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# Summitville Mine Superfund Site

Remedial Investigation and Feasibility Study

## Fact Sheet

Fact Sheet  
Number 1  
January, 1999

### What is a Remedial Investigation and Feasibility Study (RI/FS)?

This fact sheet introduces the Final Site-Wide Remedial Investigation and Feasibility Study (RI/FS) for the Summitville Mine Superfund Site. What is a RI/FS? After a site is added to the list of Superfund sites, the task of selecting the best, most appropriate clean-up method begins. The Remedial Investigation (RI) and Feasibility Study (FS) is a series of comprehensive investigations and studies that determine the best way to clean up environmental pollution at a Superfund site. This evaluation helps the Colorado Department of Public Health and Environment and the U.S. Environmental Protection Agency (EPA) select the combination of clean-up techniques that will most effectively eliminate, reduce or control risks to human health and the environment. Conducting the RI/FS generally involves determining what aspects of the site will be examined (project scoping), data collection, risk assessment, treatability studies (trying out on a small scale potential ways to clean up contamination at the site), and analysis of available clean-up alternatives. Also included in the RI/FS is the identification of Applicable or Relevant and Appropriate Requirements (ARARs). ARARs are another way to describe requirements like water quality or soil standards and limits on the amount of contamination that is allowed by state and federal laws.

### The Summitville RI/FS

The Summitville Mine Remedial Investigation and Feasibility Study (RI/FS) will differ quite a bit from the more traditional Superfund RI/FS. This is because a large amount of the investigative work has already been completed and several significant clean-

up actions have already, or are in the process of being implemented at the site. These clean-up actions are referred to as interim remedial actions, and include such things as water treatment and capping the heap leach pad. These actions are called interim because they were not intended to be the final actions at the site, but were so important that EPA and the State started them right away. These interim projects are helping to stabilize the site and reduce the amount of acid mine drainage that contaminates the Alamosa River system. The Summitville RI/FS will build on the work that has, or is being completed, and determine what the final clean-up actions at the site should be. Figure 3 is a flow chart describing the Summitville clean-up process.

### Site Background

The Summitville Mine is located 25 miles south of Del Norte, CO, in Rio Grande County (Figure 1) within the San Juan Mountain Range of the Rocky Mountains at an elevation of 11,500 feet. The disturbed area at the Summitville Mine site covers approximately 550 acres of the 1,400 permitted acres. Surface water from the mine site flows down Wightman Fork approximately 5 miles to the confluence with the Alamosa River. The Alamosa River flows past the town of Jasper into Terrace Reservoir. Alamosa River water released from Terrace Reservoir is used for livestock watering, agricultural irrigation and wildlife habitat. Important crops grown using Alamosa River water include alfalfa, barley, wheat and potatoes. The Alamosa River below Terrace Reservoir flows past the Conejos county communities of Capulin and La Jara and feeds wetlands that are habitat for aquatic life and migratory waterfowl.

This Fact Sheet  
Provides:

- What is an RI/FS?
- An Explanation of the Summitville RI/FS
- A Background of the Site
- A Summary of the RI/FS Work Plan
- A Schedule of Future Site Activities

Colorado Department  
of Public Health  
and Environment

# Summitville Mine Superfund Site

Limited mining began at the Summitville Mine in the late 1800s and continued in the early to mid 1900s. The Summitville Consolidated Mining Company, Incorporated (SCMCI), a wholly owned subsidiary of Galactic Resources, Inc., was the most recent operator of the Summitville Mine. SCMCI operated a large open pit heap leach gold mine between 1984 and 1992. Environmental problems including the uncontrolled release of acid mine drainage from the site developed soon after SCMCI began open pit mining operations. As a result, a variety of metals such as copper, zinc, and aluminum have leached into the Alamosa River system. SCMCI ceased active mining operations and abandoned the mine site when it declared bankruptcy in December 1992.

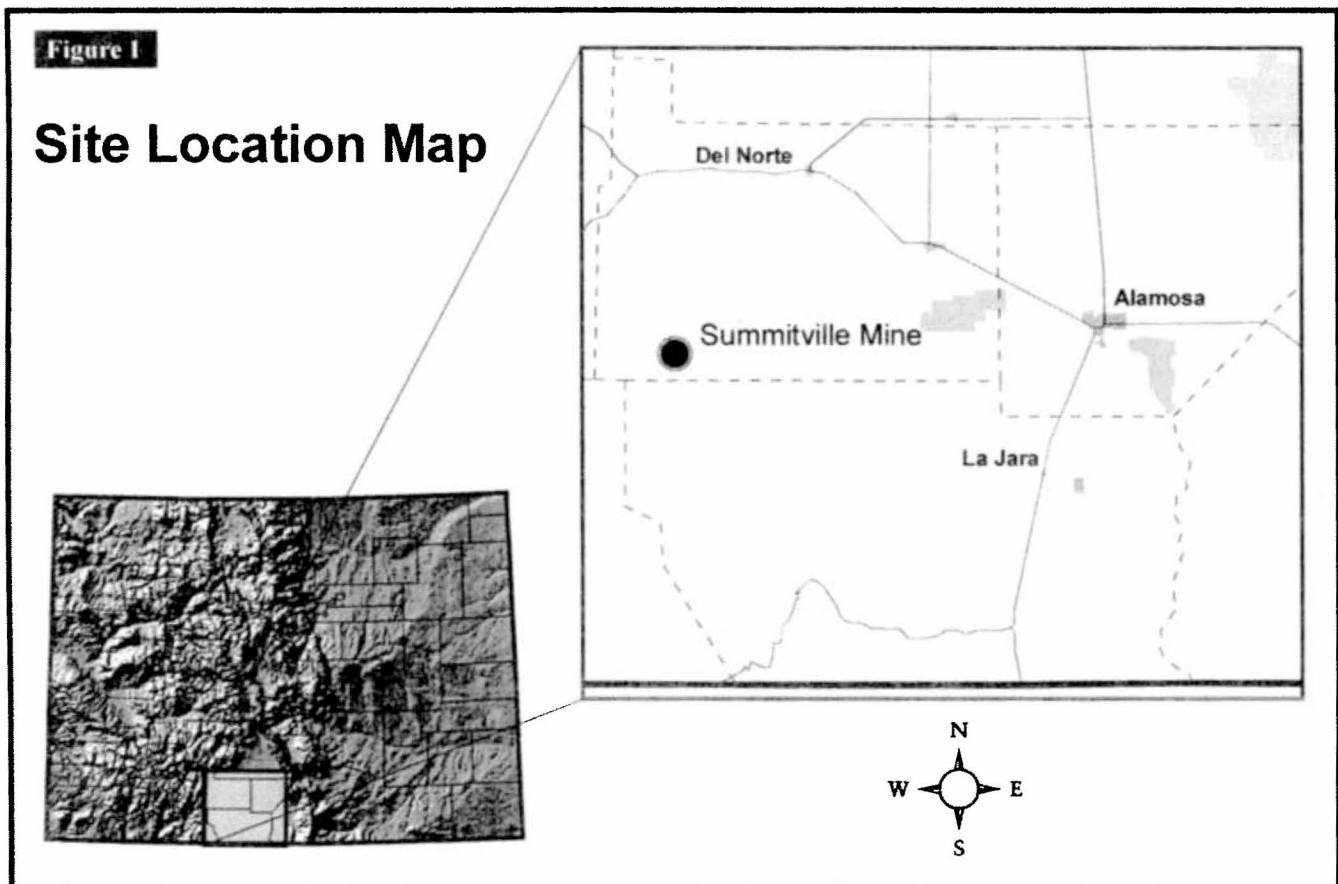
At the request of the State of Colorado, the EPA immediately took control of the site under their Superfund Emergency Response authority and began response actions to control releases from some of the source areas of contamination. In May 1994, EPA placed Summitville Mine on the National Priorities List of Superfund sites. In 1998, the Colorado

Department of Public Health and Environment, which has oversight responsibility for the RI/FS, hired Rocky Mountain Consultants (RMC) to conduct the study.

## RI/FS Work Plan

This fact sheet introduces the Work Plan for the Summitville Mine site-wide RI/FS. This Work Plan was prepared by RMC for the State Health Department and presents the general approach and schedule for conducting the RI/FS. As mentioned earlier, the RI/FS will build on work that has, or is being completed, at the site to determine what additional actions should be taken to finally clean up the site. The goals of the site-wide RI/FS are to:

- Evaluate the effectiveness and status of the interim remedial actions such as on-going water treatment, the heap leach pad capping and site-wide revegetation;
- Evaluate monitoring data collected over the last 5 years from the Summitville Mine site to the San Luis Valley;



# Summitville Mine Superfund Site

- Identify all of the areas of contamination both on and downstream of the site. Some areas of contamination may have been dealt with through the interim clean-up actions, but others exist and identifying all sources of contamination is important to the eventual success of the cleanup;
- Collect additional data as necessary to support the clean-up actions needed to augment cleanup that has already taken place at the site; and
- Develop the site-wide Record of Decision (see Figure 3).

## What's Next?

The schedule in the Summitville Mine site-wide RI/FS Work Plan outlines tentative dates for benchmark reports (see Figure 2). All of these reports will be released in draft form for a public review and comment. The benchmark reports are:

**Data Evaluation Report** The Data Evaluation Report includes an evaluation and interpretation of the following data types: geological; soil; sediment; meteorological; ground water; surface water; waste; and ecological. One of the Data Evaluation Report objectives is to determine if sufficient data are available to assess the effectiveness of the currently implemented remedial actions such as the heap leach pad capping,

adit plugging, and on-going water treatment. This will also help predict the success of additional site and/or Alamosa River basin clean up. If significant data gaps are identified during the development of the Data Evaluation Report, then subsequent RI/FS work may be delayed while additional data are collected and evaluated.

**Remedial Investigation Report** The Remedial Investigation Report assesses the nature and extent of contamination and the associated health and environmental risks.

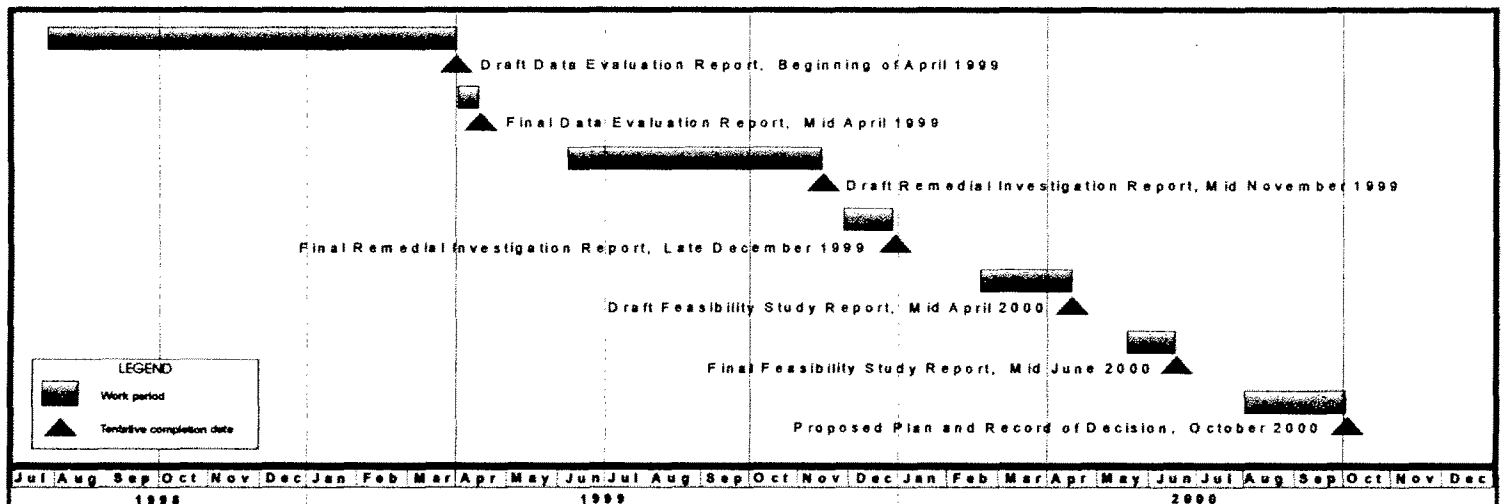
**Feasibility Study Report** The Feasibility Study Report presents a detailed analysis of clean-up alternatives for the site.

**Proposed Plan** The Proposed Plan proposes clean-up remedies for public review and comment.

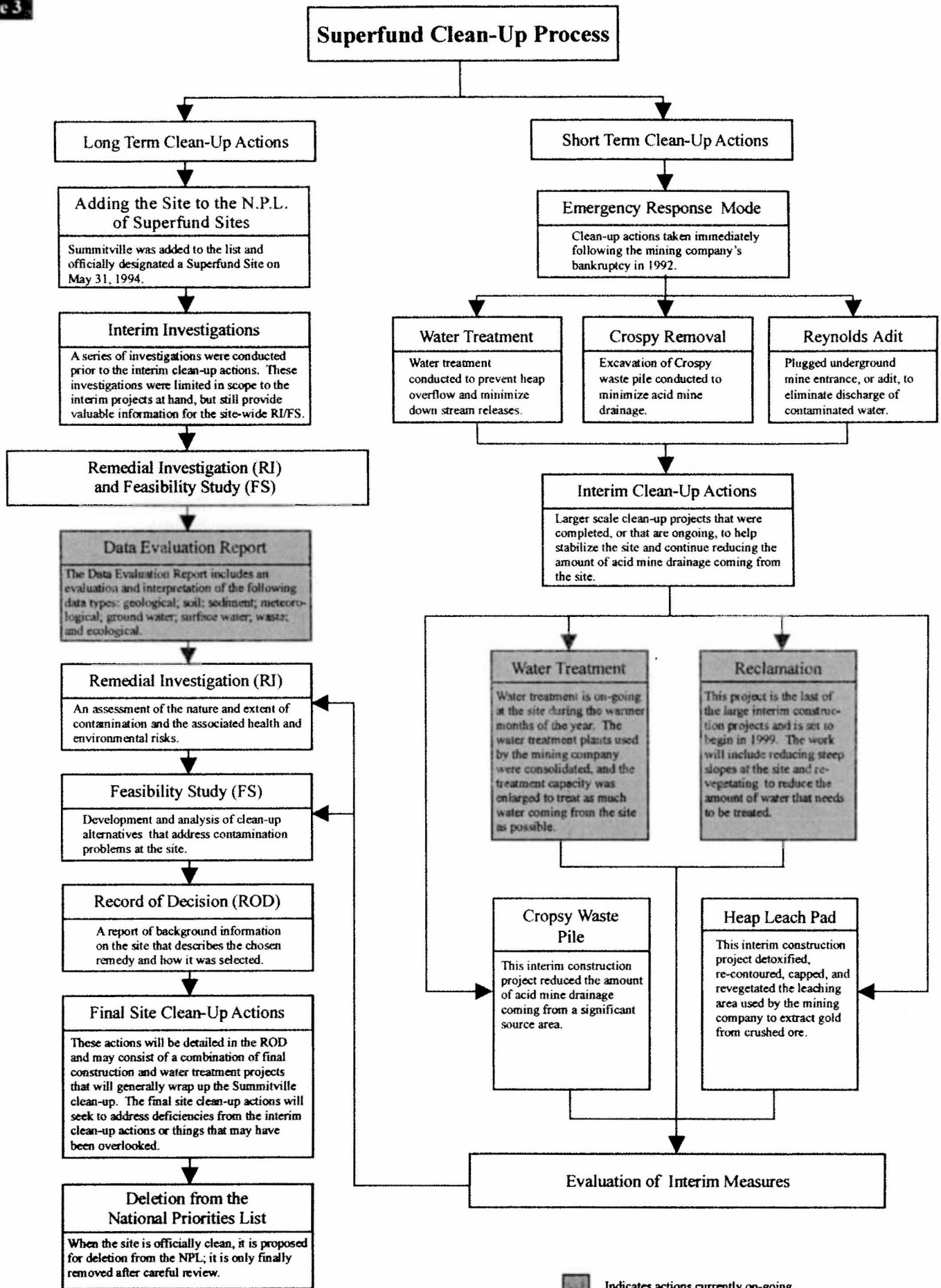
**Record of Decision** The Record of Decision provides background information on the site and describes the final clean-up strategies chosen by the State and EPA and how they were selected.


**Figure 2**

**Preliminary Work Plan Schedule**



**Figure 3.**



 Indicates actions currently on-going.

**For More Information Please Contact any of the Following Individuals**

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U.S. Environmental Protection Agency  
Region 8  
999 18<sup>th</sup> Street, Suite 500  
Denver, CO 80202  
Fax: (303) 312-6961

**Location of Summitville Mine Superfund Site Information Repositories**

Documents related to the Summitville Mine Superfund Site are available in the following information repositories:

Del Norte Public Library  
190 Grand Avenue  
Del Norte, CO 81131

Colorado Department of Public Health and Environment  
Hazardous Materials and Waste Management Division  
Records Center, Room B-215  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530

U.S. Department of Agriculture Service  
Conejos County Natural Resources Conservation Service  
15 Spruce  
La Jara, CO 81140

U.S. Environmental Protection Agency  
Region 8 Superfund Records Center  
999 18<sup>th</sup> Street, Suite 500  
Denver, CO 80202

**We want to hear from you!**

Your input into all activities pertaining to the Summitville Superfund Site is important to the Colorado Department of Public Health and Environment and the U.S. Environmental Protection Agency. Comments provided by the public are valuable in helping the agencies select the best methods for investigating and cleaning up the site.

To submit your comments, mail this half of the page to the address at the bottom or feel free to telephone any of the individuals listed above. Thanks for your input.

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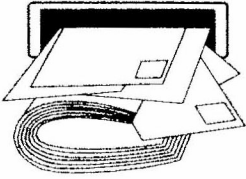
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*Please mail to:*

Colorado Department of Public Health & Environment  
Attn: George Carnes (HMWMD-B2)  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530

**MAIL**



Look for notices in the mail of up-coming meetings and publications of RI/FS documents.

Staff members from the Colorado Department of Public Health and Environment and U.S. Environmental Protection Agency are available to present updates of Summitville activities to your civic, church, school or community group. Please contact George Carnes at (303) 692-3329 or 1-888-569-1831 (toll free).



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