

ENVIRONMENTAL ASSESSMENT

NEW DEAL MINE

SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

Bureau of Land Management

Barstow Field Office

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August 2014

Table of Contents

Introduction 2

Purpose and Need 4

Description of the Alternatives 6

Affected Environment 9

Environmental Impacts and Mitigation 16

Cumulative Impacts 24

INTRODUCTION

Stuebner Industrial Minerals submitted a Plan of Operations to conduct an exploration at the New Deal Mine site located 3 miles east of Highway 247 on BLM "Open Route" OM7330 (See Site Location map).

The proposed exploration will be conducted on the unpatented New Deal (CAMC 299435) 20-acre lode claim. The initial exploration is expected to be limited to existing disturbed areas (See Claim Map #1). The expected disturbance is on lands previously disturbed by historic mining activities.

The proposed exploration activities will be in two Phases:

Phase one will be excavating the 55-foot deep shaft on the site (see shaft location on map and photo #2). The shaft will be excavated by a clamshell bucket on a crane rig or similar equipment. Excavated material will be used to build a 1000 sq ft pad around the shaft. As excavation proceeds, appropriate ground control will be installed to preclude unstable side wall conditions. A ladder-way with landings will be installed as excavation proceeds to allow for safe working areas (see shaft area in Photo #3).

Phase two will be sampling in the excavated shaft and the exposed ore vein. The samples will be sent to a certified lab for analysis. Samples of ore will also be transported to the Stuebner Mill located in Barstow for bulk testing. Sampling will also be done in the north adit/trench excavation (see Photo #4). Limited small scale drilling and blasting may occur in the shaft to obtain bulk samples for mill run testing. Any explosive use will be done with licensed contractors under the supervision of a California licensed blaster. No explosives will be stored on site. It is expected that testing will not exceed 100 tons per month. It is expected that the exploration may require 24 months to complete.

The BLM has determined that an Environmental Assessment (EA) is required to analyze and disclose the potential environmental and social consequences of conducting the Proposed Action. This EA has been prepared to the NEPA implementing regulations (40 Code of Federal Regulations [CFR] 1500-1508), BLM's surface-mining regulations (43CFR 3802 and 3809), the BLM NEPA Handbook (BLM Handbook H-1790-1), and the DOI Department Manual (DM) Part 516; NEPA.

The Proposed Action is comprised of:

- Excavation of the 55-foot shaft;
- Collecting ore samples below the 55-foot level in the shaft; and
- Transporting and testing ore samples.

BACKGROUND

Claim Name	BLM Serial No.	Claim Type	Primary Commodity
New Deal Mine	CAMC 299435	Unpatented Lode	Gold

Location:

The Proposed Action would be located approximately 15 miles southeast of Barstow in Stoddard Valley. The site is accessed via BLM “Open Route” OM7330, and is three miles east of Hwy 247. The New Deal Mine is located in Section 12, T.7 N., R.1W., SBBM.

The regional setting includes desert and mountainous habitat, predominately creosote scrub. There is historic mining activity in the area.

BLM Open route 7330 shows a high amount of Off-Highway Vehicle (OHV) use.

PURPOSE AND NEED

BLM’s purpose for the Proposed Action is to provide the New Deal Mine with legal access across public land and exploration activities on BLM managed lands. The need for this action is established by the BLM’s responsibility under the Federal Land Policy Management Act (FLPMA), Title III to respond to a request for a permit to conduct mineral exploration. The BLM will decide whether or not to grant the permit, and if so, under what terms and conditions.

The New Deal Mine’s purpose for the Proposed Action is to obtain mineralogical data from ore samples to generate information for potential future mining operations. The information would be used by the New Deal Mine to determine the efficacy of mining at the site and advance efforts to develop, construct, and operate a future mining operation. This EA examines potential effects the Proposed Action would have on the environment. The Proposed Action is independent from any future mining operations, which would be the subject of a separate environmental analysis.

Under the general mining law of 1872 (may 10, 1872), as amended (30 USC 21-54), citizens of the United States or those intending to become citizens are provided the opportunity to explore for, discover, and purchase certain valuable mineral deposits on public domain lands in the United States. The law also set general standards and guidelines for “claiming” the mineral

rights to minerals so “discovered.” Provisions are included to allow for local rules to be developed, consistent with Federal Laws.

The proposed land use action is subject to and in conformance with the California Desert Conservation Area Management Plan of 1980 (as amended) (U.S. Bureau of Land Management 1980) (CDCA Plan of 1980) per Title 43 Code of Federal Regulation 1610.5-3. Locatable mineral actions located within Multiple-Use Class L (limited) are to be subject to Title 43 CFR 3809 Regulations and applicable State and local law. The Proposed Action is also subject to the March 2006 Record of Decision for adoption of the West Mojave Plan (U.S. Bureau of Land Management 2005), which resulted in a plan amendment to the CDCA Plan of 1980. Mining Plans of Operations must be reviewed for potential impacts on sensitive resources identified on lands in this class.

Scope of this Environmental Analysis

This EA examines the resources and locations that the Proposed Action could impact. As described in the Proposed Action, the project would limit impacts to previously disturbed ground.

Conformance to Land Use Plans

All actions approved or authorized by the BLM must conform to the existing land use plan where one exists (43 CFR 1610.5-3 and 516 DM 11.5). A resource management action shall be specifically provided for in the plan, or if not specifically mentioned, shall be clearly consistent with the terms, conditions, and decisions of the approved plan or amendment (43 CFR 1601.0-5(b)).

The Proposed Action is subject to the 1980 CDCA plan as amended. As part of the 1976 FLPMA, the CDCA Plan was developed to guide land use management of the BLM lands within this portion of California. The Proposed Action is entirely located on BLM-administered lands in San Bernardino County, and is managed under the CDCA Plan, as amended (BLM 1980). Most of the lands administered under the CDCA Plan have been designated as one of four MUCs: Controlled (C), Limited (L), Moderate (M), or Intensive (I). The class designations govern the type and degree of development or management activities allowed within the boundaries of the classes, and must meet the guidelines given for that class.

The Proposed Action site is located on land identified as MUC-L. Class L protects sensitive, natural, scenic, ecological, and cultural resource values. Public lands designated as Class L are managed to provide a generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished (BLM 1980). Mining activities are allowed in a Class L designation after NEPA requirements are met. Operations on mining claims are subject to the 43 CFR 3809 Regulations. BLM will review plans of operations

for potential impacts on sensitive resources identified on lands in this class. The Proposed Action is a temporary action that would conform to the CDCA Plan after NEPA requirements are met.

The Proposed Action is located within the West Mojave Plan (WEMO PLAN) area. The WEMO Plan is a federal and use plan amendment to the CDCA Plan. The record of Decision for the WEMO Plan was signed in 2005. The WEMO Plan presents a comprehensive strategy to conserve and protect the desert tortoise, the Mojave Ground Squirrel and over 100 other sensitive plants and animals and the natural communities of which they are a part, and provides a streamlined program for complying with the requirements of the California and federal Endangered Species Acts.

The WEMO planning area covers 9.3 million acres in the western part of the Mojave Desert in southern California covering parts of San Bernardino, Los Angeles, Kern, and Inyo counties. The WEMO Plan applies to 3.2 million acres of public lands.

Applicable Regulatory and Policy Requirements

Title III of the FLPMA authorized the BLM to issue a permit for the Proposed Action. Part 3809 of title 43 of the CFR contains the regulations relating to permits under FLPMA.

Scoping

The BLM engaged in internal scoping of this EA for the Proposed Action to determine analysis in this EA. Internal Scoping refined the purpose and need, cumulative effects analysis, and other features of the Proposed Action. External scoping for EAs is optional in accordance with 40 CFR 1501.7 and was not initiated prior to the EA for the Proposed Action. Additionally, due to the temporary duration and limited scale of the Proposed Action, the BLM determined that external scoping was not necessary.

DESCRIPTION OF THE ALTERNATIVES

Alternative 1 – Proposed Action

The proposed exploration will be conducted on the unpatented New Deal (CAMC 299435) 20-acre lode claim. The initial exploration is expected to be limited to 1000 sq ft. The expected disturbance is on lands previously disturbed by historic mining activities. The proposed exploration activities will be in two phases:

Phase one will be excavating the 55-foot deep shaft on the site (see shaft location on map and photo #2). The shaft will be excavated by a clamshell bucket on a crane rig or similar equipment. Excavated material will be used to build a pad around the shaft. As excavation

proceeds, appropriate ground control will be installed to preclude unstable side wall conditions. A ladder-way with landings will be installed as excavation proceeds to allow safe areas (see shaft area in Photo #3).

Phase two will be sampling in the excavated shaft and the exposed ore vein. The samples will be sent to a certified lab for analysis. Samples of ore will also be transported to the Stuebner Mill located in Barstow for bulk testing. Sampling will also be done in the north adit/trench excavation (see Photo #4). Limited small scale drilling and blasting may occur in the shaft to obtain bulk samples for mil run testing. Any explosive use will be done with licensed contractors under the supervision of a California licensed blaster. No explosives will be stored on site. It is expected that testing will not exceed 100 tons per month. It is expected that the exploration may require 24 months to complete.

Operational Elements of the Proposed Action

1. The working area will be approximately 140 x 300 feet, less than one acre.
 - All equipment and operations will practice “avoidance” by avoiding any biological, botanical, or cultural features on-site or on the access route.
 - An existing Arrastra will be preserved. The equipment will remove backfilled material from the shaft and place excavated material around the shaft collar to build a pad as per the plan included in the Plan of Operations provided to the BLM.
 - Once the shaft is exposed, an adequate cover will be installed to completely cover the shaft opening in order to prevent any unauthorized persons or animals from entering the shaft. This cover will be used when there is no crew or security to supervise the site.
 - Once the shaft is excavated, a wood ladder or stairway will be installed for safe access. MSHA will be contacted to provide a site inspection.
 - The ore zone at the shaft bottom will be sampled and material will be trucked to the Stuebner Mill in Barstow for testing.
 - If the ore is found to be economically feasible, the mining operation will continue under MSHA guidelines. No mining is planned at this time.
 - If the operation is unsuccessful, the pad material around the shaft will be pushed in to backfill the shaft and the surface will be reclaimed. All equipment and any shaft fixtures will be removed. The required access road will be scarified.
 - Security: An approximate area of 50 ft. x 100 ft. around the shaft will be fenced as per BLM requirements. A watchman with a self-contained trailer will be on-site when the crew is not present to prevent trespassing and vandalism. If and when the property is left with no onsite crew or watchman, the shaft cover will

be secured and gates to the working area will be locked. All waste and trash will be disposed of off-site.

Expected Equipment and Personnel Details

The following table summarized the equipment that will be actively used on site.

TASK	EQUIPMENT	NUMBER OF PERSONNEL	Number of Monitors
Excavating Shaft and Hauling Materials to be Tested	Crain with Clamshell bucket Five-ton Truck 2 Pick-ups One Single Wide Trailer	3 to 5	1 as needed

Avoidance and Minimization Measures

The following Avoidance and Minimization Measures and Best Management Practices (BMPs) would also be implemented as part of the Proposed Action to prevent unnecessary or undue degradation in the Project Area.

These design features of the Proposed Action are:

1. All equipment would be equipped with approved spark arrester or equivalent. All vehicles and equipment would be equipped with a shovel, a Pulaksi, and an all-purpose type fire-extinguisher.
2. Public safety would be maintained throughout the life of the Proposed Action. All equipment would be maintained in a safe manner.
3. All solid wastes would be removed from the Project area and disposed of off-site.

Hazardous substances employed at the Proposed Action site would include diesel fuel, gasoline, hydraulic fluid, and lubricating grease. In the event that hazardous or regulated materials were spilled, measures would be taken to control the spill and the BLM would be notified as required. Any hazardous substance spills would be cleaned immediately and any resulting waste would be transferred off-site in accordance with all applicable local, state, and federal regulations. Operators will maintain a spill kit on site for use in case of a spill.

4. Prior to the start of any project work, all personnel associated with the project will be provided with Desert Tortoise Awareness Training. In addition, work will be conducted in

such a manner to reduce the possibility of tortoises being impacted on the work site or access roads.

5. **Alternative 2 – No Action Alternative**

Under the No Action Alternative, a temporary permit would not be issued for the Proposed Action. The current condition of the New Deal mining claim would remain unchanged. The New Deal mining claim would not be explored for future development. The mineral economic potential of this area of the CDCA would remain unknown.

AFFECTED ENVIRONMENT

Discussion of the existing or affected environment is necessary to serve as the basis of comparison when analyzing the impacts of a project. The affected environment section describes the existing condition and issues related to the elements of the environment that may be affected by implementing the Proposed Action.

BIOLOGY

Vegetation

The plant community can be described as a creosote bush white bursage series (Sawyer and Keeler-Wolf 1995). Creosote bush (*Larrea tridentata*) is the dominant shrub. Other perennial shrubs present include ephedra (*Ephedra* sp.), white bursage (*Ambrosia dumosa*), rhatany (*Kremaria* sp.), cheesebush (*Hymenoclea salsola*), boxthorn (*Lycium andersonii*), and brittlebush (*Encelia farinosa*).

Botanical Resources

This project will be limited to the existing access route, OM7330, and the work site. No cross country travel will be authorized. Therefore there was no need to s surveys for special status plants.

Wildlife

Two sensitive species may occur in the project location. These are the desert tortoise (*Gopherus agassizii*), and the burrowing owl (*Athene cunicularia*). The burrowing owl and the American badger are both considered Species of Special Concern by the Department of Fish and Wildlife.

The federally listed desert tortoise occurs within the project area. The project location and access route have also been designated as critical habitat by the Fish and Wildlife Service. The

project vicinity was assumed to be occupied by desert tortoise. Protocol surveys were not conducted. Instead surveys consisting of ten meter transects were conducted at the proposed mine site and access in July and concentrated on detecting tortoise burrows or burrows that can be used by tortoises. Several burrows were located that may house tortoises.

The following life history excerpt was taken from the desert tortoise recovery plan:

Desert tortoises are well adapted to living in a highly variable and often harsh desert environment. They spend much of their lives in burrows, even during their seasons of activity. In late winter or early spring, they emerge from over-wintering burrows and typically remain active through fall. Activity does decrease in summer, but tortoises often emerge after summer rain storms. Mating occurs both during spring and fall (Black 1979; Rostal et al. 1994). During activity periods, desert tortoises eat a wide variety of herbaceous vegetation, particularly grasses and the flowers of annual plants (Berry 1974; Luckenbach 1982; Esque 1994). During periods of inactivity, they reduce their metabolism and water loss and consume very little food. Adult desert tortoises lose water at such a slow rate that they can survive for more than a year without access to free water of any kind and can apparently tolerate large imbalances in their water and energy budgets (Nagy and Medica 1986; Peterson 1996a; Hensen et. Al. 1998)

The Burrowing Owl is a small, ground-dwelling bird that inhabits open spaces such as grasslands, agricultural fields, and disturbed areas in the western half of the U.S. south into Baja California and central Mexico (Johnsgard 1988). Burrowing Owls use burrows throughout the year for shelter from weather and predators, and for nesting during the breeding season (February 1 to August 31). In southern California, the most commonly used rodent burrow is that of the California ground squirrel (*Spermophilus beecheyi*). Burrowing Owl nesting distribution is strongly correlated to local ground squirrel burrow distribution (Collins 1979). Burrowing Owls form short-term pair bonds. Not all individuals capable of breeding do so every year. Burrowing Owls have declined through much of their range because of habitat loss resulting from urbanization, agricultural conversion, and destruction of ground squirrel colonies (Remsen 1978; Shuford and Gardali 2008). The incidental poisoning of Burrowing Owls and the destruction of their burrows during eradication programs aimed at rodent colonies has also been a large factor in their population decrease (Collins 1979; Remsen 1978; and Zarn 1974).

No burrowing owls were detected during the survey. No burrowing owl sign were detected at any of the mammal burrows located during the surveys.

Hydrology

The Project Site lies within the western Mojave Desert, which is an arid area. The area is noted for its high summer temperatures and low humidity. Data from the Western Regional Climate Center (WRCC), National Weather Service, and DWR indicate that the annual average precipitation is approximately 4 to 6 inches in the Project Area. Average maximum temperatures range from 60 to 102 degrees Fahrenheit in winter and summer, respectively.

Average minimum temperatures range from approximately 31 to 67 degrees Fahrenheit in winter and summer, respectively.

The Proposed Action is located within the South Lahontan REQCB Hydrologic Basin (region 6), in the Lower Mojave Hydrologic Area. The closest major water body is the Mojave River. According to the 2010 US EPA approved 303(d) List, the segment of the Mojave river that runs through HA 628.50 is not impaired. No water bodies in the HA are listed on the 303(d) List of impaired water bodies.

Surface flow in the Project Area comes exclusively from stormwater runoff from precipitation. The only beneficial use listed for HA 628.50 are for minor unnamed surface waters and wetlands; no receiving is identified. The beneficial uses of minor surface waters in the Project Area are (potentially) municipal, domestic, and agricultural supplies and recreation, and (presently) groundwater recharge, and cold freshwater and wildlife habitat.

There are no wetlands or riparian zones present near the Proposed Action site.

CULTURAL RESOURCES

The Project Site is located in a previously disturbed mining site. There is an historic "Arrastra" mill site on the location. This historic structure will be preserved. The remaining work site is within a previously disturbed area, including the mine shaft and the adit, will be impacted during the mining operation.

Access to the site is via BLM Open route OM7330. This is a BLM Open route that received significant OHV use. Access to the mine will be limited to the use of BLM Open Route OM7330, and no off road travel will be authorized, therefore no cultural resource surveys will be required to authorize this project.

RECREATION

The Project Site is located within the Ord Mountain Sub-region. According to the West Mojave Plan, Ord Mountain sub-region is a limited use area, which means Off-road travel is restricted to designated OHV Trails. The only route to access the Project Site is OM7330. This Open Route will be used to access the site, and it will still be used by OHV traffic.

NOISE

The closest sensitive receiver to the Project Site is a residence five miles to the west, therefore noise issues are de minimis.

AIR QUALITY

The Project Area is located in the Mojave Desert Air Basin (MDAB), within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The MDAQMD jurisdiction includes the desert portion of San Bernardino County and the far eastern end of Riverside County. Air quality is generally fair to good within the Project Area. Light to moderate winds sweep the valleys, resulting in clear views of the mountains across the valley; however, high winds produce dust that may obscure views and contribute to particulate matter (PM₁₀) levels. Winter inversions hold smoke in the valleys, further degrading air quality.

MDAB currently is non-attainment for both state and federal 24-hour and the state annual average PM₁₀ standards, the state 1-hour and 8-hour ozone (O₃) standards, and both the revoked 1-hour federal O₃ and the 1997 8-hour federal O₃ standards. It is expected to be non-attainment for the relatively new 8-hour O₃ standard (75 parts per billion [ppb]) (MDAQMD 2009).

The Federal General Conformity (GC) Rule (40 CFR 93) stipulates that “No department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan.” The GC rule applies to federal nonattainment or maintenance areas.

Greenhouse gases (GHG_s) emitted as a result of human activity are implicated in global climate or global warming. The principal greenhouse gases that enter the atmosphere as a result of human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. Proposed action activities associated with heavy equipment operation, and worker commute trips would temporarily generate GHG_s. Ambient air quality standards have not been established for GHG_s, thus there are no means by which to designate an area as attainment or non-attainment in regards to GHG_s. Moreover, since the potential effects of GHG emissions are global in nature, a discussion of the local GHG baseline is not meaningful. Federal regulations require mandatory reporting of GHG emissions of annual emissions are greater than 25,000 metric tons per year (tpy). Projects with GHG emissions greater than 100,000 metric tpy are considered a major source under the Prevention of Significant Deterioration (PSD) program of the Clean Air Act.

VISUAL RESOURCES

The regional setting includes desert and mountain habitat to the north, east, west, and south, Hwy 247 to the west and Interstate 15 to the northwest. The city of Barstow is to the north, and the USMC Logistics Base to the northeast. The area surrounding the Project Site is mountainous and is located within the Stoddard Valley. There are historic signs of mining activity in the area.

The Project Area is located on undeveloped desert landscape within the Mojave Desert. Portions of the surrounding viewshed have been modified by existing transmission lines, the Stoddard Wells OHV Area, and the urban development around the Slash X café. However, less developed, open desert views may be experienced from the Project Area.

TRAFFIC AND CIRCULATION

The transportation network in close proximity to the Project Area is composed of a mix of interstate, county highways, and local roadways. The circulation system plays a major role in the movement of goods originating from both interstate and international sources. The agricultural and mining communities in San Bernardino County rely on the state and county roadways for access as well as recreational and tourist oriented trips on public land. This trend and use of the transportation network will continue as new developments occur within San Bernardino as well as the surrounding communities.

Roadway Network

Several regionally and locally significant roadways are in close proximity to the Project Area. As a point of reference, Highway 247, the main road between Lucerne Valley and Barstow, is three miles from the Project Site. The Project Site is accessed from Hwy 247 via BLM Open Route OM7330. The Project Site is located 20 miles southeast of the City of Barstow. Ore samples will be hauled from the Project Site via OM 7330 to Hwy 247 and then on to Barstow for analysis.

POPULATION AND HOUSING

The Proposed Action is approximately 20 miles southeast of the City of Barstow. The estimated population of the City of Barstow in January 2013 was 23,168 (CA DOF 2013). There were approximately 10,386 total housing units in the city of Barstow in 2011, of which approximately 16.4 percent were vacant (US Census 2011a). In April of 2013, the City of Barstow had an unemployment rate of 12 percent (CA EDD 2013).

ENVIRONMENTAL JUSTICE

The following from the US EPA Final Guidance for Incorporating Environmental Justice concerns in the EPA's NEPA Compliance Analysis criteria may be sued during environmental justice screening and impact assessment:

- A minority or low-income population may be identified for the affected area if the minority or low-income population of the affected area is greater than 5 percent of the affected area's general population.

- The minority or low-income population percentage of the area is “meaningfully greater” than the minority population percentage in the general population or other appropriate unit of geographic analysis.
- Weather potential environmental impacts attributable to the project would fall disproportionately on the minority or low-income residents of the community.

Low-Income Populations

In the following analysis, the percentages of low-income populations (below poverty level) were assessed for the City of Barstow compared with data for San Bernardino County (representing the general population) as a whole. The City of Barstow is the nearest community to the Proposed Action. The project site is located approximately 20 miles southeast of the City of Barstow.

Income and Poverty Level

	City of Barstow	San Bernardino County
Per Capita Income	\$20,571	\$21,932
Median Household Income	\$45,417	\$55,853
Median Family Income	\$55,403	\$61,525
Percentage of Individuals Below Poverty Level	22.2%	16.0%
Percentage of Families Below Poverty Level	20.4%	12.7%

As the table indicates, the population of the City of Barstow had a slightly lower per capita income than San Bernardino County, and lower median household and family incomes. The percentage of individuals and families living in the City of Barstow below the poverty level is greater than San Bernardino County. However, this percentage is not meaningfully greater than San Bernardino County, nor is it above the EPA threshold of 50 percent.

Minority Populations

In the following analysis, the percentages of minority populations were assessed for the City of Barstow compared with data for San Bernardino County (representing the general population) as a whole.

Information presented in the following tables was derived from the 2010 Census. The first table summarizes the minority population percentage by race and the second table summarizes the minority population percentage by Hispanic or Latino Origin. Hispanic or Latino is

considered as origin not a race by the U.S. Census Bureau. The definition of Hispanic or Latino Origin used in the 2010 Census refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture regardless of race. The federal government considers race and Hispanic or Latino Origin to be two separate and distinct concepts. People who identify their origin as Hispanic or Latino Origin may be any race. Therefore, those who identify themselves as Hispanic or Latino are counted in one or more race categories shown in the table.

Race Demographic Comparisons

Study Area	Total Population	White	Black or African American	American Indian or Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some Other Race	Two or More Races	Minority Population
City of Barstow	22,639	11,840	3,313	477	723	278	4,242	1,766	48%
San Bernardino County	2,035,210	1,153,161	181,862	22,689	128,603	6,870	439,661	102,364	43%

As indicated in the above tables, the City of Barstow and San Bernardino County had similar percentages of minority populations. While the city of Barstow has a racial minority population near the 50 percent EPA threshold, it is not a population that is meaningfully greater than San Bernardino County.

The City of Barstow had a Hispanic or Latino population below San Bernardino County and below the 50 percent EPA threshold. The Hispanic or Latino population of the City of Barstow does not represent a population that is meaningfully greater than San Bernardino county.

ENVIRONMENTAL IMPACTS AND MITIGATION

ELEMENTS OF THE ENVIRONMENT

Elements of the environment have reviewed to determine if they would be affected by the Proposed Action. “Critical” elements are subject to requirements specified in statute, regulation, or by executive order and have been considered in the development of this EA.

The “critical” elements are: Air Quality, Areas of Critical Environmental Concern (DWMA), Cultural Resources, Paleontology, Farmlands – Prime/Unique, Floodplains, Native American Religious Concern, Threatened or endangered Species of Plants or Wildlife, Invasive Species,

Wastes – Hazardous or Solid, Water Quality (Surface or Ground), Wetlands/Riparian Zones, Wild and Scenic Rivers, Wilderness, Environmental Justice, and Noise.

Uses or Resources that Would Not be Affected by the Proposed Action.

Farmlands – Prime/Unique

The Proposed Action would not take place in designated or proposed farmlands. The Proposed Action is located on Public Land managed by the BLM. Agricultural uses (excluding grazing) are not allowed on BLM land. This element is not considered further in this document.

Wild and Scenic Rivers

There are no waterways designated under the Federal Wild and Scenic Rivers Act of 1968 in or near the Proposed Action. This element is not considered further in this document. The Proposed Action would have no impact on Wild and Scenic Rivers.

Wilderness

The Proposed Action is not in or near a designated Wilderness Area or Wilderness Study Area. This element is not considered further in this document. The Proposed Action would have no impact on Wilderness Areas.

Wetlands/Riparian Zones

The Proposed Action Site is not located in wetland or riparian areas. Therefore, this element will not be considered further in this document. The Proposed Action would not impact wetland or riparian areas.

Floodplains

According to the current FEMA 100-year floodplain boundary information, the Proposed Action is not in or near a floodplain. The ephemeral washes in the Proposed Area represent the greatest potential hazard areas for flooding. Therefore, this element is not considered further in this document. The Proposed Action would have no impact on floodplains.

Livestock Grazing

The Proposed Action is located in Stoddard Valley, and there are no authorized grazing allotments in close proximity to the Proposed Action. Therefore, the Proposed Action will have no impact on livestock grazing. This element is not considered further in this document.

Population and Housing

There are no residences located near the Proposed Action. The nearest residences are located about five miles west of the project across Highway 247. The Proposed Action would not an existing community. The Proposed Action would have no effect on existing human populations or housing, and would not induce growth in the Project Area. This element if not considered further in this document.

Public Utilities and Services

The Proposed Action would not disrupt or cause additional demand on public utilities, schools, police, or fire and search and rescue. The Proposed Action would not require relocation of workers to the area causing a strain on local services. This element is not considered further in this document.

Environmental Justice

There are no communities of concern for environmental justice impacts near the Proposed Action. Therefore, the Proposed Action would not disproportionately affect minority or low-income populations. This element is not considered further in this document.

Uses or Resources That Are Present in the Project Area But Would Not Be Affected by the Proposed Action

Geological Resources (Geology, Seismicity, and Minerals)

The Proposed Action would not affect the geology or seismicity in the Project Area. While mineral resources are present in the Project Area, the Proposed Action will not preclude or allow energy and mineral resource exploration and/or development. The Proposed Action would have negligible effects to geology, seismicity, and mineral resources.

Wastes – Hazardous or Solid

The crane and vehicles would be operated using oil, fuel, lubricating grease, coolants and hydraulic fluids. Additional sources of pollutants may include solvents, trash, and other debris. These pollutants are not expected to come into contact with onsite soils or surface waters. In the event that hazardous or regulated materials were spilled, measures would be taken to control the spill and the BLM would be notified as required. Any hazardous substance spills would be cleaned immediately and any resulting waste would be transferred offsite in accordance with all applicable local, state, and federal regulations. Work crews will maintain spill kits on site for use in case of a spill.

Recreation

The Proposed Action is temporary and is expected to be completed within 24 months. Because the Proposed Action is on public land administered by the BLM in the Stoddard Valley OHV area, activities are limited to designated Open Routes. There are no BLM-designated recreation opportunities near the Proposed Action, except for the BLM Designated Open route OM7330. The Proposed Action could temporarily interfere with nature viewing, rockhounding activities, and hiking. If BLM Open Route OM7330 requires a temporary closure, the New Deal Mine proponents will work with the BLM to post temporary closure signage at the appropriate locations.

Visual Resources

During the Proposed Action, project activities, materials, equipment and vehicles would be visible to the surrounding area. Indirect effects associated with the Proposed Action may include temporary impacts associated with fugitive dust, visible ground disturbance and the presence of heavy equipment. Construction activities will be conducted in a manner that minimizes (visible) dust emissions. Areas disturbed by the Proposed Action will be restored and nothing would physically remain in the Project Area except for the historic “Arrastra”. As such, the degree of change expected would be negligible and therefore consistent with the designated VRM Class.

ENVIRONMENTAL IMPACTS AND MITIGATION

Uses or Resources That Are Present in the Project Area and May be Affected by the Proposed Action

Geological Resources (Soils)

The Proposed Action will disturb surficial soils in the Project Area (less than one acre). Removal of the soil from the mine shaft will create some fugitive dust. Upon completion of the Proposed Action, the debris in the shaft will be removed and the shaft and the adit will be backfilled and area will be recontoured. Appropriate Best Management Practices (BMPs) will be employed throughout the process.

Biological Resources

Due to the small scale of the project, long-term adverse effects to vegetation and wildlife are expected to be negligible. Access to the Proposed Action would be via BLM Open Route OM7330 for a distance of approximately three miles. The Project Site would be fenced, and the gates would be closed when no activities were occurring on the site.

Desert tortoise

Desert tortoises are assumed to occur on lands adjacent to the Project Area and along the access route. However, the mine site is extensively disturbed by historic mining and recreation use. Much of the white bursage has been removed by recreational use in the immediate vicinity of the mine site and adjacent lands. Still small pockets of creosote bush-white bursage exist. No direct affects are anticipated with implementation of protective measures listed below.

1. To reduce effects to desert tortoise the project activities shall be restricted to the time of year when tortoises are least active (Nov 1 through March 1).
2. The mine operator shall designate a field contact representative (FCR) who will be responsible for overseeing compliance with the protective stipulations for the desert tortoise and for coordination on compliance with the BLM. The FCR shall have the authority to halt all mining activities that are in violation of the stipulation. The FCR shall have a copy of all stipulations when work in being conducted on the site. The FCR may be the mine operator, the mine manager, any other mine employee, or a contracted biologist.
3. 3. An employee education program must be received, reviewed, and approved by the BLM at least 15 days prior to presentation of the program. The program may consist of a class or video presented by a qualified biologist (BLM or contractor) or a video. Wallet-sized cards with important information for workers to carry are recommended. All mine employees shall participate in the desert tortoise education program prior to initiation of mining activities. The operator is responsible for ensuring that the education program is developed and presented prior to conducting mining activities. New employees shall receive formal, approved training prior to working on-site. The program shall cover the following topics at a minimum:
 - a) Distribution of desert tortoise.
 - b) General behavior and ecology of the desert tortoise.
 - c) Sensitivity to human activities.
 - d) Legal protection.
 - e) Penalties for violation of State or Federal laws.
 - f) Reporting requirements, and
 - g) Project protective mitigation measures.
4. Handling tortoises is prohibited.
5. A biological monitor shall be present during initial construction activities.

6. The area of disturbance shall be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other limiting factors. Work area boundaries shall be delimited with flagging or marking material to minimize surface disturbance associated with vehicle straying. Special habitat features, such as burrow, identified by the qualified biologist shall be avoided to the extent possible. To the extent possible, previously disturbed areas within the mining site shall be utilized for stockpiling of excavated materials, storage of equipment, digging of slurry pits, location of office trailers, and parking of vehicles. The qualified biologist, in consultations with the project proponent, shall ensure compliance with this measure.
6. No access road shall be bladed for exploratory work. No Cross-country travel will be authorized. Access to the mine site shall be restricted to designated "open" routes of travel.
7. To prevent desert tortoises from falling, the mine shaft shall be either fenced or covered as much of the time as possible and at all times when not attended.
8. No later than 90 days after completion of construction or termination of exploration activities, the FCR and authorized shall prepare a report for the BLM. The report shall document the effectiveness and practicality of the mitigation measures, the number of desert tortoises excavated from burrows, the number of desert tortoises moved from the site, the number of desert tortoises killed or injured, and the specific information for each desert tortoise as described in measure 9. The report shall make recommendations for modifying the stipulations to enhance desert tortoise protection or to make it more workable for the operator. The report shall provide an estimate of the actual acreage disturbed by various aspects of the operation.
9. Upon locating a dead or injured desert tortoise, the operator is to notify the BLM.
10. Except on county-maintained roads, vehicle speeds shall not exceed 15 miles per hour through desert tortoise habitat.
11. All trash and food items shall be promptly contained within closed, raven-proof containers. These shall be regularly removed from the project site to reduce the attractiveness of the area to ravens and other desert tortoise predators.

Cultural Resources

Preliminary investigations of the Proposed Action site revealed that there are no National Register Eligible Properties located on the site location. The historic "Arrastra" will remain in place and is not to be disturbed.

The BLM "Open Route" OM7330 could possibly be surveyed during the WEMO Open route Cultural Resources surveys. Preliminary Investigations reveal no eligible Properties along that route.

Water Quality (Surface and Ground)

Water quality will be protected through the implementation of water quality BMPs during activities associated with the Proposed Action. The Proposed Action is not subject to the NPDES general permit addressing stormwater discharges associated with construction activities because the total disturbance is less than one acre. Projects that disturb one acre or more of soil are required to obtain coverage under the National Pollutant Discharge Elimination Systems (NPDES) construction general Permit (CGP), Water Quality Order 2009-0009-DWQ as amended by Orders 2010-0014-DWQ and 2012-0006-DWQ.

Air Quality

The main source of fugitive dust (PM_{10}) and/or fuel combustion emissions (including NO_x and some VOC_s) associated with the proposed action include, but are not limited to, the following:

1. Excavating the mine shaft and work around the mine shaft and adits.
2. Site access and travel on unpaved road surfaces.
3. Travel on paved roads by appropriate vehicles, and
4. Worker commuting.

Project design features will incorporate the latest approved MDAQMD methods for fugitive PM_{10} emissions control. Key project design features for emission control include:

1. Mobile equipment would meet California standards.
2. Travel on dirt road will be limited to 15 mph.
3. Dust control during all operations would be accomplished through the use of the following:
 - a. Short-term dust control by a water truck.
 - b. Cover haul trucks.
 - c. Stabilize (chemical or vegetation site upon completion of grading when Proposed Action is complete.

Noise

Noise levels from the anticipated mining activities, including using the crane to excavate the mine shaft are considered construction and are of a temporary nature. The closest noise receptor is over 5 miles away (26,000 feet) from the mining operation, and are considered di minimis.

CUMULATIVE IMPACTS

Cumulative impacts are defined in 40 CFR 1508.7 as the effects that could result from incremental impacts of an action when added to past, present, or reasonably foreseeable future actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. Analysis of cumulative effects consider: geographic (space) limits; time (temporal) limits; and the characteristics of the resource being evaluated.

Resources Not Present in Project Area and Not Affected by the Proposed Action

Farmlands, Wild or Scenic rivers, Wilderness, Wetlands/Riparian Zones, and floodplains do not occur in the Project Area and will not be affected by the Proposed Action. The Proposed Action cannot contribute to cumulative effects on these resources.

Resources Present in Project Area But Not Affected by the Proposed Action

Geological resources (geology, seismicity, and minerals), livestock grazing, recreation, and visual resources occur on the Project Area but will not be impacted by the Proposed Action. The analysis of effects of the Proposed Action on population, housing, public services, utilities, environmental justice, and hazardous or solid wastes revealed that these elements would not be affected by the Proposed Action. Because the Proposed Action would have no effect on these resources and elements, the Proposed Action cannot contribute to cumulative impacts to geological resources (geology, seismicity, and minerals), livestock grazing, recreation, visual resources, population, housing, public services, utilities, environmental justice, and hazardous or solid wastes.

Resources Present that May be Affected by the Proposed Action

The Proposed Action may affect soils, biological resources, cultural and paleontological resources, water quality (surface and ground), air quality, and noise. Effects to these resources are evaluated for cumulative impacts below.

Geological Resources (Soils)

The Proposed Action includes excavation of the existing mine shaft, and possibly excavation of the existing adits within the Proposed Action area through accelerated wind and water erosion, fugitive dust generation, increased sediment loads, and/or degraded water quality. The geographic scope for cumulatively considerable, reasonably foreseeable future action that have the potential to affect geologic resources is the regional vicinity surrounding the proposed action area. Therefore, reasonably foreseeable future projects within this area were considered for cumulative effects to soils. Only one project has the potential to contribute to cumulative effects when combined with the Proposed Action. The Coolwater-Lugo Transmission Corridor Projects (CLTCP) will parallel Highway 247 could possibly be under construction concurrently with the Proposed Action. The Proposed Action would protect geologic resources through implementation of Proposed Action design features intended to reduce accelerated wind and water erosion, fugitive dust generation, increased sediment loads, and/or degraded water quality. Other reasonably foreseeable future actions will employ similar project features, BMPs, and/or mitigation measures. Considered cumulatively, impacts to geologic resources would be fully mitigated through project design, BMPs, and/or mitigation measures and are not expected to be cumulatively significant.

Biological Resources

Special Status Species

The Proposed Action is located in Stoddard Valley within suitable habitat for the federally threatened desert tortoise. The project location is also located within the Ord-Rodman critical habitat unit. The geographic scope for cumulative effects includes only those actions that are current or reasonably foreseeable in the future and have the potential to affect desert tortoise. or The Stoddard Valley is bisected by Highway 247, which acts as a barrier to species movement. However, reasonably foreseeable future projects within the Stoddard Valley were considered for cumulative effects to the desert tortoise. The analysis of effects of the Proposed Action on biological resources was limited to projects in the Stoddard Valley

Cultural and Paleontological Resources

With regard to establishing the proper geographic scope for cultural and paleontological resources, guidance provided by the US EPA states that: "For non-ecological resources, other geographic areas, such as historic districts (for cultural resources) or metropolitan areas (for economics), should be used" (*Consideration of Cumulative Impacts in EPA Review of NEPA documents*, EPA 315-R-99-002, May 1999). The geographic scope for the analysis of cumulative impacts related to cultural and paleontological resources is the region surrounding the project site. Reasonably foreseeable future projects within this area that may be under construction by 2016 were analyzed for cumulatively considerable effects to cultural and paleontological

resources. One project could have the potential to contribute to cumulative effects when combined with the Proposed Action. The CWTCP could possibly be under construction during the life of the Proposed Action. The Proposed Action would result in minimal ground disturbance. No permanent effects are anticipated from the Proposed Action as it has been designed to avoid cultural resources. Therefore, the Proposed Action would not contribute to the effects of construction occurring concurrently with the Proposed Action because cultural and paleontological resources would be avoided.

Water Quality

The Proposed Action includes excavating the existing mine shaft and potentially the adits on the proposed site, and the operation of machinery with the potential to impact surface and ground water quality. The geographic scope for cumulatively considerable reasonably foreseeable future actions that have the potential to affect water quality are the watershed and ground water basin, respectively. Therefore, reasonably foreseeable future projects within this area were considered for cumulative effects to water quality. One project, the CLTCP, could possibly be under construction concurrently during the life of this Proposed Action. The Proposed Action will protect water quality through the implementation of water quality BMPs, which include the abandonment and backfilling of the shaft at the completion of the project in accordance with current DWR Bulletins 74-81, 74-90, and DEHS regulations. Other reasonable foreseeable future actions will employ similar project features, BMPs, and/or mitigation measures. Considered cumulatively, impacts to water resources would be fully mitigated through project design, BMPs, and/or mitigation measures and are not expected to be cumulatively considerable.

Air Quality

The Proposed Action includes vehicles moving across dirt roads and may result in a temporary effect to air quality from fugitive dust and exhaust emissions. Reasonably foreseeable future projects that are in the general vicinity of the Proposed Action and have the potential to be under construction during the life of the Proposed Action were considered for cumulative effects to air quality. This geographic scope was determined based on the limited area in which the Proposed Action could cause effects to air quality. Impacts from the Proposed Action would be highly localized and would not be expected to extend past the Project Area. The Proposed Action would not produce a substantial amount of dust as no intensive soil moving activities would be required. The other project that could have the potential to contribute to cumulative effects when combined with the Proposed Action would be the CLTCP which could be under construction during the life of the project. However, the Proposed Action minimization measures incorporated in the project description would limit effects to air quality. Therefore, cumulative impacts to air quality would be negligible.

Noise

The nearest noise-sensitive receptor with respect to the Project site is a residence approximately 4 miles from the project site. The geography of the area immediately surrounding the Project Site and the corresponding nearest potentially sensitive receptors would be considered likely constraints of reasonably foreseeable future actions. Such constraining geographic features include rugged desert and mountain landscapes. The other project that could have the potential to contribute to cumulative effects when combined with the Proposed Action would be the CLTCP which could be under construction during the life of the project. However, the Proposed Action minimization measures incorporated in the project description would limit effects to air quality. Therefore, cumulative impacts to noise production would be negligible.

RESIDUAL IMPACTS

The scale of the Proposed Action has been designed to limit impacts to resources. Additionally, measures have been incorporated onto the design of the Proposed Action to ensure that impacts on resources would have negligible effects. Therefore, there would be no residual effects or adverse impacts that would remain after measures incorporated into the Proposed Action design are implemented. Literature Cited Collins, C.T. 1979. *The ecology and conservation of burrowing owls*. Pages 6-17 in P. P. Scheaffer and S. M. Ehlers (eds.). Proceedings of the National Audubon Society Symposium of Owls of the West, Their Ecology and Conservation. National Audubon Society Western Education Center. Tiburon, CA. October.

Johnsgard, P.A. 1988. *Hawks, Eagles and Falcons of North America*. Washington D.C.: Smithsonian Institution Press. Karl, A. E. 1983. *The Distribution, Relative Densities, and Habitat Associations of the Desert Tortoise, Gopherus agassizii, in Nevada*. M.S. Thesis, California State Univ., Northridge. 111 pp.

Remsen, V. 1978. *The species of special concern list: an annotated list of declining or vulnerable birds in California*. Western Field Ornithologist, Museum of Vertebrate Zoology, University of California, Berkeley.

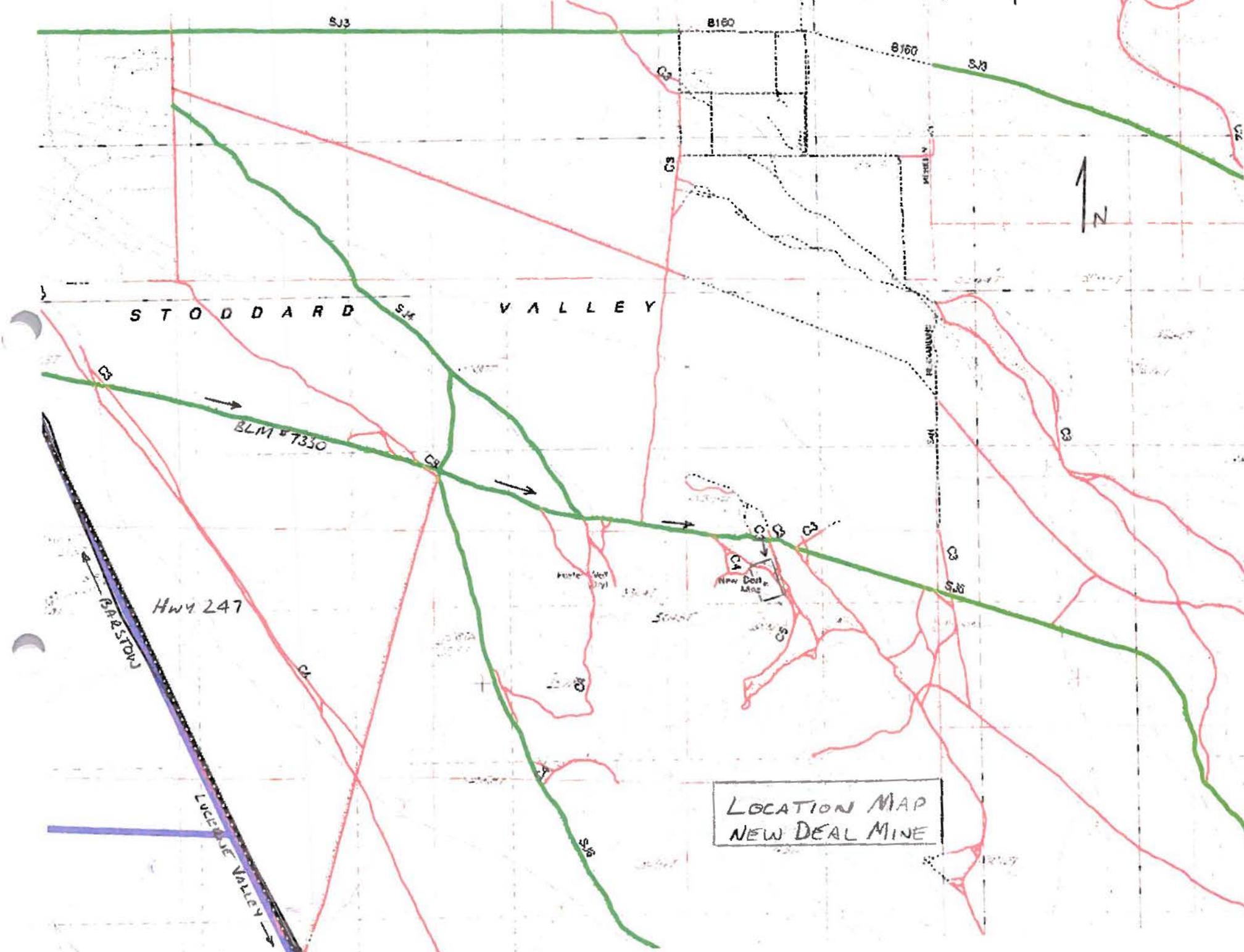
Sawyor, John O., and Keeler-Wolf, T. 1995. *A Manual of California Vegetation*. pp471.

Shuford, W.D., and Gardeli, T. editors. 2008. *California Birds Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1*. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

U.S. Fish and Wildlife Service. 2011. Revised recovery plan for the Mojave population of the desert tortoise (*Gopherus agassizii*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. 222 pp.

Zarn, M. 1974. *Technical note: habitat management series for unique or endangered species: Report no. 1; burrowing owl (Speleotyto cunicularia hypugaea)*. Bureau of Land Management, U.S. Department of the Interior. Denver Service Center, Denver Colorado. 25 pp.

Site Location Map



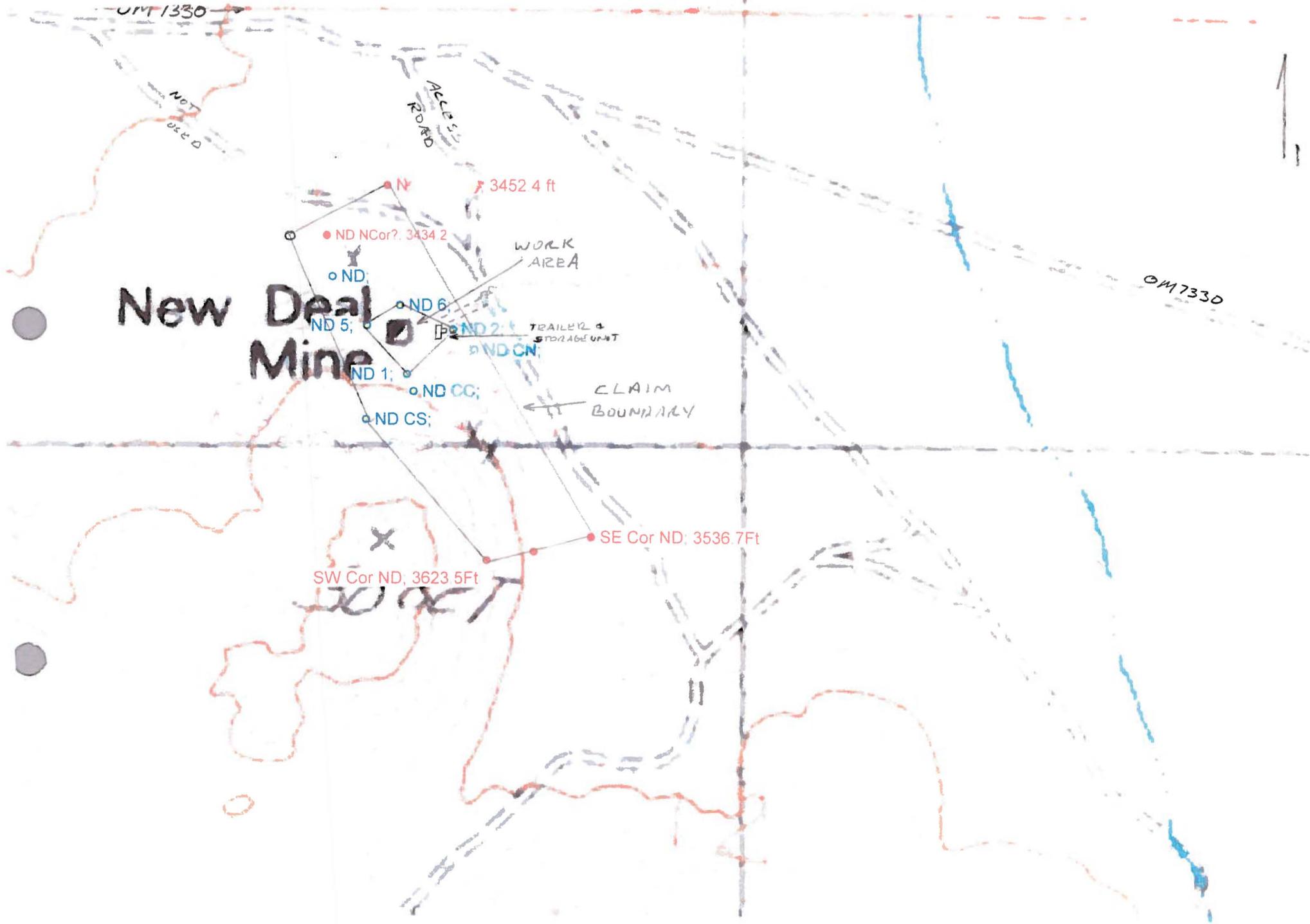


PHOTO #2

SHAFT AREA

