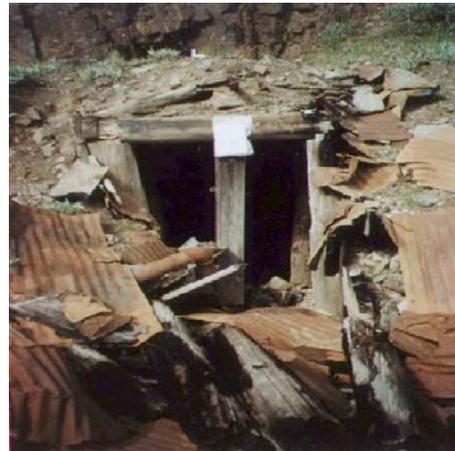
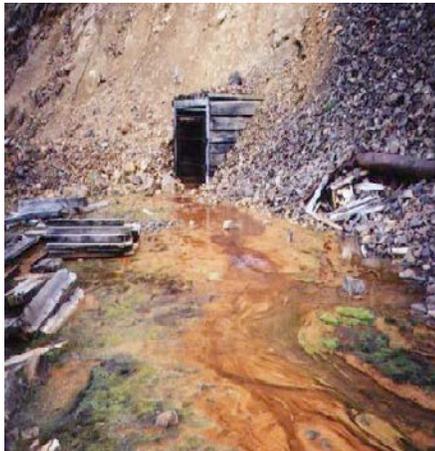


PROGRAMMATIC REVIEW PLAN

Restoration of Abandoned Mines Sites (RAMS) Program



U. S. Army Corps of Engineers
Albuquerque District

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US Army Corps
of Engineers ®

PROGRAMMATIC REVIEW PLAN

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1. PURPOSE AND REQUIREMENTS

Purpose. This Programmatic Review Plan (PgRP) defines the scope and level of peer review for the projects conducted under the Restoration of Abandoned Mines Sites (RAMS) Program.

- a. This document will serve as the overarching and project level review plan for all work products within the RAMS program. This plan identifies the process necessary for determining what products are required to undergo an Agency Technical Review (ATR) in addition to District Quality Control (DQC). RAMS authority includes planning and design documents, data bases and innovative technology demonstrations.
- b. The purpose of this PgRP is to ensure that a consistent review process is applied to all work products within the RAMS program. The Albuquerque District is responsible for ensuring that the integrity of this process is upheld for all work products.

Applicability. This PgRP is applicable to all RAMS planning and design products. All planning and design products require a DQC and/or ATR.

c. References

1. Comprehensive Environmental Response Compensation and Liability Act, 40 CFR 300.
2. EM 385-1-1, Safety and Occupational Health Requirements, Nov 2012.
3. 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response.
4. Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006.
5. QMS 02500-SPD, Preparation and Approval of Review Plans.
6. QMS 02500.1-SPD, Supplemental Review Plan Checklist.
7. Restoration of Abandoned Mine Sites Program Management Plan.

d. Program and Project Authority.

The Water Resource and Development Act (WRDA) of 1999, as amended authorized the Section 560, Abandoned and Inactive Non-coal Mine Restoration (Public Law 106-53). The RAMS program is a non-traditional stakeholder-driven program that positions the Corps to act not as the lead, but as an equal partner at most abandoned mine sites, while it support activities and priorities set by other Federal, State, tribal and non-profit entities. Under this authority, RAMS provides technical, planning, and design assistance to Federal and non-Federal interests in carrying out projects to address water quality problems caused by drainage and related activities from abandoned and inactive non-coal mines. In addition, the research component of the program is designed to provide applied engineering and scientific support to ensure efficient and cost-effective projects that will assist in restoring and protecting streams, rivers, wetlands, other water bodies, and riparian areas degraded by past mining practices. This also includes CERCLA site investigations, remedial investigation, feasibility studies, decision documents, and remedial designs.

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this PgRP. The RMO for the RAMS program will be a combination of the SPD Civil Works Integration Team for funding and the SPD Environmental Integration Team for technical and regulatory compliance.

Though funding is received by and tracked through Civil Works (CW), this is not a typical CW program and should not follow the CW template. Because AMLs follow the CERCLA process, planning processes are built into CERCLA as required by federal statute and regulation (40 CFR 300).

The RMO will coordinate with the Environmental and Munitions Center of Expertise (EMCX) to ensure the appropriate expertise is included on the review teams.

3. STUDY INFORMATION

- a. **Decision Document.** The RAMS program for abandoned non-coal mines was authorized by WRDA of 1999. The program products will consist of planning and design documents based on CERCLA requirements.
- b. **Study/Project Description.** The RAMS program will study abandoned non-coal mines, resulting from historical mining activities that are scattered throughout the western United States. These abandoned mines, which are located on private, state, and federal lands, contain numerous public safety and environmental hazards such as open shafts and acid rock drainage. Ownership of these sites, and the attendant responsibility to clean them up, has often been transferred to landowners. Many of these owners do not have the resources to clean up problems associated with the abandoned mines they inherited. The RAMS Program will look at selected abandoned mine sites in collaboration with stakeholders including, Federal land managers, State AML Programs, Native American nations and non-profit groups and associations. The USACE AML Program has the primary mission to plan, facilitate, and provide services and supplies necessary to support public land management agencies in protecting the history and cultural significance of AML while restoring these lands in a manner that is protective of human health, safety, and the environment.
- c. **Factors Affecting the Scope and Level of Review.**

Planning and program challenges include:

- Availability of funds.
- Stakeholder expectations.
- Regulatory requirements.

This program is considered to have low risk because:

- The Corps has a proven record of successfully completed projects that include CERCLA site investigations and mine closures from previous appropriations.

This program will not require Type I and Type II IEPRs because the CERCLA process requires reviews analogous to the IEPR.

Projects completed under this program do not pose a threat to the public and the range of influence from any on-site work activities is limited to the immediate project area. As required by CERCLA all chemical and physical hazards within the work site will be assessed and appropriate measures per EM 385-1-1 and 29 CFR 1910.120 will be taken to protect all on-site workers. Because of this, life safety assessments that are required by IEPR Type I and Type II (Safety Assurance Review - SAR) are not applicable.

As a result, DQC, and/or ATR are required under the following conditions:

- DQC shall be required for all projects in this program.
- ATR is also required for complex projects with a total cost greater than \$2 million and for all complex CERCLA Remedial Investigation or Remedial Designs.

d. In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC and ATR as required. The in-kind products and analyses to be provided by the non-Federal sponsor include:

1. Existing reports and data that they contribute to the study / project;
2. Assistance during public involvement actions;
3. Assistance during the formulation of alternatives.

Existing reports or data provided as part of the study are subject to peer review requirements.

4. DISTRICT QUALITY CONTROL (DQC)

All RAMS planning and design documents shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PgMP. The home district shall manage the DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC; product issues identified via DQC should be resolved prior to ATR when needed.

a. Documentation of DQC. DrChecks review software may be used to document all DQC comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to

ensure adequacy of the product. The four key parts of a quality review comment will normally include:

1. The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
2. The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not be properly followed;
3. The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
4. The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

b. Products to Undergo DQC. The RAMS planning and design documents will undergo DQC review.

c. Required DQC Expertise.

DQC Team Members/Disciplines	Expertise Required
Geologist Chemist Biologist General Engineering Risk Assessment	Required disciplines and level of expertise will be determined based on the project phase, type of mining activity, and potential contaminants present or expected to be present at the site.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR may be required for certain RAMS planning and design documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of qualified senior technical USACE personnel and may be supplemented by outside experts as appropriate. For each ATR event, the ATR team will examine, as part of its ATR activities, relevant DQC records and provide written comment in the ATR report as to the apparent adequacy of the DQC effort for the associated product or service.

a. Products to Undergo ATR.

- 1. ATR of Work Products** – Review of the appropriate work products will be conducted when those products are complete. The reviews should be appropriate to the level of risk and complexity inherent to the project, and verify compliance with clearly established policies, principles and procedures, using justified and valid assumptions. Verification shall include review of analysis assumptions; methods, procedures, and material used in the analysis; the appropriateness of the data used; and reasonableness of the results, including whether the product meets the customer’s need consistent with law and existing USACE policy.

The Work Product review will consist of DQC and then ATR. DQC will be conducted by qualified reviewers and documented prior to the start of ATR. The list of reviewers will be provided to SPA for inclusion in the PgRP. See the table below, for the list of DQC and ATRT reviewers for each work product.

Reviewer	
Geologist Chemist Biologist General Engineering Risk Assessment	Required disciplines and level of expertise will be determined based on the project phase, type of mining activity, and potential contaminants present or expected to be present at the site.

The Work Product ATR will be documented in a review report.

Contractor or sponsor generated reports and data will be reviewed in conjunction or as part of the study and supporting documentation during required review milestones for example DQC, ATR, etc.

- b. Required ATR Team Expertise.** The ATR Team shall be designated by the RMO and EMCX depending on the complexity of the project, phase requirements, mining activity, and contaminants present or expected to be present at the project site.

Note: SPA reserves the right to nominate specific reviewers by technical discipline.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR Lead should be a senior technical professional with extensive mining or CERCLA experience.

- c. Documentation of ATR.** DrChecks review software may be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure

adequacy of the product. The four key parts of a quality review comment will normally include:

1. The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
2. The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;
3. The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
4. The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, and EMCX), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the MSC for resolution. Once resolved, concerns can be closed with a description of the resolution in the response to comments. The Project Manager will prepare a Statement of Technical Compliance showing resolution for each comment. All ATR documentation will be compiled and included in the project record.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

This program will not require Type I and Type II IEPRs because the CERCLA process requires reviews analogous to the IEPR.

7. POLICY AND LEGAL COMPLIANCE REVIEW

RAMS planning and design documents will be reviewed throughout the study process for their compliance with law and policy. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in the RAMS planning and design documents.

8. COST ENGINEERING MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION

The requirement to use the MCX for review certification does not apply to HTRW projects and therefore is applicable to the RAMS program. Cost estimates for RAMS projects will be coordinated with certified cost engineers at the home District per the Procurement Instruction Letter (PIL) 2012-03-R1 Requirements for Development, Review and Approval of Independent Government Estimates.

9. MODEL CERTIFICATION AND APPROVAL

EC 1105-2-412 does not apply to HTRW projects and therefore is not applicable to the RAMS program. Any modeling associated with specific projects in the RAMS program will be reviewed by the EMCX for completeness and technical sufficiency.

The selection and application of the model and the input and output data is still the responsibility of the PDT and is subject to DQC, and ATR.

- a. Planning Models.** Planning models are not used for CERCLA projects. The planning requirements are inherent in the CERCLA process and required by 40 CFR 300.
- b. Engineering Models.** Any engineering models selected for a RAMS project will be chosen based on the existing conditions and technical requirements, including contaminants that are present or may be present at the project site. The PDT has the responsibility for selecting an appropriate model and will coordinate this decision with the RMO and EMCX.
- c. Value Engineering (VE).** VE studies will be performed for any projects exceeding \$10 M.

10. REVIEW SCHEDULES AND COSTS

- a. ATR Schedule and Cost.** The Albuquerque District shall provide labor funding by cross charge labor codes. Funding for travel, if needed, will be provided through government order. The Project Manager will ensure that a labor estimate is coordinated with the ATR Team Leader and work with the ATR Team Leader to ensure that adequate funding is available and is commensurate with the level of review needed. Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring.

The ATR Team Leader shall provide organization codes for each team member and a responsible financial point of contact (CEFMS responsible employee) for creation of labor codes. Reviewers shall monitor individual labor code balances and alert the ATR Leader to any possible funding shortages.

- b. Model Certification/Approval Schedule and Cost. Requirements for model approval and certification are provided in Section 9a and 9b above.

DETAILED SCHEDULE: Schedules will be prepared on a specific project basis.

11. PUBLIC PARTICIPATION

Public participation is required by the CERCLA process and will be coordinated with stakeholders and land managers. In addition, the RAMS Program Manager may conduct public awareness and information exchange activities as needed to support the program objectives.

12. REVIEW PLAN APPROVAL AND UPDATES

The South Pacific Division Commander is responsible for approving this PgRP. The Commander's approval reflects vertical team input as to the appropriate scope, level of detail, and level of review for the RAMS Program. The PgRP is a living document and may change as needed by the Program. The Albuquerque District is responsible for keeping the PgRP up to date. Minor changes to the review plan since the last Commander approval will be documented. Significant changes to the PgRP (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the PgRP, along with the Commanders' approval memorandum, should be posted on SPA's RAMS Program webpage. The latest PgRP should also be provided to the RMO and MSC.

13. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan can be directed to the following points of contact:

- Program Manager, 505-342-3694,
- Review Management Organization: Technical and regulatory compliance - 505-342-3475; Financial –415-503-6556
- SPD Reviewer: District Support Team Lead: 415-503-6556

ATTACHMENT 1: TEAM ROSTERS

Project Delivery Team Members

Name	Discipline	Phone
	Program/Project Manager, Civil Works Branch	505-342-3694
	Chief, Environmental Engineering Section	505-342-3474
	Civil Engineer, Geotechnical Section	505-342-3427
	Project Manager, Project Manager, SPK	916-557-7455
Other personnel assigned as needed for specific projects		

ATR Team (TBD)

Name	Discipline	Dist rict	Qualifications/ Experience	Phone

ATTACHMENT 2: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 3: ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
AFB	Alternative Formulation Briefing	MSC	Major Subordinate Command
ASA(CW)	Assistant Secretary of the Army for Civil Works	NED	National Economic Development
ATR	Agency Technical Review	NER	National Ecosystem Restoration
CFR	Code of Federal Regulations	NEPA	National Environmental Policy Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	O&M	Operation and maintenance
CSDR	Coastal Storm Damage Reduction	OMB	Office and Management and Budget
DPR	Detailed Project Report	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DQC	District Quality Control/Quality Assurance	OEO	Outside Eligible Organization
DX	Directory of Expertise	OSE	Other Social Effects
EA	Environmental Assessment	PCX	Planning Center of Expertise
EC	Engineer Circular	PDT	Project Delivery Team
EIS	Environmental Impact Statement		
EMCX	Environmental Munitions Center of Expertise	PAC	Post Authorization Change
EO	Executive Order	PMP	Project Management Plan
ER	Ecosystem Restoration	PL	Public Law
FDR	Flood Damage Reduction	QMP	Quality Management Plan
FEMA	Federal Emergency Management Agency	QA	Quality Assurance
FRM	Flood Risk Management	QC	Quality Control
FSM	Feasibility Scoping Meeting	RED	Regional Economic Development
GRR	General Reevaluation Report	RMC	Risk Management Center
Home District/MS	The District or MSC responsible for the preparation of the decision document	RMO	Review Management Organization
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RTS	Regional Technical Specialist
IEPR	Independent External Peer Review	SAR	Safety Assurance Review
ITR	Independent Technical Review	USACE	U.S. Army Corps of Engineers
LRR	Limited Reevaluation Report	WRDA	Water Resources Development Act