

# EXECUTIVE SUMMARY

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## ES.I INTRODUCTION

### ES.I.1 Purpose of this Document

The Winnemucca District Office of the US Department of the Interior, Bureau of Land Management (BLM) received the revised Plan of Operations Amendment and Reclamation Plan Amendment (#NVN-064629) from Coeur Rochester, Inc. (CRI) in June 2014. The project is to expand CRI's precious metals mining operation and the project boundary and to reclaim and ultimately close the CRI Mine (the proposed action).

The project is on public land administered by the BLM and private land controlled by CRI. It is in Pershing County, Nevada, approximately 18 miles northeast of Lovelock.

This environmental impact statement (EIS) discloses CRI's proposed action, Alternative I to the proposed action, the No Action Alternative, and the environmental consequences that could result from implementing these actions. Potential direct, indirect, and cumulative effects on the environment are analyzed. Impacts described would form the basis for a BLM decision about the proposed action, Alternative I, and the No Action Alternative and the selection of appropriate mitigation measures.

### ES.I.2 Description of the Proposed Action

Under the proposed action, CRI would expand mining and mineral exploration on public lands at its CRI Mine. This would expand the project boundary and create additional surface disturbance. The expansion would encompass approximately 231.2 acres of new surface disturbance on private and public land, for a total project surface disturbance of 2,170 acres. This would expand the existing project boundary, which encompasses approximately 4,339 acres, by an additional 499 acres, to bring the total project area to 4,838 acres of public and private land.

The CRI Mine employs approximately 289 workers. The proposed action is a 20-year project, including a five- to seven-year extension of the mine life, a period of passive leaching, and approximately five years for reclamation and site closure after each mining and process facility closure. It would increase employment by 79 temporary jobs during a one-year construction phase, with no additional operations employees.

The proposed action consists of the following:

- An approximately 67-acre expansion of the Stage IV heap leach pad (HLP)
- An increase of the allowable maximum Stage IV HLP stacking height from 330 feet to 400 feet
- Construction of the approximately 123-acre Stage V HLP
- Relocation of portions of the American Canyon public access road and establishment of an associated right-of-way (ROW) for Pershing County on public land
- Relocation of a portion of the paved Rochester main access road and abandonment of the associated ROW within the plan of operations boundary
- Realignment of the Stage IV haul road and construction of secondary access roads
- Relocation of a portion of the power line and poles along the main access road and American Canyon Road to a new alignment corridor for the Stage IV HLP expansion and relocation of power lines from the proposed Stage V HLP footprint, including making changes to existing NV Energy ROWs
- Relocation of the electrical building and core shed
- Increase in the groundwater pumping rate
- Abandonment of production well PW-2A and installation of PW-2B
- Replacement of production well PW-3A with PW-3B and subsequent abandonment of production well PW-3A
- Excavation of new borrow areas and construction of one new growth medium stockpile
- Management of potentially acid-generating (PAG) material to include hauling it outside the pit and temporarily storing it on the north and west rock disposal sites
- Installation of a Stage IV HLP conveyor system, associated load-out points, ore stockpiles, maintenance road, and utility corridor, including process solutions and freshwater supply pipelines

- Closure activities for proposed facilities and analysis of closure activities for existing facilities, outlined in the Final Permanent Closure Plan for the mine, including alteration of the open pit safety berm sizes, reclamation, the HLP interim fluid management plans, the HLP cover designs, the installation of evaporative cells (e-cells), and long-term draindown management

### **ES.1.3 Project Alternatives**

The alternatives analyzed in detail in this EIS are the proposed action, Alternative I, and the No Action Alternative. Alternative I differs from the proposed action only with respect to management and permanent storage of the in-pit waste rock PAG material. Under Alternative I, CRI would remove in-pit PAG material and any newly encountered PAG material. Then CRI would permanently store the material in the north and west rock disposal site (RDS); this is also the temporary PAG material storage area described in the proposed action. Three other alternatives were considered but were eliminated from detailed analysis; they are discussed in **Section 2.4**.

### **ES.1.4 No Action Alternative**

Under the No Action Alternative, CRI would not be authorized to develop the project and expand the CRI Mine operations, as currently defined under the proposed action; also, the mine life would not be extended. However, CRI would be able to continue mining as outlined in previously approved plans of operation. Refer to **Section 1.8.2** for a discussion of the existing mining activities.

### **ES.1.5 Issues**

As a result of the public and internal scoping process, the following issues of concern were identified:

- What are the potential impacts on air quality from mine emissions, including mercury and carbon?
- What are the potential impacts on water quality and quantity, including any impacts on groundwater and surface waters?
- What are the social costs of the CRI Mine expansion for emitting greenhouse gases (GHGs), in particular carbon dioxide?
- What is the contribution to climate change from the CRI Mine expansion from emitting GHGs, in particular carbon dioxide?
- What are the potential geochemical mining impacts from chemical leaching at mine facilities, including waste disposal sites, open pits, and HLPs?
- What are the potential impacts on wild horses and burros?
- What are the potential impacts on wildlife and special status species?

- What are the potential impacts on vegetation and riparian resources?
- What are the potential impacts on cultural resources?
- What are the potential impacts on visual resources?
- What are the indirect impacts on dispersed recreation?

### ES.1.6 Summary of Potential Impacts

A summary of the direct and indirect effects for the proposed action, Alternative I, and No Action Alternative are outlined in the table below. The effects summary is based on implementing the environmental protection measures that CRI is committed to and adhering to operating plans and local, state, and federal laws and regulations.

Native American religious concerns, geology and minerals, noise, paleontological resources, rangeland management, lands and realty, recreation, visual resources, and wild horses and burros would not be affected by the proposed action or alternatives. In addition, the following elements, or resources, would be only indirectly affected by the extended time for activities under the proposed action (five to seven years): wastes and materials (hazardous and solid) and transportation, access, and public safety. There would be no new direct impacts on these resources or elements associated with the proposed action or alternatives.

Resource	Summary of Impacts		
	Proposed Action	Alternative I— Permanent Management of PAG Material Outside of the Rochester Pit	No Action Alternative
Air quality	<p>Atmospheric pollutant concentrations would result from the direct emissions of pollutants under the proposed action. However, the modeled concentrations are not expected to exceed the standards allowed by the regulations.</p> <p>In addition to direct atmospheric pollutant concentrations, the proposed action could have indirect effects from changes in the atmosphere. Carbon dioxide equivalent (CO<sub>2e</sub>) emissions from the proposed project would increase national CO<sub>2e</sub> emissions by 0.00065 percent and global emissions by</p>	<p>Air emissions and direct and indirect impacts on the ambient air quality from the project are not expected to increase over current levels and are similar to those of the proposed action.</p>	<p>Air emissions and direct and indirect impacts on the ambient air quality from the existing project are not expected to increase over current levels and are similar to those of the proposed action.</p>

Resource	Summary of Impacts		
	Proposed Action	Alternative I— Permanent Management of PAG Material Outside of the Rochester Pit	No Action Alternative
	0.00013 percent. At the national and global scales, this would be a negligible impact.		
Cultural resources	A multicomponent, complex, prehistoric assemblage would be directly impacted by expanding Stages IV and V HLP and e-cell construction. The historic Panama townsite would be indirectly impacted by visual changes to setting and feeling as a result of the proposed borrow pit. There would also be some residual auditory and atmospheric impacts to the integrity of setting of the Rochester Cultural District and the historic Panama townsite. There would be direct and indirect adverse impacts in accordance with the NHPA on these sites even if mitigated. However, the intensity of adverse impacts would be reduced through BLM-proposed mitigation, as outlined in Section 6.1, which includes <u>implementing a treatment plan</u> .	Same as the proposed action.	Activities would affect only those historic properties that have been previously mitigated or that have been identified as needing treatment before impact.
Migratory birds	The proposed action would impact migratory birds by removing vegetation used for foraging and breeding. Though the proposed action would result in a net loss of potential habitat, it would not contribute to a loss of viability for any migratory bird species. Further, it is unlikely that implementing the proposed action would result in a decline in local or regional migratory bird populations. Mining, drilling, human presence, and construction noise could disturb birds nesting in the vicinity of the proposed project, resulting in	Same as the proposed action.	The No Action Alternative would continue to directly affect migratory birds by removing vegetation in areas authorized for surface disturbance, up to a total of 1,939 acres.

Resource	Summary of Impacts		
	Proposed Action	Alternative I— Permanent Management of PAG Material Outside of the Rochester Pit	No Action Alternative
	<p>nest abandonment. Direct impacts are loss of American Canyon Spring, associated potential loss or decrease in water discharge, and loss of habitat. There is also a potential for injury or mortality from vehicular traffic, construction, or other project components associated with the proposed action.</p>		
Water resources	<p>Groundwater levels would change due to changing the volume of water that infiltrates the ground, and pumping would increase. Models predict that the maximum drawdown would be associated with the water supply wells and would occur at the end of mining in 2024. The proposed action would result in the American Canyon Spring being covered by the proposed Stage V HLP. This spring and other nearby seeps feed an ephemeral stream that flows during times of high precipitation and snowmelt along the upper American Canyon channel. Covering the American Canyon Spring would remove surface discharge, which would lessen water quantity. Direct environmental impacts on groundwater or surface water quality from the proposed action are not anticipated, beyond those observed for the current operations.</p>	<p>Same as the proposed action.</p>	<p>Pumping rates would not change. Models predict that the highest drawdown is predicted to occur in the bedrock aquifer near the mine supply wells when mining ends in 2018. Groundwater quality impacts and trends under the No Action Alternative would remain consistent with present day conditions. The No Action Alternative would not impact surface water quantity. Seep and spring water quality impacts would remain consistent with present day conditions.</p>
Social values and economics	<p>Employment for mine workers would be extended five to seven years and would add 79 temporary workers for construction. There would be no impacts on housing or public services. Population</p>	<p>Same as the proposed action.</p>	<p>There would be no new impacts from the No Action Alternative.</p>

Resource	Summary of Impacts		
	Proposed Action	Alternative I— Permanent Management of PAG Material Outside of the Rochester Pit	No Action Alternative
	would increase due to workforce expansion, but this would be temporary. CRI anticipates that project operations under the proposed action would sustain the revenue contributions for up to seven years beyond those that would accrue under the presently approved mine plan.		
Soils	The proposed action would disturb up to 231 additional acres of soil.	Same as the proposed action.	The No Action Alternative would continue to disturb soils in areas authorized for surface disturbance, up to a total of 1,939 acres.
Special status species	Implementing the proposed action would result in direct and indirect impacts on vegetation used as habitat by special status species. The extent of habitat for individual special status species that would be impacted would vary by species; this is because not all special status species have the same habitat requirements. Additional habitat fragmentation and behavioral effects may occur as a result of the noise created during the construction and operation of the proposed action. Direct impacts are loss of American Canyon Spring, associated potential loss or decrease in water discharge, and loss of habitat. Additional direct and indirect impacts are risk of drowning and risk of increased disease transmission; <u>these impacts are expected to be minimal.</u>	Same as the proposed action.	The No Action Alternative would continue to directly affect special status species by removing vegetation in areas authorized for surface disturbance, up to a total of 1,939 acres.
Vegetation	Implementing the proposed action would result in direct and indirect impacts on vegetation over the estimated five- to seven-year time frame. Impacts are vegetation removal, temporary	Same as the proposed action.	The No Action Alternative would continue to have a direct effect by removing vegetation in areas authorized for surface disturbance, up to a total of 1,939 acres.

Resource	Summary of Impacts		
	Proposed Action	Alternative I— Permanent Management of PAG Material Outside of the Rochester Pit	No Action Alternative
	modification of vegetation structure, and increased potential for invasive plant spread.		
Wildlife	Implementing the proposed action would result in direct and indirect impacts on vegetation used as wildlife habitat over the estimated five- to seven-year time frame. Noise, construction, and human presence may impact wildlife. Direct impacts are loss of American Canyon Spring, associated potential loss or decrease in water discharge, and loss of habitat. Additional direct and indirect impacts are risk of drowning, poisoning, and increased disease transmission.	Same as the proposed action.	The No Action Alternative would continue to directly affect wildlife by removing vegetation and habitat in areas authorized for surface disturbance, up to 1,939 acres.