

**Finding of No Significant Impact  
Proposed Provision of a Water Supply System  
Gunnison Uranium Mill Tailings Site  
Gunnison, Colorado**

**AGENCY:** Department of Energy

**ACTION:** Finding of No Significant Impact

**SUMMARY:** The Department of Energy (DOE) has prepared an environmental assessment (DOE/EA-0529) for the proposed provision of a water supply system for currently and potentially affected residents with contaminated groundwater wells near Gunnison, Colorado, in Gunnison County. Based on the analysis in the EA, DOE has determined that the provision of the water supply system does not constitute a major Federal action significantly affecting the quality of the human environment, within the meaning of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.). Therefore, preparation of an environmental impact statement is not required and DOE is issuing this Finding of No Significant Impact (FONSI).

**SINGLE COPIES OF THE EA ARE AVAILABLE FROM:**

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**BACKGROUND:** The inactive uranium mill processing site in Gunnison, Colorado, was identified in the Uranium Mill Tailing Radiation Control Act of 1978, 42 U.S.C. 7901 et seq. (1988), as one of 24 sites in need of surface remediation to remove or stabilize uranium mill tailings and associated contaminated materials to protect public health. Remedial action at the site is being performed under DOE's Uranium Mill Tailings Remedial Action (UMTRA) Project. The results of domestic water well sampling from July through October 1990 showed that 22 domestic water wells downgradient of the processing site have elevated levels of uranium and other metals, including manganese, cadmium, and the uranium decay product lead-210. The majority of these wells are used by residents within a subdivision containing 108 residences. To reduce the public health risk until a permanent solution could be developed and studied, DOE began providing bottled water to all affected or potentially affected domestic well users in August 1990. The provision of a water supply system is the proposed permanent solution.

**SITE DESCRIPTION:** The Gunnison UMTRA site is located adjacent to the City of Gunnison in Gunnison County, Colorado, on a drainage divide between the Gunnison River and Tomichi Creek in the Gunnison River Valley. The tailings pile at the Gunnison site is bound on the north and east by Gold Basin Road and the Gunnison County Airport runways. The land immediately west of the tailings pile is residential and commercial. Farther west (within

1.5 miles and downgradient of the tailings pile) is a small subdivision (Dos Rios) with approximately 108 residences on small acreages, a golf course, and open-space areas. All of the residences and commercial properties use domestic water wells for potable water. The nearest residence is approximately 100 feet west of the Gunnison site boundary.

**PROPOSED ACTION:** DOE proposes to provide a permanent water supply system to all currently or potentially affected residents with contaminated groundwater wells. The proposed system would be supplied by water diverted from the Gunnison River, and system capacity would include adequate water for fire protection and a water storage tank. A treatment facility would be necessary. The proposed location of the water diversion is on county-owned land. Water rights are available to supply current and potential future water demands for system users.

Approximately 5 miles of pipeline would be constructed. The pipeline would be buried in trenches beneath or adjacent to existing roadways. Except for a 0.25-mile long segment, the pipeline would be located in areas that are already highly disturbed. The majority of the areas are under private ownership. A combination of 6-inch, 8-inch, or 12-inch diameter pipelines would be used, except for the service lines to each residence, which would be 0.75-inch diameter. The average disturbance would be confined to a surface width of 10 feet. In some areas, surface disturbance may occur over 18 feet. The length of open trench at any time would be between 150 and 200 feet. After each section is completed, the trench would be backfilled. The pipeline would cross the Gunnison River four times; each crossing would require a separate, temporary coffer dam that would remain in place for about 1 week. River crossings are planned for low-flow periods.

The proposed action would be cost-shared by DOE and the State of Colorado. The total cost is estimated at \$5.7 million. Construction would take a total of 6 months and require an average work force of 8 to 10 people.

**ENVIRONMENTAL IMPACTS:** The subject EA assesses the environmental impacts that would occur during the proposed action and proposes mitigative measures. The cumulative impacts resulting from the proposed action are expected to be temporary, minor impacts that would extend over an estimated 6-month period. This FONSI for the proposed action is based on the following findings, which are supported by the information and analyses in the EA.

#### **Air Quality**

No deterioration of air quality is anticipated during any of the construction phases. If necessary, work areas would be sprayed with water to reduce dust levels.

#### **Noise**

Minimal noise impacts are anticipated. The small crew size and limited equipment use would likely create noise similar to that associated with any road construction project.

#### **Archeological and Cultural Resources**

There are no archeological or cultural resources present that could be impacted; however, should a site be encountered during construction activities, all work in the area would be stopped until evaluation and recovery, if necessary, could be completed.

### **Threatened and Endangered Species**

Construction activities would not impact any threatened and endangered species.

### **Floodplains/Wetlands**

The EA on the provision of a water supply system at Gunnison, Colorado, includes a Wetlands Assessment as Attachment 2. This assessment considers impacts to wetlands from the proposed action, presents proposed mitigative measures to offset the impacts, and considers alternatives to the proposed action. A Public Notice of wetlands involvement was published (56 FR 34190; July 26, 1991) as required by 10 CFR 1022.

The 100-year floodplains of the Gunnison River and Tomichi Creek would not be disturbed by construction of the pipeline, water storage tank, the water treatment facility, surface water diversion, or other project components.

It is anticipated that construction of the pipeline would temporarily disturb approximately 0.46 acres of wetlands. After construction of the pipeline, wetland vegetation would be re-established in the disturbed wet meadow and shrub wetlands. Within the wet meadow habitat, the disturbed area would either be replanted with wetland grasses, sedges, and rush, or the existing sod would be stockpiled and replanted. Within the shrub wetlands, willow and other wetland shrubs would be re-established. It is expected that these areas would be revegetated within the same or following growing season and that there would be no net loss of wetlands.

### **Land Use**

There would be no permanent change to area land uses along the distribution line because the pipeline and water supply tank would be buried. Such use of county or city land is consistent with the appropriate land use plan.

### **Socioeconomic**

There would be positive benefits to the local economy. The small numbers of workers needed and short construction schedule would result in temporary economic benefits. Furthermore, the positive benefits of providing potable water to the residents of Dos Rios would last indefinitely.

### **Transportation**

Temporary impacts on highway users within the Dos Rios subdivision, along Goodwin Lane, along a small portion of Gold Basin Road, and along the access road to the water supply tank would occur. These impacts would consist of a short-term inconvenience to area residents while trenching activities are in progress along various stretches of the road.

## **ALTERNATIVES TO THE PROPOSED ACTION**

### **No Action Alternative**

The no action alternative consists of continuing the current bottled water program. The use of bottled water, however, does not address the potential risks associated with bathing in contaminated water, or the inconvenience associated with using bottled water for everyday needs. Additional concerns include whether the homeowners would be able to sell their

homes with the bottled water need and the on-going need to educate new residents of the associated risks, especially since drinking bottled water is entirely voluntary. The costs associated with the current bottled water program do not represent future costs related to yearly monitoring of the contaminated groundwater plume, and the identification, risk education, and tracking of additional well users at risk. These expenses are likely to exceed \$200,000 per year, and may last for 10 to 20 years.

#### **Alternative of Reverse Osmosis Systems on Individual Wells**

The installation of Reverse Osmosis (R/O) systems on individual kitchen faucets was evaluated by the DOE. The R/O system has been shown to be effective in removing hazardous constituents such as uranium. The use of the R/O system was dropped from further consideration because it requires scheduled maintenance and monitoring that the DOE would be required to support for an indefinite period, and because it does not normally supply enough water for everyday household use. Also, this alternative does not eliminate potential risks from bathing in contaminated water and would require ongoing monitoring and tracking of the domestic wells.

#### **Alternative of Using County Groundwater Wells as a Water Source**

This alternative consists of the county developing two to four groundwater wells on land owned by Gunnison County, constructing a treatment and pump facility as required, constructing a water storage tank, and distributing the water by pipeline to currently and potentially affected areas. This alternative was dismissed from consideration because: 1) the groundwater aquifer is not sufficiently thick to yield the required volume of water, and

2) continued pumping of the proposed supply wells would pull the contaminated groundwater plume under the river and into the proposed well field.

**Alternative of Using Municipal Water as a Water Source**

This alternative consists of providing the same distribution system and water supply tank described under the proposed action, but uses wells owned by the City of Gunnison as the water source for the system. No treatment facility would need to be constructed. This alternative would result in higher initial costs and potentially higher water rates to the Dos Rios residents than would the proposed action. Therefore, this alternative was dismissed from any further consideration due to unacceptably higher costs.

**DETERMINATION:** Based on the analyses in the EA, DOE has determined that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, the preparation of an environmental impact statement is not required.

Issued at Washington, D.C., on February 21, 1992.

Original Signed By

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Assistant Secretary  
Environment, Safety and Health