

CASTLE MOUNTAIN VENTURE  
IVANPAH UNDERGROUND WATER AND 69 kV OVERHEAD POWER LINE  
RIGHTS-OF-WAY PROJECT  
CLARK COUNTY, NEVADA  
AND  
SAN BERNARDINO COUNTY, CALIFORNIA

**PLAN OF DEVELOPMENT**

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*Submitted to:*

Bureau of Land Management  
California Desert District, Needles Field Office  
1303 S. Highway 95  
Needles, California 92363

and

Bureau of Land Management  
Southern Nevada District, Las Vegas Field Office  
4701 North Torrey Pines Drive  
Las Vegas, Nevada 89130

*Submitted by:*

Castle Mountain Venture  
980 American Pacific Drive, Suite 102  
Henderson, Nevada 89014

*Prepared by:*



Reno:  
5401 Longley Lane, Suite 5  
Reno, Nevada 89511  
Phone: (775) 826-8822

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## **1 INTRODUCTION**

This Plan of Development (POD) has been prepared on behalf of Castle Mountain Venture (CMV), a wholly owned subsidiary of Equinox Gold Corp and operator of the Castle Mountain Mine (CMM). This POD collectively provides for the following current and proposed activities:

- CMM Access across existing roads (CMM Access)
- Ivanpah Underground Water Line Right-of-Way Project (Water Line Project)
- 69 Kilovolt (kV) Overhead Power Line Right-of-Way Project (Power Line Project)

The proposed activities are located in Clark County, Nevada, and San Bernardino County, California.

CMV is proposing to construct, operate, and maintain the Water Line Project, which includes the construction and operation of a total of approximately 168,255 linear feet, or approximately 31.6 miles of an underground water line on public land, which includes approximately 2,983 linear feet on public land in the CMM approved mine boundary, and approximately 1,626 linear feet on private land (Figure 1). The Water Line Project will allow CMV to beneficially use groundwater from private land/wells located in the unadjudicated Ivanpah basin located in San Bernardino County, California. Water will be conveyed to the CMM, while crossing through both San Bernardino County, California, and Clark County, Nevada. The proposed water line is located on public land managed by the Bureau of Land Management (BLM), California Desert District Needles Field Office, and Southern Nevada District Las Vegas Field Office, and private land. CMV will obtain other approvals as necessary, including from private landowners and an excavation permit from the San Bernardino County Department of Public Works for approximately 13,007 feet of public land from Nipton to the California-Nevada state line.

CMV also proposes to re-establish the former 69kV overhead power line that provided grid power to the CMM between 1991 and 2011 from the existing NV Energy transformer located adjacent to the Walking Box Ranch. CMV will construct, operate, and maintain the Power Line Project, including the construction and operation of a total of approximately 88,455 linear feet, or approximately 16.2 miles of a 69 kV overhead power line on public land (Figure 1), which includes approximately 2,798 linear feet within the CMM approved mine boundary. The former power line was removed in 2011; this proposed Power Line Project will allow CMV to re-install the previously authorized equipment and bring line power from the Walking Box Ranch transformer in Clark County, Nevada, to the CMM in San Bernardino County, California. The Power Line Project will also allow the CMM to significantly reduce greenhouse gas emissions associated with power generation currently supplied by on-site diesel fuel power generators.

ROW applications (SF-299 forms) for the originally proposed water line were submitted to the BLM California Desert District Needles Field Office, and Southern Nevada District Las Vegas Field

Office in October 2022. SF-299 forms for the proposed power line ROW were submitted to both field offices in May 2023; a revised POD including the power line ROW was also submitted in May 2023. Based on BLM comments, a revised POD was submitted in July 2024. Additional BLM comments were received and further revised PODs were submitted in November 2024 and January 2025. This revised POD is submitted to account for new BLM comments received since January 2025. New SF-299 forms for a revised water line are included with the submittal of this revised POD. This POD describes the proposed water line and power line ROWs on public land in both California and Nevada. The descriptions for each utility are combined or separated as appropriate. Environmental documents, either combined or separate (as determined by the agencies), compliant with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA), will be prepared for the proposed Project (as required), and will be coordinated among the BLM offices and the County, as necessary.

### **1.1 CMM Access**

At the highest level, the General Mining Law of 1872 (Mining Law), specifically Section 2348, grants a preference-right of entry to mines opened and improved on public land; therefore, a formal ROW grant is not required for access to the CMM.

Access to the CMM project is not specifically requested through this POD but rather to document and formalize access that has occurred since the 1980s. The public can also benefit from the continued use and access of this public road. Similarly, this road provides reliable access to emergency services, such as during the 2023 York wildfire response. Costs for CMV to maintain this road can exceed \$1 million per year; these activities are further described in the following sections.

#### **1.1.1 CMM Access Authorization**

Notwithstanding the rights granted under the Mining Law, road access and maintenance was additionally authorized by way of the BLM approved mine plan of operations (MPO) for the CMM. The original MPO for the CMM included two potential main entry routes into the CMM: one from the west via Ivanpah and Hart Mine roads, and a second from the north following the path of the historic Barnwell to Searchlight Railroad grade. Both entry options were presented in the 1989 Draft Environmental Impact Statement (EIS) for the CMM project. A 1990 Supplemental to the Draft EIS was published and included an environmentally preferred (third) alternative for CMM main access, using other existing road segments that were established during the historic period, including segments of the current main road used to access the CMM from the YKL Ranch, or as it has become known, the Walking Box Ranch. This road, now commonly known as the Walking Box Ranch Road, was originally designated through the CMM NEPA analysis as the CMM Mitigated Access Route (CMM Access Road). This complete road that exists today, from Walking Box Ranch to the CMM, is a singular result of early permitting of the CMM, which conjoined many pre-existing road segments.

While a permit or ROW is not required to continue ongoing access to the CMM project, per the Mining Law and the authorized CMM MPO, inclusion in this POD seeks to complete the record

regarding CMM access and to define what activity constitutes authorized routine maintenance for the CMM Access Road.

**1.1.2 CMM Access Road Use and Maintenance**

The types and frequency of vehicles expected to use the CMM Access Road are listed in Table 1<sup>1</sup>. Vehicle and equipment maintenance will either be performed at the CMM or off site; no vehicle or equipment maintenance will be performed in the ROWs.

**Table 1: Vehicle Types and Frequency**

Type	Daily Trips	Weight (approximate)	Fuel	Description
Light Vehicles	84	¾ ton	Gasoline Diesel	4x4
Vanpool Van	16	¾ ton	Gasoline	Passenger van
Utility Trucks	1	20-30 tons	Diesel	Various vehicle types (drilling rigs, boom trucks, etc.)
Service truck or similar	8	1 ton	Diesel	Equipment maintenance truck
Delivery Truck/ Semi	54	Weight will vary depending on the equipment on transport	Diesel	Transportation of equipment and supplies to the CMM
Water truck	2	10 tons	Diesel	Approx. 4,000-gallon water truck for drilling support and dust suppression

Routine and non-routine road maintenance may occur across the approximate 18-mile long CMM Access Road. Routine maintenance is defined as those standard practices that must occur to preserve safe travel across an improved dirt or gravel road. Examples of these activities include:

- Use of a motor grader to repair potholing and knock down wash-boarding.
- Use of a motor grader to re-establish the definition of an aging roadway. Widening the established width of existing roads is prohibited.
- Application of fresh road aggregate using side or end-dump trucks.
- Use of a water truck and vibratory roller to prepare new road aggregate material.
- Application of dust suppressant. Two dust suppressant products are currently used and will continue to be used on the CMM Access Road:
  - Soil Sement – A non-toxic, synthetic polymer based suppressant.

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<sup>1</sup> Vehicle use and the resulting environmental effects have been analyzed during the CMM NEPA that was most recently completed as an EIS in 1997. Proposed changes to vehicle use have been included in the pending application to amend the CMM MPO and its supporting emissions inventory, all of which will be analyzed through a forthcoming mine expansion EIS expected to begin in 2025.

- Terra Lig Pro FS – A non-toxic, lignin-based suppressant. Lignin is derived from plant cellulose, a natural suppressant alternative. This specific product is certified by the Organic Materials Review Institute.

Non-routine road maintenance includes activities that generally only occur once every few years, and may include replacing an existing culvert that spans one of the many ephemeral drainage crossings.

CMM Access Road maintenance generally occurs quarterly depending upon weather conditions. Dust suppressant is generally applied annually. These activities will continue to occur associated with the other activities outlined in this POD.

## **2 REQUESTED OF BLM**

This POD includes a request for both short-term and long-term ROWs. The sum of their combined widths will form the ROW area during construction. The Ivanpah water pipeline ROW that is described in Section 2.1 will have a total ROW width of 65 feet. The 69kV power line ROW that is described in section 2.2 will have a total ROW width of 100 feet. Following successful construction, all short-term ROWs will terminate and CMV will maintain the long-term ROWs for the life of the authorized ROW use and reclamation. Table 2 shows the acreages of the short-term and long-term ROWs associated with each ROW request.

### **2.1 Ivanpah Water Pipeline**

In San Bernardino County, California, CMV is requesting a BLM long-term ROW grant for approximately 52,552 linear feet, or approximately ten miles, of a 20-foot wide longterm- ROW on public land (approximately 24.1 acres) for the proposed water line, which includes 61 linear feet in the Union Pacific Railroad ROW, and approximately 2,983 linear feet inside the CMM approved mine boundary, but excludes 1,626 linear feet on private land through the town of Nipton. Approximately 13,007 linear feet will be between Nipton and the California-Nevada state line (approximately six acres), and will be located just outside the bounds of the County's Nipton Road ROW. The County's existing Nipton Road ROW is a Revised Statute (RS) 2477 ROW (CACA53999) and approximately 45 feet in width. The 20-foot wide long-term ROW will be located just within the northern outer bounds of the Nevada Department of Transportation (NDOT) 400-foot-wide SR 164 ROW and will include a ten-foot wide unimproved dirt maintenance road centered above the buried pipeline. Approximately 35,952 linear feet of the total 52,552 linear feet of the underground water line occurring on public land in California will be located on the western side of Walking Box Ranch (WBR) Road/Castle Mountain Mitigated Access Route (CMMAR) (referred to as CMM Access Road in this POD) to the CMM. To avoid crossing a small land section corner of the Mojave National Preserve, the water line and water line ROWs will cross to the east of the CMM Access Road at a point nearest the Mojave National Preserve boundary. The water line will terminate inside the CMM approved mine boundary at the point of intersection with private land and approved land disturbance, or approximately 2,983 feet within the CMM approved mine boundary. CMV is also requesting a 45-foot wide

short-term ROW for temporary construction purposes. Most of the short-term ROW is adjacent to and parallels the length of the long-term ROW but for the following exceptions:

- Construction staging areas: one in California
- Construction access points: four in California (including one on private land)

In Clark County, Nevada, CMV is requesting a BLM long-term ROW grant for approximately 114,077 linear feet, or approximately 21.6 miles, of a 20-foot wide long-term ROW on public land (approximately 52.8 acres) for the proposed water line (Figure 2). The 61,698 linear feet of the proposed water line between the California-Nevada state line and the junction with the CMM Access Road will be centered within the long-term ROW; the long-term ROW will be located within the northern outer bounds of the NDOT SR 164 ROW (Figure 2), and will include a ten-foot wide unimproved dirt maintenance road centered above the buried pipeline. Approximately 52,379 linear feet of the total 114,077 linear feet of the underground water line occurring in Nevada will be located on the western side of the CMM Access Road. CMV is also requesting an additional 45-foot wide short-term ROW for temporary construction purposes. Most of the short-term ROW is adjacent to and parallels the length of the long-term ROW but for the following exceptions:

- Construction staging areas: three in Nevada
- Construction access points: 13 in Nevada

The estimated duration of the Short Term Water Line ROW is two years following the start of construction. The estimated duration of the Long Term Water Line ROW is 20 years for operation and maintenance and up to ten years for final reclamation.

**Table 2: Acreage of Short-Term and Long-Term ROWs**

ROW Description	ROW Term	State	Width (feet)	Length on Public Land (feet)	Length on Private Land (feet)	Area on Public Land (acres)	Area on Private Land (acres)	Location Notes
Water Line Project	Short Term*	CA	45	52,552	1,626	54.3	1.7	Between Nipton and California-Nevada state line, and from California-Nevada state line to CMM
		NV		114,077	0	117.8	0	Partially within the bounds of the SR 164 ROW, and partially on the western side of the CMM Access Road
	Long Term**	CA	20	52,552	1,626	24.1	0.7	Between Nipton and California-Nevada state line, and from California-Nevada state line to CMM
		NV		114,077	0	52.8	0	Partially within the bounds of the SR 164 ROW, and partially on the western side of the CMM Access Road
Water Line Project (Access Point Areas)	Short Term	CA	NA	NA	0	0.4	0	Starting within Nipton through California-Nevada state line
		NV	NA	NA	0	0.6	0	From California-Nevada state line to junction with CMM Access Road
Power Line Project	Long Term**	CA	100	38,956	0	89.4	0	From California-Nevada state line to CMM approved disturbance area
		NV		49,499		113.6	0	From Walking Box Ranch transformer to California-Nevada state line
Staging Areas***	NA	CA	NA	NA	NA	0	20.1	
		NV				1.4	0	

ROW Description	ROW Term	State	Width (feet)	Length on Public Land (feet)	Length on Private Land (feet)	Area on Public Land (acres)	Area on Private Land (acres)	Location Notes
<i>California Subtotal</i>						<b>168.2</b>	<b>22.5</b>	
<i>Nevada Subtotal</i>						<b>284.8</b>	<b>0</b>	
<b>Total</b>						<b>453.0</b>	<b>22.5</b>	

\*To be reclaimed after construction

\*\*To be maintained throughout the life of the Castle Mountain Mine

\*\*\*The staging areas are all previously disturbed, and no new surface disturbance is proposed in these areas. Therefore, the disturbance totals will not be included in the pending CMM EIS analysis; however, the areas will be reclaimed to their original conditions if any incidental disturbance occurs.

## **2.2 69kV Power Line**

In San Bernardino County, California, CMV is also requesting a BLM long-term ROW grant for approximately 38,956 linear feet, or approximately 7.4 miles, of a 100-foot wide long-term ROW on public land (approximately 89.4 acres) for the proposed 69kV power line. The 100-foot wide ROW fully encompasses most of the existing CMM Access Road running width (30 feet), and will traverse both sides of the existing CMM Access Road to the CMM, following the previously removed power line alignment as closely as possible (Figure 3). No short-term ROW for the proposed power line is being requested along the CMM Access Road in California. To avoid crossing a small land section corner of the Mojave National Preserve, the power line and power line ROW will cross to the east of the CMM Access Road at this point nearest the Mojave National Preserve. The power line will terminate inside the CMM approved boundary near the proposed electrical substation (per the 2022 Mine Plan amendment), or approximately 2,798 feet within the CMM approved boundary.

In Clark County, Nevada, CMV is also requesting a BLM long-term ROW grant for approximately 49,499 linear feet, or approximately 9.4 miles, of a 100-foot wide long-term ROW on public land (approximately 113.6 acres) for the proposed power line. The 100-foot wide ROW will begin at the Walking Box Ranch transformer, then turn southwest. The 100-foot wide ROW will include the existing CMM Access Road running width, and will traverse both sides of the existing road to the Nevada-California state line, following the previously removed power line alignment as closely as possible. No short-term ROW for the proposed power line is being requested along the CMM Access Road in Nevada.

The estimated duration of the Long-Term Power Line ROW is 20 years for operation and maintenance and up to ten years for final reclamation.

## **2.3 Project Purpose**

The purpose of the Water Line Project is to provide additional water supply required for CMV's proposed CMM expansion project<sup>2</sup> and the existing CMM mining operations with a backup water supply. The proposed water pipeline infrastructure may also provide other ancillary benefits, such as an emergency water supply for wildfire protection. Currently, there are a few (if any) regional water supply options should a significant fire develop (like the 2023 York fire which burned over 90,000 acres of nearby (eastern) Joshua tree habitat). Following the 2022 National Park Service's (NPS) decision to suspend the mine's historic (and only potable) water supply from the CMM's West Well Field (WWF), CMV deemed it prudent to develop an alternative supply of groundwater to support ongoing mining operations. The CMM MPO authorized the historic WWF water system under 43 Code of Federal Regulations 3809. In February 2016, the Castle Mountain National Monument was established, and jurisdiction of these public lands was transferred from the BLM to the NPS. In June 2022, NPS refused to extend the temporary use authorization

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<sup>2</sup> CMV submitted a MPO amendment for mine expansion to the California BLM (Needles Field Office) in March 2022.

granted for water supply activity at WWF for the CMM. NPS authorization for the WWF was reinstated in June 2024 when they issued a mine plan (NPS Plan) approval letter and notification of bond acceptance. The NPS Plan notwithstanding, this POD reflects the need to both identify a backup supply for current operations, while also providing a long-term stable supply for extended mining.

The use of Ivanpah Valley groundwater via a pipeline to the CMM was analyzed as a project alternative in the 1989 Castle Mountain Project Draft Environmental Impact Statement and it is again proposed in this POD. CMV needs to obtain BLM ROW grants to construct, operate, and maintain this water pipeline to deliver water from an existing well located on private land to the existing CMM.

The purpose of the Power Line Project is to provide CMV with adequate line power to the CMM for mine operations. The 69kV power line will replace the current source of the CMM's electrical power supply that is provided by diesel fuel power generators. This change will reduce the CMM's Scope 2 greenhouse gas (GHG) emissions by approximately half.

## **2.4 Authorizations, Permits, Reviews, and Approvals**

The Project complies with the BLM Las Vegas Resource Management Plan, as amended, the California Desert Conservation Area Plan, as amended by the 2016 Desert Renewable Energy Conservation Plan (DRECP), as well as with other relevant federal, state, and local statutes, regulations, and plans. The utility ROWs described in this POD support a mine project specifically identified in the DRECP as an "existing high-priority mineral operation." A portion of the proposed water pipeline and 69 kV power line falls within an area recently designated by President Biden as the Avi Kwa Ame National Monument. National Monuments are authorized under the Antiquities Act of 1906 through presidential proclamations which can define specific activities that are either prohibited or allowed within the boundary of each respective monument. Relevant to the Avi Kwa Ame monument, the proclamation is clear that the monument does not prohibit utility developments, and it provides for authorization of new utility projects, such as the activities proposed herein. Paragraph three on page 13 of the proclamation includes the following text:

*Nothing in this proclamation shall be construed to preclude the renewal or assignment of, or interfere with the operation, maintenance, replacement, modification, upgrade, or access to, existing flood control, utility, pipeline, and telecommunications facilities; roads or highway corridors; seismic monitoring facilities; or other water infrastructure, including wildlife water developments or water district facilities, within or adjacent to an existing authorization boundary. **Existing<sup>3</sup> flood control, utility, pipeline, telecommunications, and seismic monitoring facilities, and other water infrastructure, including wildlife water developments or water district facilities, may be expanded, and new facilities of such kind may be constructed, to the extent consistent with the***

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<sup>3</sup> Emphasis added.

*proper care and management of the objects identified above and subject to the Secretary’s authorities and other applicable law.*

Importantly, this proclamation specifically allows for existing, modified, and new facilities related to utility, pipeline, or other water infrastructure, and therefore, the activities proposed in this POD do not conflict with the tenants of the monument. Furthermore, the uses proposed herein will not jeopardize the care and management of the objects identified in the proclamation because the proposed activities and associated land disturbance are kept mostly to existing ROW corridors. Additionally, the proposed activities are distant from Spirit Mountain, the focal point of the monument, and as such the temporary features (e.g., power line or water line utilities) will not be visible from any part of Spirit Mountain.

As noted in this POD, the 69 kV power line was previously authorized by both BLM California (Needles) and Nevada (Las Vegas) districts. A copy of the prior NEPA document (Environmental Assessment) is included in Appendix B. Similarly, the CEQA Initial Study is included for reference as Appendix C. Appendix D contains the resulting ROW lease agreements from both BLM offices.

Table 3 includes, but may not be limited to, applicable federal, state, and local agencies’ approvals, reviews, and permitting requirements that may be required for the Project.

**Table 3: Authorizations, Permits, Reviews, and Approvals**

Action Requiring Permit, Approval, Review	Permit/Approval	Accepting Authority/Approving Agency	Statutory Reference
<b>FEDERAL</b>			
ROWs under federal management	ROW Grants	BLM	Federal Land Policy and Management Act of 1976, as amended (Public Law 94-579), United States Code (USC) 1761-1771, and 43 Code of Federal Regulations (CFR) 2800
NEPA Compliance to Grant ROWs	Environmental Document Decision	BLM	NEPA, 40 CFR Part 1500 et. seq.
Grant of ROWs by BLM	National Historic Preservation Act Compliance with Section 106	BLM and State Historic Preservation Office	National Historic Preservation Act of 1966, 36 CFR Part 800, and 16 USC 47
Dredge/fill to Waters of the United States	Approved Jurisdictional Determination (AJD) or Clean Water Act (CWA) Section 401/404 permits, as applicable	US Army Corps of Engineers (ACOE)	CWA Sections 401/404
Desert Tortoise Biological Assessment	Biological Opinion	United States Fish and Wildlife Service	Endangered Species Act of 1973, as amended

<b>STATE OF NEVADA</b>			
Construction of Utility Facilities	Notice of Intent to Comply with the General Stormwater Discharge Permit for Construction Activity (NOI)	Nevada Department of Conservation and Natural Resources, Division of Environmental Protection, Bureau of Water Pollution Control	Nevada Administrative Code (NAC) 445a
Construction of Utility Facilities in SR ROW	Encroachment Permit	NDOT	NAC 408.427
Dust Control	Surface Area Disturbance Permit	Nevada Division of Environmental Protection, Bureau of Air Pollution Control	NAC 445B.22037
<b>STATE OF CALIFORNIA</b>			
Use of Construction Equipment	Permit to Operate	Mojave Desert Air Quality Management District (MDAQMD)	MDAQMD Rule Book
Dredge/Fill to Waters of the State (WOTS)	WOTS Waste Discharge Requirements	State Water Board	California Code of Regulations Title 23, Section 3855
Impacts to California Department of Fish and Wildlife (CDFW) Surface Water Features	Lake and Streambed Alteration Agreement	CDFW	California Fish and Game Code Section 1602
Construction of Utility Facilities	General Permit for Discharges of Storm Water Associated with Construction Activity	State Water Resources Control Board	Construction General Permit Order 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-0006-DWQ)
Construction and Operation of Utility Facilities	Environmental Document (CEQA Compliance)	San Bernardino County Planning Commission	CEQA Guidelines Section 15002(b)(3)
<b>LOCAL</b>			
Construction and Operation of Utility Facilities	Conditional Use Permit	San Bernardino County	County Zoning Code
Construction of Utility Facilities in County Road ROW	Excavation Permit	San Bernardino County	California Code of Regulations, Title 8, Chapter 3.2, Article 2, Section 341

Note: CMV submitted an AJD to the US ACOE in September 2024 for surface water features within the CMM boundary; an AJD will also be submitted for features crossing the water line and power line ROWs. Based on preliminary information, CMV does not anticipate any surface water features will be determined jurisdictional; therefore, any permits required for compliance with Clean Water Act requirements are not anticipated to be necessary for the Project.

### 3 RIGHT-OF-WAY LOCATION

The Water Line and Power Line projects are located on public lands managed by the BLM California Desert District Needles Field Office and Southern Nevada District Las Vegas Field Office. The proposed underground water line will require a 20-foot wide long-term ROW, and an additional short-term 45-foot wide ROW. The proposed overhead power line will require a

100-foot wide long-term ROW. There are no additional short-term ROWs proposed for temporary construction and/or equipment storage activities associated with the overhead powerline. The requested ROWs occur entirely on BLM-managed public land (Figures 1 through 3).

### 3.1 Legal Description

The entire length of the proposed BLM ROWs for the proposed water line will traverse BLM-managed public land, originating in San Bernardino County, California, in the northwest (NW) ¼ of Section 33, Township 16 North (T16N), Range 16 East (R16E), Mount Diablo Meridian. The ROWs for the proposed water line will also terminate in San Bernardino County, California, on BLM-managed public land at the CMM boundary, in the NW¼ of Section 23, T14N, R17E, San Bernardino Meridian. Detailed legal descriptions of the entire proposed ROW for the proposed water line located on BLM-managed public land in California and Nevada are included in Appendix E.

The entire length of the proposed BLM ROW for the proposed power line will also traverse BLM-managed public land, originating in Clark County, Nevada, in the NW¼ of Section 27, T28S, R62E, Mount Diablo Meridian. The ROW for the proposed power line will terminate in San Bernardino County, California, on BLM-managed public land at the CMM boundary, in the NW¼ of Section 23, T14N, R17E, San Bernardino Meridian. Detailed legal descriptions of the entire proposed ROW for the proposed power line located on BLM-managed public land in California and Nevada are also included in Appendix E.

### 3.2 Access

Construction vehicles will access the proposed ROW alignments via Nipton Road in California, and SR 164/Joshua Tree Highway and the CMM Access Road in Nevada. No additional access for construction or maintenance will be required.

### 3.3 Existing Land Use

The land uses near the proposed ROWs include mining, utility transmission, dispersed recreation, wildlife habitat, and other public land uses, including access roads and the recently established Avi Kwa Ame National Monument. The existing land use authorizations near the proposed ROWs are listed in Table 4.

**Table 4: Existing Land Use Authorizations**

Holder	ROW/Activity	Case File No.
San Bernardino County	Nipton Road	CACA 053999
NDOT	SR 164	N-58548
NV Power Co	Searchlight Substation to Walking Box Ranch Powerline	N-54649

The proposed water line will be located on small portions of private land (see Section 1). Water supply facilities and wells will be located on the adjacent private parcel in Nipton (Assessor's

Parcel Number [APN] 057307108), which is partially leased by CMV. The water pipeline may also cross over a portion of the following other private parcels in Nipton: APNs 057307119, 057307115, 057307116, and 057307118.

## **4 FACILITY DESIGN FACTORS**

### **4.1 Water Line Project**

The trench needed for the underground water line will be up to six feet deep and up to 30 inches wide at the ground surface. Both steel and high-density polyethylene (HDPE) pipes will be used and will both be up to ten inches in diameter. The maximum supply is estimated at 750 gallons per minute, which is calculated to be 911 pounds per square inch (psi) at the beginning of the water line in Nipton. The exact path identified for the ROW alignment will be cleared and marked by CMV or their contractors. See Appendix F for a preliminary engineered drawing of the proposed water line.

### **4.2 Power Line Project**

The design, construction, operation, and maintenance of the Power Line Project will meet or exceed the requirements of the following: the National Electrical Safety Code (NESC); the United States Department of Agriculture - Rural Utilities Services; and the United States Department of Labor Occupational Safety and Health Administration standards. Based on the Avian Power Line Interaction Committee (APLIC) recommendations, adequate raptor protection construction per the APLIC Report CEC-500-2006-022 (APLIC 2006) will be implemented.

#### **4.2.1 Facilities**

The proposed 69 kV power line will include a combination of wood single-pole staggered tangent structures and wood single-pole angle dead end structures, totaling approximately 272 poles along the entire route on public land; two poles will be located on private land within the CMM boundary. The single-pole structures will be approximately 52 to 70 feet tall depending on the terrain and will be placed approximately 300 feet apart. The poles will be set in holes that will be backfilled with native or imported material to support the structure. Each pole site will require an approximate ten feet by ten feet area. Approximately 92 pole locations will require single-pole wood angle structures that will have guy wires attaching the angle poles to the soil anchors to provide structural support. An estimated 20 line tensioning pull-sites will be required, with 9 of them required additional land disturbance. The line will be designed to meet or exceed the requirements of the NESC. See Appendix G for a preliminary engineered drawing of the proposed power line.

The poles will support three aluminum conductors. All conductor wires will be at least 22 feet from the ground surface. A shield wire will be connected to copper ground wires buried in each pole excavation that will electrically ground all the poles.

## 4.2.2 Construction Staging Areas

Temporary staging areas for equipment storage and staging will be located at up to five locations within or adjacent to the Water Line Project and Power Line Project ROWs, between the community of Nipton and the CMM (Figures 1 through 3). The three staging areas located on previously disturbed public land along the pipeline route to the CMM total 1.4 acres. The number of staging areas proposed in this POD is a conservative estimate available to the utility contractors. The contractors may determine that some locations are not required, and in that case, they would not be used. Locations were chosen based on several factors, including:

- Limiting the transit distance between work locations and material storage locations;
- Limiting any new surface disturbance; and
- Keeping most staging areas on private land and the CMM site.

The five staging areas are described as follows:

1. SA-1 is located in Nipton on 17 acres of private land. It is one of the two main staging areas. See Figure 4.
2. SA-2 is located within the NDOT easement for SR 164 on 0.5 acre of public land. See Figure 5.
3. SA-3 is located at Walking Box Ranch on 0.4 acre of public land. This staging area is located within the existing CMV Easement and is listed as an approved activity that burdens the land title. See Figure 6 and Figure 6a.
4. SA-4 is located adjacent to the CMM Access Road (in Nevada) on 0.5 acre of public land. See Figure 7.
5. SA-5 is located at the CMM mine site on 3.14 acres of private land. See Figure 8.

CMV will coordinate with the BLM to ensure that no additional disturbance occurs outside the existing disturbance footprint. If any incidental disturbance were required outside the existing disturbance footprints, CMV will coordinate with the BLM before conducting any action outside the approved areas.

## 4.3 Proposed Short-Term and Long-Term Surface Disturbance

Table 5 outlines the acres of proposed surface disturbance for each of the ROW actions.

# 5 PROJECT CONSTRUCTION, OPERATION, AND MAINTENANCE

## 5.1 Pre-Construction Activities

### 5.1.1 Surveying

Before construction surveying begins, required permits to survey on BLM-managed public lands will be obtained, if necessary. Prior to construction, CMV or their contractors will stake the proposed water line and power line routes and will flag the construction limits.

### **5.1.2 Construction Specifications**

CMV will develop a set of engineered drawings in accordance with County and NDOT requirements for the water line portion along the County Road and Nevada SR ROW. If required by the BLM, CMV will develop a set of site-specific construction specifications for the water line and power line in cooperation with the BLM prior to construction along the CMM Access Road. The design and construction specifications will be custom tailored for site-specific conditions by qualified technical staff.

### **5.1.3 Pre-Construction Meeting**

CMV will contact the BLM Authorized Officer, or their designee, at least ten days prior to commencing construction and/or any surface disturbing activities. A pre-construction meeting will be scheduled with the BLM and CMV prior to commencing construction and/or surface disturbing activities. CMV personnel and contractors' representatives involved with the construction and/or any surface disturbing activities associated with the Project will attend this meeting to review the stipulations of the BLM ROW grants, and other state and/or local approvals, as necessary, including stipulations of the POD and other documents.

CMV will not initiate any construction or other surface disturbing activities until after the release of the BLM Notices to Proceed (Forms 2800-15) are issued by the BLM Authorizing Officer or their designee, and all appropriate permits are obtained from the County, NDOT, and any other applicable state and/or local agencies.

**Table 5: Proposed Short-Term and Long-Term Surface Disturbance within ROWs**

ROW Project	Activity	State and/or Number of Activity Occurrences	ROW Term	Width (feet)	Length on Public Land (feet)	Length on Private Land (feet)	Disturbance Area on Public Land (acres)	Total Disturbance on Public Land (acres)	Disturbance Area on Private Land (acres)
Water Line Project	Water pipeline construction within the long-term and short-term ROWs	California	Short Term*	45	55,145	1,626	57.2	175	1.7
		Nevada			114,077	0	117.8		0
		California	Long Term	20	55,145	1,626	25.3	77.7	0.8
		Nevada			114,077	0	52.4		0
Water Line Project (Access Point Areas)	Water pipeline construction access	California	Short Term	NA	NA	NA	0.2	0.8	0.2
		Nevada					0.6		0
Power Line Project	Tension pull sites	California: 13	Short Term*	300 (diameter)	NA	0	3.2	7.3	0
		Nevada: 7			NA		4.1		
	Angled structure sites (guy wires)	California: 55	Long Term	60 (diameter)	NA	0	0.7	1.0	0
		Nevada: 37			NA		0.3		
	Single wood pole disturbance area	California: 113	Long Term	10 FT	10 FT	0	0.1	0.2	0
		Nevada: 150					0.1		
Staging Area	Equipment and Material staging	California	NA	NA	NA	NA	0	0	0
		Nevada					0		
<b>California Subtotal</b>							<b>86.7</b>		<b>2.7</b>
<b>Nevada Subtotal</b>							<b>175.3</b>		<b>0</b>
<b>Total</b>							<b>262.0</b>		<b>2.7</b>

\*To be reclaimed immediately after construction ends

\*\*Some of these disturbance areas overlap portions of the CMM Access Road; therefore, the 262 acres of proposed surface disturbance is a conservatively high estimate.

\*\*\* The staging areas are all previously disturbed, and no new surface disturbance is proposed in these areas. Therefore, the disturbance totals will not be included in the pending CMM EIS analysis; however, the areas will be reclaimed to their original conditions if any incidental disturbance occurs.

## 5.2 Construction Activities

CMV or their contractors will conduct all construction activities within the physical authorized limits of the ROWs. CMV will construct the ROWs in strict conformity with the POD, as approved, and made part of the grants. Any relocation, additional construction, or use that is not in accordance with the approved POD and/or other state and/or local approvals, will not be initiated without the prior written approval of the Authorized Officer or their designee.

### 5.2.1 Water Line Construction Procedures

Prior to any construction activities, CMV will flag the path of the water line and ROWs, and the 17 access points that will provide construction access from Nipton Road. Vegetation salvage or grubbing will clear any vegetation, rocks, topsoil, or other obstacles from the ROWs, if necessary. Any removed vegetation will be disposed of and/or salvaged according to BLM specifications. An excavator, or similar equipment, will dig the trench up to six feet deep. Topsoil will be placed as separate furrows along the excavated trench (see Appendix F for a schematic showing the placement of the topsoil). Pipe bedding material will be placed and compacted at the bottom of the trench, then the assembled HDPE and welded steel pipe pieces will be placed in the trench. Pipe bedding and backfill material will be placed in the trench to cover the pipe and compacted to the natural ground surface. Any displaced topsoil will be replaced on top of the compacted backfill. After construction is complete, an approximate ten-foot-wide unimproved dirt maintenance road will remain over the buried water pipeline in the long-term water line ROW, and will serve as the access road for inspecting and maintaining the water pipeline and related equipment. Specific construction specifications are not required for this road. It will be a simple unimproved 2-track road that will remain until final reclamation of the water line.

Approximately 40 workers will be required to complete the Water Line Project, which includes both crew members and supervisors. Routine pipeline maintenance will be conducted by CMM staff, as necessary, including visual inspections for leak detection. It is estimated that ROW flagging and clearing, trench construction, and pipe placement may take up to 18 months; however, this timeframe may increase due to inclement weather, unexpected topography or other ground conditions, and permitting delays. Table 6 lists the typical equipment that may be used for construction and/or maintenance and repair activities as part of the Water Line Project.

**Table 6: Typical Construction Equipment for the Water Line Project**

Equipment	Use
¾-ton and one-ton pickup trucks	Transport construction personnel
Two-ton flatbed trucks; flatbed boom truck	Haul and unload materials
Mechanic truck	Service and repair equipment
Shop vans	Store tools
Bulldozer	Grade construction area; reclamation
Excavator, backhoe or similar	Excavate
Forklift or boom lift	Load and unload materials
Semi-tractor-trailers	Haul structures and equipment

Equipment	Use
Air compressors	Operate air tools
Air tampers	Compact soil around structure foundations
Dump truck	Haul excavated materials and import backfill
Fuel and equipment fluid truck	Refuel and maintain vehicles
Water truck	Suppress dust and fire

**5.2.2 Power Line Construction Procedures**

Poles will be delivered and assembled (if necessary) in the temporary equipment staging areas. From the staging areas, the poles will be delivered to each pole site location.

Holes for the structure poles and guy wire soil anchors will be excavated to depths of approximately seven to ten feet. Augering, utilizing a truck-mounted auger, is the preferred method of excavation. However, backhoe excavation may be used as alternative excavation methods as geological conditions require.

At wire stringing sites, the lead-line will be installed in the travelers on each structure by ground crews traveling overland beneath the long-term ROW centerline. The lead-line will be spooled out from a large, motorized drum at one wire site and threaded through the travelers on each structure by ground crews traveling to the next wire site. There, the lead-line will be attached to the conductors and shield wires, which will then be pulled back through to the first wire site. After the conductors and shield wires reach the pulling site, they will be correctly sagged and tensioned, then permanently clipped into the clamps at each structure.

The construction work force will consist of approximately 15 to 20 personnel. Project construction will also require additional support personnel, including construction inspectors, surveyors, and project managers. Construction activities will occur over an approximate one year period.

Table 7 lists the typical equipment that may be used for construction and/or maintenance and repair activities as part of the Power Line Project.

**Table 7: Typical Construction Equipment for the Power Line Project**

Equipment	Use
¾-ton and one-ton pickup trucks	Transport construction personnel
Two-ton flat-bed trucks; flat-bed boom truck	Haul and unload materials
Rigging truck	Haul tools and equipment
Mechanic truck	Service and repair equipment
Aerial bucket trucks	Access poles, string conductor, and other uses
Shop vans	Store tools
Bulldozer	Grade pole sites, reclamation
Truck-mounted digger or backhoe	Excavate
Small mobile cranes (12 tons)	Load and unload materials
Transport	Haul poles and equipment

<b>Equipment</b>	<b>Use</b>
Drill rig with augers	Excavate and install poles
Excavator	Excavate and install poles
Puller and tensioner	Pull conductor and wire
Cable reel trainers	Transport cable reels and feed cables into conduit
Semi tractor-trailers	Haul structures and equipment
Splice trailer	Store splicing supplies/air condition manholes
Take-up trailers	Install conductor
Air compressors	Operate air tools
Air tampers	Compact soil around structure foundations
Concrete truck	Pour concrete
Dump truck	Haul excavated materials/import backfill
Fuel and equipment fluid truck	Refuel and maintain vehicles
Water truck	Suppress dust and fire
Winch truck	Install and pull sock line and conductors into position

### **5.3 Dust Control**

Water will be used during construction activities to minimize fugitive dust to the extent practicable. Additionally, prudent vehicle speeds will be maintained to minimize fugitive dust created by travel on unpaved surfaces.

### **5.4 Erosion and Sediment Control Measures**

Project construction activities will follow site-specific soil erosion and sediment control measures. These measures will be developed in cooperation with the BLM prior to construction activities and will comply with BLM, County, and NDOT regulations, as necessary. No construction activities will occur until approved sediment and erosion control measures have been installed.

### **5.5 Safety**

CMV will be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work, including giving notices, erecting and maintaining all safeguards, and complying with all laws, ordinances, regulations, codes and lawful orders of any public agency. CMV will maintain a safety program in conjunction with the Contractor's safety procedures and construction activities.

Signs will be posted to alert the public of construction activities, minimizing dangers to the public along the County and NDOT ROWs for the Water Line Project. All signs will meet BLM standards and approval, and/or County and NDOT standards, as necessary. Approved traffic control measures will be implemented, as necessary.

### **5.6 Solid Waste**

The construction areas and temporary staging areas will be kept in orderly conditions throughout the period of construction. A minimal amount of general refuse associated with work operations will be created. All refuse generated during the Project will be managed at the Project site using ten- or 20-cubic-yard closed top roll-off bins. Bins will be periodically removed and disposed of

in an authorized off-site landfill facility, consistent with applicable regulations. No refuse will be disposed of or left on site. Portable chemical toilets will be used during the time the construction crew is on site.

## **5.7 Hazardous Materials**

All construction, operation, and maintenance activities will comply with all applicable federal, state, and local laws and regulations regarding the use of hazardous substances. CMV will be responsible for maintaining compliance with all applicable laws and regulations.

Hazardous substances utilized at the Project during construction will primarily include diesel fuel, gasoline, lubricating grease, and other substances used by mobile construction equipment. Diesel fuel and gasoline will be stored in fuel delivery systems (i.e., manufacturer installed gas tanks) on construction equipment and support vehicles. Lubricating grease and other substances will be transported by support vehicles and may be stored in the temporary staging areas.

Diesel fuel will be transported in a truck-bed mounted external tank and in internal vehicle fuel tanks. Gasoline will be transported in hand-held containers and in internal vehicle fuel tanks. All containers of hazardous substances will be labeled and handled in accordance with NDOT and/or California Highway Patrol regulations.

CMV and contractor vehicles will arrive on site with full fuel tanks; however, there may be some refueling on site. If a reportable amount of hazardous or regulated materials is spilled, measures will be taken to control the spill and the BLM and other appropriate agencies will be notified, as required. Any hazardous substance spills will be cleaned immediately and any resulting waste will be transferred off site in accordance with all applicable local, state, and federal regulations. Contract construction crews will maintain spill kits on site for use in case of a spill.

## **5.8 Post-Construction Activities**

Following construction, the short-term water line ROW will be recontoured and revegetated, as necessary, and CMV will maintain the long-term ROWs, as necessary. Reclamation activity is described below in Section 6. Standard water pipeline maintenance and repair activities will occur with a minimal frequency of approximately one inspection per month and mainly to check for leaks. Repair activities will occur as needed to maintain or replace existing equipment. Regular maintenance of the overhead powerline is not anticipated and any post-construction activities will most likely be power line or pole repairs. CMV will utilize water to control fugitive dust to the extent practicable during maintenance.

CMV will be responsible for weed control within the ROWs and will consult with the BLM, and/or County and NDOT as appropriate, for acceptable weed control methods prior to treatments.

## 6 PRELIMINARY RECLAMATION PLAN

This reclamation section is intended to inform the parties of the general reclamation methods that apply to this POD. A detailed Reclamation Plan will be provided to BLM for its review and approval before BLM grants any authorization to conduct the activities proposed herein.

Reclamation of the proposed activities falls into two general phases of reclamation: short-term ROW reclamation and long-term ROW reclamation. The former applies to the short-term ROW areas when surface disturbance ends following the construction of the proposed utilities. Long-term ROW reclamation begins following the termination of any resulting ROW lease agreement. In most cases, the same reclamation type and method applies to both reclamation phases.

A third party may wish to take ownership of some or all these proposed facilities after their mining use has ended. For example, wildfire management might benefit from having a large-diameter water pipeline remain in place for future use. Should this happen, any such facility use will constitute an end-use that will not require reclamation. CMV will notify the BLM and other agencies before final reclamation to make this determination.

### 6.1 Facilities To Be Reclaimed

Table 4 includes all areas that will be reclaimed.

Short-term reclamation refers to post-construction reclamation of construction-related disturbance; this includes reclamation of the construction staging areas on public lands back to their original conditions. Long-term reclamation will occur after the proposed facilities are no longer needed. The methods of facility closure differ for each type of linear utility and for short-term or long-term reclamation, as described below.

Short-term reclamation will generally follow the steps in Section 6.3. Long-term reclamation focuses more on surficial ripping and seeding because construction-related disturbances will have been previously reclaimed. Long-term reclamation is anticipated to be significantly less invasive. Activities will include the removal of and the reclamation of surface disturbance associated with utility surface equipment such as water pipeline vaults and power pole removal, and the water pipeline maintenance road.

Powerline closure includes removing and recycling the overhead wiring, cutting the wood poles at or near ground level, and removing cable supports or other ancillary surface equipment.

Water pipeline closure includes draining the water line, excavating both ends of the pipeline, and sealing the pipeline at those locations, followed by reburial. This closure technique is the industry standard for buried utilities known as closure-in-place. Any surface equipment or vaults will also be removed, and the pipeline will be sealed and reburied at those locations.

## 6.2 Reclamation Equipment

Table 8 includes the equipment types anticipated to perform reclamation activities. The vehicles and equipment listed are typical for this type of work. Other similar types of equipment could be used.

**Table 8: Standard Reclamation Equipment**

Type	Weight (approximate)	Fuel	Description	Use
Light Vehicles	¾-to 1-ton	Gasoline/Diesel	Four-wheel drive for personnel transport	Small utility vehicles for worker transport; pick-up trucks for seed material and equipment
Water truck	30 tons	Diesel	4,000-gallon on-road water truck	Dust control as needed
Dump Truck and/or Flatbed Truck	25 tons	Diesel	25-ton dump truck and/or flatbed truck	Off-site transport of equipment and debris
Backhoe (or similar)	8 tons	Diesel	Equipment	Site grading, loading of equipment and debris into dump and/or flatbed trucks for removal off site. Dragging area after seeding or pulling sheet's foot attachment
Motor Grader (or similar)	22 tons	Diesel	Equipment	Site and road grading and ripping

## 6.3 Reclamation Methods

Project area elevations range from approximately 3,004 feet above mean sea level (amsl) at Nipton, California, to 4,868 feet amsl at the highest point on SR 164. Vegetation types vary depending on the elevation; therefore, reclamation methods will also vary (depending on elevation). In general, Joshua tree woodland exhibits the most dominant vegetation community (at most project elevations), while creosote scrub is found at a lower elevation near Nipton.

During initial ground preparation and construction, affected vegetation will be crushed rather than bladed when it is feasible to do so. Vegetation that is not salvaged will be removed and stockpiled out of the way. This material can be reapplied during reclamation for use as a vertical mulch; it has also proven beneficial for seed stabilization during the germination period.

The reclamation method includes these key steps:

- Growth media salvage
- Plant salvage

- Growth media application
- Transplanting salvaged plants
- Seeding with a certified weed-free seed mix
- Watering and monitoring

Growth media will be salvaged primarily during the construction of the water pipeline because subsurface disturbance will be minimal for the overhead powerline and power pole installation. The latter consists of installing the tension cables and small-diameter auger drilling for the poles. Pole locations will be adjacent to the existing CMM Access Road, so temporary roads will not be required. Growth media will be furrowed adjacent to the water pipeline trench and will remain in place until short-term reclamation begins. Reclamation of the short-term water line ROW is estimated to begin within 12 months from the time of disturbance.

Plant salvage will focus on the (eastern) Joshua tree, Mojave yucca, and (red) barrel cactus. All these species of a reasonable size<sup>4</sup> will be salvaged by the bare root method and placed in temporary furrows adjacent to the project work area. Salvage may also be limited in the higher elevations that exhibit surface bedrock conditions. It could be possible to augment or replace some plant salvaging with the planting of these species from stock propagated at the greenhouse facility located at the CMM. This will be further defined in a final reclamation plan approved by the BLM.

Following the construction of the proposed facilities, stockpiled growth media will be reapplied to areas of surface disturbance. Any salvaged plants will also be transplanted within the short-term ROW areas during this step.

Finally, the short-term water line ROW area will be seeded with a local certified weed-free seed mixture. The seed mix and application method will be pre-approved by the BLM and included in a final reclamation plan. Seed will either be collected locally or purchased from a commercial vendor. Prior to beginning reclamation, a post-reclamation watering and monitoring schedule will be provided to the BLM for review and approval.

#### **6.4 Invasive Species**

Invasive species control reduces or limits the occurrence of non-native plant species that may currently occur or invade the site where active and natural revegetation is taking place. Invasive species (weeds) can compete with native plant species for available moisture and nutrients and consequently interfere with revegetation.

Any invasive species encountered during reclamation will be removed during grading and ripping. Manual clearing is the suggested method or the use of approved herbicides, depending on the

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<sup>4</sup> It has been documented at the CMM that large specimens, particularly Joshua tree, are difficult to salvage successfully as multilimbed specimens lose their structural integrity following excavation.

species and the extent of the infestation. The selection of method(s) to be used will be site-specific and made by a qualified biologist in concert with the BLM. All efforts to remove invasive species will be overseen by a qualified biologist to ensure the level effort addresses the issue.

The occurrence of invasive species onsite after revegetation shall be monitored by visual inspection annually during the annual monitoring. The goal is to prevent invasive species from becoming established and depositing seeds in revegetated areas. Reports of inspections and weed control implementation shall be part of the revegetation monitoring as reported to the BLM.

## 6.5 Monitoring & Success Criteria

Monitoring for reclamation success will follow the methods stated in the Castle Mountain Mine 2022 MPO and Reclamation Plan (2022 Plan). Standardized linear transects or plots (typically two meters by ten meters in size) will be used to record perennial plant density and diversity. Revegetation monitoring will be conducted to qualitatively evaluate native plant establishment and vigor, to identify and make recommendations for correcting problems (weeds, lack of progress), and to quantitatively measure the development of the reclaimed habitat to determine its progress to the established success criteria. An Annual Revegetation Monitoring Report will be prepared to summarize revegetation and monitoring efforts for ten years or until deemed successful by the observed results and review by the BLM.

Based on the monitoring results, and upon consultation with the BLM, additional remedial activities may include additional seeding, plant protections, and/or a change of seed mix.

These success criteria have been established from data collected over the past 30 years at the Castle Mountain Mine, through a collaboration of numerous research organizations, contracted professionals, and agencies, as documented in the 2022 Plan. The established success criteria proposed are listed in Table 9. An exception will be the Nipton (low elevation) area of the project. Vegetation throughout this area may not be representative of the CMM site; therefore, the standards in Table 9 may have to be adjusted to reflect a reduction in species diversity for this project area. Final standards will be reviewed by the BLM and included in the final reclamation plan.

**Table 9: Success Criteria**

Standard	Five-year	Ten-year
Density (number of perennial plants per acre)	255 (6%)	895 (21%)
Richness (total number of species on site)	5 (4%)	18 (15%)

## 7 APPLICANT-PROPOSED ENVIRONMENTAL PROTECTION MEASURES

CMV has proposed the following environmental protection measures to prevent environmental degradation during construction, operation, and maintenance activities of the Project. These environmental protection measures are divided into seven categories: Air Quality; Cultural and

Paleontological Resources; Fire Protection; Migratory Birds; Noxious Weeds, Invasive and Nonnative Species; Soils; and Wastes, Hazardous or Solid.

### **7.1 Air Quality**

- During Project construction, the disturbed soil will be wetted, chemically treated, or treated by other means satisfactory to the Authorized Officer, sufficiently to effectively reduce airborne dust and reduce soil erosion. Additionally, prudent vehicle speeds will be maintained to minimize fugitive dust created by travel;
- Construction and maintenance activities will be conducted to minimize disturbance to vegetation adjacent to the ROWs; and
- All construction vehicle movement outside the ROWs will be restricted.

### **7.2 Cultural and Paleontological Resources**

- Pursuant to 43 CFR 10.4(g), CMV will notify the BLM-authorized officer, by telephone, and with written confirmation, immediately upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined in 43 CFR 10.2). Further pursuant to 43 CFR 10.4, CMV will immediately stop all activities in the vicinity of the discovery and not commence again until a notice to proceed is issued by the BLM-authorized officer;
- Prior to construction, CMV will inform all field personnel of the Archaeological Resource Protection Act of 1979, the Native American Graves Protection and Repatriation Act of 1990 (Public Law 101-601), and California Health and Safety Code responsibilities and their associated penalties;
- Any cultural resource discovery by CMV, or any person working on their behalf, during the course of activities on federal land will be immediately reported to the authorized officer by telephone, and with written confirmation. The permit holder will suspend all operations in the immediate area of the discovery and an exclusion buffer may be defined by the BLM to protect it until an evaluation of the discovery can be made by the authorized officer. This evaluation will determine the significance of the discovery and what mitigation measures are necessary to allow activities to proceed. CMV will be responsible for the cost of evaluation and mitigation. Operations will resume only upon written authorization to proceed from the authorized officer; and
- CMV will not knowingly disturb, alter, injure, or destroy any scientifically important paleontological deposits. If previously undiscovered paleontological resources are discovered by CMV in the performance of any surface disturbing activities, the item(s) or condition(s) will be left intact and immediately brought to the attention of the BLM-authorized officer. If significant paleontological resources are found, avoidance, recordation, and/or data recovery will be required, and at the expense of CMV.

### 7.3 Fire Protection

- All federal, state, and county laws, ordinances, rules, and regulations, which pertain to prevention, pre-suppression, and suppression of fires, will be strictly adhered to, including fire safety requirements and reliability standards established by the Electric Reliability Organization (per 43 CFR 2805.21[c][3]). All personnel will be advised of their responsibilities under the applicable fire laws and regulations. It will be the responsibility of CMV to notify the BLM Las Vegas Interagency Communication Center at (702) 631-2350, if a Project-related fire occurs within or adjacent to the construction area in Nevada, and to 911 if a Project-related fire occurs in California;
- Fire extinguishers will be available in the construction area. Water from a water truck that may be used for construction and dust control will be available for firefighting; and
- CMV will take aggressive action to prevent and suppress fires on and adjacent to the construction area, and will utilize its workers and equipment on the Project for fighting fires within the construction area.

### 7.4 Migratory Birds

- Conducting vegetation removal outside the active nesting bird season that runs from March 1 through August 31. Vegetation clearance that does occur inside the active nesting bird season (March to August) must be preceded by a nesting bird survey to document the absence of nesting birds;
- To avoid potential impacts to breeding migratory birds, a nest survey will be conducted by a qualified biologist prior to any surface disturbance associated with Project activities during the avian breeding season (March 1 through August 31). Pre-disturbance surveys for migratory birds are only valid for 14 days. If the disturbance to the specific location does not occur within 14 days of the survey, another survey will be needed. If active nests are located, or if other evidence of nesting (i.e., mated pairs, territorial defense, carrying nest material, transporting food) is observed, a protective buffer will be delineated after consultation with the BLM resource specialist, and the buffer area avoided to prevent destruction or disturbance to nests or birds until they are no longer actively breeding or rearing young; and
- Powerlines and associated structures will be constructed to conform to those practices and standards described in the *Suggested Practices for Avian Protection on Power Lines* (APLIC 2006). These standards prevent electrocution through proper spacing between overhead transmission line features.

### 7.5 Noxious Weeds, Invasive and Nonnative Species

- If noxious weeds are encountered within the construction area, mitigation measures will be instituted in consultation with the BLM weed specialist, and/or County and NDOT.

ROW monitoring and weed abatement following construction will be conducted as required by the applicable agency. To avoid the spread of noxious weeds, all vehicles brought in from out of the area will go through high pressure washing of the undercarriages at a commercial carwash prior to arriving on site and before being used on the Project.

## 7.6 Soils

- To minimize erosion from storm water runoff, construction areas will be maintained consistent with the best management practices (BMPs); and
- CMV will comply with the requirements outlined in the California Construction Stormwater General Permit.

## 7.7 Waste, Hazardous or Solid

- All construction vehicles will be maintained in accordance with the manufacturers' recommendations. All vehicles will be inspected for leaks prior to entering the jobsite. All discovered leaks will be contained with a bucket of absorbent materials until repairs can be made;
- Pursuant to 43 CFR 8365.1-1(b)(3), no sewage, petroleum products, or refuse will be dumped from any trailer or vehicle;
- Hazardous material storage and equipment repair will be conducted at least 100 feet away from ephemeral drainages;
- Spilled materials of any type will be cleaned up immediately. A shovel and spill kit will be maintained on site at all times to respond to spills;
- All sanitary waste will be collected in portable, self-contained toilets in the temporary use area and managed in accordance with local requirements; and
- All solid waste will be disposed of in a state, federal, or local designated site.

## 7.8 Wildlife

- Applicable Reasonable and Prudent Measures will be used at the Project to minimize impacts to desert tortoise (*Gopherus agassizii*), as outlined in the BLM Southern Nevada District's Programmatic Biological Opinion (File No. 84320-2010-F-0365). CMV will prepare a Raven Monitoring Plan outlining measures that will discourage the use of power poles.

## 8 REFERENCES

Avian Power Line Interaction Committee (APLIC). 2006. *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*. 227 pp.

## **APPENDIX A**

### **Figures**

## **APPENDIX B**

### **Castle Mountain Mine 69 kV Power Transmission Line Environmental Assessment (1990)**

**APPENDIX C**

**CEQA Initial Study**

## **APPENDIX D**

### **Right-of-Way Grants**

## **APPENDIX E**

### **Legal Descriptions**

## **APPENDIX F**

### **Proposed Water Line - Preliminary Engineered Drawings and Schematic**

## **APPENDIX G**

### **Proposed Power Line - Preliminary Engineered Drawings and Pole Schematic**