



April 14, 2025

Samantha Rynas

Reclamation Specialist

New Mexico Energy Minerals and Natural Resources Department,

Mining and Minerals Division

1220 South St. Francis Drive

Santa Fe, NM 87505

**RE: Laramide Resources Permit Application xxxxx- La Jara Mesa Uranium Mine:
Response to Agency Comments on the 2024 Baseline Data Report**

Dear Ms. Rynas

Attached to the accompanying email communication please find the response from Laramide Resources (Laramide) to the 2024 Baseline Data Report (BDR) agency comments transmitted by your office on date.

Please note that Laramide has requested some discussion related to a few of the comments. This is to clarify requirements or obtain conditional approval to move forward with certain activities to avoid delaying them into 2026. We look forward to the opportunity to discuss these matters briefly.

Laramide appreciates MMD's continued cooperation as we complete the application process.

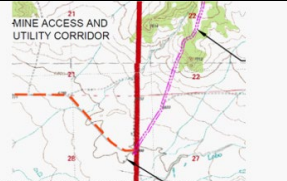
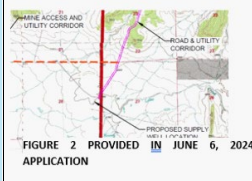
Please contact me with any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Josh Leftwich". The signature is stylized with a large "J" and "L".

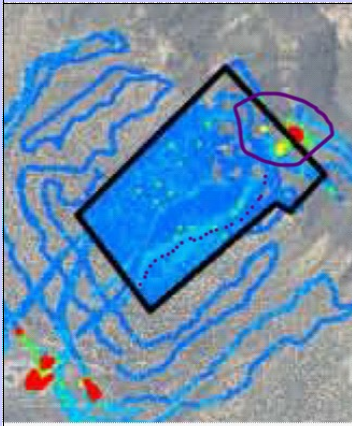
Josh Leftwich

Vice President of Operations and Strategic Development, USA

Comment #	Section	Subsection	MMD Comment	Laramide Response
1	General		MMD will consider this "Draft BDR" a draft and moving forward please submit the revised "Draft BDR" in non-draft form as Version "0" with data from this draft BDR pulled forward into the Version 0 submittal. All future submittals of the BDR will be labeled as "V1..2...3". No Response is required for this comment.	Noted
2	General		A general observation on the data from the Draft Baseline Data Report; the majority of the data provided is from the 2012-time frame. Due to the data's age MMD will be requiring updates to the collected data. In the following comments MMD will call out what data will need to be updated. One area of major change affects multiple sections, the reclamation work done on the Taft and Old Jara Mine sites. Significant clean-up & removal of materials as well as borrow material being used for cover, and seeding of these areas, would have changed baseline data for soils, vegetation, historical data, and Radiological survey. MMD is additionally providing Laramide with the below documents for their reference. 1.MMD Part 6 New Mining Operations Guidance 2.Guideline for Radiation Cleanup Criteria - Part 6 New Mining Operations (2016 Uranium Guidance) 3.Soil and Cover Material Handling and Suitability Guideline (2022) 4.Revegetation Guidance (2022) 5.Example Vegetation survey 6.Previous MMD/Agency Technical comments on the SAP (2010) 7.Copper Flat Hydrology (Surface and Ground water) Examples No Response is required for this comment.	Noted
3	General		A general observation on the application; often in the data collection, the road corridor and the escape raise are not included for site specific data collection. These areas are within the Permit Area and will be affected by mine operations, therefore data is needed from these units. In MMD's comments you will see specific requests for additional data collection in those areas. No response is required for this comment.	Noted
4	General	Draft BDR plates and Application dated June 6th, 2024	The Application materials dated June 6th and the Draft BDR from 2013 have multiple maps in both "plate" and "figure" naming conventions. Some of these materials are extremely similar (example: Plate 1 and Figure 1). Please consolidate the maps/figures/plates using a consistent naming convention; as well as ensure they are up to date.	Laramide agrees that the BDR v 0 will include consolidated, clear, consistent, and updated maps.
5	General	Figure 2/3/4 of Application Dated June 6th, 2024	Proposed road bypass: Please update all figures to accurately and clearly depict the below: •Utility Corridor •Road re-routes •Forest Service roads 450 & 544 Examples: 1.The proposed re-route throughout the June 6 application, as well as figures in the Draft BDR shows a different road configuration (see examples below). 2.Figure 3 from the June 6th Application to shows FS 450 & 544 as orange lines but doesn't categorize under "Site access road"   FIGURE FROM RAD SURVEY ROAD FOOTPRINT FROM DRAFT BDR   FIGURE 2 PROVIDED IN JUNE 6, 2024 APPLICATION FIGURE 1 FROM APPLICATION JUNE 6, 2024. PURPLE LINE SHOWS DIFFERENT ROAD FOOTPRINT FROM RAD.	Laramide agrees that the BDR v 0 will include updated maps that depict the Permit Area components and USFS roads. All figures depicting the proposed Permit Area components will be updated to reflect current boundaries, designs and alignments.
6	General		Site access and Permit area: With the road re-route and change in supply well, will the section of road marked in blue still need be needed and upgraded? 	Laramide agrees that the BDR v 0 will be updated to reflect current designs, proposed uses of existing roads, and the proposed haul road eastern end alignment. This will include the anticipated need for any road upgrades.
7	General	Figure 2, section 9	It is MMD's understanding that the proposed supply well (Elkins well B-01272) marked at this location is no longer relevant due to low production. Please provide an updated Well location and data associated with anticipated well quality and production. Additional data (i.e., modeling or pump testing) will be required to demonstrate the probable hydrologic consequences of well utilized for mine operations.	Laramide agrees that the BDR v 0 will identify the proposed source of the facility's water supply. If applicable, it will include modeling or testing data as relevant. The source for water has not been finalized and may include imported water.
8	General	Figure 10 & Multiple maps	Between the SAP and the Draft BDR, many of the maps show two different boundaries of the permit area/design limit. The SAP mainly defines the Permit Area as a larger rectangle shape, versus the Draft BDR mostly depicts the area as a more narrowed "tear drop". The tear drop shape would be what MMD calls the design limit. MMD requests for clarity and consistency to keep both boundaries marked on the maps. Plate 2, "Conceptual Mine Layout Plan" from the Draft BDR is a good example of including both the Permit Area as well as the design limit. The Permit Area should be carefully considered by Laramide. For example, inclusion of a large drainage (Drainage B later in this document) parallel to the northwest edge of the Permit Area as drawn may require additional baseline data to be collected if this drainage will in fact be utilized in some way during mine operations or reclamation. This is not clear in the BDR; the "tear drop" disturbance does not appear to incorporate this drainage into any disturbance or design, yet it appears to be included in the Permit Area. Please consider and refine the Permit Area as needed for the agency's consideration for baseline data collection.	Laramide agrees that maps in BDR v 0 will be updated with consistent and revised Permit Area and Design Limit areas.
9	General		MMD requests Laramide provide the GPS "SHP" files for the Permit Area boundary for MMD's internal mapping and records.	Laramide agrees to provide shapefiles of updated boundaries with the submittal of BDR v 0.
10	Introduction	1.1	"The access road right-of-way and utility corridor would occupy approximately 30 acres of the total proposed Permit Area" Please include the expected width of the utility corridor as well.	Laramide agrees that the expected dimensions of disturbance areas for the road and utility corridor will be provided in the BDR v.0.

11	Climate	2	MMD will require updated climate data to include the below. a. Updated to include 2024 data b. 10 years of data averages (precipitation, high/low temperature) c. Data from any additional weather stations (see MMD's below comment 13)	Laramide agrees that updated climate data will be provided in the BDR v.0.
12	Climate	2	While the escape raise location is mentioned briefly, this location is a part of the Permit Area, MMD will require equivalent quantity/quality of data to be collected for this location.	Laramide agrees that the escape raise is part of the Permit Area and will be included in the analysis. Laramide requests discussion regarding scaling the baseline data collection effort to reflect the 1 acre area of the escape raise component of the Permit Area.
13	Climate	2.3	While the Homestake mill is representative of the regional weather, MMD is requesting additional site-specific climate data due to the specific location of the mine site. MMD requests a new weather station or, at minimum, measurement of rainfall quantities on the Permit Area. The site-specific topography could increase orographic effects, as well as the concentration of precipitation from directly above the site would make data from a site like Homestake mill irrelevant. It is important to have site specific precipitation totals to accurately determine the potential water quantities on site to inform accurate storm water management and site stability.	Laramide is concerned that short term site-specific monitoring data is subject to annual variability and may not provide sufficient comparison to long term climatic data from nearby sites. We propose that a more in-depth regional analysis of climate data will be included in BDR v.0, which will include more detailed consideration of measurement location, elevation, and orographic effects. A description of how the regional climate data is being used to inform project design in a conservative manner will also be included.
14	Topography	3.0 (page 2)	The highlighted word "date" needs to be changed to reflect a date. Please also ensure the provided USGS map is the most up to date map.	Laramide agrees that updated topographic imagery and current dates will be included in revised mapping.
15	Topography	3	MMD is has concerns of on-going erosion of the drainages flanking the North/South sides of the Permit area (Marked A and E). During site inspections USFS and NMED noted significant changes to the drainage E due to storm events. See NMED SIWQ comment #1. MMD requests this data be included within this section.	Laramide agrees that additional detail regarding current conditions, physical description (width, depth, channel slope, and bank slope) and erosion will be included in the BDR v.0 for drainages in the Permit Area. Laramide requests further discussion to determine which drainages outside the Permit Area would be considered affected. The MORP will describe how engineering controls will be used to manage erosion within the Permit Area as part of the project.
16	Topography	3.0 Page 2/ Plate 2	While Plate 2 shows the proposed Mine layout (as requested in the Part 6 Guidance); Plate 1 is also applicable to meet this standard as that is the USGS map that includes the entire permit area. Please ensure this USGS map is the most current version and update this section to include Plate 1.	Laramide agrees that updated topographic imagery will be included in revised mapping.
17	Vegetation	4	19.10.6.602.D(13)(c) Due to age of the data MMD will require the 1 year of vegetation data to be re-collected with the following parameters. Please review updated guidance documents and submit an amended sampling plan for MMD approval. Considerations to include: 1.Include both the proposed road access corridor as well as the escape raise locations. 2.Transsects should avoid areas known to have been previously disturbed (where possible). MMD is providing an example Vegetation Survey for your reference.	Laramide agrees that vegetation surveys consistent with current guidance are needed within all Permit Area components. Laramide proposes to update the SAP with a description of methods proposed to calculate cover, shrub density and production values for the proposed reclaimed land use of the Permit Area. A discussion is requested to confirm methods that are acceptable to all the commenting agencies and appropriately scaled to the project's Permit Area, once defined. Transect data will be provided with the BDR v.0 submittal.
18	Vegetation	4.2.1 & 4.3.1	Methods - Section 4.2 states methods will be described in section 4.2.1, however, no method of survey was described. 4.3.1 Results read as if an onsite transect was performed. No transect details are mapped or provided. Please submit all supporting methods and data used to perform and evaluate the vegetation data.	Laramide agrees that vegetation survey methods appropriate for the Permit Area will be identified and described in coordination with the commenting agencies to confirm the results address each agencies requirements. All Transect data will be provided with the BDR v.0 submittal.
19	Vegetation	4.0	For consideration for the MORP: MMD will require Laramide to propose an undisturbed area(s) to be used going forward as reference vegetation areas.	Undisturbed reference areas will be identified as feasible for the vegetation strata.
20	Vegetation	4.2.3	In accordance with 19.10.6.602.D(13)(c) MMD will require Canopy Cover, Shrub Density and Production data. "The Forest Service does not provide data regarding shrub density", while using Forest Service TES data can supplement the baseline data, MMD rules require onsite vegetation data collection to include all three parameters listed above.	Laramide agrees to complete surveys to provide field data collection to inform the calculation of canopy cover, shrub density and production. Digital methods may be included to provide supplemental data.
21	Vegetation	4.2.4	This section mentions a ground survey that was done in conjunction with a database search, and the following was also stated "results compared to the plants inventoried by the vegetation mapping, as described in Section 4.2.2." It is unclear if the mapping performed was through an onsite field (ground) survey or only based on aerial photography or other means. For the new vegetation survey please provide details on the methods of data collection and review.	Laramide agrees that detailed methods will be proposed in an updated SAP and included in BDR v.0 results.
22	Wildlife	5	MMD will require a new wildlife survey to include herpetology, mammals, birds, and any other species potentially occurring in the area of potential impact (19.10.6.602.D(13)(d)). Please submit an amended sampling plan for MMD approval. 19.10.6.602.D(13)(c) Expanded Wildlife Survey: While surveys were performed within the main Permit Area, the "affected area"/area of potential impact" is not limited to the Permit Area. The escape raise and utility corridor were not included in the wildlife survey and are part of the Permit Area. New Wildlife data shall include: A.Escape raise B.Utility Corridor C.Expanded buffer around Permit Area: Area of potential impact D.Special habitat features: Basalt cliffs E.Spotted Bat Survey F.Grey Vireos Survey G.Considerations for Habitat Fragmentations	Laramide agrees to submit an amended SAP and provide updated wildlife surveys for the Permit Area and Affected Area. Laramide would like to learn whether the revision and acceptance of the revised SAP will be a formal process. If so, we request a discussion of potential to allow conditional SAP approval be granted to accommodate the initiation of seasonally limited surveys (for example, gray vireo spring/summer bird surveys) during the current calendar year. Laramide's contractor (Barr Engineering) and any subcontractors will provide protocol references for expedited surveys as required by the agencies. Additionally, conditional approval of the Permit Area and Affected Area boundaries to be used for surveys may be requested.
23	Wildlife	5.3	The related comments were provided to Laramide in 2010 in the NM Dept. of Game and Fish & MMD SAP comments. These comments are still applicable. NM DGF: A picture containing text, indoor, screenshot Description automatically generated 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. NM DGF 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 1/2 mile of all proposed project facilities, including roads. The activity status of any nests which are found should be determined during the appropriate season. MMD: 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.	Laramide will address the NM DGF and MMD comments in the revised SAP. Laramide agrees to conduct raptor use and nest surveys during the appropriate season. We request clarification regarding the distance required beyond the permit area, which is stated as both 1/2 mile (NM DGF) and 1 mile (MMD). Understanding that species sensitivities vary, Laramide requests the use of a 1/2 mile survey buffer where unlikely or lower quality habitats (such as highways or developed lands) would be included, and to focus on likely habitats such as the cliff line and slopes within the 1 mile buffer. Laramide commits to providing surveys for gray vireo within the Permit Area and Affected Area. We request confirmation of survey techniques for spotted bat (acoustical methods). If conditional SAP approval is allowed, these surveys would be conducted during the current year, to the extent feasible. Laramide's contractor would request confirmation from NM DGF regarding protocol specifics and approval of acoustic monitoring techniques. We propose to determine the presence of or use by furbearers, small mammals, and reptiles via observational surveys conducted concurrently with vegetation and bird surveys, since the Permit Area components and their associated Affected Area are of a size to allow full observational coverage. Laramide agrees to conduct raptor use and nest surveys during the appropriate season (s). We request clarification regarding the distance required beyond the permit area, which is stated as both 1/2 mile (NM DGF) and 1 mile (MMD). Understanding that species sensitivities vary, Laramide requests the use of a 1/2 mile survey buffer where unlikely or lower quality habitats (such as highways, developed lands) would be included with expanded focus on likely habitats such as the cliff line and slopes within the 1 mile buffer.

24	Wildlife	5.3	Ensure up to date species lists are included in the BDR. •5.3.4 Faunal Threatened and Endangered Survey •5.3.4.1 Federally Listed Threatened and Endangered Wildlife Species •5.3.4.2 Forest Service Regional Foresters' Sensitive Species List	Laramide agrees that applicable species lists will be updated in the BDR v.0.
25	Wildlife	5.0	19.10.6.602.D(13)(d)(iv) does not seem to be adequately addressed in the current BDR. Please answer this section in more detail. For example: As noted in the NM DGF comment from 2010 Agency comment; impact of habitat fragmentation needs to be considered in this summary. Update this section to include habitat fragmentation impacts from the Permit Area, specifically the utility corridor.	Laramide agrees that habitat fragmentation impacts will be addressed in the BDR v.0.
26a	Soil	6	Due to the length of time since the data for the Draft BDR was collected, MMD will require an amended soil sampling plan be submitted for MMD approval to reflect current data and recent activities in the area. Key updates and considerations include: 1. Updated Guidance and Data: •Incorporate the 2022 MMD Soil Guidance parameters into the analysis. For example - section 4.3 of the guidance, depth-to-bedrock data, is not currently addressed in the current submission. •Ensure up to date Geochemistry and reactivity testing in accordance with the most recent guidelines. 2. Reclamation Impact Assessment on the Soils: •Provide a detailed summary of reclamation work conducted in the vicinity and how it impacts baseline data, specifically regarding CERCLA uranium mine cleanup efforts at Taffy and Old Jara Mesa mine. This should include: •Types of borrow or cover materials used •Effectiveness of these materials as cover	1.Laramide concurs this guidance will be incorporated as appropriate. Depth to bedrock is problematic (see USFS comment 9 response) and will be discussed in the BDR v. 0. Laramide believes reactivity and geochemistry testing in the DBDR seem in conformity with 2022 Guidance. 2.Laramide suggests that USFS reclamation work, outside of the Permit Area, has not impacted Laramide Section 6 soil baseline data which examines suitability of Permit Area soil for reclamation purposes. Characterization of the borrow material used by the USFS would be undertaken if Laramide were to propose also using that borrow material as cover material. However, Laramide can summarize and share information obtained from USFS which documents aspects of the referenced reclamation activities. Laramide agrees to update radiological surveys in the BDR v.0 to document new conditions at USFS remediation sites adjacent to the permit area (see Section 13 comments below).
26b	Soil	6	1.Soil Sampling and Radiological Survey: •Conduct updated & expanded soil sampling to assess current conditions, especially considering potential impacts from nearby historic mines and the subsequent reclamation. •Having reviewed the RAD survey, additional sampling should be done to address findings from Section 13 (Radiological Survey) of the Draft BDR, which noted elevated radiation levels in the permit area. •Soil sampling should also incorporate testing parameters described in the 2016 Guidance for Meeting Radiation Criteria Levels and Reclamation at New Uranium Mining Operations. 2.Include soil testing representative of all soil series in the Permit Area. Both the escape raise, and Utility Road locations will need to be included in analysis for cover material stored for reclamation. 3.Include spatial distribution of soil testing representative of the soil types and characteristics (salvage or depth). MMD suggests expanding the soil testing to account for potential borrow sources, if they are needed.	1. Laramide proposes to update radiological surveys to document changes at reclaimed areas adjacent to the Permit Area, and to validate the existing baseline data in the Permit Area. This could include soil sampling and analyses following Section 13 and 2016 guidance, the locations of which to be described in a revised SAP (See Radiological comment 57). We would like to discuss whether USFS reclamation activities outside of the Permit Area have affected Laramide's soil baseline as relates to the purpose of Section 6 of the BDR. Laramide proposes that additional soil characterization as per Section 13 and 2016 Guidance could be done in the Permit Area in areas of concern identified in gamma surveys. Details of updated surveys will be provided in an revised SAP. 2. Laramide agrees to soil sampling for suitability at the escape raise and access route. 3. Laramide agrees to soil sampling for suitability and depth for all proposed cover materials.
27	Soils	6.3.3	Clarify if waste rock originating from adit development or development of the escape raise is being considered as an alternate cover material. If this waste rock is included as an alternate cover, please expand the soil section to include characterization for the escape raise waste rock as well.	Waste rock was characterized in parallel with the soil samples and with the prescribed testing for evaluating cover material. Additional studies of waste rock for suitability as cover material will be conducted as the material becomes available, as will be described in the MORP. Laramide considers the volume of waste rock from the escape raise to be relatively insignificant, making it unlikely to be considered for use as cover material.
28	Soils	6.3.3	Alternative Cover sources. While this section considers rock size and erodibility, compared to salvage soils, it does not address the waste rock's ability to support plant growth. 19.10.6.602.D(13)(e) requires alternative cover to show suitability for vegetation. Any proposed alternative cover should be subjected to the same baseline characterization as the salvaged soils. MMD will require additional chemical composition of the waste rock to determine suitability as an alternate cover. Also see the 2016 Guidance for Meeting Radiation Criteria Levels and Reclamation at New Uranium Mining Operations for more details.	Please see the DBDR tables 6-6 through 6-9. Suitability of waste rock as growth medium is also discussed in Sec 6.3.3 of the DBDR. The Section 6 and 2016 Guidance-prescribed testing for cover materials will be followed for all proposed cover materials as part of further studies. Waste rock is currently unavailable for study, but the potential further characterization of waste rock as cover material will be described in the MORP.
29	Soils	6	For future consideration for the MORP: 1.As stated in MMD's Soil Guidance from 2022 section 6, "Any proposed Cover Material that is not undisturbed native soil should be tested through a test-plot program to demonstrate how the seeded native plant community responds". MMD recommends incorporating this component into future plans (MORP). 2.Also include an analysis of the quantity/volume of available cover. 3.As stated in this Draft BDR, wind erodibility of the soils in map unit TES 105 is severe. The MORP should include an element of preventing wind erosion on the salvaged soil stockpiles.	Laramide will follow MMD Guidance in future studies of cover materials. The MORP will include the description of cover material volume, handling and preservation.
30	Soils	6.3.3	As stated in MMD guidelines, please include laboratory detection limits.	Laramide will include laboratory detection limits in the BDR v.0.
31	Soils	6.3.3	Anomalies in data should be investigated further. See also MMD previous comment 2 regarding previous mining and subsequent reclamation potentially interfering with consistent & reliable soil data.	While there is some variability in the reported Cu, Pb and As values from the AB-DPTA extraction (the accepted technique for this survey), the extracted amounts are quite low compared to either crustal abundances or 2022 plant suitability standards. Metal values reported are typically one or two orders of magnitude less than the amount which would be unsuitable for plant life. Laramide does not interpret that variability in the Section 6 DBDR data comprise anomalies of concern. Laramide would like to discuss whether USFS remediation activities outside of the permit area have impacted the soil of the permit area as relates to Section 6, although Laramide is planning to update radiological baseline data to document changes to existing conditions after USFS reclamation activities.
32	Orebody and Geology Desc.	7.5.2	MMD will require additional details on waste rock characterization and this section to be updated to the 2016 Guidelines. •Expand sampling for the metals/radioactive isotopes listed in the 2016 guidelines for analysis of waste rock to determine more accurate volumes of available material for use as cover. •See also related NMED GWQB comment regarding categorization in the August 12, 2010 Comments on the SAP (below).	The 2016 Guidance addresses characterization of cover material and will be applied to waste waste rock that is proposed as cover material. Waste rock samples are generally unavailable prior to operations. Because expanded evaluation of waste rock as cover material is not currently feasible, Laramide proposes to conduct this characterization after the commencement of operations, to include test plots and other applicable aspects of the 2016 Guidance. A description of these activities will be included in the MORP. Waste rock characterization in the DBDR conforms to waste rock characterization guidance if not considering waste rock as cover material.
			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 Westwater 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 Westwater Canyon Member waste material being brought to the surface and the greater potential for contaminants within the Westwater 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.	There are 8 Westwater samples and 5 Bluff samples in the DBDR, a different ratio than what the comment cites. Laramide agrees to sample waste rock periodically during operations. It is not feasible to characterize the variability across the total length (5,000 ft) of the access tunnel before initiating mining. A description of this sampling will be included in the MORP.
			The MORP should expand further on how the La Jara mine will account for this volume of material needing to be stored in a protective manner versus the waste rock available for alternate cover. See also the below comment from the previous SAP comments in reference to escape raise waste rock:	Noted for MORP.

			<i>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.</i>	Noted for MORP.
33	Orebody and Geology Desc.	7.5.2.2	*There are a few anomalies in the ABA data.* Anomalies in data should be investigated further. While Laramide considered a theoretical explanation, additional analysis does not appear to have been performed.	Laramide believes that the variability in the ABA data reflects the normal expected range of pyrite and calcite contents for the rock formations sampled. The intent of the ABA study is to determine the potential for water discharged from the waste rock pile to be acidic, which if acidic could theoretically transport metals of concern (if there were any in the pile). In 24 waste rock samples, the average pyrite content (main driver of AGP or acid generation) is 0.3% (low). Only three of 24 samples contain more than 1% pyrite, with a high value of only 1.4%. Most samples contained less than 0.1% pyrite. The average AGP is 8.4, while the average acid neutralizing potential, or ANP (driven by calcite content) is 79.1. A calculated ABA (ANP-AGP) of >20 is considered to be confidently non acid-generating. Only 7 of 24 samples had an ABA of less than 20 and the average ABA of the waste rock samples is a 70.8 (strongly acid neutralizing). Laramide considers that the ABA study has successfully demonstrated that the waste rock is overall strongly acid neutralizing. Sample-specific mineralogical studies would only document what the Modified Sobek Analysis has already reported - that a minor number of waste rock samples contain around 1% pyrite, and most samples contain significantly more calcite than pyrite.
34	Orebody and Geology Desc.	Figure 6 from Application Dated June 6th 2024	In accordance with 19.10.6.602.D(13)(f), MMD is requiring comprehensive maps and supporting data. While Figure 6 shows geological formations, it is insufficient. MMD will need the below data. See also, NMED Ground Water Quality comments and OSE comments regarding geology/hydrology. Additionally, MMD is providing examples of Surface/Ground water hydrology baseline data for Laramide reference. *Cross sections depicting nature/depth of aquifers specific to the Permit Area and affected areas/areas of potential affect *Hydrology, groundwater quality data, and cross sections of the proposed extraction well location *Nearby springs *Well/borehole logs *Hydrology of recharge to springs in the vicinity. Below was a previous MMD comment that is still applicable as figure 6 from the June 6th application contains the same content: "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."	Laramide agrees to provide more detailed, scaled geologic maps and cross sections in the BDR v.0. Laramide has engaged a hydrogeologist to address the hydrology/groundwater comments which will be addressed in appropriate sections of a revised BDR.
35	Orebody and Geology Desc.	Tables 7-3 and 7-4	Table 7-3 & 7-4 provides details on Metal Leaching and was compared to 1994 standards. Please ensure data is compared to the most recent WQCC standards.	Laramide agrees to revise tables 7-3 and 7-4 to compare results to current WQCC standards.
36	Surface Water	8	MMD is requiring an amended sampling plan be submitted for MMD review & subsequent surface water baseline data to be collected. See below for specific concerns to address in the amended sampling plan. 1.According to figure 8-4, Permit Area crosses the delineated watershed. Drainage E is considered part of the impacted watershed and shall be included in sampling and data. Annotated image below, red circle indicated where the Permit Area crosses the watershed. 2.Surface water should account for the entire affected area; including escape raise and utility corridor. 3.Test surface water quality from all three drainages existing in and leaving the Permit Area. See the below Annotated Surface water map. No data was collected for drainage "D" (see Figure 8-4), although this drainage specifically showed higher radioactive readings in the RAD survey (below). 4.Expanded water quality testing around the Permit Area (drainages A and E, as labeled below) to bracket the water quality around La Jara Mesa Mine to adequately evaluate affected areas versus non-affected areas. 5.Sampling additional areas near old La Jara mine footprint, shown with higher RAD survey readings. 6.Include data on the on-going changes to the flanking arroyos (A and E). As noted during the onsite inspection, as well as in the BDR data, significant erosion and sediment movement is occurring within these drainages. These areas fall under areas of potential impact. Picture 	Laramide requests the opportunity to meet with the MMD to confirm the Affected Area boundaries and discuss additional surface water sampling locations that will be required once these boundaries are defined. Note that the Permit Area and Design Limit will be updated to reflect the current mine plan and a more accurate understanding of where ground disturbance will be necessary. Laramide expects to sample any affected Permit Area drainages.
37	Surface Water	8.3.2	In section 8.3.1 the Draft BDR states "Channel scour, head cutting, and redistribution of sediment were observed during field investigations" and in section 8.3.2, personnel visited surface water sites after rain event: "Sediment deposition buried the mounting tube at locations LJM-SW-02 and -03 from the August 2011 rainstorms (Attachment 8A, Photos 3 and 4)". No specific details are provided on the scale of the specific rain event or impact of scouring on channels. Events such as this relate to MMD concerns on site specific rainfall and active changes to the channels and watershed delineation. See USFS comment #16.	Laramide agrees that additional details on scouring rates of these features, as evident in aerial photographs, will be included in the updated BDR v.0.
38	Surface Water	8.3.4	In accordance to 19.10.6.602.D(13)(g)(i): Provide additional maps including: *map of spring locations relative to the permit area. See previous MMD comment 34. *Watershed mapping: to include adjacent watersheds. The considered watershed was limited in size and did not include surrounding watersheds, or regional watersheds. Also see the prior 2010 NMED comment from the SAP that still remains. 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.	Laramide agrees that updated maps, including those requested, will be provided in the updated BDR v.0. Applicable NMED comments will be addressed in the revised SAP. Laramide agrees that additional detail will be provided in the BDR v.0 describing the hydrogeologic regime in the vicinity of the La Jara Mesa site. This description will provide supporting detail for why the referenced springs are not within Affected Area.

39	Surface Water	Page 8-6, Section 8.4	Probable Hydrologic Consequences. This section states that San Mateo Creek has no hydrologic connection with bedrock aquifers and would not be affected by water supply pumping from bedrock aquifers. As a clarification, explain how the San Mateo Creek waters have no hydrologic connection to bedrock aquifers with respect to potential recharge through faults and sub-cropping of alluvium with bedrock formations.	The BDR v.0 will include the current new plan for water supply, which Laramide believes makes this comment no longer applicable.
40	Surface Water	Section 8.4	Probable Hydrological Consequences. Laramide should collect baseline data, such as flow rates, of nearby springs to determine any future impacts to potentially affected areas. OSE notes the conflicting data showing evidence of springs emanating from La Jara Mesa	Additional detail will be added to the BDR v.0 describing the hydrogeologic regime in the vicinity of the La Jara Mesa Permit Area. This description will provide supporting detail for why the referenced springs are not within Affected Area. Laramide does not currently propose to sample water from the springs.
41	Ground water	9	MMD is requiring an amended sampling plan & subsequent baseline data to be submitted. See below for specific concerns to address in the amended sampling plan. •Any new groundwater data for the region: for example, 2022 San Mateo Creek Basin Central Study Report •Updated wells •Updated ground water analysis/monitoring	Laramide agrees to providing an amended SAP that references updated groundwater data.
42	Ground water	Section 9.1	Page 9-1 states that "the proposed Permit Area is in unsaturated rocks, situated as much as 600 feet above the shallowest regional aquifer in the area." This statement is contradicted by Section 9.2.3 which states that the estimated water depth in the Entrada Sandstone could be 320 feet beneath the Permit Area and is the aquifer for the Elkins well B-1272. Please clarify.	Laramide agrees that the BDR v.0 will be updated to add additional clarification on depths to various units and aquifers across the project area. Given the amount of topographic relief across the site, generalizations can cause confusion, as is highlighted by this comment.
43	Ground water	Section 9.1	Page 9-1 states "the anticipated dry mine conditions is based on exploratory drilling at the site and research and study of regional groundwater conditions in the area." Laramide shall provide data to demonstrate that the mine workings are anticipated to be dry. Data should include drill logs from representative boreholes demonstrating that little to no water was encountered in the units anticipated to be encountered during mine development and active mining/extraction.	Laramide agrees to provide additional support for this statement, along with a more detailed description of the hydrogeologic regime in the vicinity of the site.
44	Ground water	Section 9.1	Page 9-1 and 9-2 state "the objectives of the groundwater baseline assessment included...2) developing a baseline inventory of wells, springs and groundwater uses within 1 mile, or reasonable radius, from the surface facility portion of the proposed Permit Area (Plate 2). There is no further data or discussion about the presence or absence of springs in the area except later in this section which reports numerous springs on the east side of the mesa. Please clarify and discuss the presence/absence of springs, where they are located relative to the Permit Area, and what the probable hydrologic consequences of pumping will have on known springs.	Laramide agrees that additional discussion of the springs will be provided in the BDR v.0. It is noted that USGS Water-Resources Investigations Report (WRIR) 94-4178 states that springs "issue from basalts along the margins of the mesas near Grants". Reference: Baldwin, J.A. and D.R. Rankin, 1995. Hydrogeology of Cibola County, New Mexico, U.S. Geological Survey Water-Resources Investigation Report 94-4178, prepared in cooperation with the New Mexico Bureau of Mines and Mineral Resources and the New Mexico State Engineer Office, 102pp.
45	Ground water	Page 9-3, Section 9.2.1	The statement "...the Gordon potentiometric surface provides a good indication of the groundwater flow direction in the proposed Permit Area, due to limited groundwater development" should be accompanied by data such as maps from this report demonstrating the potentiometric surface discussed here.	Laramide will update the BDR v.0 with Figure 8 in Shoemaker and Samuels (2009) which provides a map sourced from Gordon (1961) showing pre-development water-level contours in the alluvial and bedrock aquifers in the Grants-Bluewater area. The La Jara Mesa study area is included on Figure 8 in Shoemaker and Samuels (2009). Maps from Gordon (1961) and/or Shoemaker and Samuels (2009) will be added to support the referenced discussion. References: Shoemaker, J.W. and K.E. Samuels, 2009. Regional Hydrogeologic Setting of La Jara Mesa Project, Cibola County, New Mexico, Draft report prepared for Laramide Resources, April 6, 2009. Gordon, E.D., 1961. Geology and Ground-Water Resources of the Grants-Bluewater Area, Valencia County, New Mexico, New Mexico State Engineer Technical Report 20, 109 pp.
46	Ground water	Sections 9.2.1 and 9.2.2	Pages 9-3 and 9-4 state that the Entrada Sandstone is a potential water-bearing unit in the Permit Area. As discussed above, the Entrada is reportedly saturated 3 miles southwest in Elkins well B-1272. No discussion in the BDR is provided for wells B-1340 and B-1341 identified on Figure 9-1, however the NMOSSE website contains applications to appropriate water from these locations and identifies the target depth to water as 300 feet. While B-1340 and B-1341 do not appear to have been drilled, the data implies that groundwater could be as shallow as 300 feet below ground surface below the Permit Area. MMD recommends drilling an exploratory borehole within the Permit Area to establish baseline conditions and depth to groundwater.	Laramide agrees that discussion related to wells B-1340 and B-1341 (at least their locations, if the wells were not drilled) and depth to water in the Entrada Sandstone will be added. The well record for well B-1272 indicates "white water @ 70ft" in a sandstone unit. Based on the log descriptions, it would appear that the water at a depth of 70 ft is likely under unconfined conditions. The well record for well B-1272 also indicates "water" in the depth interval 135 to 155 ft in a sandstone. The log descriptions suggest the presence of shale in the depth interval 120 to 135 ft (the well record describes the material encountered between 120 and 135 ft as "Red shell", which is interpreted to mean shale that is red in color was encountered). Laramide will consider drilling of an exploratory borehole in the Permit Area to establish baseline conditions and depth to water.
47	Ground water	Plate 3 Regional Geologic Map and Plate 4 Hydrogeologic Cross-Section	The resolution of this plate is poor and uses the geologic map from 1967. Please update this figure to increase resolution and use Cather (2011) as the basis. Several groundwater wells shown on Plate 3 and projected onto cross-section A-A' are not actually projected onto the cross-section. For example, well B01272 (Elkins well) is shown to be projected onto the cross-section but isn't shown on Plate 4. Please correct. Plate 4 has mixed measurement units: meters on the X-axis and feet on the Y-axis. Please use one measurement unit and calculate/identify the vertical exaggeration of the cross-section. Plate 4 shows the approximate location of the mine portal to be within the Bluff Sandstone, however Figure 6 (Site Geology) of the application shows the mine portal to be in unit Jm, Morrison Formation. Please clarify.	While not stated, Laramide inferred that the first comment refers to the geologic map base for Plate 3. Plate 3 will be updated to improve resolution. The Cather (2011) geologic map will be used as the base for Plate 3. It is agreed that Plate 3 indicates wells B01272, B0028 S-305, B0770, and B0028 S-298 are projected onto geologic cross section A-A' that is presented on Plate 4 but these four wells are not shown on Plate 4. These wells will be added to Plate 4 unless a different cross section line is chosen for a replacement Plate 4, in which case the portrayed well may be somewhat changed. The horizontal scale on Plate 4 will be adjusted to be shown in feet and the vertical exaggeration of the cross section will be shown. The discrepancy the comment notes between Plates 4 and Figure 6 regarding the approximate location of the mine portal will be clarified. Reference: Cather, S., 2011. Geologic map of the Dos Lomos quadrangle, Cibola and McKinley Counties, New Mexico, NMBSMR Open-file Geologic Map 219, New Mexico Bureau of Geology and Mineral Resources, last modified in 2013.
48	Ground water	Page 9-4, Section 9.2.1.	Quaternary Alluvium. This section dismisses the possibility that quaternary alluvium could yield a reliable source of water. Provide more analysis of whether the alluvium is a recharge source for bedrock aquifers.	Laramide agrees that additional discussion of whether the alluvium is a recharge source for bedrock aquifers in the vicinity of the proposed action will be included in the BDR v.0.
49	Ground water	9	19.10.6.602.D(13)(g) "lithology and thickness of each geologic unit below the site indicating which units are water bearing, cross sections and potentiometric maps indicating the location of wells and ground water flow direction in the vicinity of the site, and references or sources for this information;" Table 9-1, Plate 4 and Figure 6 only partially satisfy this requirement. MMD will need additional mapping and data to support the expected ground water conditions, to include potentiometric maps. For example: General regional mapping was not provided (San Juan basin), •Data supporting depth to first aquifer, •No well data provided for areas. Gordon (1961) constructed a pre-development potentiometric surface of the alluvial and bedrock aquifers in the Grants and Bluewater region; however this data was not provided.	Laramide agrees that additional information identified in the comment will be compiled and submitted as part of BDR v.0. Plate 2 in Gordon (1961) presents potentiometric surface contours for the alluvial and bedrock aquifers in the Grants-Bluewater area. Reference: Gordon, E.D., 1961. Geology and Ground-Water Resources of the Grants-Bluewater Area, Valencia County, New Mexico, Technical Report 20, New Mexico State Engineer.
50	Ground water	Plate 4	Update plate to reflect newest data and water levels. The date of the data collection should be included on maps.	Comment noted. It is interpreted that this comment is referring to Plate 4. The plate will be updated with the most current applicable data and water levels.
51	Ground water	Plate 4	This plate is insufficient to determine the expected hydrology of the site. The alluvial base from the Mesa only accounts for a portion of the hydrology. No data is provided for the larger watershed footprint upslope from the site, or for the larger Rio San Jose Basin the project is located in.	Laramide agrees that additional hydrogeologic information for the watershed and Rio San Jose Basin will be added to the BDR v.0.
52	Prior Exploration and Mining	10	Due to the length of time since BDR data was collected, reclamation of historic mines has occurred in the Permit vicinity since submittal. Please update this section to reflect activity in the area since this Draft BRD was submitted.	Laramide agrees to including updated USFS reclamation information in the BDR v.0.
53	Prior Exploration and Mining	10	In accordance with 19.10.6.602.D(13)(h) Please provide a map including the following: La Jara Mesa Permit Boundary, the reclaimed footprint of the Historic Mines (Taffy, Zia, and Old La Jara). This can be included under Figure 4 from the June 6 th Application. "Past Exploration activity".	Laramide will include current boundaries in the BDR v.0.
54	Prior Exploration and Mining	10	Cultural Resources Section; MMD will be utilizing the US Forest Service cultural resources process (section 106) to satisfy our requirements. This section will need to be updated to reflect on any changes occurring through the section 106 process.	Laramide will update the cultural resources sections with current information related to the ongoing Section 106 Consultation process in the BDR v.0.
55	Historic Places and Cultural Properties	11	Since the Draft BDR was submitted in 2013, the proposed permit area has since been designated as part of the Traditional Cultural Property Mt. Taylor. This section will need to be updated to reflect the TCP status and impacts, as well as any on-going section 106 updates.	Laramide will update the cultural resources sections with a current discussion of the TCP status and provide information related to the ongoing Section 106 Consultation process in the BDR v.0.

56	Radiological Survey	13	MMD will require a new RAD survey to be conducted due to the time since collection and due to USFS/CERCLA activities occurring on and immediately adjacent to the Permit Area. An amended sampling plan will need to be submitted for MMD review.	Laramide notes that the 2011 gamma survey data instruments were cross calibrated to a High Pressure Ionization Chamber (HPIC) and all gamma count rates converted to exposure rates. Given the very long half-life of the gamma emitting radionuclides being measured at the site, a small comparison of the original data to newly acquired data in various locations of the site should be sufficient to show the 2011 survey is still valid and that a new site-wide survey is unnecessary. Where site conditions have changed, due to USFS/CERCLA activities, new survey data will be collected to replace the data that is no longer representative of site conditions. An amended sampling plan will be submitted to MMD for review.
57	Radiological Survey	13	As described in the Part 6 guidelines the Radiological survey should be comprised of the following: The proposed scope of work for the radiological survey should provide a baseline for radiochemical content and include a gamma-survey of the primary permit areas such as roads and facility locations as well as potential downstream affected areas. Bulk soil samples should be proposed for collection to verify field readings for analysis of uranium (total-238), radium 226, radium 228, thorium (total-232) and gross alpha/beta. MMD requests that the amended sampling plan includes the above components.	The 2011 gamma survey included the primary permit areas such as roads and facility locations as well as potential downstream affected areas. New access route portions will be included in a new survey as well local areas of new data collection overlapping the old survey in order to demonstrate the continued validity of the old data. The 2011 field work consisted of collecting 64 samples, of which 12 samples were submitted for radiochemical analyses, including for all parameters listed (Total U, Total Th, radium-226/radium-228, thorium-230, and gross alpha/beta). These sample results and locations should be acceptable for inclusion in a gamma count rate to radionuclide in soil concentration correlation. Additional samples will be collected and analyzed, as identified as necessary when developing an amended sampling plan.
58	Radiological Survey	13	The RAD survey shall include all affected areas, including the expanded footprint of the expanded road. Due to Historic Reclamation on and surrounding the immediate area of the Permit Area it is important to gather complete data from the surrounding areas for accurate baseline data. As other pre-act mining activities historically have shown widespread contamination from things like wind-blown erosion, MMD believes it is prudent for Laramide to cover a broader landscape for the RAD survey to ensure accurate pre-disturbance RAD levels.	Laramide has determined that any additional gamma survey data will be collected to include any proposed changes to the permit area, expanded road, and buffer around the permit area. Additional gamma survey data will also be collected to adequately confirm current (pre-disturbance/baseline) radiological condition these areas.
59	Radiological Survey	DY:	As previously mentioned, the below RAD survey footprint doesn't appear to be the same as the proposed road. When conducting the new RAD survey, ensure it covers the proposed road footprint. 	Additional gamma survey data will also be collected to adequately confirm current (pre-disturbance/baseline) radiological condition the expanded road.

Com men	Section	Subse ction	Agency Comment	Laramide Response/ Attachment
1			The draft baseline data report (Section 11-i-Historic Cultural Properties) does not address the results of testing at eight archaeological sites either eligible for inclusion for listing in the National Register of Historic Places (NRHP) or sites whose eligibility for listing was indeterminate pending the results of testing. The report will need to be updated to include information on the results of such testing.	Laramide agrees to update Section 11 of the BOR v.0 to include testing results at archeological sites.
2			The discussion of Traditional Cultural Properties (TCP) does not include a thorough discussion of the TCP and the anticipated adverse effects. Some discussion on ways to mitigate adverse effects would be warranted—including the Cibola National Forest's ongoing consultation with the tribes on effects to the TCP.	Laramide agrees to update potential effects of the project on the TCP to reflect current information.
3			Two references are missing from the References section.	Laramide agrees to update references in the BOR v.0

DY: Possible Newcomer task

DY: Poorly worded. The mined material is about that high above the aquifer, not the portal facilities.

DY: No holes or logs go beneath the ore body. However, there is no plausible recharge area for the sand units, which dip away from their narrow outcrop. And the sands are capped by impermeable.

DY: See maps accompanying Discharge Permit. Having said that, the Gordon Potentiometric Surface is for an area far away and is not very convincing re groundwater flow directions at the portal site.

DY: A well to document groundwater at mine site (and as monitor well for future) seems like a normal thing.

Comm ent #	Secti on	Sub secti on	Agency Comment	Laramide Response/ Attachment
MECS	2		Section 2.0 – Climate data is collected from the Homestake mill. The Homestake Mill is in the open plain of the San Mateo Creek Basin, while the LJMP is on the foothills and approximately six miles away. NMED-MECS has observed significant differences in regional climate data at distances of one mile, as localized storms are common to the area. NMED-MECS recommends the LJMP install a weather station on-site for accurate climate data and or at minimum update the climate data for the period of 2013-2023	A more in-depth regional analysis of climate data will be included in the updated BDR v.0, which will include consideration of orographic effects. A description of how the regional climate data is being used to inform project design in a conservative manner will also be included
MECS	6		Section 6.0 –a.Hot water extraction was performed to evaluate soil with respect to nutrients. Some horizons showed elevated arsenic, lead and copper. NMED-MECS recommends additional testing be done on these horizons at a new location in the project area to verify the presence of these potential contaminants. As part of the material characterization of a mine site, NMED-MECS requires meteoric water mobility procedure, or another approved method, to determine the leaching potential of site soils. NMED-MECS recommends testing of this nature be completed and submitted. b.The Summerville is the main geologic formation to be used as the stockpiled base for operations and the bedrock at the surface. Table 6-6 does not include the Summerville formation for waste rock testing. NMED-MECS recommends testing be performed on the Summerville formation.	Laramide respectfully requests to not conduct test procedures designed for metalliferous mine waste rock on project area soil samples. The Section 6 soil surveys are for studying soil suitability as growth medium. Meteoric water mobility testing is used to test the potential for mine waste, generally known to contain heavy metals, to leach those metals under meteoric conditions. Compared to waste rock at a copper mine, for example, there is no reason to suspect that copper, arsenic or lead minerals susceptible to leaching are contained in La Jara Mesa project soils. Consistent with that, while there is some variability in the reported Cu, Pb and As values from the AB-DPTA extraction (the accepted technique for the Section 6 characterization), the extracted amounts are quite low compared to either crustal abundances or plant suitability standards. Metal values reported are typically one or two orders of magnitude less than the amount which would be deemed unsuitable for plant life as per 2022 Guidance.
MECS	7		Section 7.0 – Based on the geologic maps shown, the mine facilities will be placed on the Summerville formation. A description of this geologic unit is not present in the BDR. NMED-MECS recommends a detailed description of the Summerville formation be added to this section.	Laramide will update the BDR v. 0 to include a description of the Summerville formation.
MECS	9		Section 9.0 –a.Water quality data for the region is sourced from Homestake Mining Company (HMC). As stated in Comment 1, the LJMP is a notable distance from HMC and in a different groundwater regime. HMC has impacts from current and historic regional mining and milling processes which most likely would not be similar to the site conditions at LJMP. NMED-MECS recommends LJMP locate another source of information closer to its location for water quality data for all aquifers proposed for use in the project.b.The BDR only contains a brief description of "unsaturated" as the water bearing potential for the operation. NMED-MECS recommends the inclusion of geologic and drilling logs from site drilling activities or other additional lines of direct evidence that supports this statement for all geologic units to be encountered at the LJMP. c.A more extensive description of the groundwater of the Summerville formation is needed in the BDR since it will be the geologic unit composing the base layer for site facilities. NMED-MECS recommends water quality analysis be found for this geologic unit. d.NMED-MECS recommends an updated search for wells in the region. e. The New Mexico Administrative Code Standards for Ground Water, under 20.6.2.3103, have changed since the 2013 submittal, effective December 21, 2018. NMED-MECS recommends revising Table 9-2 with the current NMAC standards.	Laramide agrees to address these comments in the BDR v.0. Laramide will provide representative driller's logs which document the unsaturated nature of the explored strata.
MECS	13		Section 13 – a. At the time of radiological surveys, regional mines on neighboring United States Forest Service land have not been reclaimed. NMED-MECS recommends the site radiological survey be completed again to establish site background as described in the Joint Guidance for the Cleanup and Reclamation of Existing Uranium Mining Operations in New Mexico, March 2016. b. In the new survey, NMED-MECS recommends expanding to the west and south of the red-outlined areas on Figure 2-7 and along the road in the section near highway 605 where existing elevated radiological impacts may be present.	Laramide plans to update radiological surveys at adjacent USFS remediated sites to characterize new existing conditions and provide this information in the BDR v.0. The Permit Area and Affected Area will be defined and updated methods identified in the revised SAP.
AQB			20.2.15 NMAC, Pumice, Mica and Perlite Processing. Including 20.2.15.110 NMAC, Other Particulate Control: "The owner or operator of pumice, mica or perlite process equipment shall not permit, cause, suffer or allow any material to be handled, transported, stored or disposed of or a building or road to be used, constructed, altered or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne."	Laramide agrees to comply with air quality-related particulate control measures that apply to it's activities.
AQB			Paragraph (1) of Subsection A of 20.2.72.200 NMAC, Application for Construction, Modification, NSPS, and NESHAP - Permits and Revisions, states that air quality permits must be obtained by: "Any person constructing a stationary source which has a potential emission rate greater than 10 pounds per hour or 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Ambient Air Quality Standard. If the specified threshold in this subsection is exceeded for any one regulated air contaminant, all regulated air contaminants with National or New Mexico Ambient Air Quality Standards emitted are subject to permit review." Further, Paragraph (3) of this subsection states that air quality permits must be obtained by: "Any person constructing or modifying any source or installing any equipment which is subject to 20.2.77 NMAC, New Source Performance Standards, 20.2.78 NMAC, Emission Standards for Hazardous Air Pollutants, or any other New Mexico Air Quality Control Regulation which contains emission limitations for any regulated air contaminant." Also, Paragraph (1) of Subsection A of 20.2.73.200 NMAC, Notice of Intent, states that: "Any owner or operator intending to construct a new stationary source which has a potential emission rate greater than 10 tons per year of any regulated air contaminant or 1 ton per year of lead shall file a notice of intent with the department." The above is not intended to be an exhaustive list of all requirements that could apply. The applicant should be aware that this evaluation does not supersede the requirements of any current federal or state air quality requirement.	Laramide agrees to evaluate the project to determine whether air quality permits are required. Laramide further agrees to comply with air quality regulations and emissions standards that apply to proposed activities.

AQB		Fugitive Dust Air emissions from this project should be evaluated to determine if an air quality permit is required pursuant to 20.2.72.200.A NMAC (e.g. 10 lb/hour or 25 TPY). Fugitive dust is a common problem at mining sites and this project will temporarily impact air quality as a result of these emissions. However, with the appropriate dust control measures in place, the increased levels should be minimal. Disturbed surface areas, within and adjacent to the project area, should be reclaimed to avoid long-term problems with erosion and fugitive dust. EPA's Compilation of Air Pollutant Emission Factors, AP-42, "Miscellaneous Sources" lists a variety of control strategies that can be included in a comprehensive facility dust control plan. A few possible control strategies are listed below: Paved roads: covering of loads in trucks to eliminate truck spillage, paving of access areas to sites, vacuum sweeping, water flushing, and broom sweeping and flushing. Material handling: wind speed reduction and wet suppression, including watering and application of surfactants (wet suppression should not confound track out problems). Bulldozing: wet suppression of materials to "optimum moisture" for compaction. Scraping: wet suppression of scraper travel routes. Storage piles: enclosure or covering of piles, application of surfactants. Miscellaneous fugitive dust sources: watering, application of surfactants or reduction of surface wind speed with windbreaks or source enclosures.	Laramide agrees to evaluate the project to determine whether an air quality permit is required. Construction and operations will be required to implement best management practices described in the comment at a minimum to control fugitive dust and erosion during construction and operations.
SWQB		The SWQB recommends that the DBDR include representative cross-sectional and longitudinal surveys of the arroyos within the project area to describe their physical characteristics including width, depth, channel slope, and bank slope.	Laramide will complete surveys of arroyos within the Permit Area; surveys will include data collection of the identified physical characteristics.
SWQB		The SWQB recommends updating the 2013 DBDR to include current surface water quality data to reflect current surface water quality conditions	Laramide agrees that baseline surface water quality will be compared to the most recent NMWQCC standards in the BDR v. 0.
SWQB		The SWQB recommends including gross alpha and Radium 226 + 228 in surface water quality analyses.	Laramide will include these in future surface water sampling and analysis.
SWQB		Section 8.3.2, Baseline Surface Water Quality, of the DBDR says, "Metal concentrations were less than the relative New Mexico Water Quality Control Commission standards (20.6.2.3103 NMAC). The sample concentrations for cadmium, chromium, and mercury concentrations are below laboratory method detection limits." The arroyos in the project area are subject to 20.6.4.13 and 20.6.4.98 NMAC and include designated uses for livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact. Section 8.3.2 of the DBDR should be revised to reference the correct surface water quality standards at 20.6.4 NMAC including those standards at 20.6.4.900 NMAC for livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact. The SWQB also recommends revising Table 8-4 of the DBDR	Laramide agrees that baseline surface water quality will be compared to the most recent NMWQCC standards in the BDR v.0.

Comment #	Section	Subsection	Agency Comment	Laramide Response/ Attachment	
1	Wildlife	5.3.4.2	Report states that the USFS recommended "performing any vegetation removal (grubbing) for construction outside of the spring breeding season for the gray vireo (<i>Vireo vicinior</i>)". The Department recommends that, in order to minimize the likelihood of adverse impacts to all migratory birds, ground disturbance and vegetation removal activities be conducted outside of the primary migratory bird breeding season. This season runs from 15 April - 1 September for upland songbirds; 1 March - 1 September for most raptors; and 1 January - 15 July for golden eagle (<i>Aquila chrysaetos canadensis</i>) and great horned owl (<i>Bubo virginianus</i>). If ground disturbing and clearing activities must be conducted during the breeding season, the area should be surveyed for active nest sites (with birds or eggs present in the nesting territory) and avoid disturbing active nests until young have fledged. For active nests, establish adequate buffer zones to minimize disturbance to nesting birds. Buffer distances should be at least 100 feet from songbird and raven nests; 0.25 miles from most raptor nests; and 0.5 miles for ferruginous hawk (<i>Buteo regalis</i>), golden eagle, peregrine falcon (<i>Falco peregrinus</i>), and prairie falcon (<i>Falco mexicanus</i>) nests. Active nest sites in trees or shrubs that must be removed should be mitigated by qualified biologists or wildlife rehabilitators. Department biologists are available to consult on nest site mitigation and can facilitate contact with qualified personnel.	Laramide commits to avoid clearing and grubbing during the breeding season, to the extent feasible. In complying with requests identified in the MMD technical comments, the baseline presence of the species identified in the Permit Area and Affected Area will be presented in the BDR v.0. If active nests are identified, the defined buffers will be established per the NMDGF comment.	
2	Wildlife	5	During the site inspection, Department staff observed a basalt cliff line below the top of La Jara Mesa. The cliff line provides nest substrate suitable for breeding raptor species. The surrounding habitat is also highly suitable for nesting golden eagles, prairie falcons, and red-tailed hawks (<i>Buteo jamaicensis</i>). All three of these species were documented during the wildlife surveys conducted by EMI. The Department therefore recommends that Laramide conduct additional surveys designed specifically to locate raptor nest sites during the breeding season. The survey area should include, at minimum, a one-mile buffer zone around the proposed project area footprint.	Laramide requests the use of a 0.5 mile survey buffer where unlikely or lower quality habitats (such as highways and developed lands) would be included with expanded focus on likely habitats such as the cliff line and slopes within the 1 mile buffer.	

Comment #	Section	Subsection	Agency Comment	Laramide Response/ Attachment
NMOSE gengeral No. 1	Ground Water	9.0	The La Jara Mesa Mine Project site lies within the Bluewater Underground Water Basin, which is partially closed to new groundwater diversions for irrigation, industrial and municipal uses. Order No. 60, which established this closure, is provided in the Appendix of this memorandum. (It should be noted that at the time of the order, Cibola County was part of Valencia County.) Plans for water supply sources need to consider the basin closure area, which is delineated on the NMOSE POD Locations website: https://gis.ose.state.nm.us/gisapps/ose_pod_locations/ .	Laramide will consider the basin closure area and update the BDR v.0. Bluewater Underground Water Basin appears to be to the west of the vast majority of the project area and is part of the consideration for water supply for the project.
NMOSE gengeral No. 2	Ground Water	9.0	The Hydrology Bureau cannot provide an independent drawdown analysis to evaluate potential impacts to existing water rights of other ownership at this time due to the ongoing evaluation by Laramide to determine the water supply source for the La Jara Mesa Mining Project.	Comment noted. The BDR v.0 will be updated to identify the new water source
NMOSE sepecific No. 1	Ground Water	9.0	Laramide should provide lithologic and/or drillers logs from licensed drillers of the exploration work to document the unsaturated nature of the explored strata beneath La Jara Mesa to assess whether or not the multitude of springs that emanate from the base of the mesa will be impacted by mining activities.	Laramide will provide representative driller's logs which document the unsaturated nature of the explored strata as well as an assessment of the hydrology of the nearest springs which are several miles away in Lobo Canyon.
NMOSE sepecific No. 2	Ground Water	9.0	Information regarding water rights, if any, that may be associated with the springs emanating from the base of La Jara Mesa should be provided by Laramide.	Laramide will provide further support to document that no springs are known to exist at the base of La Jara Mesa.
NMOSE sepecific No. 3	Ground Water	9	Section 9.0 of the Draft Baseline Data Report (Golder, 2013) cites NMAC 19.10.6.602 D.(13) (g) for the required description of the aquifer characteristics, which includes transmissivity and storativity with references. However, storativity was not provided for the the Entrada Sandstone, and transmissivity and storativity were not provided for the Chinle and San Andres-Glorieta aquifers. These aquifer parameters should have been provided in the report text for all aquifers in consideration for water supply and for the drawdown analyses. Any analysis requested of the Hydrology Bureau in the future will require this information with relevant references.	Laramide agrees that additional details on the hydrogeology of the Entrada Sandstone and Chinle and San Andres-Glorieta, and other applicable aquifers will be provided in the BDR v.0.
NMOSE sepecific No. 4	Ground Water	9.2.2.3	Section 9.2.2.3 of the Draft Baseline Data Report (Golder, 2013) cites a water supply evaluation conducted by JSAI on well B-01272 that shows the Entrada Sandstone has a transmissivity of 51.5 MMD_2024_009_CI008RN 6 ft ² /d. The JSAI evaluation including the test data should be provided to complete an independent drawdown analysis.	Well test data from Laramide testing will be reported in an updated BDR v.0.
NMOSE sepecific No. 5	Ground Water	9.3	Section 9.3 of the Draft Baseline Data Report (Golder, 2013) cites a drawdown analysis conducted for withdrawals from the Entrada Sandstone formation, the Chinle Formation and the San Andres-Glorieta aquifer. However, no specifics regarding these analyses were provided in this report. The cited drawdown analyses including the nearest pumping well should be provided. Any pending review requested of the Hydrology Bureau will require this information.	Only the Entrada Sandstone was tested. Laramide agrees that the updated BDR v.0 will clarify and provide available additional data.

Comment #	Section	Subsection	Agency Comment	Laramide Response/ Attachment															
			It should be noted that a population of <i>Helianthus paradoxus</i> (Puzzle Sunflower), a state endangered plant, has been documented approximately 5-10 miles southwest of the project area near the San Jose Rio, on the north side of Interstate 40. Puzzle sunflowers typically occur on permanently saturated saline soils in desert wetlands, springs or seeps (pielegas) or adjacent to riparian areas (3,300-6,600 ft). Additionally, <i>Puccinellia parviflora</i> (Parish's Alkali Grass), a state endangered grass species, also associated with alkaline springs, seeps and wetlands, has been documented 5.5 miles northeast of La Jara Mesa, and west of the town of San Mateo. While these two state endangered plants have not been documented within the project area, a botanical survey conducted by a person or private consulting company with expertise in the field of botany and qualified to identify state endangered plants (usually when plants are in flower or fruit) is recommended prior to disturbance if any permanently saturated (not seasonally wet) riparian or wetland areas are found within the project vicinity (if they will be impacted) or immediate project disturbance area. If state endangered plants are found, an incidental take permit will be required if plants are anticipated to be destroyed or harmed, or mitigation measures developed to minimize disturbance.	Laramide agrees that state endangered plants will be included in the updated vegetation surveys. Any that are present will be mapped and included in BDR v.0 results. Please note that no seeps, springs, or other saturated soil-dependent habitats are expected in the Permit Area.															
	Vegetation	4																	

DY: Possible Newcomer task
DY: Poorly worded. The mined material is about that high above the aquifer, not the portal facilities.
DY: No holes or logs go beneath the ore body. However, there is no plausible recharge area for the sand units, which dip away from their narrow outcrop. And the sands are capped by impermeable.

DY: See maps accompanying Discharge Permit. Having said that, the Gordon Potentiometric Surface is for an area far away and is not very convincing re groundwater flow directions at the portal site.
DY: A well to document groundwater at mine site (and as monitor well for future) seems like a normal thing.

Agency Comment	Laramide Response/ Attachment
It was stated that Site-specific climate data for the baseline period (January 1, 2011, through December 31, 2011) was collected from the Homestake Mill weather station. The Cibola recommends that Laramide install a weather station on-site for accurate climate data, specifically wind speed and direction. Since the project is entirely on National Forest System (NFS) lands, Laramide will need this to be permitted by the Cibola. We are willing to work with Laramide to complete this.	Laramide requests further discussion to address this recommendation and the associated permitting requirements.
The Cibola confirms the information is still correct for listed plants.	Comment noted.
The Regional Forester's Sensitive Species (RFSS) list is now obsolete. The RFSS has been replaced by Species of Conservation Concern (SCC) and is a different list of species. SCC do not require analysis, just a land use plan compliance check.	Laramide agrees that the BDR v.0 will include a current list of SCC and verification with the land use plan for compliance.
'Sensitive' is no longer a status for the Cibola. The designation has been replaced by 'Species of Conservation Concern', which have different criteria. For plants, the Cibola's SCC list includes Zuni milkvetch (<i>Astragalus accumbens</i>), villous groundcover milkvetch (<i>Astragalus humistratus</i>), Sivinski's fleabane (<i>Erigeron sivinskii</i>), and Sandia Mountain alumroot (<i>Heuchera pulchella</i>). The Zuni milkvetch is the only one that occurs in Cibola County. The following species listed as 'Sensitive' in Table 4-6 have no Forest Service designation: Chaco milkvetch (<i>Astragalus micromeris</i>), Arizona leatherflower (<i>Clematis hirsutissima</i> var. <i>hirsutissima</i>), and Parish's alkali grass (<i>Puccinellia parishii</i>). They do not require analysis as Forest Service 'Sensitive' species. The Forest Service Status column should be updated to reflect the current SCC species and remove the status for previous RFSS species listed in the table as 'Sensitive'	The BDR v.0 will include an updated status table, a current list of SCC, removal of those species with no current status, and verification with the current land use plan for compliance.
The Cibola no longer has Management Indicator Species (MIS) designated and is now obsolete. MIS has been replaced with Focal Species, which have different criteria. We now have Focal Species, which include Grace's Warbler (<i>Setophaga graciae</i>) and Ash-throated Flycatcher (<i>Myiarchus cinerascens</i>).	Laramide agrees to update this section to identify appropriate Focal Species.
The Cibola confirms the information is still correct.	Comment noted.
The Regional Forester's Sensitive Species (RFSS) list is now obsolete. The RFSS has been replaced by Species of Conservation Concern (SCC), which have different criteria, and are a different list of species. SCC don't require analysis under NEPA, just a land use plan compliance check.	Laramide agrees that the BDR v.0 will include a current list of SCC and verification with the land use plan for compliance.
Table 5-3. Gunnison's prairie dog is not a Candidate. It has no protection under the Endangered Species Act. Zuni bluehead sucker is not a Candidate. It is listed as Endangered under the Endangered Species Act. (See table in PDF version of Comments)	Laramide agrees to update table of status species to reflect current agency status or lack thereof.
Further description on why 100 cm was the limit of the soil descriptions is needed. If 100 cm captures the soil horizons, then this is acceptable but needs to be described. A pedon extends down to the lower limit of a soil. It extends through all genetic horizons and, if the genetic horizons are thin, into the upper part of the underlying material. The pedon includes the rooting zone of most native perennial plants. For purposes of most soil surveys, a practical lower limit of the pedon is bedrock or a depth of about 2 meters, whichever is shallower (Soil Survey Manual, No.18, USDA Handbook, 1993).	Laramide interprets the BDR instructions as requiring a discussion characterizing "topsoil" if vegetation is part of a reclamation plan. The DBDR soil profiles extend into a CR horizon of talus in one instance, and into C horizons of semi-consolidated aeolian sand in the other two instances. In all three profiles, the surveys extended below the penetration depth of roots. Laramide suggests that the talus and aeolian sand units comprise a sort of bedrock relative to soil development and rooting zone considerations. Depth to consolidated Jurassic rocks (beneath potentially many meters of sand or talus) seems unimportant to the goals of the BDR topsoil characterization. 100cm in each case was a convenient stopping point and beneath which, significant changes were not soon expected. However, Laramide plans geotechnical borings in construction areas and will perform additional, deeper soil profile characterizations as part of that geotechnical work.
Reliance on gully exposures for soil profiles skews the results to those soils associated with gullies and may not be representative. Please justify that using gully exposures is representative of the soils in the project area.	Laramide believes exposed soils in gullies are indicative of soils in adjacent areas. Pictures of soil profiles suggest representative A and B horizons are still intact, even if a nearby gully has helped create an exposure. However, Laramide plans geotechnical borings in construction areas and will perform additional, distributed soil profile characterizations as part of that geotechnical work.
Please include the 12-digit HUC boundary of Lobo Creek (130202070305) in addition to the larger 10-digit HUC of San Mateo Creek (1302020703). Lower San Mateo Creek (HUC130202070306) could also be of interest. This is the scale most often used when planning and assessing watershed conditions. There is also a map of the smaller catchments on OpenEnviroMap that are useful for showing drainage from smaller areas of the proposed action. In addition, the use of available lidar imagery would show that the ephemeral drainages do have a connection to San Mateo Creek during higher flows. It is likely the mobility of the sand fields/dunes removes the evidence of this flow periodically.	Laramide agrees to include these updates in the BDR v.0 as requested.
It is unclear what the area of interest is for this report. Is it the HUC10 watershed, San Mateo Creek, the smaller HUC12 Lobo Creek or does it vary by feature. Please describe rationale behind the chosen area of interest.	Text will be updated in response to this comment in the BDR v.0.
It is requested that water quality of storm flows in the ephemeral channels be collected for another year. Explain the flows that occurred during the sampling and available discharge information.	Laramide requests discussion to help understand the objectives for the additional year of sampling that is being requested.
It is unclear what is meant on page 8-3 that the channels are in moderate to poor condition. What metrics or methods was used to determine this? Examples of stream channel stability assessment methods include Rosgen 2001 – A Stream Channel Stability Assessment. Methodology (Rosgen_2001_Channel_Stability.pdf_ and Pfankuch, D.J., 1975. Stream Reach Inventory and Channel Stability Evaluation. USFS/USDA.	Laramide agrees to provide additional details related to the assessment of stream channel condition in the BDR v.0.

In the discussion of channels, it would be good to establish a system of identification so that the discussion of channels is clear as to which one is being discussed. The narrative is difficult to visualize. It could be linked to the sites selected for water quality sampling or another example would be to label the channels on a map and reference the label. [MMD added comment: see our annotated map, labeling drainages A, B, C..]	The BDR v.0 text and figures will be updated in response to this comment.
A discussion of the discharge of the flows in the various channels would be informative. What magnitude of flows are expected from these channels? Climate change is expected to increase extreme events. Are there points where the flow from one ephemeral channel will move to another? Are there locations where the roads could capture flows? Are there head cuts which could migrate into the project area? The methodology is reasonable.	Additional details on current and future surface water flow conditions will be provided in the BDR v.0.
There are additional springs in the HUC12 Lobo Creek watershed. There are also riparian areas and perennial stream sections. Because an area of interest is not explained, it is unclear whether these features could be of interest to project assessment. Lobo Creek has perennial portions	Laramide will provide additional detail in the BDR v. 0 describing the hydrogeologic regime in the vicinity of the Permit Area. This description will provide supporting detail for why the referenced springs are not within the Affected Area.
There is a surface water permit (SP-04250) which could be associated with Pumice Spring.	Comment noted.
In the last paragraph of section 8.3.4, there is a reference to the "La Jara Mesa proposed Permit Area watershed". It is unclear what the boundary of this watershed is. Is this the watershed of interest? If so, why and use this as a reference for the rest of the report. This could be helpful for the last section, 8.4 Probable Hydrologic Consequences.	Laramide agrees to update the relevant BDR v.0 text and figures to clarify a relevant watershed boundary associated with the Permit Area and Affected Area.
Probable Hydrologic Consequences does not discuss all the various features in the area of interest specifically the channels and discharge, stability of channels, and other features. The rationale for the no hydrologic consequence is not explained clearly. Why is San Madero Creek not hydrologically connected? Are the springs connected? If not explain the reasoning. Are the flows in the channels expected to stay the same? What about the water quality? More information and connecting the features to the probable hydrologic consequences is needed to support the statements in Section 8.4.	Laramide agrees that additional detail will be added to the BDR v.0 describing the hydrologic conditions of the Permit Area and Affected Area. This description will provide supporting detail for why the referenced springs are not within the Affected Area, as well as the fate of the ephemeral channels in and adjacent to the Permit Area, which is currently being refined.
Has any new groundwater data been collected and reviewed since the April 2013 Draft Baseline Data Report? If so, please provide.	Laramide agrees to collect and provide updated groundwater baseline data. No new groundwater data has been collected since the 2013 Draft Baseline Data Report was completed.
Is spring data based only on NHD or was a survey conducted? This question applies to Section 7.0 and Section 8.0 as well.	No springs were identified by onsite investigations associated with the development of the Draft BDR. However, their locations were likely based solely on the NHD and topographical mapping. Laramide agrees to provide more supporting detail related to the presence of springs in the refined Permit Area and Affected Area, including ground verification.
The Plan of Operations (Laramide, 2008) is referenced when describing the site's hydrogeologic regime. Please provide more information about the outcomes of the exploration drilling program. Specifically, please provide the locations and depths of exploration boreholes described in Laramide 2008. Which lithologies did they penetrate?	The BDR v.0 will include maps showing exploration drill hole locations, representative drill logs and scaled cross sections showing the depths of drill holes and the lithologies penetrated.
There are numerous springs located along the south side of the mesa. There are faults and contacts in the area. If some springs are present because of faulting, they could be fed partly or wholly from deeper aquifers and could be impacted by pumping. Springs present at contacts could be fed by recharge and could suggest a south flow in this area in contrast to the east and west flow suggested in Section 9.2.1. Flow should be measured at the springs on the south side of the mesa and water chemistry or isotope analysis to determine water source at selected springs on south and east sides of the mesa.	Laramide will provide additional detail in the BDR v.0 describing the hydrogeologic regime in the vicinity. This description will provide supporting detail for why the referenced springs are not within the Affected Area
Describe or cite method used to calculate drawdown.	Laramide will update the BDR v.0 to reflect the new plan for water supply, which is anticipated to address this comment.
Please describe rationale on three miles being used for effects on surface water.	The identification of an Affected Area for surface waters and other resources will be updated in the BDR v.0 in association with the update of the Design Limit and Permit Area.
Figure 5 (Site Geology). Is there data that reveal the character of the faults located downgradient of the mineralized zone?	The faults in the area of the mineralized zone have demonstrated down-to-the east offset of up to several hundred feet and are known to predate (not affect) the volcanic rocks.
Did the exploration drilling program have drill logs documented? If so, that information would be beneficial to include as attachments.	Laramide will provide representative cross sections across the ore body and access tunnels with exploration drill holes identified and the electric logs of the drill holes shown. A map of drill holes will also be provided.
The Cibola has specific responsibilities to consider effects to historic properties under Section 106 of the National Historic Preservation Act (NHPA). Because the Cibola will use its effects analysis under Section 106 to consider potential impacts to cultural and historic resources and uses, a review of this section was not completed by Cibola personnel. A reminder that archaeological survey locations are confidential and not available to the public.	Comment noted.
Please make the corrections: The proposed escape raise would be located within 8,145-acre La Jara pasture (no. 001) of the 40,632-acre El Rito Grazing allotment. The proposed surface facilities and road and utility corridor would be within the 5,468-acre Rincon pasture (no. 006), which is also in the El Rito Grazing allotment. There are two permittees that graze 130 cattle on one pasture and 133 head of cattle the other, for a total of 263 head of cattle this allotment.	These revisions will be reflected in the BDR v.0

Given the proximity of the proposed La Jara Mesa Mine project area to the legacy uranium Taffy Mine above the project area, it is recommended to expand the radiological surveys to include the Taffy Mine. This will separate the disturbance from the proposed La Jara Mesa Mine to the background radon that may be residual from the Taffy Mine and its disturbance.	The Taffy Mine area was covered in the original survey. Where site conditions have changed, due to USFS/CERCLA activities, new survey data will be collected to replace the data that is no longer representative of site conditions. An amended sampling plan will be submitted to MMD for review.
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