New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

Jim Noel Cabinet Secretary

Karen Garcia Deputy Cabinet Secretary Bill Brancard
Division Director
Mining and Minerals



7008 2810 0002 3378 2005

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 3, 2010

Mr. Lee "Pat" Gochnour Consultant to Laramide Laramide Resources (USA) Inc. The Exchange Tower 30 Kind Street West, Suite 3680 Box 99 Toronto, Ontario, Canada M5X 1B1

RE: Review and Comments on Sampling and Analysis Plan, La Jara Mesa Mine, Laramide Resources (USA) Inc., Permit No. CI008RN

Dear Mr. Gochnour,

Pursuant to 19.10.6.602.D(12) NMAC, the New Mexico Mining and Minerals Division (MMD) has reviewed the submittal from Laramide Resources (USA), Inc. (Laramide) titled, "Revised Sampling and Analysis Plan for the La Jara Mesa Project" (Revised SAP) dated October 5, 2009 in support of a forthcoming application for a New Mine Permit No. CI008RN for its proposed La Jara Mesa uranium mine in Cibola County, New Mexico. Additional information in support of the Revised SAP was received by MMD on December 8, 2009, May 6, 2010, and May 24, 2010. MMD reviewed the Revised SAP and supporting information and deemed the Revised SAP Administratively Complete on June 22, 2010.

Pursuant to 19.10.6.602.D(12)(b) NMAC MMD has distributed the Revised SAP and supporting information to the New Mexico Environment Department (NMED), the New Mexico Department of Game and Fish (NMDG&F), the New Mexico Office of the State Engineer (NMOSE), the New Mexico Department of Cultural Affairs Historic Preservation Division (NMHPD), the New Mexico State Forestry Division (NMSFD), and the U.S.D.A. Forest Service Cibola National Forest (USFS) for their (Agency) review and comments. MMD has received written comments from NMED, NMOSE, NMDG&F, and the NMHPD and they are enclosed with this letter. In addition, MMD has reviewed the Revised SAP and supporting information and MMD's comments are also enclosed with this letter. Pursuant to 19.10.6.602.D(12)(c) NMAC, Laramide may request a conference with MMD, to discuss the comments on the Revised SAP.



RE: Review and Comments on Sampling and Analysis Plan, La Jara Mesa Mine, Laramide Resources (USA) Inc., Permit No. CI008RN

September 3, 2010

Page 2

Please be aware that depending upon the results of the data collected, and changes to the developing operation and reclamation plan, additional sampling may be required before a permit is issued.

Additionally, please be advised that other permits will be required regarding the La Jara Mesa Mine. The information provided by Laramide to MMD may not satisfy the requirements for the eventual approval of additional permits. Laramide must contact the agencies responsible for those permits, including, but not limited to, the NMED and the OSE.

Please contact me at 505-476-3437, or David Ohori at 505-476-3438 or david.ohori@state.nm.us, if you have any questions.

Sincerely,

Holland Shepherd, Program Manager

Mining Act Reclamation Program (MARP)

New Mexico Mining and Minerals Division

Enclosures

cc: Chuck Thomas, Executive Manager, Mine Reclamation Bureau Kurt Vollbrecht, Team Leader, NMED/MECS-GWQB Diane Tafoya, USDA Forest Service Matthew Wunder, Ph.D., Chief, Conservation Services Division, NMDG&F Mike Johnson, Chief, Hydrology Bureau, NMOSE Michelle Ensey, Archaeologist, NMDCA/HPD David Ohori, Permit Lead, Mining Act Reclamation Program James Hollen, Permit Lead (MK025RN), MARP/MMD Mine File (CI008RN)

GOVERNOR Bill Richardson



TO THE COMMISSION

Tod Stevenson

Robert S. Jenks, Deputy Director

STATE OF NEW MEXICO DEPARTMENT OF GAME & FISH

One Wildlife Way Post Office Box 25 12 Santa Fe, NM 87.04

RECEIVED

Phone: (505) 476-8008 Fax: (505) 476-8024

AUG 1 3 2010

MINING & MINERALS DIVISION

Visit our website at www.wildlife.state.nm.us

For information call: 505/476-8000

To order free publications call: 1-800-862-9310

STATE GAME COMMISSION

JIM McCLINTIC, Chairman Albuquerque, NM

SANDY BUFFETT, Vice-Chairwoman Santa Fe, NM

DR. TOM ARVAS, Commissioner Albuquerque, NM

GARY W. FONAY, Commissioner Hobbs, NM

KENT A. SALAZAR, Commissioner Albuquerque, NM

M.H. "DUTCH" SALMON, Commissioner Silver City, NM

THOMAS "DICK" SALOPEK, Commissioner Las Cruces, NM

August 11, 2010

David Ohori, Permit Lead EMNRD Mining & Minerals Division 1220 South St. Francis Drive Santa Fe NM 87505

Re: La Jara Mesa Sampling and Analysis Plan, Permit No. CI008RN; NMDGF Project No. 13442

Dear Mr. Ohori:

In response to your letter dated July 7, 2010, the New Mexico Department of Game & Fish (NMDGF) has reviewed the above referenced document. La Jara Mesa is a proposed new underground uranium mine, located in the Cibola National Forest approximately 10 miles northwest of Grants, NM. The Sampling and Analysis Plan (SAP) is required by MMD as part of the New Mine permit application under Mining Act Rule 19.10.6 D(12). The purpose of the SAP is to describe how baseline environmental information about the permit area and affected area will be collected. NMDGF reviewed Chapters 4, Vegetation, and 5, Wildlife of the above referenced SAP. No site inspection was conducted by NMDGF staff in connection with this consultation request.

The SAP proposes comprehensive walking surveys for vegetative species composition, ungulate pellet group count transects, and a combination of transect and point count methods for bird diversity. These proposed methods are appropriate, however NMDGF does not consider them fully adequate to obtain baseline information needed to characterize vegetation and fauna of the site as required in Mining Act Rule 19.10.6 D(13). Please refer the applicant to the NMDGF Wildlife Baseline Study Guidelines, available on the Department's website at http://wildlife.state.nm.us/conservation/habitat_handbook/documents/WidllifeBaselineStudyGuidelines.pdf. The SAP should include, at a minimum, the

Site-specific vegetation monitoring. The SAP proposes that existing Forest Service data from a broader area will be used in lieu of conducting quantitative site-specific monitoring for the variables of vegetative cover, shrub density and productivity. NMDGF concurs that this data set may be appropriate since the broad scope and longer time frame may contribute to characterizing the general area and determining revegetation success standards. However this data should not be substituted for site specific information. Monitoring methods can be designed so that results will be directly comparable with existing data.

Adequate sample coverage. The SAP does not describe how proposed habitat types in the project area will be divided. Once discreet habitat types are defined, there should be at minimum two transects within each type. The proposed monitoring locations shown on Figure 5-1 only cover the directly impacted project area. Monitoring activity should be designed to include potential affected areas surrounding the mesa-top vent shaft and, especially, the access route (including the existing Forest Service road). The greatest and most likely impact to ungulates from this project will be due to increased traffic on the access route. Please see the NMDGF document Habitat Fragmentation and the Effects of Roads on Wildlife (http://wildlifeandHabitats.pdf) for more information on this subject. Pellet counts should be conducted in both spring and fall, to document seasonal use.

Targeted search for special status species. In addition "to assess[ing] the potential occurrence" of special status species (SAP 5.1, page 12), the objective of the baseline survey should be to determine, to the extent feasible, the presence or absence of species for which habitat exists on or near the permit area. We have enclosed a Wildlife of Concern list for Cibola County to assist in selecting special status species which may occur at the project location. At a minimum, the La Jara Mesa SAP should include targeted searches, using appropriate methods, for the state Threatened gray vireo and spotted bat.

Characterization of site fauna. The SAP does not include any mention pertaining to the methods in which proponents will gather information on reptile, amphibian, or small mammal communities of the project area. NMDGF concurs that opportunistic observations during bird and plant surveys should be adequate to document use of this relatively small area by medium to large size animals.

Raptor nest searches. Baseline studies should include raptor nest searches of all cliff or rimrock habitat and any large trees within ½ mile of all proposed project facilities, including roads. The activity status of any nests which are found should be determined during the appropriate season.

Thank you for the opportunity to consult on this permit document. If there are any questions, please contact Rachel Jankowitz at 505-476-8159, or rjankowitz@state.nm.us.

Sincerely,

Matthew Wunder, PhD

Chief, Conservation Services Division

cc:

Wally Murphy, Ecological Services Field Supervisor, USFWS

Brian Gleadle, NW Area Office Supervisor, NMGF Kurt Vollbrecht, NMED Groundwater Quality Bureau

NEW MEXICO WILDLIFE OF CONCERN CIBOLA COUNTY

For complete up-dated information on federal-listed species, including plants, see the US Fish & Wildlife Service NM Ecological Services Field Office website at http://www.fws.gov/ifw2es/NewMexico/SBC.cfm. For information on state-listed plants, contact the NM Energy, Minerals and Natural Resources Department, Division of Forestry, or go to http://nmrareplants.unm.edu/. If your project is on Bureau of Land Management, contact the local BLM Field Office for Information on species of particular concern. If your project is on a National Forest, contact the Forest Supervisor's office for species information.

GOVERNOR Bili Richardson



DIRECTOR AND SECRETARY TO THE COMMISSION Tod Stevenson

Robert S. Jenks, Deputy Director

STATE OF NEW MEXICO **DEPARTMENT OF GAME & FISH**

One Wildlife Way Post Office Box 25112 Santa Fe. NM 87504 Phone: (505) 476-8101 Fax: (505) 476-8128

Visit our website at www.wildlife.state.nrn.us

To order free publications call: 1-800-862-9310

For information call: 505/476-8000

RECEIVED

AUG 0 4 2010

DF. TOM ARVAS, Commissioner Albuquerque, NM GARY W. FONAY, Commissioner

Habbs, NM

STATE GAME COMMISSION JIM McCLINTIC, Chairman

SANDY BUFFETT, Vice-Chairwoman

Albuquerque, NM

Santa Fo, NM

KENT A. SALAZAR, Commissioner MINING & MINERALS DIVISION HIGHER NA

H. "DUTCH" SALMON, Commissioner Silver City, NM

THOMAS "DICK" SALOPEK, Commissioner Las Cruces, NM

August 3, 2010

David Ohori New Mexico EMRD 1220 South St. Francis Drive Santa Fe NM 87505

Re: La Jara Mesa Mine; NMDGF No. 13442

Dear Mr. Ohori,

In response to your letter dated July 7, 2010, regarding the above referenced project, enclosed is a list of species of concern that occur in Cibola County. Other sources of information are listed below.

For more information on listed and other species of concern, contact the following sources:

- 1. BISON-M Species Accounts, Searches, and County lists: http://www.bison-m.org
- 2. Habitat Handbook Project Guidelines:
- http://wildlife.state.nm.us/conservation/habitat_handbook/index.htm 3. For custom, site-specific database searches on plants and wildlife, go to http://nhnm.unm.edu, then go to Data, then to Free On-Line Data, and follow the directions
- 4. New Mexico State Forestry Division (505-476-3334) or http://nmrareplants.unm.edu/index.html for
- 5. For the most current listing of federally listed species always check the U.S. Fish and Wildlife Service at (505-346-2525) or http://www.fws.gov/southwest/es/NewMexico/SBC.cfm.

Thank you for the opportunity to review and comment on your project. If you have any questions, please contact Brandon Griffith. Northwest Area Office Depredation Specialist at (505) 22-4721 or brandon.griffith@state.nm.us.

Sincerely

Terra Manasco

Assistant Chief. Conservation Services Division

Technical Guidance Section

TLM/bwg

xc: Wally Murphy, Ecological Services Field Supervisor, USFWS Brian Gleadle, NW Area Operations Chief, NMDGF

NEW MEXICO WILDLIFE OF CONCERN CIBOLA COUNTY

For complete up-dated information on federal-listed species, including plants, see the US Fish & Wildlife Service NM Ecological Services Field Office website at http://www.fws.gov/ifw2ss/NewMexico/SBC.cfm. For information on state-listed plants, contact the NM Energy, Minerals and Natural Resources Department, Division of Forestry, or go to http://nmrareplants.unm.edu/. if your project is on Bureau of Land Management, contact the local BLM Field Office for Information on species of particular concern. If your project is on a National Forest, contact the Forest Supervisor's office for species information.

Common Name Southwestern Willow Flycatcher Loggerhead Shrike Gray Vireo Western Small-footed Myotis Bat Yuma Myotis Bat Occult Little Brown Myotis Bat Long-legged Myotis Bat Fringed Myotis Bat Fringed Myotis Bat Spotted Bat Big Free-tailed Bat Gunnison's Prairie Dog Cebolleta Pocket Gopher Northern Pocket Gopher Northern Pocket Gopher Red Fox Ringtail Black-footed Ferret Common Hog-nosed Skunk Socorro Mountainsnail New Mexico Silverspot Butterfly	Scientific Name Empidonax traillii extimus Lanius ludovicianus Vireo vicinior Myotis ciliolabrum melanorhinus Myotis yumanensis yumanensis Myotis lucifugus occultus Myotis volans interior Myotis thysanodes thysanodes Myotis evotis evotis Euderma maculatum Nyctinomops macrotis Cynomys gunnisoni Thomomys bottae paguatae Thomomys talpoides taylori Vulpes vulpes Bassariscus astutus Mustela nigripes Conepatus leuconotus Oreohelix neomexicana	NMGF E s T s s s s s s s s s s s s s s s s s s	US FWS E SOC	critical habitat
ivew inexico Silverspot Butterfly	Speyeria nokomis nitocris	-	SOC	



BILL RICHARDSON Governor DIANE DENISH Lieutenant Governor

NEW MEXICO ENVIRONMENT DEPARTMENT

Ground Water Quality Bureau

1190 St. Francis Drive P.O. Box 5469, Santa Fe, NM 87502 Phone (505) 827-2918 Fax (505) 827-2965 www.nmenv.state.nm.us William C. Olson, Bureau Chief



RON CURRY Secretary SARAH COTTRELL Deputy Secretary

MEMORANDUM

DATE:

August 12, 2010

TO:

Holland Shepherd, Program Manager, Mining Act Reclamation Program

FROM:

Kurt Vollbrecht, Mining Act Team Leader, Ground Water Quality Bureau

Neal Schaeffer, NMED Surface Water Quality Bureau

RE:

Comments on Laramide Resources (USA) Inc., La Jara Mesa Mine,

Sampling and Analysis Plan, Permit no. CI008RN

The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on July 13, 2010 requesting NMED review and provide comments on the Sampling and Analysis Plan (SAP) referenced above. MMD requested comments be submitted within 30 days of receipt in accordance with the New Mexico Mining Act Requirements. The NMED Surface Water Quality Bureau (SWQB) and Ground Water Quality Bureau (GWQB) have submitted comments in this memorandum jointly.

NMED SWQB Comments:

The SAP describes using siphon samplers as a contingency if ephemeral channels are not running. These samples must be identified, including in any data comparisons also involving ambient grab samples. Laramide Resources should attempt to identify the date and approximate time when the siphon samplers are filled, to estimate the time before sample preservation.

NMED GWQB Comments:

Section 7, Orebody and Geology

In Section 7.2 it is stated that characterization of waste rock will be done in such a manner that "The number of samples of each unit is proportional to the expected volumes in the piles." A review of Table 7-1 indicates that over half the material (151,900 yd³) will be derived from the Westwater Canyon Member. The number of samples proposed for the Westewater Canyon Member is five, the same number as that proposed for the Bluff Sandstone which will represent half as much waste rock material (86,600 yd³) as the Westwater Canyon Member volume. Given the high volume of

Holland Shepherd August 12, 2010 Page 2 of 3

Westwater Canyon Member waste material being brought to the surface and the greater potential for contaminants within the Westewater Canyon Member relative to the other formation material brought to the surface, NMED recommends a much greater frequency of sampling this material. Further, it is indicated in Section 7.2.1 that a geologist will study core samples obtained during exploration and "...evaluate the core samples for uniformity and select sections that are representative of the formation". It is unclear how this will result in a selection of samples that represent any spatial variability that may be encountered during the excavation of inclines over 5000' in length.

Further sampling and analysis is likely to be required during operations to characterize material as it is brought to the surface. Analytical requirements may include analysis such as EPA Method 1312 (SPLP) to determine the potential for leaching of metals. Although sampling of core will be representative of the material encountered during exploration activities, it is unclear if the existing core will be representative of the actual material removed during excavation of the inclines and escape raise, and during mine development.

Section 8, Surface Water

Section 8.0: At the bottom of the second paragraph it is stated that "Additional minor surface water features are located in the vicinity of the proposed mine site, including...and springs south/southwest of the site that would not be affected by the proposed activities..." Section 8.2.4 mentions that springs located within several miles of the proposed activity are located "...outside of the La Jara Mesa site drainage basin". No discussion is provided regarding the possible aquifer source or pathway of the water being discharged from the springs nor the associated recharge areas for the springs. As such it is unclear how the determination has been made by the applicant that the proposed activities will not affect these springs. NMED recommends that the water within these springs be sampled on a quarterly basis for one year at a minimum to establish background conditions as required under the New Mexico Mining Act. Further investigation regarding the source and recharge areas for these springs may be necessary.

Section 9, Ground Water

In Section 9.1.2 it is stated that one (1) water sample will be collected from the proposed water supply well during the one year baseline period. One data point is inadequate to establish trends and/or variability in water quality over time. NMED recommends quarterly samples be collected during the one year baseline period to establish background conditions as required under the New Mexico Mining Act.

In Section 9.1.1 it is indicated that the hydrogeologic regime of the aquifers within the permit area will be described based on available published sources. In Section 9.1.3 it is indicated that an inventory of wells and springs within a one mile radius of the main facility will be conducted and water levels will be recorded of all existing wells documented through this investigation. No water quality sampling is proposed. NMED recommends that an inventory of wells and spring be based on the results of the hydrogeologic characterization of the area surrounding the proposed facilities and mine, rather than an arbitrary one mile radius from the main facility. Further, any wells or springs inventoried during this investigation should be sampled on a quarterly basis for one year to establish background conditions as required under the New Mexico Mining Act.

Holland Shepherd August 12, 2010 Page 3 of 3

Further review and evaluation of the SAP relative to a Ground Water Discharge Permit application may result in additional comments. At this time Laramide Resources has not made any contact with NMED regarding permitting requirements for the La Jara Mesa Mine pursuant to the Water Quality Control Commission Regulations, 20.6.2 NMAC.

If you have any questions, please contact Kurt Vollbrecht at 827-0195.

cc: William C. Olson, Chief, GWQB
Glenn Saums, Acting Chief, SWQB
Mary Ann Menetrey, NMED MECS
Charles Thomas, Chief, Mine Reclamation Bureau



STATE OF NEW MEXICO DEPARTMENT OF CULTURAL AFFAIRS HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING 407 GALISTEO STREET, SUITE 236 SANTA FE, NEW MEXICO 87501 PHONE (505) 827-6320 FAX (505) 827-6338

August 12, 2010

David Ohori
Permit Lead
Mining Act Reclamation Program
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Request for Review and Comment on the Sampling and Analysis Plan, La Jara Mesa Mine, Laramide Resources, Inc., Permit No. CI008RN

Dear Mr. Ohori:

This letter is in response to sampling and analysis plan for La Jara Mine located in Cibola County. According to 19.10.6.602 NMAC, a sampling and analysis plan shall include a list and accompanying map indicating all sites on or eligible for listing on either the National Register of Historic Places and/or the State Registers of Cultural Properties and known cemeteries and human burials within the proposed permit area. Included in this list shall be a description of effects the proposed mining operations may have on these sites and any proposed mitigation measures.

Section 11 does not indicate whether there are cultural properties listed on or eligible for listing on either the National Register of Historic Places and/or the State Registers of Cultural Properties. A review of our records shows that a portion of the permit area is located within the boundaries of the Mount Taylor Traditional Cultural Property (TCP), which was added to the State Register of Cultural Properties on June 5, 2009 and was determined to be eligible for listing to the National Register of Historic Places on March 14, 2008. In addition, our archaeological records database shows some cultural resources survey of the permit area has been conducted. Although the sampling and analysis plan does not list any known archaeological sites, the plan proposes to conduct a 100% (class III) intensive cultural resources pedestrian survey of the permit area and record any previously recorded and new archaeological sites.

The sampling and analysis plan also states that a plan of operations has been submitted to the Cibola National Forest. The Cibola National Forest will be reviewing this project under Section 106 of the National Historic Preservation Act (NHPA). As such, they will determine

the level of effort for the cultural resources survey and consult with this office on the eligibility of any cultural properties for inclusion in the National Register of Historic Places. The Cibola National Forest will also evaluate the potential effects of La Jara Mesa Project on cultural properties, including the Mt. Taylor TCP and consult with this office on their determination.

Mining and Minerals Division also has a responsibility to consult with the State Historic Preservation Officer (SHPO) under Section18-6-8.1 of the Cultural Properties Act, NMSA 1978 and implementing regulation 4.10.7 NMAC. This consultation with the SHPO under state law should run concurrently with the review by the Cibola National Forest under Section 106 of the NHPA.

If you have any questions regarding these comments, please do not hesitate to contact me at (505) 827-4064.

Sincerely,

Michelle M. Ensey Archaeologist

Log: 89849

Cc/Email: Cynthia Benedict, Forest Archaeologist, Cibola National Forest

Ohori, David, EMNRD

From:

Myers, Kevin, OSE

Sent:

Tuesday, August 03, 2010 5:00 PM

To:

Ohori, David, EMNRD

Cc:

Johnson, Mike S., OSE; Rappuhn, Doug H., OSE

Subject:

OSE Comments for proposed La Jara Mesa Mine SAP - MMD Permit No. Cl008RN

David,

NM OSE Hydrology has reviewed the Sampling and Analysis Plan (Revised SAP), La Jara Mesa Mine, Laramide Resources (USA) Inc., MMD Permit No. CI008RN. MMD requested OSE review and comment on the SAP dated October 5, 2009 with its multiple revisions. NM OSE received the SAP on July 13, 2010.

As proposed in the SAP, the La Jara Mesa mine will be an underground mine with 22 acres of surface disturbance. The mine will be located about 10 miles northwest of Grants, in Cibola County. According to the SAP, the depth to water is estimated at more than 300 feet below ground surface at the proposed mine facility and mine portal.

- 1. <u>Page 5, Table 2-2</u>. In column 2, add the direction (East-Northeast) to the 4 to 5 mile distance from the proposed mine portal to the Homestake Mill climate station.
- 2. <u>Page 18, Section 7.2.1</u>. For the groundwater and springs data used to construct a geologic cross section in the vicinity of the mine, provide detailed documentation of the sources of information used for the springs and water level measurements.
- 3. Page 23, Section 8.0; Figure 8-1. The terminus of an ephemeral watershed is described as a dune field located about 3 miles west of the mine facilities. Based on the notes to the Dos Lomas USGS 7.5 minute quadrangle, this was partially photo revised in 1995 by the USFS. The map notes state that the 1995 revisions focused on National Forest lands. Previously, the Dos Lomas map underwent photo-revision in 1980 as an update to the 1957 map. The Revised SAP should review this dune field and document the sources, including the year that the USGS 7.5 minute Dos Lomas quadrangle topographic map was revised. OSE agrees that a field check of the drainage is necessary because 2005 aerial photography does not show the dune field as prominent feature.
- 4. Page 26, Section 8.2.4; Figure 8-1. NM OSE agrees that aerial photographs and field verification are necessary to evaluate ponds/stock tanks, including some about 3 miles west of the mine facility.
- 5. <u>Page 30, Section 9.0</u>. Provide documentation to support the depth to groundwater beneath the mine facility.
- 6. Page 30, Section 9.1; Page 31, Section 9.1.3 and Plate 1. The supply well is outside the proposed one-mile radius of the main facilities. The applicant should inventory springs and wells, at a minimum, within one-mile radius of the supply well located in Section 28, T12N, R9W.
- 7. Page 30, Section 9.0. As written, it's unclear whether the water supply well is an existing well with established water rights or new well. The applicant should provide information regarding the supply well such as the following, well OSE permit number, current owner of water rights for this well, current beneficial use, diversion amount to be used for La Jara Mesa mine, aquifer (or geologic unit) and well record (date drilled, method of drilling, casing diameter, sealants used, well screen interval, filter pack, lithology, total depth, well capacity estimate and water level estimate). This information is necessary for OSE to better evaluate the need for further permits (e.g., application to appropriate underground water in the Bluewater Underground Water Basin) that may be necessary through the District I Water Rights Division office. If there are specific questions regarding potential OSE Water Rights permitting issues, contact the Albuquerque District I office:

Jess Ward, District Supervisor

5550 San Antonio Dr. NE Albuquerque, NM 87109-4127 (505) 383-4000

- 8. Page 30, Section 9.1.2. The SAP proposes to collect and analyze one sample from the proposed water supply well during the one year baseline period. Reliance upon one sample as a baseline for this proposed operational mine seems insufficient. Baseline water chemistry that relies upon one sample may not be useful in evaluating the well development, water quality trends and a range of concentrations. The water quality may be useful in determining or confirming the aquifer used by the water supply well. Unless there is some rationale such as existing lab data for this well, NM OSE recommends three samples be collected to ensure that the water quality is representative of baseline conditions.
- 9. <u>Page 31, Section 9.1.3 and Plate 1</u>. Plate 1 should have lines drawn to identify the proposed investigation area of one-mile radius of the main facilities. A clearly marked Plate 1 would clarify whether the utility corridor would be part of the area.
- 10. <u>Page 34, Section 10.2.4</u>. Add units after 1,200 in the following sentence "...Point measurements will be made in the western offset (west side of the road) at 1,200 intervals."

If you have any question about the above comments, contact me.

KCM Kevin Myers, Hydrologist Hydrology Bureau - NM OSE P.O. Box 25102 Santa Fe, NM 87504-5102 Ph: (505) 827-3521

Fax: (505) 476-0220

http://www.ose.state.nm.us/

MEMORANDUM

DATE: July 13, 2010

TO: David Ohori

FROM: Dave Clark

RE: La Jara Mesa Mine, October 2009 Vegetation and Wildlife SAPs

I have reviewed the sampling and analysis plans for vegetation and wildlife baseline work dated October 2009. My review generated the following comments:

19.10.6.602.D(13)(c):

The relevancy of the USDA Forest Service or NRCS data that is proposed for use in establishing baseline vegetation conditions is unclear. It would be hard to select the proper off-site data to use, without a reasonable understanding of the on-site vegetation communities that will be disturbed. The Mining Act Reclamation Program Revegetation Standards and Sampling Methods (Attachment #2, 19.10 NMAC) indicate that this type of information is to be "coupled with data collected from undisturbed vegetation types on the mine or adjoining the mine area". Minimum sample sizes for the vegetation communities encountered during the mine site sampling effort are also specified in the Sampling Methods. Please specify the methods to be used for collecting data on the proposed mine, and clarify how the validity of the off-site data source(s) will be verified.

19.10.6.602.D(13)(d)(3):

- 1. Protocol surveys must be conducted for Gray Vireos and Spotted Bats. Please commit to conducting the protocol surveys for these species, and specify when this work will be completed.
- 2. Raptor nest locations need to be mapped, and raptor breeding activity needs to be documented. Anticipated impacts to raptors from mining operations cannot be addressed without this information. Please commit to searching for, and mapping, all raptor nests within the permit area. Please commit to documenting raptor breeding activity annually. Raptor breeding pairs commonly establish alternative nest sites in relatively close proximity to one another. Alternative nest sites may be located adjacent to the permit area, and an extension of the nest search area to one mile beyond the proposed permit boundary may provide evidence that other nesting sites are available, and could mitigate nests disturbed by mining activity. Please commit to searching for and mapping raptor nests within one mile beyond the proposed permit boundary.
- 3. Please propose a plan for determining the presence, distribution and relative abundance of furbearers, small mammals and reptiles, and any key habitat areas that these animals may be using, within the proposed permit area.

La Jara Mesa SAP Technical Review Section 7.0 – Geology Comments by David Ennis, MMD MARP

Section 7.0 statement, page 18: "The uranium mineralization is restricted to unnamed sandstones in the Poison Canyon tongue of the Brushy Basin Member of the Morrison Formation."

Some geologic references suggest that the Poison Canyon tongue (the target ore zone of the La Jara Mesa project) is part of the Westwater Canyon Member, not the Brushy Basin Member. While the naming convention distinction isn't necessarily important to MMD, the relevance is that Table 7-1 in the SAP indicates that the majority of the waste rock (56%) will be obtained from the Westwater Canyon Member, which historically is recognized as having several uranium mineralized sandstone layers within the Ambrosia Lake Mining District. Based on this information, it is MMD's opinion that a greater number of samples should be collected and analyzed from the Westwater Canyon Member for the Baseline Data Report (BDR) in order to characterize the potential for contaminants to emanate from these materials once excavated and stockpiled on-site.

Section 7.2 statement, page 18: "The number of samples of each unit is proportional to the expected volumes in the piles."

The number of samples proposed from each unit does not appear proportional to the expected volumes of the piles. For example, 3 samples are proposed to be collected from both the Upper Brushy Basin Member and the Recapture Shale. Based on the expected volumes presented in Table 7-1, this results in 1 sample for every ~56 cubic yards of Upper Brushy Basin Member, and 1 sample for every ~5,800 cubic yards of Recapture Shale that is excavated. Similarly, 5 samples are proposed to be collected from the Westwater Canyon Member, which is 1 sample for every ~30,400 cubic yards excavated. The rationale for the number of samples collected and analyzed should be clarified in the BDR. Similar to the comment above, it is MMD's opinion that a greater number of samples should be collected and analyzed from the Westwater Canyon Member since this member represents the majority of the anticipated waste rock, and has the potential to be mineralized with uranium.

MMD would have preferred that at least one sample be collected and analyzed from each of the geologic units anticipated to be stockpiled on-site (i.e. Tertiary basalt layer, ash tuff layer [Mesa Verde Group], Mancos Shale, and Dakota Sandstone). However, since the SAP states that core samples from these units were not retained, MMD recommends that the Mine Operation Plan include sampling and analysis of these units during excavation of the escape raise. MMD is not particularly concerned about the potential for these geologic units to create environmental contaminants through interaction with water once stockpiled, but believes it prudent to verify the anticipated innocuous nature of these materials.

Section 7.2.1 statement, page 18: "Maps and cross-sections will be presented to show the relationship of the mining area to the groundwater and springs system."

Cross-sections presented in the BDR should also show the relationship of the mining area to the anticipate ore zone(s), and should be constructed from representative exploratory boreholes advanced in preparation for this mine project. The cross-section included in Figure 7-1 of the SAP is adequate for the SAP, but is too generalized (i.e. not to scale, too small) to incorporate into future documents like the BDR. It is MMD's opinion that scaled geologic cross-sections with increased geologic detail, based on actual geologic logs from within the project area, should be included for cross-sections presented in the BDR. The BDR should also include a plan view figure (or figures) showing the locations of the exploratory boreholes used to create the geologic cross-sections.

Section 7.2.2 statement, page 19: "As indicated earlier, the uranium-bearing Poison Canyon unit will be segregated from the waste rock and hauled to a licensed mill for processing."

This statement is adequate for the SAP and BDR as a general plan as to how the mine will be operated in the future. However, it is MMD's opinion that the process of how the uranium-bearing materials will be segregated from the waste rock should be described in great detail within the Mine Operation Plan. MMD considers the proper segregation of ore from waste to be critical to future reclamation of waste rock piles. MMD is concerned that the improper segregation of excavated material during mine operation may result in elevated uranium mineralization being disposed as waste rock, potentially creating future environmental issues upon interaction with water and/or complicate future reclamation activities.

Section 7.2.2: General Comment

In addition to the analytical suite presented in Table 7-2, MMD recommends the following analyses:

- thorium (total-232) through SPLP analysis
- gross beta through SPLP analysis
- acid/base potential

Memo

To: Dave Ohori

From: Joe Vinson, Soil Scientist

Date: 9/1/2010

Re: La Jara Mesa, SAP Review, Soils, Permit Cl008RN

The following comments address plans to collect and evaluate soils data for the La Jara Mesa Project, Permit CI008RN, specifically Part 6 of the October 5, 2009 Sampling and Analysis Plan, submitted for MMD review. Generally, the approach proposed by Laramide Resources (USA) Inc. (LRI) for soils is sound, but is incomplete.

At this stage of the permitting process MMD is looking for baseline data to ensure that adequate soils resources will be available for high quality reclamation in support of the approved Post Mining Land Use. Since the proposed mine plan is tentative and subject to future modification before any permit is issued and during the life of any mining operation, MMD finds that a certain minimum amount of information is warranted for the entire permit area and somewhat more information for the (currently) proposed areas of disturbance. To meet this minimum at La Jara Mesa, MMD requires 1) confirmation of previous mapping accuracy across the permit area, 2) gross estimates of suitable/salvageable soil volume across the permit area based on descriptions and available information from confirmed mapping and 3) estimates of suitable/salvageable soil volume across the (planned) disturbed areas based on sampling.

MMD suggests that before any sampling begins, that LRI first confirm the accuracy of previous mapping performed by the USFS Terrestrial Ecosystems Survey approach. Field transects should be conducted to confirm major soil types found within mapped soil units and generally describe the diversity and extent of inclusions that are found within those units. This does not imply extensive sampling or disturbance of the surface to describe representative pedons but does require the expertise of a professional soil scientist who is familiar with soils in the area. Some soil pits or trenches would likely be required. MMD suggests that a field pH/EC meter be employed to identify saline/sodic materials.

The sampling that LRI has proposed for unit 105 appears adequate, assuming that these locations are representative of the unit and encompass the majority of soil types found there. Generally, in areas where soils are relatively uniform, 1-2 samples per 20 acres of disturbance will probably be adequate. In areas where soil units contain many inclusions or are composed of diverse complexes this sampling should be doubled or tripled, depending on soil diversity. Shallow and/or poor soils should be sampled if any salvage is uncertain, but possible.

Areas outside of unit 105, where disturbance is currently planned, should be sampled at least once (major pedon horizons) for each mapped/confirmed soil unit. Again, sampling should capture the range of dissimilar soil types contained within these units if they are intersected by disturbance and contribute significantly to the composition of the unit and the area to be

disturbed. Based on current plans and assuming map units are accurately mapped, this would require at least one sampled pedon for each of units 165, 502, 165 and 34. If there is no possibility of salvage from these units due to shallow lithic contact, sodicity, or other limiting factor, sampling can be omitted. A prescribed number of samples to be collected is premature without some idea of soil diversity.

MMD believes that soils within the project area are unlikely to contain acid-forming materials. LRI may omit acid-base accounting and neutralization potential testing for soils unless the project soil scientist believes these tests are helpful.

List full citations for the methods to be used for all soil analyses.