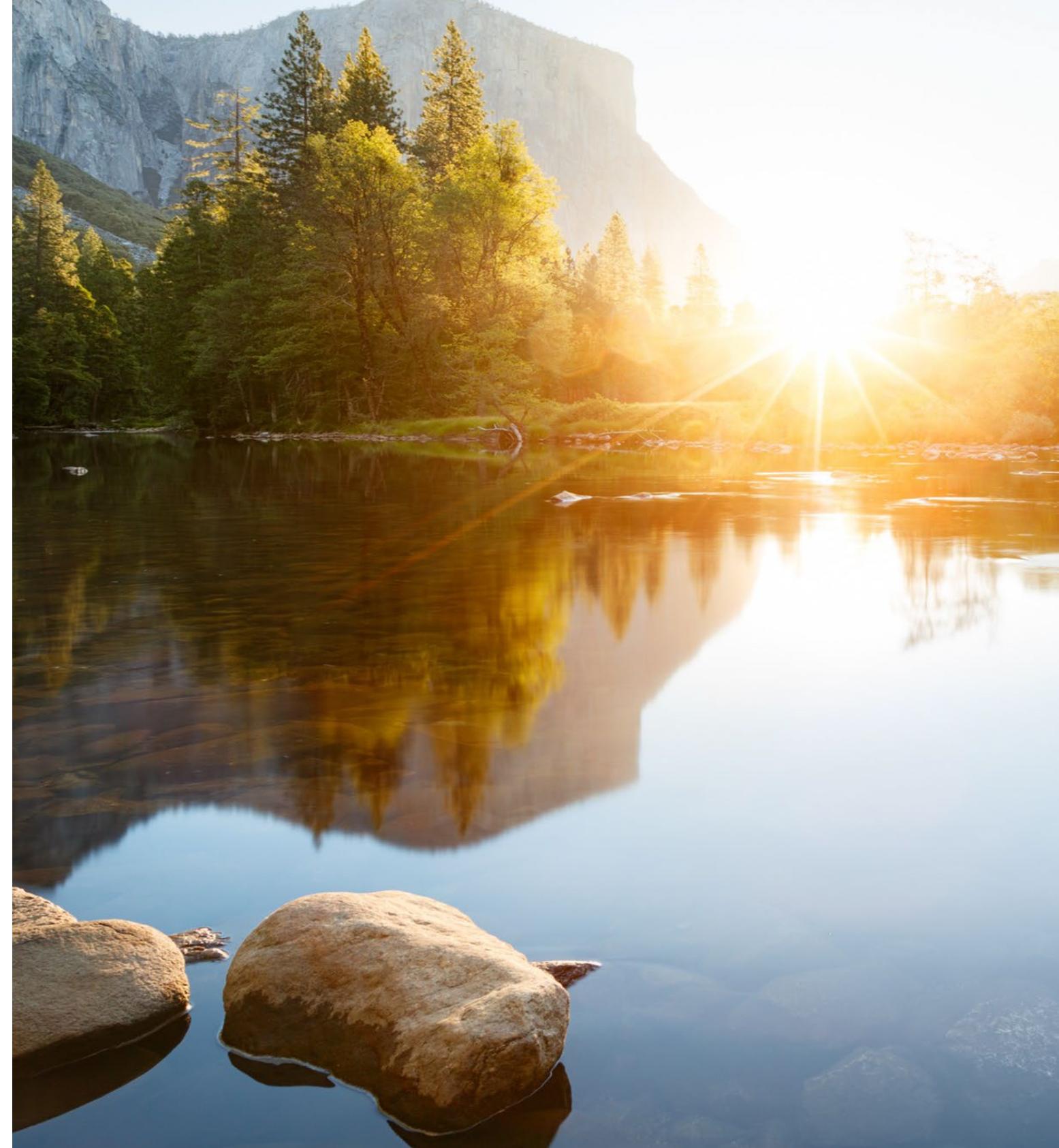
# Incorporation by Reference Rulemaking

Notice of Proposed Rulemaking: MAR – 17-438

Comment Period: January 12 – February 9, 2024

The MT DEQ, Waste Management and Remediation Division is proposing to adopt and incorporate by reference the most recent edition of

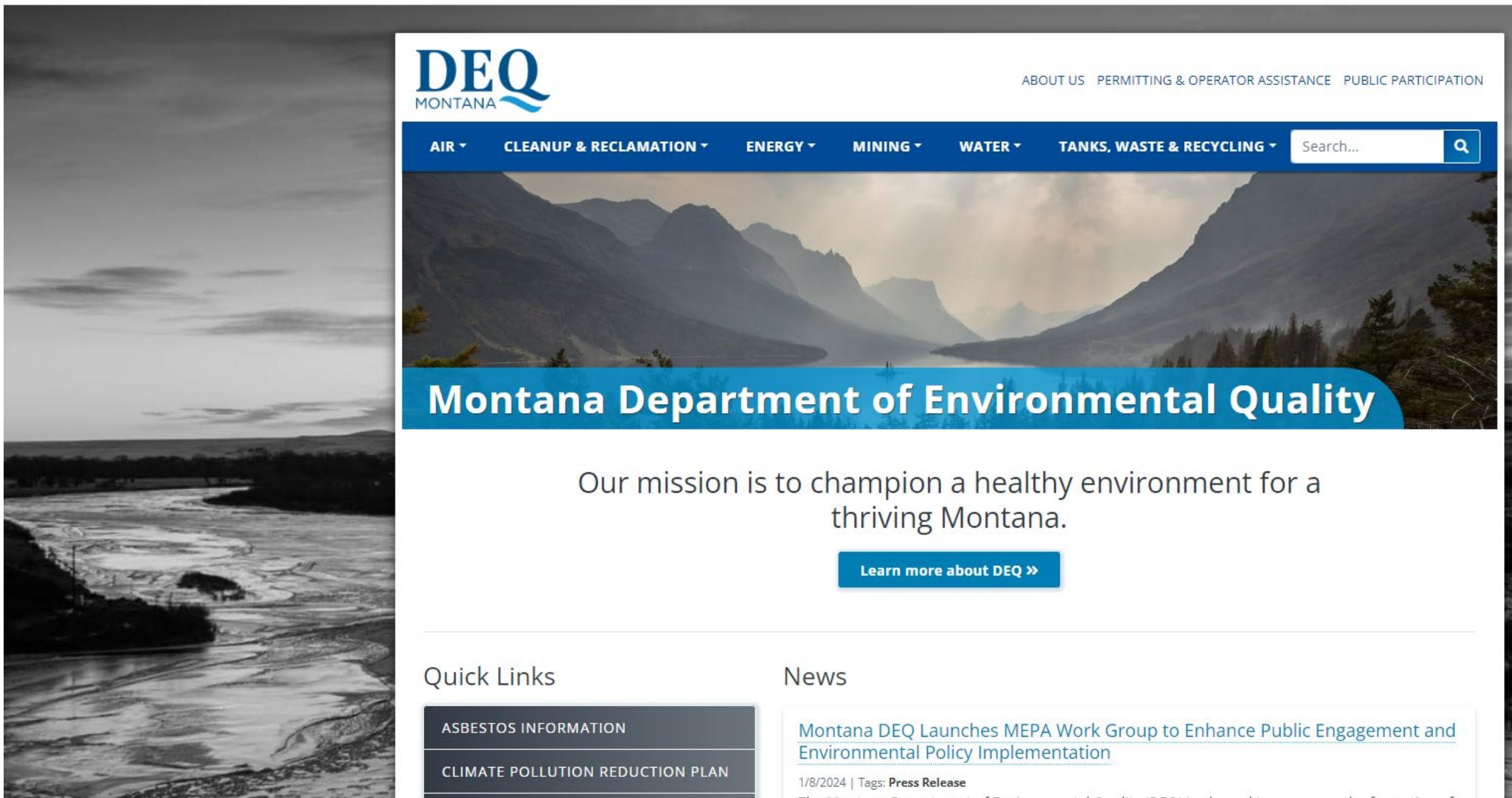
- Federal Drinking Water Maximum Contaminant Levels (MCLs),
- U.S. Environmental Protection Agency Regional Screening Levels (RSLs),
- Reportable Quantities for Hazardous Substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA),
- The Montana Risk-Based Corrective Action Guidance for Petroleum Releases.



# Incorporation By Reference Rulemaking

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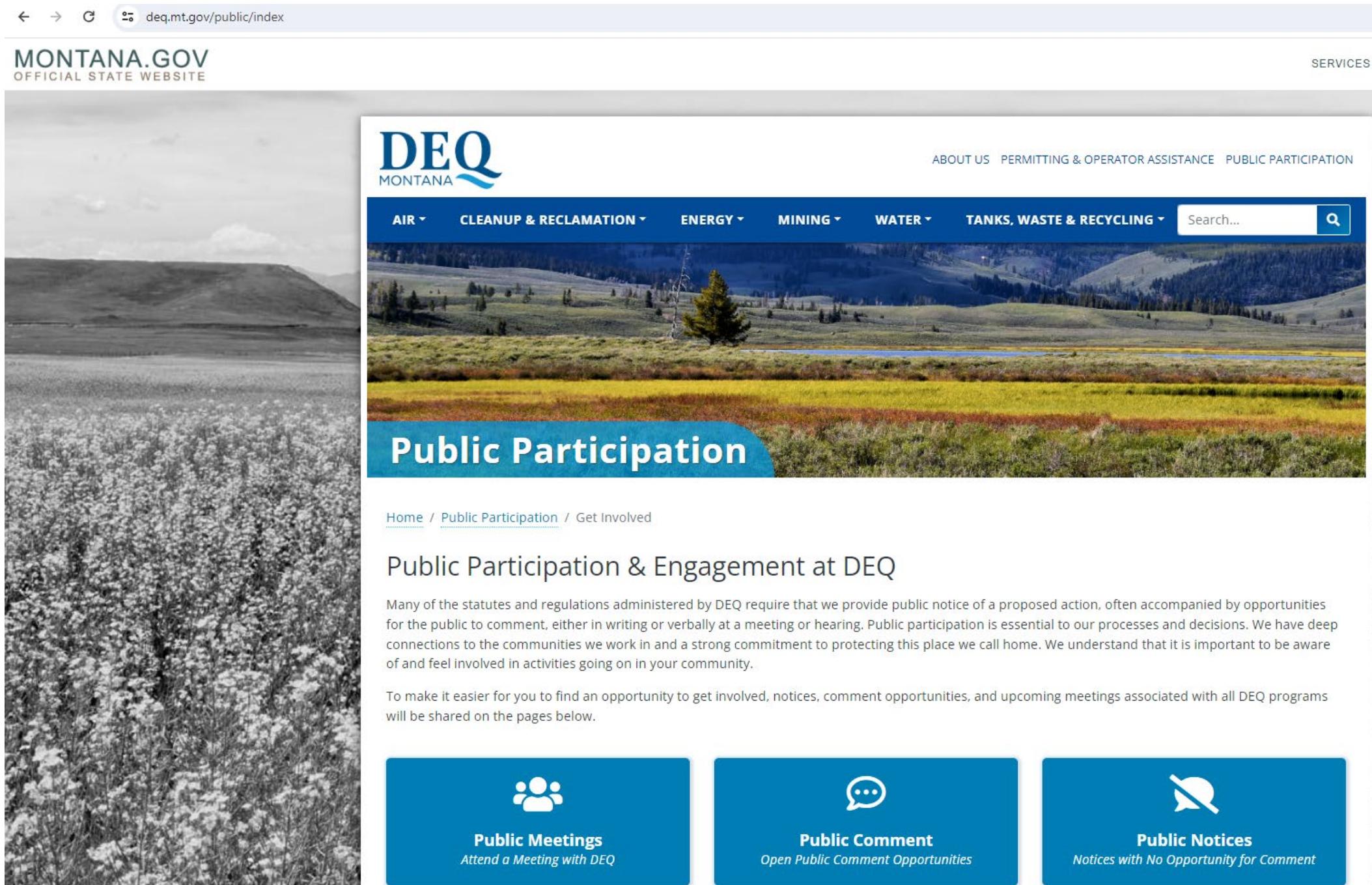
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1/8/2024 | Tags: [Press Release](#)

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[deq.mt.gov/public/index](http://deq.mt.gov/public/index)

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# Cleanup



deq.mt.gov/public/cleanup-public

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## Get Involved

To make it easier for you to find an opportunity to get involved, notices, comment opportunities, and upcoming meetings associated with Cleanup and Reclamation will be shared here. To see all opportunities go to [Public Participation](#). If you do not see any articles below, there are no current public participation opportunities at this time. Please check back periodically for new articles.

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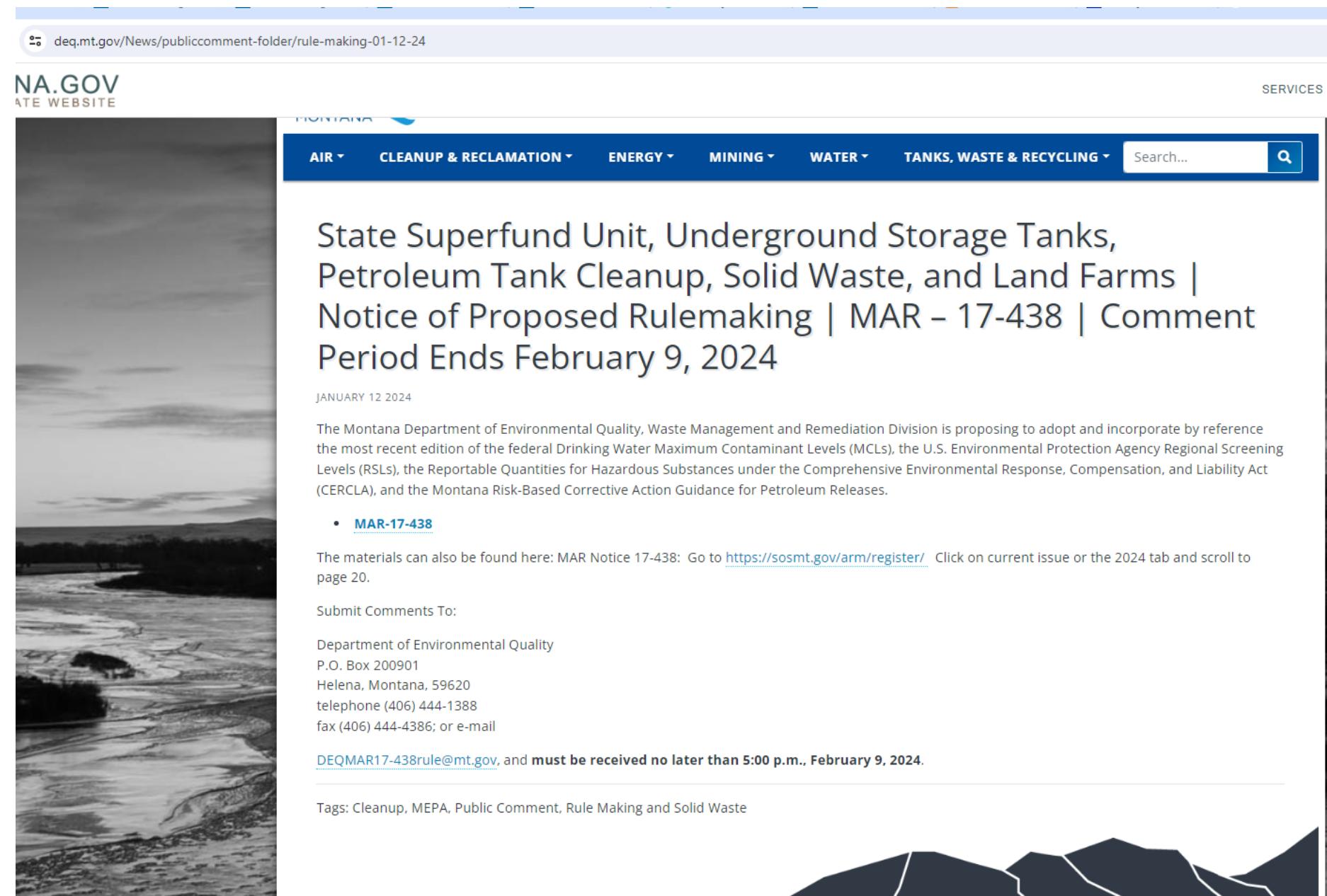
WATER

[Colstrip Steam Electric Station | Remedial Progress Annual Public Meeting | February 15, 2024](#)  
1/24/2024 | Tags: [Cleanup](#), [Public Meeting](#), [Colstrip](#)  
The Montana Department of Environmental Quality (DEQ) is holding an informational public meeting on the annual progress for remedies and monitoring at the Colstrip Steam Electric Station February 15, 2024.

[State Superfund Unit, Underground Storage Tanks, Petroleum Tank Cleanup, Solid Waste, and Land Farms | Notice of Proposed Rulemaking | MAR – 17-438 | Comment Period Ends February 9, 2024](#)  
1/12/2024 | Tags: [Cleanup](#), [MEPA](#), [Public Comment](#), [Rule Making](#), [Solid Waste](#)  
The Montana Department of Environmental Quality, Waste Management and Remediation Division is proposing to adopt and incorporate by reference, MAR-17-438.

[State's Selected Cleanup Plan to Move Forward at Colstrip Ash Ponds](#)  
9/25/2023 | Tags: [Cleanup](#), [Colstrip](#), [Press Release](#)  
The Montana Department of Environmental Quality (DEQ) has received notice from Talen Montana, LLC, the operator of the Colstrip Steam Electric Station, that the company will not pursue an alternative cleanup strategy for the Colstrip coal ash pond cleanup at the Units 1&2 Stage One Evaporation...

Closes 5:00  
today



deq.mt.gov/News/publiccomment-folder/rule-making-01-12-24

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## State Superfund Unit, Underground Storage Tanks, Petroleum Tank Cleanup, Solid Waste, and Land Farms | Notice of Proposed Rulemaking | MAR - 17-438 | Comment Period Ends February 9, 2024

JANUARY 12 2024

The Montana Department of Environmental Quality, Waste Management and Remediation Division is proposing to adopt and incorporate by reference the most recent edition of the federal Drinking Water Maximum Contaminant Levels (MCLs), the U.S. Environmental Protection Agency Regional Screening Levels (RSLs), the Reportable Quantities for Hazardous Substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Montana Risk-Based Corrective Action Guidance for Petroleum Releases.

- [MAR-17-438](#)

The materials can also be found here: MAR Notice 17-438: Go to <https://sosmt.gov/arm/register/>. Click on current issue or the 2024 tab and scroll to page 20.

Submit Comments To:

Department of Environmental Quality  
P.O. Box 200901  
Helena, Montana, 59620  
telephone (406) 444-1388  
fax (406) 444-4386; or e-mail  
[DEQMAR17-438rule@mt.gov](mailto:DEQMAR17-438rule@mt.gov), and must be received no later than 5:00 p.m., February 9, 2024.

Tags: Cleanup, MEPA, Public Comment, Rule Making and Solid Waste

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

17.50.1612 ANALYTICAL METHODS (1) For purposes of this subchapter, the department adopts and incorporates by reference:

(a) remains the same.  
(b) Montana Risk-based Corrective Action Guidance for Petroleum Releases, ~~(May 2018) (December 2023)~~ as the analytical methodology landfarms must utilize and Table 1 of the Montana Risk-based Corrective Action Guidance for Petroleum Release as the standards for compliance with remediation requirements outlined in ARM 17.50.1617. A copy of the Montana Risk-based Corrective Action Guidance for Petroleum Releases, ~~(May 2018) (December 2023)~~ may be obtained at <http://deq.mt.gov/Land/lust> or by contacting MDEQ the Department of Environmental Quality at P.O. Box 200901, Helena, MT 59620-0901 or 1 (406) 444-5300.

(2) remains the same.

MAR Notice No. 17-438

1-1/12/24

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-22-

AUTH: 75-10-204, MCA  
IMP: 75-10-204, MCA

17.50.1617 LANDFARM FACILITY REMEDIATION STANDARDS

(1) Contaminated soils are considered remediated when:  
(a) contaminant concentrations listed in Montana Risk-based Corrective Action Guidance for Petroleum Releases, Table 1 ~~(May 2018) (December 2023)~~ are permanently reduced to the residential RSBL concentrations.  
(2) and (3) remain the same.  
(4) The owner or operator of a landfarm facility may not supply or use soils for any purpose exceeding the contaminant concentrations specified in Montana Risk-based Corrective Action Guidance for Petroleum Releases, Table 1 ~~(May 2018) (December 2023)~~.  
(5) remains the same.

AUTH: 75-10-204, MCA  
IMP: 75-10-204, MCA;



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ensure a clean  
and healthy  
environment

# Connect with us

- **Terri Dorrington**
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