



INITIAL STUDY
MAMMOTH COMMUNITY WATER DISTRICT
P.O. Box 597, Mammoth Lakes, CA 93546
Phone: (760) 934-2596; Fax (760) 934-4080

1. Project Title: Arsenic removal at Mammoth Community Water District Groundwater Treatment Plants #1 and #2 to meet the new federal drinking water standard

2. Description of Project:

The Mammoth Community Water District (District) is proposing to begin removing naturally occurring arsenic from potable water supplies to meet the new federal drinking water standard. As of January 23, 2006, all water suppliers will be held to a higher standard for arsenic, which is being lowered from the current limit of 50 ppb (parts per billion) to 10 ppb. While this is a federal maximum contaminant level, or MCL, the California Department of Health Services is administering the regulatory process.

The District is proposing to remove arsenic at both of its existing groundwater treatment plants. A conventional iron and manganese removal process that includes chlorination and filtration will be utilized, which is already in place at both treatment plants. A new chemical feed system will be used to introduce ferric chloride, or iron, to the untreated well water, which will combine with the arsenic and be removed using existing filters prior to the water entering the distribution system. Arsenic will be disposed of into the existing sewer collection system with the iron and manganese that is currently removed and disposed of.

During the summer and fall of 2005, the District conducted pilot studies of the ferric chloride treatment to ensure that this system will enable the District to meet the new MCL for arsenic. Small-scale pilot studies were initially conducted by diverting a small quantity of water, adding ferric chloride and sodium hypochlorite (chlorine), and sampling the treated water. Full-scale pilot studies are projected for November 2005, which will test ferric chloride treatment on all production wells. Arsenic will be precipitated from the untreated well water as it enters the treatment plant utilizing the ferric chloride treatment and, after filtration, will be delivered to District customers. Water samples will be obtained to ensure that arsenic levels are being reduced to at least 10ppb.

The District has evaluated the potential for arsenic loading in the wastewater treatment solids, or sludge. Currently, no arsenic is detected in the sludge since the dissolved arsenic simply moves through the treatment process with the wastewater and is disposed of at Laurel Pond. With the new proposed treatment process, arsenic

will be discharged into the wastewater collection system as a solid precipitate, will be treated with other wastewater solids, and will be disposed of at the Benton Crossing Landfill. Based on low dosages of ferric chloride required in the pilot studies to remove arsenic, the District does not anticipate that quantities of arsenic in the sludge would be considered a hazardous waste (MacPhee et al. 2001, p. 48). The District will continue to regularly monitor for various constituents in the solids, such as arsenic, to ensure that regulatory limits for such substances will not be exceeded for disposal at the landfill.

3. Project Sponsor's Name and Address: Mammoth Community Water District
P.O. Box 597
Mammoth Lakes, CA 93546

4. Contact Person and Phone Number: Gary Sisson
(760) 934-2596 x 238

5. Project Location:

Mammoth Community Water District Groundwater Treatment Plant #1, located off Old Mammoth Road near the intersection of Old Mammoth Road and Waterford Lane, and Groundwater Treatment Plant #2, located at the corner of Meridian Boulevard and Majestic Pines Drive.

6. Surrounding Land Uses and Setting:

Groundwater Treatment Plant #1

This facility is located adjacent to the Mammoth Lakes Housing, Inc. Aspen Village workforce housing project on Old Mammoth Road that is currently being developed. In addition, single family and multifamily residences are adjacent to the facility to the south and west.

Groundwater Treatment Plant #2

This facility is located across Meridian Boulevard from Summit Condominiums and across Majestic Pines Drive from the Juniper Springs Lodge parking area. Single family residences are also located to the north.

7. General Plan Designation / Zoning

Groundwater Treatment Plant #1

Located on land zoned as Resort and adjacent to a Low Density Residential zoning and a High Density Residential zoning

Groundwater Treatment Plant #2

Located on land zoned as Resort and adjacent to a Low Density Residential zoning and a High Density Residential zoning

(From the 1987 Town of Mammoth Lakes General Plan)

8. Other Agencies Whose Approval is Required:

California Department of Health Services – Amendment to existing water supply permit will be required

9. Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

	Land Use and Planning		Transportation		Public Services
	Population and Housing		Biological Resources		Utilities and Services
	Geological Problems		Energy and Mineral Resources		Aesthetics
	Water		Hazards		Cultural Resources
	Air Quality		Noise		Recreation

10. Determination

On a basis of this evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	■
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project.	
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect has: a) been adequately analyzed in an earlier document to applicable legal standards, and b) been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is listed as “Potentially Significant Impact” or “Potentially Significant Unless Mitigated.” An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects: a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.	

Signature

Date

Printed Name

For

11. ISSUES AND SUPPORTING INFORMATION:

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. LAND USE AND PLANNING. Would the proposal:				
a) Conflict with general plan designation or zoning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project involves modifications to the existing iron and manganese removal equipment located on the interior of the buildings of Groundwater Treatment Plants #1 and #2. These Treatment Plants are located on land zoned as Resort by the Town of Mammoth Lakes 1987 General Plan. The proposed project is among the uses permitted in the Resort land use category.				
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
This project is subject to the approval of the California Department of Health (DHS) and will adhere to current DHS standards.				
c) Be incompatible with existing land uses in the vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Land uses in the areas surrounding the both groundwater treatment plants include Resort, Low Density Residential, and High Density Residential. The proposed project is compatible with the land uses in these areas.				
d) Affect agricultural resources or operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
There are no agricultural resources near the proposed project.				
e) Disrupt or divide the physical arrangement of an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project involves minor modification to equipment on the interior of existing District water treatment buildings. The modification to these structures will not be noticeable on the exterior of the buildings and, thus, will not alter the arrangement of the existing community.				

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2. POPULATION AND HOUSING. Would the proposal:				
a) Cumulatively exceed official regional or local population projections?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
b) Induce substantial growth in an area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
a) and b) The proposed project will enable the District to meet the new federal drinking water standard of arsenic. The purpose of revising the standard from the 50ppb to the new standard 10 ppb, effective January 23, 2006, is to reduce the public health risks from naturally occurring arsenic in drinking water. The project has no potential of impacting population projections or inducing growth.				
c) Displace existing housing, especially affordable housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
The proposed project involves modification to the interior structures of the District's groundwater treatment plants and, thus, will not affect housing in the vicinity. The Mammoth Lakes Housing's Aspen Creek affordable housing development is located adjacent to Groundwater Treatment Plant #2 and will be utilizing the access road to the Plant as an emergency fire access road. Vehicle traffic to the plant during project construction will not affect the use of this road as an emergency access.				
3. GEOLOGIC PROBLEMS. Is there a potential for:				
a) Fault Rupture?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
b) Seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
a) and b) As noted in the Town of Mammoth Lakes General Plan, (Town, 1987, p. 201-202) the Mammoth Lakes area has a long history of seismic activity and six known active faults are located in the region. Alquist-Priolo Fault Zoning Act prohibits the location of most structures for human occupancy across active faults to mitigate the hazards associated with fault rupture. However, none of the proposed project elements are located in a designated Alquist-Priolo study zone, nor would the proposed project precipitate seismic events. Project structures and employees would likely be exposed to seismic activity over the life of the project, but these potential effects would be no greater than the risk currently experienced in the vicinity of the project.				

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c) Seismic ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
e) Landslides or mudflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
g) Subsidence of the land?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
c), e), and g) The proposed project is located within existing structures that have previously been evaluated for geologic hazards. No geologic hazards are anticipated to occur as a result of the proposed project construction.				
d) Seiche, tsunami or volcanic hazard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
The proposed project is not located adjacent to large water bodies capable of generating tsunamis or seiches, and no impacts are anticipated with respect to these hazards. Although the region has experienced volcanic activity for an estimated 3.2 million years (Town, 1987, p. 197), it is not anticipated that the physical structures associated with the proposed project would contribute to the probability of volcanic activity. Project structures and employees may be exposed to volcanic activity over the life of the project, but these potential effects would be sufficiently mitigated through compliance with implementation of identified emergency response actions.				
f) Erosion, changes in topography, or unstable soil conditions from excavation, grading or fill?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
h) Expansive soils?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
i) Unique geologic or physical features?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
f), g), and h) No grading and excavation activities are anticipated as part of the proposed project. The proposed project will utilize Best Management Practices to ensure that any possible erosion would be minimized.				

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4. WATER. Would the project result in:				
a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project will not alter the existing footprint of the groundwater treatment plants on the surface of the land and, thus, will not alter absorption, drainage, or surface runoff.				
b) Exposure of people or property to water related hazards such as flooding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project will have no impact on potential flood hazards. Groundwater Treatment Plant #1 is located near Mammoth Creek, but is not within the existing FEMA 100-year floodplain. (Town, April 2005 Draft General Plan, p. CHS 3).				
c) Discharge into surface waters or other alteration of surface water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Changes in the amount of surface water in any water body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Changes in currents or the course or direction of water movements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c), d), and e) The proposed project will involve minor modifications to existing groundwater treatment facilities and will not alter or impair surface water movement or quality.				

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f) Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations, or through substantial loss of groundwater recharge capability?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Altered direction or rate of flow of groundwater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Impacts to groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>f), g), and h) The proposed project involves the modification to the groundwater treatment process, but will not involve any changes to amount of groundwater pumped. All production wells that feed water to the groundwater treatment plants have been previously constructed with an annular seal to prevent surface water contamination or movement of shallow ground water to deeper, higher quality groundwater. In addition, the logic control systems at the groundwater treatment plants will be modified to reduce the number of backwash cycles, which will reduce the amount of water used for the treatment process.</p>				
i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>The treatment process of the water currently extracted from the aquifer is the only modification to groundwater involved in the proposed project. The proposed project will not alter the amount of water currently extracted from the aquifer.</p>				
5. AIR QUALITY. Would the proposal:				
a) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>All construction activities will occur within the interior of existing District Groundwater Treatment Plant buildings and are not anticipated to impact air quality.</p>				

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b) Expose sensitive receptors to pollutants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create objectionable odors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) and d). No objectionable odors are anticipated from the construction phase or operation of the proposed project.				
c) Alter air movement, moisture, or temperature, or cause any change in climate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project will have no greater impact on air movement, temperature, or climate than what is currently being experienced in the vicinity of the project.				
6. TRANSPORTATION/ CIRCULATION. Would the proposal result in:				
a) Increased vehicle trips or traffic congestion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
During construction phase of the proposed project, there may be a slight increase in construction-related traffic near the groundwater treatment plants. Following construction, traffic in and around the District site would return to current levels.				
b) Hazards to safety from design features or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
There would be no design features or incompatible uses associated with the proposed project. Best Management Practices will be used when handling and storing Ferric Chloride. The existing safety equipment present at both Groundwater Treatment Plants meets industry standards.				
c) Inadequate emergency access or access to nearby uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project will not influence existing emergency procedures, which are based on the Town of Mammoth Lakes emergency evacuation plan. The Aspen Creek affordable housing project anticipates using the access road to Groundwater Treatment Plant #2 as an emergency fire road. The proposed project will not affect the use of this road for emergency uses.				

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d) Insufficient parking capacity on-site or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project will not increase the need for parking at either Groundwater Treatment Plant.				
e) Hazards or barriers for pedestrians or bicyclists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflicts with adopted policies supporting alternative transportation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Rail, waterborne or air traffic impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e), f), and g) The proposed project involves modifications to the water treatment structures located on the inside of the Groundwater Treatment Plan buildings. Impacts to pedestrians, bicyclists, and alternative transportation are not anticipated. The area is not served by waterborne or rail transportation.				
7. BIOLOGICAL RESOURCES. Would the proposal result in impacts to:				
a) Endangered, threatened or rare species or their habitats?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Locally designated species?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Locally designated natural communities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Wildlife dispersal or migration corridors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a), b), c), and e) The proposed project construction will be contained within existing structures and, thus, is not anticipated to impact biological resources. Waste disposal of arsenic will occur in the existing sewer collection system in combination with iron and manganese, which is currently disposed of as such.				

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d) Wetland habitat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
There is no wetland habitat near either Groundwater Treatment Plant.				
8. ENERGY AND MINERAL RESOURCES. Would the proposal:				
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The chemical feed equipment that will be used as part of the proposed project will consume minimal amounts of energy. In order to save energy, the logic control systems will be modified to reduce the number of backwashes required to clean the filter media of iron, manganese, and arsenic.				
b) Use non-renewable resources in a wasteful and inefficient manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The principal project objective is to benefit community health by reducing the amount of naturally occurring arsenic in the drinking water supplies. The project does not propose to utilize any additional groundwater resources beyond what is currently being used in the treatment of groundwater.				
c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The <u>Town of Mammoth Lakes General Plan</u> does not designate and areas of known mineral resource.				

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9. HAZARDS. Would the proposal involve:				
a) A risk of accidental explosion or release of hazardous substances?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) The creation of any health hazard or potential health hazard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Exposure of people to existing sources of potential health hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>a), c), and d) The only potential health risks from the proposed project are associated with the presence of ferric chloride at the Groundwater Treatment Plants. Best Management Practices will be used in handling and storing ferric chloride. Ferric chloride will be stored in a secondary containment unit, which will prevent any leakage outside of the treatment plants in the event of a spill or leak.</p> <p>Project construction activities are not anticipated to create any health hazard. Due to the extremely small quantities of arsenic being removed from groundwater, quantities of arsenic in the wastewater treatment solids, or sludge, are not anticipated to exceed Lahontan Regional Water Quality Control Board regulations.</p>				
b) Possible interference with an emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>The proposed project does not pose any interference with existing emergency response or evacuation plans established by the District or the Town of Mammoth Lakes.</p>				
e) Increase fire hazard in areas with flammable brush, grass, or trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Ferric chloride is not considered a fire hazard. All construction activities will be occurring inside existing structures and are not anticipated to increase fire hazards. (MSDS http://www.jtbaker.com/msds/englishhtml/f1060.htm)</p>				
10. NOISE				
a) Increases in existing noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of People to severe noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a) and b) The chemical feed pump systems that will be utilized as part of the proposed project produce virtually no noise. Construction activity noise will be minimal and will occur inside an already existing structure.</p>				

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
11. PUBLIC SERVICES. Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:				
a) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a) and c) The Mammoth Lakes Fire Protection District provides fire protection services for facilities located in the Town of Mammoth Lakes. It is not anticipated that either construction activities associated with installing the chemical feed equipment or implementation of the arsenic removal project itself will place any demand for fire protection.</p> <p>The project would place no demand on school facilities since it does not generate user populations.</p>				
b) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Maintenance of public facilities, including roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other governmental services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b), d), and e) As a self-governing public agency, the District is responsible for the maintenance of its facilities; the use of non-District public agencies is limited. Where appropriate, the District and Town Council work together to coordinate overlapping regulatory activities. The District rarely requires service from the police department, and the proposed project is not expected to result in additional security assistance. The impact of the proposed project on police and governmental services would not be significant.</p>				
12. UTILITIES AND SERVICE SYSTEMS				
a) Power of natural gas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>The only additional energy consumption that would result from the proposed project is from the chemical feed pumps. The electricity required to run these pumps is minimal.</p>				

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<p>b) Communication systems?</p> <p style="text-align: center;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> </p> <p>No additional communication equipment beyond what the District currently utilizes is anticipated as part of the proposed project.</p>				
<p>c) Local or regional water treatment or distribution facilities</p> <p style="text-align: center;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> </p> <p>The proposed project will improve the level of water treatment at the District's groundwater treatment facilities. Distribution facilities will not be impacted by the proposed project.</p>				
<p>d) Sewer or septic tanks?</p> <p style="text-align: center;"> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> </p> <p>There are only a limited number of septic tanks remaining in the MCWD service area and such systems would not be impacted by the proposed project. The proposed project will introduce naturally occurring arsenic into the sewer system in a solid form. As the water-soluble arsenic is bound to iron in the proposed treatment process, a precipitate is formed. This precipitate is removed in the existing iron and manganese filtration system, sent to the sewer collection system as the filters are backwashed, and eventually ends up in the wastewater solids, or sludge. Instead of the current system of sending the soluble arsenic to Laurel Pond with the treated wastewater, this solid arsenic will be removed with the sludge.</p>				
<p>e) Storm water drainage?</p> <p style="text-align: center;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> </p> <p>All proposed project construction would occur inside existing facilities and is not anticipated to have any impact on storm water drainage.</p>				

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
f) Solid waste disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>The proposed project will result in a small quantity of arsenic accumulating in the solid waste from the wastewater treatment plant. These solids, or sludge, are sent to the Benton Crossing Landfill for disposal. Currently, no arsenic is detected in the sludge. It is not anticipated that loads of arsenic would qualify as hazardous based on the low requirements of ferric chloride required to remove arsenic (MacPhee et al. 2001. p.48). In addition, solids removed from the wastewater treatment process will be regularly tested for arsenic to ensure that standards are not exceeded.</p>				
g) Local or regional water supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>The proposed project will enhance the quality of groundwater supplies provided to customers in Town of Mammoth Lakes through reducing the quantities of naturally occurring arsenic. No impacts to the quantities of local water supplies will occur because of the proposed project.</p>				
13. AESTHETICS				
a) Affect a scenic vista or scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a demonstrable negative aesthetic effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create light of glare?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a), b), and c). All project construction will occur within existing structures and, thus, will have no impact on aesthetics or visual resources.</p>				

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14. CULTURAL RESOURCES				
a) Disturb paleontological resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Disturb archaeological resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Affect historical resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have the potential to cause a physical change, which would affect unique ethnic cultural values?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Restrict existing religious or sacred uses within the potential impact area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a), b), c), d), and e) All construction associated with the proposed project will occur within existing structures and has no potential to disrupt cultural resources.				
15. RECREATION				
a) Increase the demand for neighborhood or regional parks or other regional recreational facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Affect existing recreational opportunities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) and b) Neither the construction of project facilities or arsenic removal project itself would have any impact on parks, recreational facilities, or recreational opportunities. No part of the proposed project would increase the demand for recreation since the project does not induce growth in the Mammoth Lakes area.				

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16. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species. Cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have impacts that are individually limited, but cumulatively considerable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EARLIER ANALYSES

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA processes, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D).

The following earlier analyses were used to make the above determinations. These reports are available for review at the MCWD District offices.

- Town of Mammoth Lakes. *General Plan*. October 1987.
- Town of Mammoth Lakes. *Draft General Plan*. April 2005
- MacPhee, M.J., Charles, G.E., and Cornwell, D.A. Treatment of Arsenic Residuals from Drinking Water Removal Processes. June 2001.

Websites

- Material Safety Data Sheet for ferric chloride.

<http://www.jtbaker.com/msds/englishhtml/f1060.htm>