Memorandum

To:Ben Downard
Environmental Coordinator
Local Assistance/Non-Cap Environmental
District 9

Making Conservation a California Way of Life.

Date: May 17, 2019

File: D9/ INYO 136/ PM 15.5/ EA 09-37400 Keeler Pit Expansion/ Material Site #300

From: DEPARTMENT OF TRANSPORTATION- District 9 Dannique Aalbu Environmental Planner/Biologist District 9- Environmental

Subject: BIOLOGICAL RESOURCES CLEARANCE MEMO

Project Description:

The Keeler Pit Expansion (MS) #300 (Project) is located at Post Mile 15.5, approximately 2.5 miles (mi) southeast of the community of Keeler near the junction of State Route 136 and State Route 190, Inyo County, California. The California Department of Transportation (Caltrans) has an existing highway easement deed on the Bureau of Land Management (BLM) land for shale mining. The Project proposes expanded mining operations at Keeler Pit MS #300 for continued maintenance of dirt shoulders in Inyo County.

Approximately 300,000 cubic yards of material will be extracted from the site over a 30 to 50year span, in an 8.1 acre-expansion area. Mining will occur in 4 phases, entailing the creation of a dirt access road and material extraction pit east and southeast of the existing pit. Four to six inches of topsoil will be relocated to soil berms on the north, south and east edges of the pit. The pit will be graded to ensure stormwater containment (final slope configuration 3:1 or flatter). All equipment storage and operations will occur within the limits of the existing (lower) pit. A retention basin, to manage and contain all stormwater, will be constructed in the lower pit.

General operations for the Project include:

- Boundary staking
- Access road construction (along southwest border of site)
- Berm construction using 6 inches of topsoil
- ➤ Grading
- Material extraction
- Stockpiling of natural materials (i.e. dirt and rock)
- Reclamation (end of Phase 4)

Mobile and/or stationary equipment stored and operated for the Project include:

- ➢ Graders
- Dozers
- Loaders
- Sorting grizzlies

➢ Excavators

Anticipated provisions to maintain environmental compliance include:

> Berm creation and grading for management of stormwater

Project Setting:

The Project is located at the southern end of Owens River Valley on an upland mesa/bluff, at an elevation range of 1100- 1200 meters (m), with lower elevation desert washes marking the site boundaries to the north and south. A minimum 30-foot offset boundary will be demarcated with metal stakes to buffer the edge of the bluff and provide a visual cue for excavation activities. The adjacent washes have cliffside crevasses and Creosote bush (Larrea tridentate) and may provide habitat for sensitive species.

Common plant species at the Project site include: Mojave cleomella (*Cleomella obtusifolia*), desert holly saltbush (*Atriplex hymenelytra*), Annual psathyrotes (*Psathyrotes annua*), velvet turtleback (*Psathyrotes ramosissima*), pebble pincushion (*Chaenactis carphoclinia*), devel's spineflower (*Chorizanthe rigida*), broad-leaf gilia (*Aliciella latiforia*), buckwheat species (*Enogonum sp.*), wire lettuce (*Stephanomeria pauciflora*), yellow cups (*Camissonia brevipes*), desert pepperweed (*Lepidium fremontii*), white bursage (*Ambrosia dumosa*), Anderson's desert thorn (*Lycium andersonii*), scale bud (*Anisocoma acaulis*), Fiddleleaf species (*Nama sp.*), and Primrose species (*Camissonia sp.*); prickly Russian thistle (*Salsola tragus*), an invasive species, is also present. Overall vegetation cover at the site is less than 10 percent.

Wildlife species observed in the area include: rock wren (*Salpinctes obsoletus*), common raven (*Corvus corax*), side-blotched lizard (*Uta stansburiana*), zebra-tailed lizard (*Callisaurus draconoides*), painted lady butterfly (*Vanessa cardui*) and cabbage white butterfly (*Pieris rapae*).

Quad (s): Keeler

Methods Used (Species Lists Attached):

X California Department of Fish and Wildlife (CDFW), California Natural Diversity Data Base (CNDDB)

X California Native Plant Society Online Inventory

X U.S. Fish and Wildlife Service (USFWS) Species List

X Bureau of Land Management (BLM), Special Status Animal and Plant Species Lists

Survey Completion Date(s):

- Focused surveys for activities covered under this biological clearance memo:
 - o Rare plant survey, May 9, 2019
 - General wildlife survey, May 9, 2019
- Nesting bird survey(s) (NBS) is/are required prior to ground disturbing activities
- Additional focused surveyed are required prior to each phase of the Project

<u>Resources Evaluated</u>: See table below. Special-status species evaluated using a nine-quad search.

Common Name Scientific Name	Status (rank or other listing status)	Habitat Description	Elevation Range (m)	Habitat Present (Y) or Absent (N)	Rationale
Communities					
Active Desert Dunes	CDFW Ranked Community	Active desert dunes		N	Present in nine-quad search, but no active dune communities present at site
Plants	<u>.</u>				
Ripley's aliciella Aliciella ripleyi	28.3	Limestone Cliffs; Mojave Desert scrub	305 - 1955	Y	No individuals observed during field surveys in May 2019; nearest record (CNPS) 11 mi NE in Nelson Range at 1130 m
Darwin Mesa milk-vetch Astragalus atratus var. mensanus	1B.1	volcanic clay, gravelly; Great Basin scrub; Joshua tree woodland; Pinyon and juniper woodland	1320 - 2315	N	No habitat present – out of elevation range
inflated Cima milk-vetch Astragalus cimae var. sufflatus	1B.3	Carbonate, rocky; Great Basin scrub; Pinyon and Juniper woodland	1500 - 2075	N	No habitat present – out of elevation range
Fish Slough milk-vetch Astragalus lentiginosus var. piscinensis	FT	Playas (alkaline)	1130 - 1300	N	No habitat present; no documented occurrences (CNPS) near site
curved-pod milk-vetch Astragalus mohavensis var. hemigyrus	1B.1	Carbonate; Joshua tree woodland; Mojave Desert scrub	1250 - 1620	N	No habitat present – out of elevation range
Shockley's milk-vetch Astragalus serenoi var. shockleyi	2B.2	Alkaline, granite alluvium; Chenopod scrub; Great Basin Scrub; Pinyon and Juniper woodland	1500 – 2320	N	No habitat present – out of elevation range
Tidestrom's milk-vetch Astragalus tidestromii	28.2	carbonate, sandy or gravely; Mojave Desert scrub	600 - 1785	Y	No individuals observed during field surveys in May 2019; nearest record (CNPS) 12 mi SE off Saline Valley Road at 1540 m
King's eyelash grass Blepharidachne kingii	28.3	Great Basin scrub	1065 - 2135	Y	No individuals observed during field surveys in May 2019; nearest record (CNPS) 13.5 mi SE at Talk City Hills at 1620 m
Lincoln rockcress Boechera lincolnensis	2B.3; BLM_S	carbonate; Mojave Desert scrub	1100 - 2705	Y	No individuals observed during field surveys in May 2019; nearest record (CNPS) 10 mi NE in San Lucas Canyon at 1750 m
Inyo mariposa Calochortus excavatus	BLM_S	alkaline, mesic. Chenopod scrub. Meadows and seeps	1150-2000	N	No habitat present; wet areas only

Panamint rock-goldenrod		Carbonate, rocky; Pinyon and Juniper	2040 - 2900	Ν	No habitat present – out of elevation
Cuniculotinus gramineus	2B.3	woodland; subalpine coniferous forest			range
Sanicle cymopterus		gravelly, sandy, carbonate; Mojave Desert	1000 - 1600	Y	No individuals observed during field
Cymopterus ripleyi var.		scrub			surveys in May 2019; nearest record
saniculoides	1B.2				(CNPS) 11.5 mi SW in wash at 1150m
Parry's monkeyflower		Great Basin scrub	1200 - 2600	Ν	No habitat present – out of elevation
Diplacus parryi	2B.3				range
bald daisy		Great Basin scrub	unknown	Y	No individuals observed during field
Erigeron calvus					surveys in May 2019; nearest record
	1B.1				(CNPS) 9 mi NW near Dolomite at 1170 m
limestone daisy		Carbonate; Great Basin scrub; Pinyon and	1900 - 2900	Ν	No habitat present – out of elevation
Erigeron uncialis var. uncialis		juniper woodland; subalpine coniferous			range
-	1B.2	forest			
Alexander's buckwheat		shale or gravelly; Great Basin scrub;	unknown	Ν	Presumably out of elevation range (only 2
Eriogonum alexanderae		pinyon and juniper woodland			instances record are at high elevation); no
5	BLM S				occurrences (CNPS) near site
Wildrose Canyon buckwheat	—	sandy or gravelly; Pinyon and juniper	2200 - 3100	Ν	No habitat present – out of elevation
Eriogonum eremicola		woodland; upper montane coniferous			range
5	1B.3	forest			
Pinyon Mesa buckwheat		Rocky or gravelly; Great Basin scrub;	1800 - 2805	N	No habitat present – out of elevation
Eriogonum mensicola		Pinyon and Juniper woodland; upper			range
	1B.3	montane coniferous forest			
Panamint Mountains		Rocky; Pinyon and juniper woodland;	1890 - 3250	Ν	No habitat present – out of elevation
buckwheat		subalpine coniferous forest			range
Eriogonum microthecum var.		···· •			
panamintense	1B.3				
Limestone monkeyflower		carbonate; talus slope; Mojave Desert	915 - 2165	Y	No individuals observed during field
Erythranthe calcicola		scrub; woodland			surveys in May 2019; nearest record
,					(CNPS) 7 mi NE near Cerro Gordo Peak at
	1B.3				2670 m
Jaeger's hesperidanthus	-	carbonate, rocky; Great Basin scrub;	2135 - 2800	N	No habitat present – out of elevation
Hesperidanthus jaegeri		Pinyon and juniper woodland; Subalpine			range
	1B.2	coniferous forest			
Alkali ivesia		mesic, alkaline, clay. Great Basin scrub.	1200 - 2130	N	No habitat present – out of elevation
Ivesia kingii var. kingii	BLM S	Meadows and seeps. Playas		-	range
Sagebrush loeflingia		Sandy; desert dunes. Great Basin scrub.	700 - 1615	N	No individuals observed during field
Loeflingia squarrosa var.		Sonoran Desert scrub			surveys in May 2019; nearest record
artemisiarum	BLM_S				(CNPS) approximately 50 mi N at 1470 m
Panamint Mountains lupine		Great Basin scrub; upper montane	1260 - 1830	N	No habitat present – out of elevation
Lupinus magnificus var.		coniferous forest			range
magnificus	1B.2				i ange
magnijicas	10.2				

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intermontane lupine		Great basin scrub (sandy)	1220 - 2060	Ν	No habitat present – out of elevation
Lupinus pusillus var.					range
intermontanus	2B.3				
Inyo blazing star		rocky, sometimes carbonate. Great Basin	1858 - 1980	Ν	No habitat present – out of elevation
Mentzelia inyoensis	BLM_S	scrub. Pinyon and juniper woodland			range
Watson's oxytheca		Sandy; Joshua tree woodland; Mojave	1200 - 2000	Ν	No habitat present – out of elevation
Oxytheca watsonii	2B.2	Desert scrub			range
Amargosa beardtongue		Mojave Desert scrub	850 - 1400	Y	No individuals observed during field
Penstemon fruticiformis var.					surveys in May 2019; nearest record
amargosae	1B.3				(CNPS) in Nelson range at 1920 m
Inyo rock daisy		Great Basin scrub; pinyon and juniper	1795 – 2715	Ν	No habitat present – out of elevation
Perityle inyoensis	1B.2	woodland; rocky carbonate cliffs			range
Inyo phacelia		Meadows and seeps (alkaline)	915 - 3200	Ν	No habitat present; wet areas only
Phacelia inyoensis	BLM_S				
Bailey's greasewood		Alkaline, dry lakes, washes, roadsides;	1500 - 1600	Ν	No habitat present – out of elevation
Sarcobatus baileyi	2B.3	Chenopod scrub			range
Owens Valley checkerbloom		alkaline, mesic; chenopod scrub;	1095 - 1415	Y	No individuals observed during field
Sidalcea covillei		meadows and seeps			surveys in May 2019; nearest record
					(CNPS) at meadow complex near
	1B.1				roadside in Owens Valley at 1200 m
Animals					
pallid bat	BLM_S;	Deserts; rocky outcrops; oak and pine		N	No individuals or sign observed during
Antrozous pallidus	CDFW_SSC	forests; open farmland. Roost in caves,			field surveys in May 2019; potential
		rock crevices, mines, hollow trees,			habitat in rock crevices/cliffs lining wash
		buildings			adjacent to site; nearest record (CNDDB)
					at Dirty socks springs, on SE side of Owen:
					Dry Lake
golden eagle	BLM_S;	Great basin scrub; rolling foothills,		Ν	No habitat present; nearest record
Aquila chrysaetos	CDFW_fully	mountain areas, sage-juniper flats, and			(CNDDB) in upper Vermillion canyon, SE o
	protected;	desert			Owens Dry Lake
	USFWS_BCC				
Inyo Mountains slender	BLM_S;	Riparian scrub and woodland; talus slope;		Ν	No habitat present; aquatic areas only
salamander	CDFW_SSC	wetland; moist canyons, where surface			
Batrachoseps campi		water is present			
Crotch bumble bee	CDFW ranked	Coastal California east to Sierra-Cascade		Y	A small number of Eriogonum
Bombus crotchii	species	crest and south into Mexico; food plant			(buckwheat) species were observed
		genera include Antirrhinum, Phacelia,			during May 2019 field survey, but no
		Clarkia, Dendromecon, Eschscholzia, and			individuals (Crotch bumble bee) observed
		Eriogonum.	┥───┤		
Swainson's hawk	BLM_S;	typical habitat is open desert, grassland,		N	No habitat present
Buteo swainsoni	USFWS_BCC	or cropland containing scattered, large			

		trees or small groves; roost in large trees, but will roost on ground if no trees are available			
Costa's hummingbird Calypte costae	USFWS_BCC	Desert washes; sage scrub; dry and open habitats with variety of perennial vegetation		Ν	No habitat present – requires variety in perennial vegetation
western snowy plover Charadrius alexandrinus nivosus	FT; CDFW_SSC	Great Basin standing waters; sand shore; wetland		Ν	No habitat present - needs sandy, gravelly or friable soils for nesting
mountain plover Charadrius montanus	BLM_S; CDFW_SSC; USFWS_BCC	Chenopod scrub and valley and foothill grassland; short grasslands, freshly plowed fields, newly sprouting grain fields, and sod farms		Ν	No habitat present
Townsend's big-eared bat Corynorhinus townsendii	BLM_S; CDFW_SSC	Mesic sites; Great Basin scrub; roosts in the open, hanging from walls and ceilings		Ν	No habitat present; nearest record (CNDDB) at large Dolomite mine, used for roosting
Panamint kangaroo rat Dipodomys panamintinus panamintinus	CDFW ranked species	Great Basin scrub; Panamint Range	1400 - 2140	Ν	No habitat present – out of elevation range and found only in the Panamint Range
spotted bat Euderma maculatum	BLM_S; CDFW_SSC	Arid deserts; grasslands; mixed conifer forests; needs rock crevices in cliff or caves for roosting		Ν	No individuals or sign observed during field surveys in May 2019; potential habitat in rock crevices/cliffs lining wash adjacent to site; nearest record (CNDDB) on eastern end of Owens Dry Lake, south of Keeler
desert tortoise Gopherus agassizii	FT; ST	Mojave Desert scrub; Sonora Desert scrub; Joshua tree woodland; occurs in almost every desert environment		N	No habitat present – requires friable soil for burrow construction; creosote bush habitat with large annual wildflower blooms preferred
yellow-breasted chat Icteria virens	CDFW_SSC	Riparian scrub; inhabits riparian thickets of willow near watercourses		Ν	No habitat present – requires riparian vegetation and water
loggerhead shrike Lanius ludovicianus	CDFW_SSC; USFWS_BCC	Desert wash; Mojave Desert scrub; Joshua tree woodland		N	No individuals or sign observed during field surveys in May 2019; potential habitat in desert wash adjacent to site; nearest record (CNDDB) 3 mi SE of Olancha at HWY 395/190 junction
Owens Valley vole	BLM_S;	Meadow and seep; wetland; lush grassy		Ν	No habitat present
Microtus californicus vallicola western small-footed myotis	CDFW_SSC BLM_S	ground in Owens valley Arid wooded and bushy uplands near		N	No individuals or sign observed during
Myotis ciliolabrum	DLIVI_3	water; seeks cover in caves, buildings, mines and crevices		iN	field surveys in May 2019; potential habitat in rock crevices/cliffs lining wash adjacent to site; nearest record (CNDDB)

					at springs on eastern shore of Owens Dry Lake, approx. 1.5 miles SSW of Keeler
Yuma myotis Myotis yumanensis	BLM_S	Lower and upper montane coniferous forest; riparian forest and woodland; near water		Ν	No habitat present
northern sagebrush lizard Sceloporus graciosus graciosus	BLM_S	mountainous sagebrush and shrublands; prefers exposed areas with scattered low-growing shrubs	150 - 3200	Y	Potential habitat present - no individuals or sign observed during field surveys in May 2019; nearest record (CNDDB) 3 mi SE of Olancha at HWY 395/190 junction; preconstruction surveys will be conducted prior to implementation of each phase of work
Owens tui chub Siphateles bicolor snyderi	FE; SE	Aquatic; endemic to Owens River basin		Ν	No habitat present
Le Conte's thrasher Toxostoma lecontei	CDFW_SSC; USFWS_BCC	Open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats; nests in dense shrub or branched cactus in desert wash		Ν	No individuals or sign observed during field surveys in May 2019; potential habitat in rock crevices/cliffs lining wash adjacent to site; nearest record (CNDDB) in town of Keeler approx. 2.5 mi NW of site
least Bell's vireo Vireo bellii pusillus	FE; SE	Riparian forest, scrub, and woodland		Ν	No habitat present
Mohave ground squirrel Xerospermophilus mohavensis	ST; BLM_S	Endemic to Mojave Desert - open desert scrub, alkali scrub, and Joshua tree woodland; also feeds in annual grasslands		Ν	No habitat present- species prefers sandy to gravelly soils and avoids rocky areas

Species Status Key				
FE = Federally Endangered	SE = State Endangered	CDFW_SSC = State Species of Special Concern		
FT = Federally Threatened	ST = State Threatened	1.B.1-3 = CA Native Plant Society Rank. 1B plants		
		are rare, threatened or endangered in CA and		
		elsewhere.		
USFWS_BCC = USFWS Bird of Conservation Concern	BLM_S = BLM Sensitive Species	2.B.1-1 = CA Native Plant Society Rank. 2B plants		
		are rare, threatened or endangered in CA but more		
		common elsewhere.		

Waters of the U.S. Evaluation:

Waters of the U.S. (WOUS) do not occur within the Project limits; therefore, no WOUS will be impacted by the proposed project.

Determination:

The Project is not within the jurisdiction of NMFS (National Marine Fisheries Service) and so no NMFS species list was included.

This Project will have **No Effect** on any of the special-status species in the resources evaluated below (see attached species lists).

Avoidance Measures:

- Notify Biologist 30 days prior to ground-disturbing activities
- Focused surveys for plant and animal species that do have potential habitat at the site are required prior to each phase of the Project

Rationale:

The Project site is bordered on the west by an existing Caltrans-operated scale mining pit; the existing pit site is disturbed, intermittently noisy, and does not provide suitable habitat for special-status species. Furthermore, the presence of ground-disturbing activity may deter some special-status species from entering/using the Project site.

The Project site is bordered on the north and south by lower elevation desert washes; these washes contain cliff crevasses and substantial Mojave Desert scrub vegetation, dominated by Creosote bush (Larrea tridentate). They are important in desert environments – as they intermittently hold and transport water – and, therefore, may provide suitable habitat for special-status species. A staked 30-foot offset boundary (see *Project Setting*) is planned to buffer the edge of the bluff and ensure the washes are not impacted by Project activities.

The Project site (bluff) is dominated by scale rock and contains sparse vegetation (< 10 percent). It does not provide suitable habitat for most of the special-status species that were analyzed from the nine-quad search (see table above of *Resources Evaluated*). Of the few species that do have potential to occur at the site, none were observed during the May 2019 focused survey. With the implementation of focused surveys for special-status plant and animal species prior to ground disturbance, no impacts to special-status species are expected.

If you have any questions regarding this memo, please contact Dannique Aalbu, District Biologist, at (760)872-0763 or Dannique.aalbu@dot.ca.gov.

Dannique Aalbu Environmental Planner/Biologist District 9- Environmental

Attachments:

USFWS – Species List_Carlsbad Fish And Wildlife Office CDFW – CNDDB Summary Table Report (nine-quad search) CNPS – California Native Plant Society Online Inventory (nine-quad search) BLM – Special Status Species List