

APPENDIX B - CLEANUP/RESTORATION AND FUNDING OPTIONS FOR MINE OPERATIONS OR OTHER SOURCES OF METALS CONTAMINATION

There are several approaches for cleanup of mining operations or other sources of metals contamination in the State of Montana. Most of these are discussed below, with focus on abandoned or closed mining operations.

B1.0 THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)

CERCLA is a federal law that addresses cleanup on sites, such as historic mining areas, where there has been a hazardous substance release or threat of release. Sites are prioritized on the National Priority List (NPL) using a hazard ranking system with significant focus on human health. Petroleum related products and associated raw materials are not covered under CERCLA. Other federal regulations such as Resource Conservation and Recovery Act and associated Leaking Underground Storage Tank cleanup requirements tend to address petroleum.

Under CERCLA, the potentially responsible party or parties must pay for all remediation efforts based upon the application of a strict joint and several liability approach whereby any existing or historical land owner can be held liable for restoration costs. Where viable landowners are not available to fund cleanup, funding can be provided under Superfund authority. Federal agencies can be delegated Superfund authority, but cannot access funding from Superfund.

Cleanup actions under CERCLA must be based on professionally developed plans and can be categorized as either Removal or Remedial. Removal actions can be used to address the immediate need to stabilize or remove a threat where an emergency exists. Cleanup of metals-contaminated soils in the Town of Superior was performed as a removal action.

Once removal activities are completed, a site can then undergo Remedial Actions or may end up being scored low enough from a risk perspective that it no longer qualifies to be on the NPL for Remedial Action. Under these conditions the site is released back to the state for a "no further action" determination. At this point there may still be a need for additional cleanup since there may still be significant environmental threats or impacts, although the threats or impacts are not significant enough to justify Remedial Action under CERCLA. Any remaining threats or impacts would tend to be associated with wildlife, aquatic life, or aesthetic impacts to the environment or aesthetic impacts to drinking water supplies versus threats or impacts to human health. A site could, therefore, still be a concern from a water quality restoration perspective, even after CERCLA removal activities have been completed.

Remedial actions may or may not be associated with or subsequent to removal activities. A remedial action involves cleanup efforts whereby Applicable or Relevant and Appropriate Requirements and Standards (ARARS), which include state water quality standards, are satisfied. Once ARARS are satisfied, then a site can receive a "no further action" determination.

B2.0 THE MONTANA COMPREHENSIVE CLEANUP AND RESTORATION ACT (CECRA)

The 1985 Montana Legislature passed the Environmental Quality Protection Fund Act. This Act created a legal mechanism for the Department to investigate and clean up, or require liable persons to investigate and clean up, hazardous or deleterious substance facilities in Montana. The 1985 Act also established the Environmental Quality Protection Fund (EQPF). The EQPF is a revolving fund in which all penalties and costs recovered pursuant to the EQPF Act are deposited. The EQPF can be used only to fund activities relating to the release of a hazardous or deleterious substance. Although the 1985 Act established the EQPF, it did not provide a funding mechanism for the Department to administer the Act. Therefore, no activities were conducted under this Act until 1987.

The 1987 Montana Legislature passed a bill creating a delayed funding mechanism that appropriated 4 percent of the Resource Indemnity Trust (RIT) interest money for Department activities at non-National Priority List facilities beginning in July 1989 (§ 15-38-202 Montana Code Annotated (MCA)). In October 1987, the Department began addressing state Superfund facilities. Temporary grant funding was used between 1987 and 1989 to clean up two facilities and rank approximately 250 other facilities. Beginning in fiscal year 1995, the 4 percent allocation was changed to 6 percent to adjust for other legislative changes in RIT allocations. Effective July 1, 1999, the 6 percent allocation was increased to 9 percent.

The 1989 Montana Legislature significantly amended the Act, changing its name to the Montana Comprehensive Environmental Cleanup and Responsibility Act (CECRA) (§75-10-75 MCA) and providing the Department with similar authorities as provided under the federal Superfund Act (CERCLA) (U.S. Environmental Protection Agency, 2011). With the passage of CECRA, the state Superfund program became the CECRA Program. Major revisions to CECRA did not occur until the 1995 Legislature, when the Voluntary Cleanup and Redevelopment Act (VCRA) (§75-10-730 MCA), a mixed-funding pilot program, and a requirement to conduct a collaborative study on alternative liability schemes were added and provisions related to remedy selection were changed. Based on the results of the collaborative study, the 1997 Legislature adopted the Controlled Allocation of Liability Act, which provides a voluntary process for the apportionment of liability at CECRA facilities and establishes an orphan share fund. Minor revisions to CECRA were also made by the 1999 and 2001 Legislatures.

As of June 2013, there were 208 facilities on the CECRA Priority List (Montana Department of Environmental Quality, 2011a). CECRA facilities are ranked maximum, high, medium, low and operation and maintenance priority based on the severity of contamination at the facility and the actual and potential impacts of contamination to public health, safety, and welfare and the environment. The Department maintains database narratives that explain contamination problems and status of work at each state Superfund facility.

B2.1 THE CONTROLLED ALLOCATION OF LIABILITY ACT (CALA)

The Montana Legislature added the Controlled Allocation of Liability Act (Montana Department of Environmental Quality, 2011b) (§§ 75-10-742 through 752, MCA) to the Comprehensive Environmental Cleanup and Responsibility Act (Montana Department of Environmental Quality, 2011a) (§§ 75-10-701 through 752, MCA), the state Superfund law, in 1997. The department administers CALA including the orphan share fund it establishes.

CALA (Montana Department of Environmental Quality, 2011b) is a voluntary process that allows Potentially Responsible Parties (PRP) to petition for an allocation of liability as an alternative to the strict, joint and several liability scheme included in CECRA. CALA provides a streamlined alternative to litigation that involves negotiations designed to allocate liability among persons involved at facilities requiring cleanup, including bankrupt or defunct persons. Cleanup of these facilities must occur concurrently with the CALA process and CALA provides the funding for the orphan share of the cleanup. Since CECRA cleanups typically involve historical contamination, liable persons often include entities that are bankrupt or defunct and not affiliated with any viable person by stock ownership. The share of cleanup costs for which these bankrupt or defunct persons are responsible is the orphan share. Department represents the interests of the orphan share throughout the CALA process.

The funding source known as the orphan share fund is a state special revenue fund created from a variety of sources. These include an allocation of 8.5 percent of the metal mines license tax, certain penalties and additional funds from the resource indemnity trust fund and 25 percent of the resource indemnity and groundwater assessment taxes (which will increase to 50 percent when the RIT reaches \$100 million). The current balance of the Orphan Share Fund is around \$4 million and revenues projected for the rest of this biennium are about \$2 million.

In the absence of a demonstrated hardship, claims for orphan share reimbursement may not be submitted until the cleanup is complete. This ensures that facilities are fully remediated before reimbursement. The result is that a PRP could be expending costs it anticipates being reimbursed for some time before the PRP actually submits a claim.

CALA was designed to be a streamlined, voluntary allocation process. For facilities where a PRP does not initiate the CALA process, strict, joint and several liability remains. Any person who has been noticed as being potentially liable as well as any potentially liable person who has received approval of a voluntary cleanup plan can petition to initiate the CALA process. CALA includes fourteen factors to be considered in allocating liability. Based on these factors causation weighs heavily in allocation but is not the only factor considered.

B2.2 THE VOLUNTARY CLEANUP AND REDEVELOPMENT ACT (VCRA)

The 1995 Montana Legislature amended the Comprehensive Environmental Cleanup and Responsibility Act (CECRA) (Section 75-10-705 MCA), creating the Voluntary Cleanup and Redevelopment Act (VCRA) (Sections 75-10-730 through 738, MCA). VCRA formalizes the voluntary cleanup process in the state. It specifies application requirements, voluntary cleanup plan requirements, agency review criteria and time frames, and conditions for and contents of no further action letters.

The act was developed to permit and encourage voluntary cleanup of facilities where releases or threatened releases of hazardous or deleterious substances exist, by providing interested persons with a method of determining what the cleanup responsibilities will be for reuse or redevelopment of existing facilities. Any entity (such as facility owners, operators, or prospective purchasers) may submit an application for approval of a voluntary cleanup plan to the Department. Voluntary Cleanup Plans (VCPs) may be submitted for facilities whether or not they are on the CECRA Priority List (Montana Department of Environmental Quality, 2011a). The plan must include (1) an environmental assessment of the facility; (2) a remediation proposal; and (3) the written consent of current owners of the facility or property to both the implementation of the voluntary cleanup plan and access to the facility by the applicant and its

agents and Department. The applicant is also required to reimburse the Department for any costs that the state incurs during the review and oversight of a voluntary cleanup effort.

The act offers several incentives to parties voluntarily performing facility cleanup. Any entity can apply and liability protection is provided to entities that would otherwise not be responsible for site cleanup. Cleanup can occur on an entire facility or a portion of a facility. The Department cannot take enforcement action against any party conducting an approved voluntary cleanup. The Department review process is streamlined: the Department has 30 to 60 days to determine if a voluntary cleanup plan is complete, depending on how long the cleanup will take. When the Department determines an application is complete, it must decide within 60 days whether to approve or disapprove of the application; these 60 days also includes a 30-day public comment period. The Department's decision is based on the proposed uses of the facility identified by the applicant and the applicant conducts any necessary risk evaluation. Once a plan has been successfully implemented and Department costs have been paid, the applicant can petition the Department for closure. The Department must determine whether closure conditions are met within 60 days of this petition and, if so, the Department will issue a closure letter for the facility or the portion of the facility addressed by the voluntary cleanup.

The act is contained in §§ 75-10-730 through 738, MCA. Major sections include: § 75-10-732 - eligibility requirements; § 75-10-733 and § 75-10-734 - environmental property assessment and remediation proposal requirements; § 75-10-735 - public participation; § 75-10-736 - timeframes and procedures for Department approval/disapproval; § 75-10-737 - voluntary action to preclude remedial action by DEQ; and § 75-10-738 - closure process. Section 75-10-721, MCA of CECRA must also be met.

The Department does not currently have a memorandum of agreement (MOA) with the Environmental Protection Agency (EPA) for its Voluntary Cleanup Program. However, the Department and EPA are in the process of negotiating one. EPA has indicated that Montana's Voluntary Cleanup Program includes the necessary elements to establish the MOA. Currently, EPA is reviewing the latest draft of the MOA.

The Department has produced a VCRA Application Guide (Montana Department of Environmental Quality, 2012a) to assist applicants in preparing a new application; this guide is not a regulation and adherence to it is not mandatory.

As of 2012, the Department has approved 31 voluntary clean plans, including mining, manufactured gas, wood treating, dry cleaning, salvage, pesticide, fueling, refining, metal plating, defense, and automotive repair facilities (Montana Department of Environmental Quality, 2012b). Applicants have expressed interest and/or submitted applications for voluntary cleanup at fifteen other facilities. The Department maintains a registry of VCRA facilities.

B3.0 ABANDONED MINE LANDS CLEANUP

The purpose of the Abandoned Mine Lands Reclamation (AML) Program is to protect human health and the environment from the effects of past mining and mineral processing activities. Funding for cleanup is via the Federal Abandoned Mine Fund, which is distributed to the State of Montana via a grant program. The Abandoned Mine Fund is generated by a per ton fee levied on coal producers and the annual grant is based on coal production. There are no collections or contributions to the Abandoned Mine Fund from mineral production beyond coal production fees. Expenditures under the abandoned mine program can only be made on “eligible” abandoned mine sites. For a site to be eligible, mining must have ceased

prior to August 4, 1977 (private lands, other dates apply to federal lands). In addition, there must be no continuing reclamation responsibility under any state or federal law. No continuing reclamation responsibility can mean no mining bonds or permits have been issued for the site, however, it has also been interpreted to mean that there can be no viable responsible party under State or Federal laws such as CERCLA or CECRA. While lands eligible for the Abandoned Mine Funds include hard rock mines and gravel pits (collectively categorized as “non-coal”), abandoned coalmines have the highest priority for expenditures from the Fund. As part of the approved plan for Montana, abandoned coal mines are required to be prioritized and funded for reclamation ahead of eligible non-coal mine sites. . Cleanup of any eligible site is prioritized based primarily on human health, which can include health risks such as open shafts, versus risks only associated with hazardous substances, as is the case under CERCLA.

Montana's AML Program maintains an inventory of all potential cleanup sites, and also has a list of non-coal priority sites from which to work from. The DEQ conducts cleanups under the Abandoned Mine Funds as public works contracts utilizing professional engineers for design purposes and private construction contractors to perform the actual work.

Limited scoping and ranking of water pollution from discharging abandoned coal mines has been completed and Montana’s AML program is evaluating how to proceed with funding water treatment and stream quality restoration at the highest priority abandoned coal mine sites. In cases of non-coal cleanups, mitigating impacts associated with discharging adits can be included within the cleanup, although ongoing water treatment is not pursued as a reclamation option to avoid long-term operational commitments, which are outside the scope of the program and funding source. Therefore, even after cleanup, an abandoned non-coal mine site could still represent a source of contaminant loading to a stream, especially if there is a discharging adit associated with the site. Where discharging adits are not of concern, cleanup of either coal or non-coal mines may generally represent efforts to achieve all reasonable land, water, and soil conservation practices for that site.

A Guide to Abandoned Mine Reclamation (Noble and Koerth, 1996) provides further description of the Abandoned Mine Lands Program and how cleanup activities are pursued.

B4.0 CLEANUP ON FEDERAL AGENCY LANDS

A Federal land management agency may pursue cleanup actions outside of any requirements under CERCLA or CECRA where such activities are consistent with overall land management goals and funding availability.

B5.0 PERMITTED OR BONDED SITES

Newer mining sites that are or have been in recent operation are required to post bonds as part of their permit conditions. These bond and permit conditions help ensure cleanup to levels that will satisfy Montana Water Quality Standards during operation and after completion of a mining operation. Such sites also include larger placer mines greater than 5 acres in size. There are no permitted or bonded sites in the Flint Creek TMDL planning area.

B6.0 VOLUNTARY CLEANUP AGREEMENT

At least one location within Montana (the Upper Blackfoot Mining Complex) is being addressed via a voluntary cleanup approach based on an agreement between the responsible person and the State of Montana. Although similar in nature to the goals of CECRA, this cleanup effort is currently not considered a remedial action under CECRA. The responsible person is responsible for cleanup costs in this situation.

B7.0 LANDOWNER VOLUNTARY CLEANUP OUTSIDE OF A STATE DIRECTED OR STATE NEGOTIATED EFFORT

A landowner could pursue cleanup outside the context of CECRA or other state negotiated cleanup approaches. Under such conditions, liability would still exist since there is presumably a lack of professional oversight and assurance of meeting appropriate environmental and human health goals. Regulatory requirements such as where waste can be disposed, stormwater runoff protection, and multiple other environmental conditions would still need to be followed to help ensure that the cleanup activity does not create new problems. This approach can be risky since the potential for additional future work would likely make it more cost effective to pursue cleanup under CECRA or some other state negotiated approach where PRP liability can be resolved.

B8.0 STATE EMERGENCY ACTIONS

Where a major emergency exists, the State can undertake remedial actions and then pursue reimbursement from a responsible party. This situation does not exist within the Douglas Creek project area, nor the Flint Creek TMDL planning area.

B9.0 REFERENCES

Montana Department of Environmental Quality. 2011a. Comprehensive Environmental Compensation Responsibility Act (CECRA) Priority List.

<http://deq.mt.gov/StateSuperfund/cecralistformats.mcp>. Accessed 2/21/2013a.

----- 2011b. Controlled Allocation of Liability Act (CALA) Program.

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----- 2012a. Voluntary Cleanup and Redevelopment Act (VCRA) Application Guide. Accessed 2/21/2013a.

----- 2012b. Voluntary Cleanup and Redevelopment Act (VCRA) Registry.

<http://deq.mt.gov/StateSuperfund/PDFs/VCRARegistry.pdf>. Accessed 2/21/2013b.

Noble, Cassandra and John Koerth. 1996. Montana ... Bringing the Land Back to Life: A Guide to Abandoned Mine Reclamation. Helena, MT: Montana Department of Environmental Quality.

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