

NUMBER	TOPIC	QUESTION / COMMENT	DIVISION RESPONSE	PERMIT APPLICATION/ PERMIT SECTION / REGULATORY CITATION/ REFERENCE
E-mail from John Hadder, Director of Great Basin Resource Watch, received 3 November 2021.				
1	Water Table / Life of Mine	Your fact sheet does cite both 20 years and 10 years in connection to when the water table is expected to be reached, which is correct? ... If it is 20 years, then what is the 10 year mine plan about?	<i>The initial mine plan is for 10 years, and all mining will occur above the 4,840 feet amsl elevation as required by the Permit; however, the Piteau water level memo indicates that really, 20 years of mining can occur above the 4,840-foot elevation. The sentence referencing the 20 years that may occur above the water table has been revised.</i>	Fact Sheet Section "Waste Rock/Gangue Management and Pit Backfill" and "Mining"; Piteau 28 April 2021 Technical Memo Thacker Pass Project Piezometric Hydrographs
2	Tailings Facility	Page 11 of the Fact Sheet references a seepage calculation of 74 gpm. Can you point to this calculation of 74 gpm? And, this is during operations?"	<i>The calculation was not originally provided as it was essentially superseded by the 21 September 2021 Piteau Model; however, the calculation is now available on the public document viewer.</i> <i>The 74 gpm was calculated by subtracting the native moisture content of the ore from the optimum moisture content which the tailings material would be stacked. It included several conservative factors including a higher permeability, greater square footage, and using the native moisture content of the ore instead of the residual water content of the soil. This volume of moisture was expected to seep out of the Phase I facility at a uniform and controlled rate of 74 gpm and the calculation was used to size the reclaim pond.</i> <i>Since this original calculation, a more refined seepage analysis was completed by Piteau which indicates, "moisture content through the CTFS was estimated to take several thousand years to equilibrate and produce any seepage to the underdrain system. No meaningful seepage related to draindown from residual water present in the clay tailings upon stacking is anticipated." Therefore, the design of the Reclaim Pond was acceptable. Any solution collected in the Reclaim Pond during operations will be pumped to the process plant.</i>	26 June 2019 NewFields Seepage Calculation Fact Sheet Section "Clay Tailings Filter Stack (CTFS)" Piteau 21 September 2021 Clay Tailing Filter Stack (CTFS) Unsaturated Flow Modeling Revision 1 (Piteau CTFS)
3	Tailings Facility	On page 11 of the FS - "However, under covered closure conditions, the resulting seepage is 0.01 percent of the Mean Annual Precipitation which translates to a total 0.02 gpm over the facility." It looks like this comes from the technical memo, revised September 21, 2021, "Clay Tailing Filter Stack (CTFS) Unsaturated Flow Modeling Revision 1." However, according to the memo the average thickness of the tailings dump is 190 feet, which is consistent with the full build out. What is the analysis under the constraint of the permit? (above the water table - which seems to be 10 years).	<i>The Phase 1 CTFS has a maximum height of 200 feet. At ultimate buildout (the future expansion requiring the submittal of and separate NDEP approval of a permit modification to be assessed pursuant to NAC 445A.4155, 445A.416, and 445A.417), the facility will have a maximum height of 400 feet. The referenced memo correctly analyzes the average height of 190 feet. Therefore, 0.02 gpm is the analysis under the constraints of the Permit.</i>	WPCP NEV2020104 Part I.G.9; Piteau CTFS NAC 445A.4155, 445A.416, 445A.417



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4	Tailings Facility	Is the agency assuming that seepage will 0.02 gpm at the time of closure and remaining at that rate indefinitely? Does BMRR have data on the seepage rate over time for the full build out and the permitted mine plan?	<p><i>Yes, 0.02 gpm is the draindown rate which would be managed through an evapotranspiration cell in closure; however, the clay tailings is filtered to near optimal moisture content and therefore unsaturated when placed on the CTFS and not anticipated to produce meaningful seepage. The Piteau report says, "seepage related to the drainage of in-situ water content during the first 1,000 years of emplacement was zero. Water content at the bottom of the CTFS was simulated to slowly increase as a result of unsaturated gravity drainage. However, pore water along the bottom of the CTFS will remain in tension with clay material until water content reaches field saturation conditions to overcome capillary tension and freely seep into the collection system. The wetting front via infiltration slowly migrated downward to approximately the 20-meter depth during the 1,000-year simulation, confirming that there will be significant time before any infiltration reaches the CTFS bottom. Moisture content through the CTFS was estimated to take several thousand years to equilibrate and produce any seepage to the underdrain system. In practice a minor amount of draindown may occur, due to macro pores, heterogeneity, and stacking irregularities; but it is anticipated to be very small, if measurable at all."</i></p> <p><i>BMRR does not have direct analysis on the seepage rate at full buildout because the expansion requires submittal and separate NDEP approval of a permit modification to be assessed pursuant to NAC 445A.4155, 445A.416, and 445A.417. That information would be provided to the Division with that particular modification; however, similar to Phase 1, minimal draindown is anticipated due to the unsaturated clay characteristics of the material.</i></p>	Piteau CTFS NAC 445A.4155, 445A.416, 445A.417
5	Tailings Facility	Based on the technical memo cited in Comment 1.3 there is a roughly 600-fold increase in the seepage if the precipitation is doubled from the base case. The memo does not state the precipitation for the base case, but the value of 12.2 in/yr was used in the 2019 Water Quality analysis, so I assume its about the same value. There is considerable variation in this from year to year with a value of 15.7 in/yr for 2014, so it is not unreasonable to assert on the order of 30% increase from the base case. It is important to understand what level of seepage could be expected with this more likely to be observed range. In fact, I think the important point here is at what precipitation level does the seepage rate begin climb rapidly - in other words at what precipitation level does the ability of the material to "absorb" water become near zero? Does BMRR know this?	<p><i>You are correct that 12.2 in/year Mean Annual Precipitation rate was used in the base case scenario. This value was derived from the daily data, measured at the on-site meteorological station for the period from January 2012 to December 2018 (7 years) recycled over the 1,000-year model timeframe. The referenced memo includes a sensitivity analysis where the precipitation was doubled across the entire facility (24.4 in/year). The result of this sensitivity analysis estimated 12.7 gpm of seepage. This sensitivity captures the 15.7 in/year that was observed in 2014.</i></p> <p><i>The level of precipitation needed to cause the seepage rate to climb rapidly was not analyzed as a sensitivity analysis which doubles the precipitation rate is a very conservative analysis.</i></p>	Piteau CTFS
6	Tailings Facility	Does BMRR have data on the water quality of the seepage over time? If so what is it? I think there was only one HCT on the clay tailings that provides some information on the change in concentration over time. Does BMRR have the details on that data? Please provide. Even given that one test, how representative is that of the water quality drainage profile over time? If BMRR does consider the HCT to be representative, please provide the analysis that shows this. Furthermore, one test is not statically relevant. In general, the number of samples tested across the board appears low.	<p><i>HCT data is provided in Appendix D of the Geochemical Report. A total of six samples of clay tailings, four samples of neutralization solids, and one sample representative of sulfate salts were collected for the tailings characterization program. After completing multi-element analysis, acid base accounting, NAG pH, and MWMP analysis, two samples were selected for kinetic testing: one on the clay tailings and one on neutralized tailings material. The general conclusion for the "CLAY TAILINGS" (which represents the majority of the material to be placed on the facility) is that acidity and sulfate release are related to the presence of residual sulfuric acid, rather than the oxidation of sulfide.</i></p> <p><i>The clay tailings sample generated acidic leachate in the short term due to the presence of residual sulfuric acid; however, it was expected that this sample would not continue to generate acidic leachate in the long term due to the low pyritic sulfur content. This makes sense because the ore prior to processing is not acid generating. Throughout the test, pH increases (from 1.6 to 3.4) and metal concentrations decreased as the material is "rinsed" or "flushed" with meteoric water. Therefore, the geochemical nature of the material is expected to improve over time.</i></p> <p><i>This conclusion was confirmed by termination testing which enables the geochemical properties to be determined alongside the evolution of the leachate during the HCT. The neutralization solids and clay tailings samples underwent geochemical characterization before and after the humidity cell test work. This included ABA and multi-element assay on the initial (pre-leach) and the residual (post-leach) HCT materials. Mineralogical analysis (XRD, SEM, petrography) was also completed.</i></p> <p><i>The neutralization solids maintained a circum-neutral paste pH ranging between 8.1 and 7.9 s.u. consistent with the neutral conditions seen during the HCT. The clay tailings was predicted to be PAG in the short-term but not maintain acid generating</i></p>	SRK Baseline Geochemical Characterization Report for the Thacker Pass Project, Appendix D



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			<i>potential in the long-term. The clay tailings HCT reported an increasing pH trend throughout the duration of the HCT and this was also reflected in the pre- and post-paste pH results (1.5 to 4.4 s.u.). Pyritic sulfur concentrations were low (ranging between 0.005 and 0.02 wt%) reflecting the prediction that neither samples would likely be acid generating in the long-term.</i>	
E-mail from Glenn Miller, received 19 November 2021.				
7	Tailings Facility	How will the tailings be managed? From a chemical perspective, it seems to me that neutralization prior to filtration (and placement in the tailings facility) is the best option for several reasons, but I would really appreciate confirmation that neutralization of the acidic clay extract will occur prior to filtration.	<p><i>The tailings material and Clay Tailings Filter Stack Facility (CTFS) is described on page 10 in the Fact Sheet .</i></p> <p><i>Although the Division agrees that neutralization of all tailings material prior to filtration is a more benign option, the CTFS is designed in accordance with the applicable regulations and will be constructed as a zero-discharge facility. The material will be stored on 80-mil geomembrane-lined containment, compacted to approximately 10⁻⁶ to 10⁻⁷ cm/sec, and covered with waste rock/growth media at closure; therefore, no degradation to groundwater will occur. Sulfuric acid is compatible with 80-mil HDPE geomembrane which still has a long life expectancy when in contact with low pH solutions (see Response 150 regarding liner life expectancy). Therefore, neutralization prior to placement is not necessary or required to protect waters of the State.</i></p> <p><i>In addition, because the CTFS will be a dry-stack facility, a permit limitation (Part I.G.10) prohibits ponded water on the surface during operations. The reclaim pond for the CTFS is a double-lined pond with leak detection which will be converted to an ET-Cell at closure to passively evaporate any seepage, although minimal from the CTFS.</i></p> <p><i>The Division understands that Lithium Nevada has been evaluating the option to neutralize all tailings prior to filtration, briefly described in the document titled "Filterability of LNC Neutralized Clay Slurry V2", but these studies have not been finalized or officially proposed to the Division. .</i></p> <p><i>The Permit includes a continuing investigation item (Part I.N.3 of the Permit) requiring the Permittee to submit the findings of neutralization studies annually, which should at least include details of how neutralization is being evaluated, problems being encountered, and the effects of neutralization on tailings properties and stability.</i></p>	NAC 445A.438 WPCP NEV2020104 Part I.N.3
E-mail from John Hadder, Director of Great Basin Resource Watch, received 29 November 2021.				
8	Tailings Facility ET Cell	ET cells for the tailings dump - what is the capacity of these cells? Is is based on the base case from the Piteau analysis of 0.02 gpm?	<p><i>The ET cell has a surface area of 1.4M sq ft (700' x 2,000') and has a volume of approximately 30 million gallons. The evaporative capacity is 15.24 gpm which is determined by taking the area of the crest of the pond 7.62 acres and using the NDEP default evaporation rate of 2 gpm/acre, and was designed to manage the flow from the "Cover only" sensitivity analysis, i.e. 6.26% MAP, seepage rate of 15.2 gpm.</i></p> <p><i>The ET-Cell will consist of two zones; an evaporation/evapotranspiration zone will evaporate water during periods of the year that evaporation exceeds precipitation; and allow plants to remove water through evapotranspiration, and an underlying storage zone will store water when the inflow exceeds the evaporative loss rate.</i></p> <p><i>The design is based on the most conservative sensitivity, which was the infiltration rate of the "Cover Only" simulation, i.e. 6.26% MAP, resulting in a seepage rate of 15.2 gpm.</i></p>	TPPC

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9	Tailings Seepage	The Technical memo - revised September 21, 2021, "Clay Tailing Filter Stack (CTFS) Unsaturated Flow Modeling Revision 1, provides a range of water content for the filtered clay tailings. How was this handled in the analysis?	<i>The equilibrium seepage analysis is independent of the initial water content; however, the value utilized for modeling purposes represented the 46% initial water content of the tailings. The model was initiated using the initial water content and allowed to run for a period of 1,000 years to allow water content to reach equilibrium and generate seepage from the toe of the facility. When seepage from the facility began, (time x), the seepage volume was measured thru the end of the model run, 1,000 years (time y). This allowed for an equilibrium flux volume from the CTFS to be calculated. This iteration process removes the time component and allows various [moisture] designs to be compared independently.</i>	Piteau CTFS
10	Tailings Seepage	Was there a particular value used?	<i>Yes. The initial moisture content of 46% was used to start the analysis.</i>	Piteau CTFS
11	Tailings Seepage	We also did not see any analysis that varied the moisture content to determine the effect on seepage.	<i>That is correct. The model was run to equilibrium and steady-state conditions until breakthrough occurred and continued to the end of the model run. A range of moisture contents was not analyzed because the clay tailings is required to be dried, stacked at near optimal moisture content, and compacted by the approved engineered design, thus the materials are unsaturated upon placement and are not anticipated to produce any meaningful seepage.</i>	Piteau CTFS
12	Tailings Seepage	During the analysis that was run for 1,000 years was same precipitation amount used for each year or was the precipitation varied from year to year in a statistically defensible way with an overall average of 12.2 in/year?	<i>The precipitation data of 12.2 in/year was derived from the daily data, measured at the on-site meteorological station for the period from January 2012 to December 2018 (7 years) recycled over the 1,000-year model timeframe. The daily data was used as the model input and recycled over 1,000-years; therefore, periods of high precipitation (i.e. 15.7 in/year in 2014) are accounted for in the model. Additionally, the annual precipitation rates recorded in 2019 and 2020 were 14.33 and 6.11, which brings the average precipitation rate down to 11.8 inches, and makes the model more conservative.</i>	Piteau CTFS
13	Tailings Seepage	The sensitivity analysis with double the precipitation, same question.	<i>For this data set, all daily data from the on-site meteorological station between 2012 to 2018 was multiplied by a factor of 2 and recycled over the 1,000-year model timeframe.</i>	Piteau CTFS
14	Tailings Seepage	Was the analysis done that combined the infiltration and drain down models?	<i>No. Two similar, but separate models were utilized to estimate equilibrium infiltration and drain down. Both models consisted of the same cover design and were run for a period of 1,000 years – The infiltration rate through the store and release cover was minimal at approximately 0.02 gpm seepage and the drainage of insitu water content (draindown) was zero. Note: As migration of the wetting front through the CTFS at full buildout of Phase 1, e.g. 58.5 meters, is an extremely long and slow process, the infiltration model utilized a thickness of 10-meters for the CTFS. The 10-meter depth is deep enough that surface evaporation and transpiration are not affected. The draindown model utilized the Phase 1 full build-out height of 58.5 meters for 1,000 years. At the end of the model run, the wetting front had migrated approximately 20 meters, resulting in no seepage at 1,000 years.</i>	Piteau CTFS
15	Tailings Seepage	Is the store and release cover the 24-inch layer on top of the tailings and will full vegetation?	<i>Yes, that is correct. The cover will be vegetated using a seed mixture as previously described in unsaturated modeling for waste rock and coarse gangue facilities (Cedar Creek Associates 2019). Details of the cover design are provided on Pages 2 and 3 of the September 2021 Piteau technical memo.</i>	Piteau CTFS
Letter from Edward Grandy, VP of Legal and Regulatory Affairs, Lithium Nevada Corp., received 30 November 2021.				
16	Permit Language	On page 1, paragraph 1 change the sentence to, "The Permittee is authorized to process up to 7,640,000 dry tons of ore per year."	<i>This sentence in the Permit has not been modified as suggested. The Division does not specify this level of detail and assumes the ore to be at a native moisture content.</i>	NAC 445A.394.2(e)
17	Permit Language; Discharge Requirements	Page 2 Section 1A[3] change the sentence to, "Not release or discharge any process or non-process contaminants from the fluid management system that does not meet Profile I water quality criteria." It is our understanding that any water that meets Profile I water quality criteria can be discharged without prior approval.	<i>Part I.A.3 is standard boilerplate language. This Permit is a zero-discharge Permit. It is incorrect that any water that meets Profile I reference values may be discharged without prior approval. Any discharge from the facility, other than that resulting from a storm event exceeding the design, requires Division approval through a separate discharge Permit. Part I.A.3 has not been modified as suggested.</i>	NAC 445A.433.1(a)



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18	Permit Language; Geotechnical Information	Page 2 Section 1B[6] should be removed. It is up to the structural engineer to decide if additional geotechnical information is needed. If there is already adequate data, then no further investigations would be needed.	<i>In the NewFields Design Report and Geotechnical Study of the area, NewFields recommended additional geotechnical information was needed due to a relocation of the sulfuric acid plant since the geotechnical study was completed. The Division requires this additional information, and if this additional information results in the need for modification to the sulfuric acid plant, a permit modification and fee will be required for Division review and approval. LNC acknowledged this requirement in the response to comments dated 21 June 2021. Part I.B.6 was not removed as suggested.</i>	WPCP NEV2020104 Part I.B.6
19	Permit Language; Tailings Facility	Page 3, Section 1C[1] should be changed to, "The clay tailings filter stack facility (CTFS) with solution collection pipes lined with 80-mil high density polyethylene (HDPE) geomembrane;" Keeping consistent wording with the design documents.	<i>The term "geomembrane" has been added as suggested.</i>	WPCP NEV2020104 Part I.C.1
20	Permit Language; Tailings Facility	Page 3, Section 1C[2] should be changed to, "Leak detection system for the CTFS south solution collection channel;" Keeping consistent wording with the design documents.	<i>The CTFS perimeter piezometers also serve as leak detection for the CTFS. Part I.C.2 has been modified to specify the CTFS piezometers and leak detection for the "CTFS South Solution Collection Channel" as suggested.</i>	WPCP NEV2020104 Part I.C.2
21	Permit Language; Waste Rock Facilities	Page 3, Section 1C[4] should be changed to, "Two waste rock storage facilities, coarse gangue stockpile, and run-of-mine stockpile each with a low hydraulic conductivity soil layer (LHCSL), and stormwater sediment ponds lined with 80- mil HDPE geomembrane;" Keeping consistent wording with the design documents.	<i>Part I.C.4 has been modified to replace the term "compacted clay base" with "low-hydraulic conductivity soil layer"; however, the HDPE-lined ponds serve to collect both stormwater runoff from the stockpiles as well as sediment. The term "runoff ponds" has been modified to "stormwater sediment and runoff ponds." The term "geomembrane" was added after "HDPE."</i>	WPCP NEV2020104 Part I.C.4
22	Permit Language; Process Components	Page 3, Section 1C[6] should be changed to, "Sulfuric acid plant and process plant, including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the process components within the buildings;" Keeping consistent wording with the design documents.	<i>Part I.C.6 has been modified to include the term "process components" instead of "components".</i>	WPCP NEV2020104 Part I.C.6
23	Permit Language; Process Components	<p>Update Section 1D Monitoring Requirements on pages 3, 4, 5 &6 in accordance with tracked changes. Keeping consistent wording with the design documents and to provide better references and clarifications for various topics. The NDEP-BMRR is requiring both Profile I (Footnote 1) and radionuclides (Footnote 2) for many of the media listed in the "Monitoring Requirements" table. Taken together, both Footnotes 1 and 2 comprise the Profile I-R parameters list. In its memorandum, dated August 13, 2021 (Modification to Profile I-R Parameter List), the NDEP BMRR specifically states the following:</p> <p>If the ore, waste rock, or process fluid is known or likely to contain elevated concentrations of radionuclides, a Profile I-R analysis will be required for some or all monitoring points, as applicable.</p> <p>Based on analyses of ore and waste rock provided to the Nevada Department of Health and Human Services, Radiation Control Program, no elevated concentrations of radionuclides (radium-226, uranium, thorium-232) occur in these materials. Therefore, these materials are exempt from regulation under NAC 459. Furthermore, LNC has no indication that process fluids will contain elevated concentrations of radionuclides. According to NDEP BMRR's August 24, 2021, memorandum (Update and Revision: Modification to Profile I Parameter list), the following actions are to be taken regarding radionuclides:</p>	<i>Ore, waste rock, and process fluid is known and likely to contain elevated concentrations of radionuclides with respect to drinking water constituents as detailed in the Baseline Geochemical Report. The Department of Health and Human Services, Radiation Control Program use different criteria, which are not analogous to evaluating for water pollution control. Therefore, Part I.D of the Permit was not modified and Profile I-R remains as the required parameters for water quality and material sampling at all locations.</i>	Bureau of Mining Regulation and Reclamation GUIDANCE DOCUMENT 2021 MODIFICATION TO PROFILE 1-R PARAMETER LIST



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		<p>If results of the uranium (dissolved) analyses indicate a concentration ≥ 0.010 mg/L, the Division will then require uranium analysis as total recoverable content, i.e., unfiltered, preserved and digested as required per method specifics.</p> <p>If the total uranium analyses indicate a concentration ≥ 0.030 mg/L, the Division will require a Profile I-R analysis.</p> <p>Elevated radionuclide concentrations have not been detected in ore or waste rock, and there are no indications that elevated radionuclide concentrations exist in process fluids so Profile I analysis is the only analytical test that should be recommended. If elevated uranium concentrations are detected during Profile I testing, then LNC will follow the August 24, 2021, guidance.</p>		
24	Permit Language; Monitoring Requirements	The need to collect the elevation of the well collar each time is also unnecessary so that should be removed from the monitoring requirement as well. It will be measured once during installation and then after that the water level only needs to be measured.	<i>The requirement for well collar elevations has been reduced to every 5 years, for submittal at the time of the 5-year renewal.</i>	WPCP NEV2020104 Part I.D.8
25	Permit Language; Monitoring Requirements	Footnote 5 paragraph 2 on page 7 should be removed as the materials are already going to be on containment. This would only be needed if those materials were off containment.	<i>Footnote 5 explains the requirement to initiate kinetic testing if static testing shows the potential for acid generation. It is incorrect that kinetic testing is only required if the materials are off containment. The Permit requires ongoing verification of the character of the materials that is expected and originally described in the Geochemical Characterization Report. If acid generating material is present during operations, containment would be required to be upgraded because the proposed waste rock storage facilities and coarse gangue stockpile are not designed to accept acid-generating material. Footnote 5 has not been removed.</i>	WPCP NEV2020104 Part I.D(5)
26	Permit Language; Permit Limitations	Page 8, Section 1G[1] should be changed to, "The accumulation of more than 2 feet of sediment in the lined sediment ponds at the ultimate facility buildout;" Keeping consistent wording with the design documents and to more accurately describe the design intent. More sediment can be accumulated in the early years before the ultimate facility is built because the runoff area will be smaller, and less water would flow into the ponds. The OMS Manual will provide updated and accurate allowable water and sediment storage tables that will need to be complied with and it will be updated as the facilities expand to the full buildout as defined in this permit.	<i>With drainage pipes placed over the footprint of the facility to convey stormwater and infiltration to the pond, the ponds must be able to contain all solution resulting from a 100-year storm event. Therefore, the pond must not accumulate more than 2 feet of sediment. The permit limitation has not been modified. LNC may submit a permit modification and fee once the OMS Manual is developed to request a different limitation.</i>	WPCP NEV2020104 Part I.G.1
27	Permit Language; Permit Limitations	Page 9, Section 1G[3] should be changed to, "The daily accumulation or flow exceeding 150 gallons per day averaged over the quarter in the leak detection sump and does not meet Profile I water quality criteria identified in Part I.D.4;" This was added because if there is clean stormwater runoff water leaking into the sump from a rainfall event or as a result of intentional filling of the pond during construction to test the dual liners that it should not be considered a violation because it will not degrade the waters of the State. The only time this is likely to occur is during initial construction of the CTFS pad and Reclaim Pond prior to loading. It is LNC's intent to repair any leaks as soon as reasonably possible, but we want to make sure that a clean water leak is not counted as a violation.	<i>Part I.G.3 has not been modified as suggested. Any solution detected in the leak detection system must be reported to ensure that it is investigated properly. Regardless of the quality of water, any solution detected must be investigated to ensure there is not a leak in the primary liner.</i>	WPCP NEV2020104 Part I.G.3
28	Permit Language; Permit Limitations	Page 9, Section 1G[4] should be changed to, "The daily accumulation or flow exceeding 50 gallons per day averaged over the year in the leak detection sump and does not meet Profile I water quality criteria identified in Part I.D.4;"	<i>Please see Response 27.</i>	WPCP NEV2020104 Part I.G.4

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29	Permit Language; Permit Limitations	Page 9, Section 1G[6] should be changed to, "The storage of solution in a single-lined pond, greater than what is needed to ballast the geomembrane in the bottom of the pond, for more than 20 consecutive days for any single event;" Typically water or sediment can be used to ballast the liner in the bottom of the pond so we are asking for an allowance to use some water in the pond to provide ballast until sediment layer can build up over the top.	<i>The permit limitation has not been modified. If LNC believes there is a need to ballast the liner, LNC may submit an engineering design change and corresponding fee to incorporate ballasting into the design of the pond. The Division has not encountered this problem with other single lined ponds in Nevada.</i>	WPCP NEV2020104 Part I.G.6
30	Permit Language; Permit Limitations	Page 9, Section 1G[8] should be changed to, "Other than for the purposes of collecting samples or relocating material from the bottom of the stack or within the Reclaim Pond, tailings material may not be removed from the tailings impoundment, except with prior written authorization from the Division;" Amended to clarify the intent of the limitation.	<i>Part I.G.8 has not been modified as suggested. Collecting samples is authorized under Part I.D.7 of the Permit which requires the analysis. In the event material must be relocated from the bottom of the stack or from within the Reclaim Pond, written Division approval would be required because these activities have the potential to damage the primary liner. In the event damage does occur, the liner would have to be repaired and depending on the extent of the damage, replaced outright.</i>	WPCP NEV2020104 Part I.G.8
31	Permit Language; Permit Limitations	Page 10, Section 1G[9] should be changed to, "The Clay Tailings Filter Stack Facility, as measured vertically from the top of the synthetic liner for any point on the pad, constructed in excess of a maximum permitted elevation of 200 feet over 80-mil HDPE geomembrane;" Keeping consistent wording.	<i>Part I.G.9 was modified to use the term "HDPE geomembrane."</i>	WPCP NEV2020104 Part I.G.9
32	Permit Language; Permit Limitations	Page 9, Section 1G[10] should be changed to, "Ponding of solution on the CTFS shall be limited to occurrences from precipitation or kept as minimal as reasonably possible if minor ponding is formed as a result of dust suppression or active evaporation as part of necessary fluid management procedures.;"	<i>Part I.G.10 was not modified as requested. The Engineering Design Report for the CTFS indicates the lifts will be sloped toward the exterior edges to shed precipitation. Ponding on the CTFS could have significant impacts, encouraging infiltration and affecting the required moisture contents for compaction and stability. Every effort should be made to eliminate ponding on the surface by grading the surface to shed precipitation.</i>	WPCP Application, Attachment J; WPCP NEV2020104 Part I.G.10
33	Permit Language; Permit Limitations	Page 9, Section 1G[11] should be changed to, "The tailings shall be placed in the CTFS in accordance with the latest approved drawings and technical specifications;"	<i>Part I.G.11 has not been modified as suggested. This Permit limitation specifies the allowed moisture content of the tailings material to be placed in the CTFS based on the approved engineering design. The approved drawings and technical specifications indicate tailings material placed in the structural zone must have optimum moisture content of 46% plus/minus 6 percent. If the moisture content in the tailings material deviates from the approved conditions, an updated slope stability analysis must be performed and submitted to the Division for review and approval. Depending on the outcome of the analysis, modification of the CTFS might be required and the WPCP modified.</i>	WPCP NEV2020104 Part I.G.11; LNC 24 September 2021 Response to Comments Attachment 6
34	Permit Language; Permit Limitations	Page 9, Section 1G[12] should be removed as it will be covered by the revised comment 11.	<i>Part I.G.12 has not been modified as suggested. This Permit limitation specifies the allowable moisture content in the non-structural zone to achieve the required compaction. If the moisture content in the tailings material deviates from the approved conditions, an updated slope stability analysis must be performed and submitted to the Division for review and approval. Depending on the outcome of the analysis, modification of the CTFS might be required and the WPCP modified.</i>	WPCP NEV2020104 Part I.G.12
35	Permit Language; Permit Limitations	Page 9, Section 1G[13] should be changed to, "The CTFS shall not degrade waters of the State to the extent that applicable water quality standards or reference values, and background concentrations, are exceeded;" Keeping consistent wording.	<i>Part I.G.13 of the Permit is not intended to apply to only the CTFS. Rather, it is intended to apply to the whole Thacker Pass Project. The Permit was not modified as suggested.</i>	WPCP NEV2020104 Part I.G.13; NAC 445A.424
36	Permit Language; Closure	Section 1[J] on page 11 should be changed to, "Prior to initiating permanent closure activities for a particular facility on site the Permittee must have an approved final plan for permanent closure for that facility;" Not all the facilities will be reclaimed at the same time.	<i>Part I.J contains boilerplate language and states, "Prior to initiating permanent closure activities at the facility, or at any process component or other source within the facility, the Permittee must have an approved final plan for permanent closure." Including the phrase, "or at any process component or other source within the facility" is meant to recognize that not all facilities will be reclaimed at the same time. Part I.J was not changed.</i>	WPCP NEV2020104 Part I.J; NAC 445A.447



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37	Permit Language	Section 2A[1] on page 12 shall be changed to, "The Permittee shall achieve compliance with the conditions, limitations, and requirements of the Permit upon commencement of each relevant activity. The Administrator may, upon the request of the Permittee and after public notice (if required), revise or modify a Schedule of Compliance in an issued Permit if he, she, or they determines good and valid cause (such as an act of God, force majeure, a labor strike, materials shortage, or other event over which Permittee has little or no control) exists for such revision;" Added to cover all typical wording used for forces out of one's control.	<i>Part II.A.1 has not been modified as suggested and contains boilerplate language. The reference to "an act of God, a labor strike, materials shortage, or other event over which Permittee has little or no control" is cited from NAC 445A.263.</i>	WPCP NEV2020104 Part II.A.1; NAC 445A.263
38	Permit Language	Section 2A[3] on page 13 shall be changed to, "Whenever the Permittee becomes aware that he, she or they failed to submit any relevant facts in the Permit application or submitted incorrect information in a Permit application or in any report to the Administrator, the Permittee shall promptly submit such facts or correct information. Any intentionally false inaccuracies found in this information which led to degradation of the waters of the State may be grounds for revocation or modification of this Permit and appropriate enforcement action;" A simple spelling error could technically be considered an inaccuracy but should not be grounds for a permit revocation or modification.	<i>Part II.A.3 contains standard boilerplate language applied universally for all mining water pollution control permits. The Division will consider updates to address gender inclusivity in our next update to standard Permit boilerplate language. Note that grounds for permit revocation or modification are triggered by inaccuracies which led to degradation of waters of the State, as opposed to a minor spelling error in any document.</i>	WPCP NEV2020104 Part II.A.3; NRS 445A.600 NAC 445A.4155, NAC 445A.416, and NAC 445A.417
39	Permit Language;	Section 2B1[f] on page 13 shall be changed to, "The testing information identified in Part I.D.7" This wording is too specific. There are more testing requirements than just moisture content and compaction. All that needs to be referenced are the latest technical specifications for the project.	<i>Part II.B.1.f has not been modified as suggested. The Division specified monitoring requirements and reporting for moisture content and compaction because those parameters are crucial for the intended operation, stability, and functionality of the CTFS.</i>	WPCP NEV2020104 Part II.B.1.f
40	Permit Language;	Section 2B2[a] on page 14 shall be changed to, "Annual neutralization study progress report and interim as-built report for the CTFS, including but not limited to a report describing construction activities, as-built drawings, construction photos, field & laboratory testing, and a revised stability analysis incorporating data collected within the year". Added in the typical information that is included in an as-built report. It's not just moisture content and compaction.	<i>"A report describing construction activities, as-built drawings, construction photos, field and laboratory testing," has been added to Part II.B.2.a in addition to "chimney drain placement, tailings moisture contents, and compaction QA/QC."</i>	WPCP NEV2020104 Part II.B.2.a
41	Permit Language;	Section 2B3[a] on page 14 shall be changed to, "A release of any quantity of hazardous substance, as defined at NAC 445A.3454, to natural surface water bodies, or that threatens a vulnerable resource, as defined at NAC 445A.3459, must be reported to the Division as soon as practicable after knowledge of the release, and after the Permittee notifies any emergency response agencies, if required, and initiates any action required to prevent or abate any imminent danger to the environment or the health or safety of persons. An oral report shall be made by telephone to (888) 331-6337, and a written report shall be provided within 10 days in accordance with Part II.B.4.b". Since there could be surface water in double contained area that has a hazardous substance released into it, we added wording specifically referencing the natural waters of the State.	<i>Part II.B.3.a contains standard boilerplate language and has not been modified as suggested.</i>	WPCP NEV2020104 Part II.B.3.a



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42	Permit Language	Section 2B3[c] on page 15 shall be changed to, "A release of a nonpetroleum hazardous substance, not subject to Parts II.B.3.a. or II.B.3.b., from one of the facilities on site to soil or other surfaces of land, and the total quantity is equal to or exceeds 500 gallons or 4,000 pounds, or that is discovered in or on groundwater in any quantity, shall be reported to the Division no later than 5:00 P.M. of the first working day after knowledge of the release. An oral report shall be made by telephone to (888) 331-6337 and a written report shall be provided within 10 days in accordance with Part II.B.4.b. Smaller releases from one of the facilities on site, with total quantity greater than 25 gallons or 200 pounds and less than 500 gallons or 4,000 pounds, released to soil or other surfaces of land, or discovered in at least 3 cubic yards of soil, shall be reported quarterly on NDEP Form 0390 or equivalent." Just referencing that it is a release on property from one of the facilities.	<i>Part II.B.3.c is standard boilerplate language and has not been modified as suggested. This Permit is for the Thacker Pass Project. It is inferred that Part II.B.3.c applies to the Project area and facilities on site.</i>	WPCP NEV2020104 Part II.B.3.c
43	Permit Language	Section 2B3[d] on page 15 shall be changed to, "Petroleum Products and Coolants: If a release is subject to Parts II.B.3.a. or II.B.3.b., report as specified in Part II.B.3.a. Otherwise, if a release from on-site equipment or a facility of any quantity is discovered on or in groundwater, or if the total quantity is equal to or greater than 100 gallons released to soil or other surfaces of land, report as specified in Part II.B.3.c. Smaller releases, with total quantity greater than 25 gallons but less than 100 gallons, released to soil or other surfaces of land, or if discovered in at least 3 cubic yards of soil, shall be reported quarterly on NDEP Form 0390 or equivalent." Just referencing that it is a release on property from a piece of equipment or one of the facilities.	<i>Part II.B.3.d is standard boilerplate language and has not been modified as suggested. It is inferred that this part applies to activities occurring in the Project area.</i>	WPCP NEV2020104 Part II.B.3.d
44	Permit Language	See tracked redline changes and comments for edits to the Fact Sheet.	<i>LNC proposed to remove several sections in the Fact Sheet due to being too specific. This information is critical to provide understanding of how the components were approved by the Division. Deviations from the approved designs may require submittal of a Permit modification and fee and must be approved in writing by the Division. A permit modification meeting the criteria pursuant to NAC 445A.417 will require a 30-day public comment period. Sections of the Fact Sheet labeled as too specific such as the restricted permit elevation, approximate waste rock slopes and lift heights, perforated pipe sizes at the base of constructed stockpiles and storage facilities, stability analyses, seepage calculations, tailings material placement, compaction requirements, chimney drain placement, reclaim pond sump and pumpback system, and description of groundwater quality at specific wells were not removed.</i> <i>Minor clarifications were made regarding site location, pond names to be consistent with the Permit, the concrete pad to be constructed for the gas side of the SAP, and seepage calculations.</i>	NAC 445A.417
E-mail from Edward Bartell, resident of Orovada, received 30 November 2021.				
45	Timing of Permit Decision; Water Quantity and Quality	I am respectfully requesting a 30 day extension to respond to the NDEP's Lithium Nevada Thacker Pass Permits.	<i>As requested, the Division extended the public comment period one week from December 1, 2021 to December 8, 2021.</i>	



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46	Timing of Permit Decision; Water Quantity and Quality	<p>We believe we will be substantially affected by the proposed Thacker Pass mine. Much of the NDEP permitting is relying on LNC groundwater modeling and underlying data. We are currently engaged in extensive litigation over this very model, with a 10 day hearing starting tomorrow in front of the State Engineer.</p> <p>Ironically the very reason I cannot meaningfully respond to the proposed permits, is because me, my legal council, and our expert have to prepare for this substantial litigation and trial.</p>	<i>Comment noted.</i>	
47	Timing of Permit Decision; Water Quantity and Quality	<p>During the discovery process in the Federal BLM litigation we found several documents that are troubling that call into question the entire project.</p> <p>Due to the rushed EIS it appears BLM did not have time to respond to comments from the public, and government agencies, about water quality and quantity concerns. Hence, BLM turned comment responses over to LNC to respond in mass to comments from the public, and government agencies. See Attachment 1.</p> <p>Once these comments were incorporated into the FEIS (with minor grammatical changes) ; LNC then used these very comments to then respond to my earlier comments to NDEP, without disclosing that this very language originated at LNC, BLM just rubber stamped it. See Attachment 2.</p> <p>Specifically with respect to PZ17-01 LNC represent to NDEP "The data was confirmed to be valid." See Attachment 2 p. 3. It is a vastly different context if BLM confirmed data was valid; rather than what appears to be the case that LNC is claiming their own data is valid without any independent review. I can find no evidence in the BLM Administrative Record, that BLM confirmed the data in question; all BLM did as far as I can tell; is repeat what LNC told them. In Attachment 1 p. 7.</p>	<i>Please see Response 50 regarding data verification.</i>	
48	Perched Aquifers	<p>The third document I am attaching reveals the catastrophic declines in water tables in the pit area that resulted from exploration. (<i>Groundwater Occurrence at the Western Lithium Kings Valley Clay Mine Project</i>)(2012) This document notes with respect to monitoring wells:</p> <p>"These wells were screened several hundred feet across interbeds of ash and claystone. The decline in water levels is attributed to leakage from upper, perched portions of the bedrock aquifer to the lower portions through the monitoring well. Eventually a new equilibrium was reached, that is several feet to several hundred feet lower than where water was first encountered. Attachment 3 p. 10. (emphasis added)</p>	<i>The potential draining of perched aquifers in the area within the vicinity of the referenced boreholes would not be expected to result in extensive water table declines and be limited to localized perched aquifers. Potential groundwater degradation will be monitored in downgradient monitoring wells during facility operations.</i>	
49	Perched Aquifers	<p>I would also note allowing water to run down boreholes appears to be an unlawful comingling of water strata under NAC 534.4355 (6), (10). Also the potential contamination of groundwater under NAC 534.4359; whereas wells that had water "cascading down the borehole" were also were naturally contaminated with arsenic. See LNC's Baseline Data Report.</p>	<i>NAC 445A.424 allows the establishment of background concentrations. Because arsenic is elevated in the regional aquifer, the perched aquifer is not likely to cause degradation. Nonetheless, any exceedance in profile I reference values or previously observed concentrations would be monitored and investigated.</i>	NAC 445A.424



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50	Data Verification	Rather than granting LNC more permits; LNC should do on the ground investigations of damage that may have already occurred to water quality. It is my understanding that NDEP has not gathered any data on the ground and is instead relying entirely on LNC data.	<i>NDEP oversees data collection by reviewing and approving sampling and characterization plans, which include sample locations, frequency, parameters to be analyzed, methods of collection, and requirements to utilize certified laboratories for analyses. Data collection is completed by the mine operator or by consultants. BMRR is not present to observe all data collection activities, but can and at times does observe sampling activities during quarterly inspections.</i>	WPCP NEV2020104 Part II.E.5
51	Proposed Monitoring	Given the extensive draining of water tables that appears to already occurred via "monitoring". It appear NDEP's proposal for LNC to do more "monitoring" will exacerbate this problem. The more holes are drilled to "monitor" the more contaminated water runs down the boreholes & LNC has a cheap way to dewater their pit --- they will "monitor" their way to a dry pit.	<i>It appears that large screen intervals at previous wells is the reason that localized perched aquifers may have drained into deeper elevations. LNC is required to submit the designs of the piezometers to measure the water levels at the pit for Division approval and to ensure proper screen intervals are inserted to prevent this occurrence in the future.</i>	
		<p>NDEP Note: Mr. Bartell's email included the following attachments:</p> <p><u>Attachment 1 BLM Record LNC rsp cmts .pdf</u> <i>A 106-page October 2020 technical memo titled "Thacker Pass Project DEIS Responses to Select Water Resource Comments" from Piteau Associates to Lithium Nevada Corporation, documenting Piteaus's input regarding comments on the Thacker Pass Project Draft EIS)</i></p> <p><u>Attachment 2 NDEP Clay Mine Cmmt Rsp.pdf</u> <i>A March 2021 email chain titled "Kings Valley Lithium Public Comment (NEV2015108) documenting comments from Mr. Bartell received by NDEP in February 2021 regarding the Notice of Proposed Action for the Kings Valley Lithium Water Pollution Control Permit, NDEP's notification to LNC of the comments received, and LNC's input regarding Mr. Bartell's comments.</i></p> <p><u>Attachment 3 BLM Record GW Study 2012.pdf</u> <i>A 19-page September 2012 technical memo titled "Groundwater Occurrence at the Western Lithium Kings Valley Clay Mine Project" from Schlumberger Water Services to Western Lithium Corporation regarding the Plan of Operations submitted to the BLM for the Kings Valley Lithium Project.</i></p>	----	
<i>E-mail from Anthony Johnson, Natural Resources Student, received 30 November 2021.</i>				
52	Tribal Consultation	<p>Thank you for the opportunity to comment on Notice of Proposed Action – Bureau of Mining Regulation and Reclamation-Thacker Pass Project. I am a natural resources student studying water quality and sustainable resource management. I have family and friends that will be impacted by the decisions made regarding the Thacker Pass lithium project. I look forward to participating in a fair and just decision-making process that enhances the lives of Northern Nevadans.</p> <p>While I understand the importance of transitioning away from fossil fuels, I would like to raise some concerns about the proposed Lithium Nevada project and hopefully provide some new information regarding The Applicant for Water Pollution Control Permit NEV2020104.</p> <p>Additionally, I want to acknowledge that this project is being proposed on the traditional homelands of the Numu (Northern Paiute) and Newe (Western Shoshone) peoples. It is my hope</p>	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i>	



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		<p>that we proceed with their cooperation and that any decision made will reflect the larger communities' wishes.</p> <p>I want to address the committee with the following concerns: water quality, and water availability. Below is a detailed description of the concerns I hope will add to the conversation leading to a truly sustainable green power source.</p>		
53	Historical Mining; Water Quality	<p>Water Quality</p> <p>A common saying of the Lakota people is "Mní wičhóni" or "Water is life."1 Water is foundational to life on earth and water quality must be of great concern. This is especially true in the Great Basin where water is so scarce, and of diminished quality2.</p> <p>Much of my concern stems from the fact that we Nevadans understand what it is like to occupy a region that has already been heavily impacted by historical mining practices. To this day many Nevadans cannot consume the fish of their local waters due to contaminates because of poorly established environmental policies that gave mining operations a free pass to pollute3.</p> <p>Unfortunately, Nevadan's are far too familiar to the reality of toxic metals in our waters. An article on Nevada's ground water claimed, "Mining activities have produced and will continue to produce tailings piles and milling wastes that are susceptible to leaching of contaminants. More than 300 mining districts throughout Nevada may be adversely affecting ground-water quality."4 Again, this is not new information to most Nevadans who have had to adapt to this reality, I simply add it to remind us that there is a history that we must reflect on when making decisions about projects such as this.</p> <p>The Thacker Pass project must be considered with this hindsight if we want to protect people and the environment. How can we be sure that a lithium project of this scale will not have similar consequences? We know that there is a limited understanding on the effects of lithium in our water source. We can be sure of this based on the research that has already been conducted in South America.</p>	<p><i>Please see Response 95 regarding impacts from historic mining. The regulations implemented by BMRR were adopted in 1989. Regions may be more impacted by pre-regulation mining activities which are overseen by the Abandoned Mine Lands Program.</i></p> <p><i>With the implementation of the BMRR Program in 1989, modern mining has significantly more oversight on evaluating if degradation is occurring and requiring the Permittee to investigate and mitigate the source.</i></p>	
54	Health Concerns	<p>In a Harvard International Review article, the author claimed, "In Chile, local inhabitants have criticized mining companies for polluting their waters and covering their landscapes in blankets of discarded salt. In Argentina, natives of the Salta and Catamarca provinces have alleged that the operations of lithium mining companies have contaminated the streams that are used by humans and livestock and for the purposes of crop irrigation."5 Unfortunately, these criticisms have not been unfounded. An additional article analyzing the health of Chileans living near lithium extraction sites wrote this, "lithium blood levels were exceptionally high due to elevated levels of lithium in the drinking water."6 This is certainly problematic considering researchers claim, "we still know almost nothing about the effects of lithium on normal people particularly in terms of brain function."7 Unfortunately, the South American example is further complicated considering research has found that exposure to lithium "may adversely affect fetal</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>Aside from the background concentrations that are already elevated at the Thacker Pass Project, groundwater must meet Profile I drinking water reference values. Surface waters must meet established water quality standards specific to the water body pursuant to NAC 445A.121 through NAC 445A.2234. Water quality data is required to be submitted for Division review on a quarterly and annual basis under Parts II.B.1 and II.B.2 of the Permit.</i></p> <p><i>NDEP acknowledges impacts of historical mining and has an Abandoned Mine Lands program to review, prioritize, and address those impacts with available resources. The Nevada mining regulations were established to prevent impacts like those described by the commenter. In the past, mines were not required to obtain permits or comply with regulations. The</i></p>	



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		<p>development” and be transmitted “transmaternally via breast milk and transplacentally in utero” potentially causing negative health affects to the most vulnerable 8,9.</p> <p>Additional studies are being conducted in South America as well regarding lithium exposure. In one article, researchers found an association between hyperthyroidism and lithium exposure, meanwhile calling for stricter screening regulations to protect people10.</p> <p>These health concerns are not limited to South America either. Another source wrote this about a lithium project in Tibet, “lithium mining has leaked chemicals like hydrochloric acid into the Liqi River, which resulted in the poisoning of fish and the killing of livestock.”11</p> <p>When considering the potential for future studies, the authors of one article wrote “[it] seems very likely that lithium contamination could be important in areas where lithium is processed (such as in Nevada, North Carolina, and Tennessee)”12. I bring this to your attention only show that researchers are already opening the door to potential studies in the United States including here in Nevada. Are we willing to allow Nevadans to be the next test subjects in this field of health research? How can we ensure the safety of Nevadan’s including the most vulnerable populations?</p>	<p><i>mining regulations and permitting processes were developed to prevent these types of issues. The record since the adoption of mining water pollution control regulations in 1989 and reclamation bonding regulations in 1990 shows that Nevada's regulations are highly effective at preventing release of contaminants to the environment and ensuring that mines are closed and reclaimed to a safe and productive post-mining condition. Mine operators in Nevada are required to abide by the law and to operate in accordance with all permits issued.</i></p>	
55	Water Quality	<p>The Thacker Pass project claims that it has support of the local people because it will create jobs but that is only one side of the story. We know that there are individuals that will be impacted by the mine that are concerned with the quality of their water. Jean Williams, of Orovada stated the following, “this mine at Thacker Pass is not being permitted for the wellbeing of our farming community. The process they wish to use is questionable. The amount of sulfur to be brought in for processing has the potential for permanent harm to crops and cattle production.”13 Can we assure the local agriculture community that we are looking out for their best interest?</p> <p>Can we assure that the mitigation strategies have been defined in great enough detail to ensure the safety and wellbeing of Nevadans? Are we positive that the benefits of the lithium mine will not be overshadowed by environmental degradation and risks to human health?</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>The WPCP Permit application for the Thacker Pass Project with additional permit requirements and limitation satisfies the requirements of NAC 445A.350 through NAC 445A.447 to ensure waters of the State are protected. Pursuant to NAC 445A.401, if an application is technically complete, the Division must prepare and issue a draft Permit, fact sheet, and public notice.</i></p> <p><i>Pursuant to NAC 445A.408, once the public comment period has concluded, the Division shall issue a decision to deny or approve the Permit.</i></p> <p><i>The proposed mitigation assumes water will be degraded as a result of the Thacker Pass Project. Pursuant to State regulations, a facility regardless of size or type may not degrade waters of the State. Therefore, the Water Pollution Control Permit (WPCP) includes a limitation that does not allow mining below the water table. A proposal to allow mining below the water table would require a permit modification that includes additional studies and plans to demonstrate that degradation of waters of the State will be prevented. Such a permit modification would be subject to NDEP review and approval after a public comment period. The permit limitation will prevent a pit lake and associated groundwater degradation from developing. Due to this permit limitation, there will be no need to institute a long-term funding mechanism for mitigation of degraded water. A 15-foot buffer will be maintained above the water table, with piezometers installed in advance of mining and continuously maintained to confirm the water level as mining progresses.</i></p>	<p>Nevada Administrative Code (NAC) 445A.565; WPCP NEV2020104 Part I.G.2; Fact Sheet Section "Mining"</p>



56	Water Quantity	<p>Water Availability</p> <p>Even if the committee decides that the above water quality concerns have been appropriately addressed, there still lies the issue of water availability. In the final EIS the BLM noted that the “a reduction of groundwater levels would likely result in a reduction of the groundwater discharge perennial springs or streams with a corresponding reduction in spring flows, lengths of perennial stream reaches, and their associated riparian/wetland areas.”¹⁴ I include this simply to remind us that the project is going to alter the regions water availability. According to one source Lithium Nevada Corporation will “pump up to 3,250 gallons per minute of groundwater”¹⁵, a substantial amount of water considering the arid location of the proposed project. Knowing that this project will result in reduced ground water levels, I ask the committee if this use is justified?</p> <p>In the Final EIS under section 4.3.1.1.1 Water Quantity, the report claims “The model simulations predict that drawdown would result in reductions in baseflow of up to approximately 4 percent in Thacker Creek, 3 percent in Crowley Creek and less than 1 percent reduction in the upper and middle reaches of Pole Creek (Piteau 2020a). Therefore, mine related drawdown is not expected to result in a measurable effect to flows in the perennial stream reaches in the Project area including Thacker Creek (or flows into Thacker Pond), Crowley Creek and Pole Creek”, however it also noted “There are no perennial stream reaches within or near the maximum extent of the projected drawdown areas.” Knowing that we are considering altering mostly ephemeral streams how can we be sure this drawdown will not have a more significant impact on water availability since it is already incredibly limited?</p> <p>It is important that we do not simply consider this project in the contexts of itself but in relation with the region, current and future climate conditions, and additional state goals/policies, and other projects that will also tax the over allocated Northern Nevada Water supply. According to one source, “Nevada will begin 2022 under a federally-declared water shortage and will have to reduce its annual usage by 7% — or 21,000 acre-feet, which roughly equals 6.8 billion gallons.”¹⁶ How does this fit into the state goal of reducing its water usage? While the state is considering ways to conserve its water resources, we are considering a project that will draw down a significant amount of water. Again, I ask is this consumption justified?</p> <p>According to the 2021 Water-year in Review report, “Drought began developing across Nevada during 2020. By the start of the 2021 water year (October 1, 2020) more than 95% of the state was in drought, and over half of the state was in D3 Extreme or D4 Exceptional Drought.”¹⁷ This report did not exclude Humboldt County, in fact it noted that Humboldt County is amid a moderate to severe drought¹⁸. According to another source, “Clark County and Humboldt County withdraw the largest shares of water in the state, about 478 and 470 Mgal/d, respectively.”¹⁹ There is certainly a correlation between these two statements. Can we be sure that the Thacker Pass Project will not contribute to worsening conditions? Is it wise to continue allocating Humboldt County water during these current conditions?</p> <p>Drought, water issues, and climate uncertainty is obviously not new information and has been documented on many occasions. Policy makers in the Great Basin region have been concerned with drought and climate conditions for several years. In the Senate hearing 110-273 (Great Basin Threats) research ecologist Jane Belnap wrote, “As population grows, the demand for water will increase at the same time that water availability is decreasing due to climatic</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i></p>	
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		<p>conditions.”²⁰ Belnap also noted “Small springs and streams may dry up earlier in the season, or completely, placing plants, animals, and humans that depend on surface water at risk.”²¹</p> <p>In the same senate hearing then Senator Harry Reid claimed “It’s certainly clear that wildfire, invasive species, Cheatgrass and drought are wreaking havoc on the Great Basin. Temperatures in the west have been steadily rising for the past fifty years, but very much so in the past decade. A report from the world’s best climatologists shows that summer temperatures in the west could increase by up to nine degrees by mid-century. Hotter will make the southwestern States even warmer and more arid, even when conditions are compared to those we’re experiencing today. The warming will make droughts, I’m sorry to say, longer and more severe. Invasive plants like Cheatgrass thrive in the hotter and drier conditions that will come with climate change.”²² My point being that when considering this project, we should be viewing it in a way that considers the regional circumstances. We know that because of invasive plants, and more severe wildfires our water sources will become more taxed than they already are. We should not be over allocating our waters because we will certainly need it as we experience more severe weather conditions, more intense fire regimes, and increased population growth.</p>		
57	Sustainability / Climate Change	<p>Final Comments</p> <p>I understand the need to develop the region and to bring jobs, but I also think that this growth needs to be sustainable. This project has been given an estimated project life of forty-six years. During this time the Lithium Nevada Corporation is permitted to continue exploration of additional mineral resources. Yet, climate scientists in one of the most extensive reports on the climate yet have just found that we are very likely to experience unpredictable extreme temperatures over the next thirty years²³. A friend of mine, the late Norm Harry of the Walker River Paiute Tribe once explained to me the foolishness of how Nevada often considers growth and development on what is economically possible, not based on what is ecologically realistic. My hope is that you consider these concerns as you have the power to change the region and impact people’s livelihoods.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP appreciates the magnitude of the challenges faced by our region in response to climate change and the need to integrate sustainability and resiliency into state planning efforts. We refer to the Nevada’s Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/).</i></p>	
Letter from Ron Cerri, Chairman, Humboldt County Board of Commissioners, received 1 December 2021 via email, and 3 December 2021 via standard mail.				
58	Availability of Public Records	Paraphrased: Regarding Part I.B.6 of the Permit, will the County’s Engineer of Record be allowed to review any modifications of the Permit to affirm the foundation design to be modified?	<p><i>Yes, all proposed modifications submitted to the Division are available for review upon request.</i></p> <p>The Division has placed our records related to this project on our online document viewer, which is accessible to the public, at https://ecms.nv.gov/ndep. If you are unable to find the records you are looking for online, you may submit a public records request at https://ndep.nv.gov/resources/public-records-request.</p> <p><i>BMRR plans to post Thacker Pass related permit and project information online for review within 2 weeks of receipt.</i></p>	NRS 239.010
59	Kinetic Testing and Materials Management	Paraphrased: Regarding Part I.D Footnote 5, at which week in the kinetic testing will this determination be made? Are there provisions for the Mined Materials that are mined during this interim time to be relocated post-determination to a safer storage/isolation facility?	<p><i>A kinetic test must be conducted for a minimum of 20 weeks, at which time the Permittee may submit a request to the Division for termination if stable conditions are observed. If kinetic testing indicated that acid generating material is being mined, the Permittee would be required to submit a new waste rock management plan and designs for associated containment structures for the acid generating material to be stored.</i></p>	WPCP NEV2020104 Part I.D(5)

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60	Kinetic Testing and Materials Management	What cleanup provisions are in place if there is downwind distribution of significant amounts of wind borne tailings from the Clay Tailing Filter Stack facility that could leach into the vadose zone during storm events and ultimately contaminate groundwater?	<i>Downwind distribution of any amount of wind borne tailings from the CTFS would be considered a release and require the appropriate remediation and clean up activities required under Parts II.B.3 and II.B.4 of the Permit.</i>	WPCP NEV2020104 Parts II.B.3 and II.B.4; NAC 445A.3456
61	Kinetic Testing and Materials Management	Will the operator have water meters on the supply wells to ensure that the operation doesn't take other stakeholders' allocations?	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	
62	Kinetic Testing and Materials Management	Paraphrased: Does a 2-foot layer of cover material on the waste rock facilities and coarse gangue stockpile account provide adequate protection to the covered infrastructure during prospective environmental changes due to climate change? i.e. does the cover need to be thicker at some point in time to ensure long term freeze/frost protection?	<i>Based on the various sensitivity analyses performed for the cover system, i.e., "No Transpiration", "Decreased Potential Evaporation/Transpiration", and "Precipitation X 2", the proposed 2-foot thick cover is expected to be sufficient to manage potential climatic changes.</i>	Piteau CTFS
63	Kinetic Testing and Materials Management	Will the vented combustion products include nitrogen compounds that could be deposited downwind of the SAP with potential for groundwater contamination during infiltration through the vadose zone, particularly during extreme storm events?	<i>The Division did not directly evaluate the impact of potential downwind deposition of airborne compounds on groundwater quality. However, the WPCP requires monitoring for Nitrate + Nitrite and total Nitrogen at monitoring wells downgradient of the processing facility on a quarterly basis. This allows us to monitor for trends indicating potential contamination related to the processing facility. Any exceedances of drinking water standards are considered potential violations and will require investigation to determine the source of contamination and remediate contaminated groundwater.</i>	NAC 445A.424
64	Tailings Facility; Materials	Has the filtering of tailings material been tested on a pilot scale to confirm its success?	<i>Yes, the filtering of tailings material has been tested on a pilot scale to confirm success. The document titled "Filterability of LNC Neutralized Clay Slurry V2" was provided to the Division during the technical review and has been uploaded to the public document viewer.</i>	4 August 2021 Filterability of LNC Neutralized Clay Slurry v2
65	Tailings Facility; Stability	In the event of a Maximum Design Event, will there be a LIDAR survey to verify stability or to quantify movement that should occur?	<i>In the event of a Maximum Design Event, the Division would require verification that all materials remain on containment. If severe displacement has occurred, the Engineer of Record would inspect the facility and provide recommendations of what actions are necessary.</i>	
66	Reclaim Pond	Will the concrete associated with the CTFS Reclaim Pond be a sulfate resistant mix, e.g., Type 5?	<i>The Engineering Design Report states, "the 18-inch diameter HDPE pipe sleeve will be held down by sheet of 80-mil HDPE liner ballasted with two concrete filled six-inch diameter HDPE pipes. At the crest of the pond the 18-inch diameter HDPE pipe transitions to a flanged stainless-steel pipe that is braced and welded to a steel plate embedded into a six feet wide by six feet long by three feet deep reinforced concrete anchor block."</i> <i>The two concrete filled 6-inch diameter HDPE pipes ballast pipes will have end caps at the bottom and the reinforced concrete block is located outside of the pond. Therefore, a sulfate resistant, Type 5 concrete is not required because reclaim solution should not come in contact with the concrete.</i>	WPCP Application, Attachment J
E-mail from Taught2believe@yahoo.com, received 1 December 2021.				
67	Equipment Failures/Spills	It is of the general public consensus that "pollution control" has no definitive guarantee that the filtration systems as well as overall contractor or equipment failure will not occur.	<i>Any equipment failures causing process fluid to escape secondary containment would be considered a release and would be subject to reporting and clean up requirements pursuant to Parts II.B.3 and II.B.4 of the Permit.</i>	WPCP NEV2020104 Parts II.B.3 and II.B.4; NAC 445A.3456

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68	Water Rights	The main problem with the concept of water pollution control is the fact that you ignore the reality of our shortage of water. We don't have 1.7 Billion gallons of water (in a desert biome already lacking water) to use annually exclusively for lithium...	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns. The mission statement of NDEP is "preserve and enhance the environment of the State in order to protect public health, sustain healthy ecosystems, and contribute to a vibrant economy."</i>	
69	Water Quality	...as well as cant guarantee that polluted water seepage wont contaminate the surrounding area.	<i>A series of downgradient monitoring wells are required for routine monitoring under Part I.D.8 and reporting under Part II.B.1 to measure water quality and ensure degradation is not occurring at the Thacker Pass Project.</i>	NAC 445A.398 WPCP NEV2020104 Parts I.D.8 and II.B.1
70	Effectiveness of Controls; Water Pollution	<p>We are already well aware that this whole area will be contaminated negatively impacting the surrounding pristine ecology of old growth sage, greater sage grouse, golden eagles, and actual human communities. This will also impact farmers who grow alfalfa for export to california cattle, we know you want to kick them off their lands their livelihoods in order to steal their already limited aquifers. You conflate the numbers and language in order to suit your violent extractive agenda. You want to "liberate" the lithium from the clay, How about you liberate these individuals from your biased greed and obvious corruption.</p> <p>The consequence of this project will destroy this regions intrinsic value, you talk about the benefit of having such a project in an economic standpoint which is your error. what will be the point of this emerging white gold rush if the water and air is contaminated for hundreds of years. These are greenwashed lies, I urge you all to visit the land you seek to desecrate and destroy, to spend time there to contemplate the future for your children and the rest of the world. Thank you for your time and we can only hope you make the right decisions as individuals, not as constituents serving the interests of corporations and agencies that have lost their way and purpose.</p>	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns. The mission statement of NDEP is "preserve and enhance the environment of the State in order to protect public health, sustain healthy ecosystems, and contribute to a vibrant economy."</i>	
E-mail from Bree Kasper, resident of Orovada, received 1 December 2021.				
71	Water Quality	I am a local resident concerned about our water quality and the potential risks associated with granting permitting and permissions to Lithium America's extraction in Thacker Pass. For a mine that has a life span of 47 producing years, I don't believe we should grant access to a region that will experience polluted water for the next 300 years (4 generations).	<i>Please see Response 55 regarding the Permit limitation. Part I.G.2 of the Permit restricts mining to remain 15 feet above the water table. With this restriction, degradation of waters of the State is not anticipated.</i>	
72	Water Rights	Lithium Americas plans to extract more than 5,000 acre-feet of water annually from an aquifer already over allocated more than 30,000 acre-feet per year.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	

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73	Water Quality	The BLM's Final Environmental Impact Statement even declares the high possibility that the mine will leach uranium, antimony, sulfuric acid, and other dangerous substances into groundwater. To pollute the groundwater would be detrimental to this dry region!	<i>Please see Response 55 regarding the Permit limitation. Part I.G.2 of the Permit restricts mining to remain 15 feet above the water table. With this restriction, degradation of waters of the State is not anticipated.</i>	
74	Water Quality	I implore the decision makers in this matter to earnestly reconsider allowing permissions to BLM & Lithium America's to continue with this process. Water is life and needs to be protected by this generation for all future generations to come.	<i>Please see Response 55 regarding BMRR regulatory requirements.</i>	
Oral comment from Bree.				
75	Monitoring Requirements	My concern is that we will be monitoring the water table cleanliness that you spoke of the not authorized to mine below the water table. So I was just curious for how long and who would be in charge of monitoring. That they will be staying above 15 feet and they will be doing it monthly.	<p><i>LNC will be required by Part I.D.2 to conduct monthly monitoring of water levels at the pit as long as they are operating under the WPCP as it is issued. The WPCP has a term of five years, after which LNC must apply for renewal to continue operating. LNC must submit the monitoring data to the Division on a quarterly basis in accordance with Part II.B.1 of the Permit.</i></p> <p><i>LNC may propose to modify their WPCP by submitting a permit modification to the Division for review and approval. This could potentially include a proposal to mine below the water table or to change monitoring requirements. The Division cannot authorize any modifications to the mine plan that are expected to result in degradation of waters of the State. Thus, LNC will be required to conduct water level monitoring on a monthly basis unless and until an alternate plan can ensure that mining below the water table will not result in groundwater degradation. Lithium Nevada may submit an application to mine below the water table; however, the application materials must present a plan that would not result in degradation of waters of the State.</i></p> <p><i>A proposal to allow mining below the water table would require a permit modification that includes additional studies and plans to demonstrate that degradation of waters of the State will be prevented. Such a permit modification would be subject to NDEP review and approval after a public comment period.</i></p>	WPCP NEV2020104 Part I.D.2; NAC 445A.409; NAC 445A.417
Oral comment from Anthony Johnson, Natural Resources Student.				
76	Drought and Water Availability	My question is if drought continues in the state, um, and I guess I'm curious if drought is related in the WPCP Act and if it is related if drought continues, is there any way to make an amendment to the permitting process or are there changes that LNC has to abide by because of changed water conditions and water availability?	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	NAC 445A.424
Oral comment from Max Wilbert, Co-founder of Protect Thacker Pass.				
77	Hydrology and Modeling	So, the first thing I want to say, more on a technical note, is that I had a conversation with Dave Kempler who was the Winnemucca District Manager prior to the current district manager and who oversaw a good deal of the permitting for this project and he relayed to me directly that the hydrology in this area is exceptionally complex, that this is volcanic region. Obviously, the origin of it is the yellowstone hotspot as I'm sure most people here know. And that as a result of that you have a pretty unique hydrology with quite a few perched aquifers. If folks don't know what a perched aquifer is, it's like the groundwater itself is down on the bedrock, but you	<p><i>Perched aquifers were not considered in the model because, as described, perched aquifers occur above the water table and their occurrence does not affect the project's potential to degrade.</i></p> <p><i>If perched zones are encountered during mining above the water table, LNC will have to manage the water in their operations. Water from perched zones is not permitted to collect and remain in the pit.</i></p> <p><i>As more information and data is collected in the field during operations, the model will be updated accordingly.</i></p>	



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		<p>might have other layers of impermeable rock or impermeable sediments that are creating a lens of water above them. That's a, quote/unquote, "perched aquifer."</p> <p>He also mentioned the prevalence of lava tubes and similar complex underground structures in the region that created a hydro -- hydrological situation that's just -- just very complex. And I believe that the groundwater at one of the test wells that Lithium Nevada drilled during their exploration of the area already punched through one of those perched aquifers and caused the groundwater level to drop by something like 80 feet.</p> <p>So, my question would be, if -- are these perched aquifers and the complexity of the hydrology in this region accounted for in your models and your projections?</p>		
78	Hydrology	<p>And also on that note, are you relying primarily or only on hydrology data that's provided by consultants paid by Lithium Nevada Corporation?</p>	<p><i>Data collection and reporting is completed by the mine operator or by consultants. In this case, by Lumos, Schlumberger Water Services, SRK Consulting, and Piteau Associates.</i></p> <p><i>The underlying question here is whether LNC may have submitted falsified data, models, and/or reports. While NDEP does not collect the field data or create the hydrology reports necessary to characterize this or any other mine project, our PhD hydrologist evaluates the data collection methods, as well as the modeling methods and results based on recognized industry and academic practices as well as conformance with Division guidance.</i></p> <p><i>Our guidance for modeling is published on our Website:</i></p> <p><i>Guidance for Geochemical Modeling at Mine Sites:</i> https://ndep.nv.gov/uploads/land-mining-reqs-guidance-docs/20210521_Geochem_GuidanceRev00_ADA.pdf <i>Guidance for Hydrogeologic Groundwater Flow Modeling at Mine Sites:</i> https://ndep.nv.gov/uploads/land-mining-reqs-guidance-docs/20210420_Hydro_GuidanceRev00_ADA_1.pdf.</p> <p><i>The data collection and modeling methods presented to NDEP for this project are consistent with standard practices for characterizing the water table. There is no evidence that leads us to believe that any of the parties involved with collecting and analyzing data for this site have falsified data or analyses for this project.</i></p>	
79	NDEP Permitting	<p>The second comment I want to make is that Nevada is number one on EPA's state ranking of toxic waste. And NDEP is the agency that is permitting this to happen. So, I want the people who are NDEP employees on this phone call to think about that personally and think about what you're leaving behind for your children. And I want you to think about finding the courage to step out of line and step out of doing what is easy and instead do what is right.</p> <p>The third thing I want to say is that the Nevada State Constitution says -- and this is a direct quote -- it says that all political power is inherent in the people. Government is instituted for the protection, security, and benefit of the people and they have the right to alter or reform this name [ph] whenever public good may require it.</p> <p>I want everyone to recognize that under -- even the existing law that we have right now, NDEP, you are our employees. You are subordinate to the will of the people. And the reality is that</p>	<p><i>NDEP assumes the commenter is referring to the annual EPA Toxic Release Inventory or TRI. It is important to note that the TRI ranking is a not a "toxic waste ranking", the TRI is a high-level reporting inventory that tracks quantities of toxic substances to increase availability of information and identify where there may be opportunities for reduction or further control. The TRI does not rank risk to human health or the environment. In the case of Nevada, according to the most recent 2019 data posted by EPA at https://www.epa.gov/trinationalanalysis/where-you-live, the vast majority (95%) of toxic substances released in Nevada are attributed to mining activity, which is subject to the comprehensive water pollution control and bonding requirements administered under state laws. Thus, the releases reported as part of TRI are not indicative of actual or relative risk to human health and the environment relative to other states, so it is not correct to state that Nevada has a certain ranking on "toxic waste" relative to other states based on TRI data. In fact, according to the most recent 2019 EPA biennial report on hazardous waste generation and disposal (located at https://rcrapublic.epa.gov/rcrainfoweb/action/modules/br/summary/view), Nevada ranks 39th amongst states in hazardous waste generation and 20th on hazardous waste disposal. Nevada only has 1 National Priorities List Superfund</i></p>	



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		the vast majority of people of this region are opposed to this mine and are very concerned about the impact that it's going to have. And so, again, to go back to that courage, I want you, NDEP employees, to think about what this means. And if you are public employees and you are truly representing the people, all political powers inherent in the people, then what are you doing by permitting mines like this and permitting destructive projects like this and leaving behind a legacy of toxic pollution that the rest of us are gonna have to deal with for a long, long time in many generations into the future.	<p><i>Site (the Carson River Mercury Site), fewer than any state except North Dakota which has no NPL Sites (see at https://www.epa.gov/superfund/national-priorities-list-npl-sites-state).</i></p> <p><i>From https://www.epa.gov/toxics-release-inventory-tri-program/explore-metal-mine-reports-tri-program "Please note that TRI data alone cannot reveal the degree to which the public is exposed to listed chemicals. The presence of a chemical in the environment must be evaluated along with the potential and actual exposures and the route of exposures, the chemical's fate in the environment and other factors before any statements can be made about potential risks associated with the chemical or a release, none of which are addressed by this graphic. However, TRI data can, in conjunction with other information, be used as a starting point in evaluating such exposures and the risks posed by such exposures. EPA recommends that users of TRI data consult EPA's guidance on "Factors to Consider When Using Toxics Release Inventory Data" for further information."</i></p> <p><i>From https://www.epa.gov/newsreleases/us-epa-publishes-2019-annual-toxics-release-inventory-report "The Nevada Division of Environmental Protection implements state laws and regulations that subject all operating Nevada mines to rigorous permitting, monitoring, and inspection to protect water quality and public health," said Nevada Division of Environmental Protection Administrator Greg Lovato. "It is well understood that the TRI data alone do not indicate whether the environment or the public is actually exposed to any of the listed chemicals. Safe management practices are required and enforced for the engineering design, permitting and construction of ore and waste rock facilities to ensure strong protection of Nevada's air, water and land."</i></p> <p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p>	
80	Engineering Controls	And I want everyone to understand that, you know, all of this talk about tailings filter stacks, and mitigating pollution by channeling it into these various ponds and so on, that these are all work around, these are all attempts to take a terribly destructive process and just control it a little bit and make it a little bit less bad. It's simply not possible to do a project like this without creating huge amounts of pollution. And it's our --	<i>The engineered containment proposed at Thacker Pass is common throughout the Nevada mining industry to control process solution and materials and protect waters of the State.</i>	NAC 445A.397
81	General	The last thing I will say is that, you know, if NDEP is not going to stop this mine like the State of Oregon, who was just able to stop the extremely destructive [inaudible] LNG pipeline and export project, you know, after concerted opposition from environmentalist triage [ph], ranchers, farmers, and land owners in the area, then the people are going to have to be the ones who do it. Thank you.	Comment noted.	
Oral comment from Jean Williams, resident of Orovada, NV.				
82	Permitting Process	I appreciate you extending that comment period to December 8 with the hearing that's going on with water resources. I'm going to state also at this time, like I did in a meeting in Winnemucca, that these permits should be delayed as far as issuing those permits until the lawsuit with BLM on the three parties is settled. So, the issuance of permit cannot be used against the litigants that are suing the BLM.	<p><i>Please see Response 55 regarding BMRR regulatory requirements. The Division is legally required to act upon permit applications pursuant to State laws and regulations. Pursuant to NAC 445A.401, if an application is technically complete, the Division must prepare and issue a draft Permit, fact sheet, and public notice.</i></p> <p><i>Pursuant to NAC 445A.408, once the public comment period has concluded, the Division shall issue a decision to deny or approve the Permit.</i></p>	NAC 445A.401 NAC 445A.408



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83	Permitting Process	<p>And also, I have a -- I was looking at some of this on the precipitation. They were saying a 24-hour event and I was reading back through some of the original information that was -- was provided by the previous owner of the mine site and that was during the exploration. Bo Elgby was saying that an inch of moisture in a day. We just had an event here not too long ago that my neighbor does the official measure and it's not up on the hillside which they can get more moisture than we do. But I believe he measured about 2.79 inches in a very short period of time. We had water standing here for quite some time. And I -- I -- I don't know what your design program was for a moisture event but, you know, three inches, it's happened and it could happen again.</p>	<p><i>Pursuant to NAC445A.433, process components must be able to contain the 25-year, 24-hour storm event and withstand the 100-year, 24 hour storm event. This is equivalent to 1.96 inches and 2.48 inches respectively. Upon review of data from the on-site meteorological station, during the referenced storm event, 1.74 inches of precipitation was recorded in 24 hours.</i></p> <p><i>The Division recognizes that storm events may occur above this regulatory threshold. If a storm event resulted in a release to the environment, clean up is required by Parts II.B.3 and II.B.4 of the Permit.</i></p>	<p>NAC445A.433; WPCP NEV2020104 Parts II.B.3 and II.B.4</p>
84	Permitting Process; Limitation on Mining Below the Water Table	<p>And my other concern is, Aimee was presenting what -- and I had questioned previously at the meeting about the no mining below groundwater level. There was an article in the Humboldt Sun quite a while after that meeting that we had last summer. And Tim Crowley had stated that he said, well, we'll just apply for another permit so we can go below water -- groundwater level. Now, if that's the case that you would allow that, then you're -- given us a snow job on this because he's just pretty sure that they're gonna be able to get a permit to mine below groundwater level.</p>	<p><i>Please see Response 75 regarding submittal of a future permit modification. Lithium Nevada may submit an application to mine below the water table; however, the application materials must present a plan that would not result in degradation of waters of the State.</i></p> <p><i>A proposal to allow mining below the water table would require a permit modification that includes additional studies and plans to demonstrate that degradation of waters of the State will be prevented. Such a permit modification would be subject to NDEP review and approval after a public comment period.</i></p>	
85	Water Quality (Sulfate)	<p>I've -- I really have enjoyed listening to these comments. The Native American women, some of the language just are so breathtaking. I had a timely article from a November 15th Western Livestock Journal. We have cattle that showed up on our doorstep and it's an article from the extension service at North Dakota State University and they're talking about drought and water quality. And I see on your level that you're looking at the 500 ppm cutoff for sulfates in water. And I appreciate that very much because for calves, not cows but calves, the concentration should be less than 500 ppm. Issues that can happen with cattle are sulfates can be toxic to livestock or animals, wildlife, deer, resulting in decreased performance, abortions, blindness, central nervous system disorders, and death.</p> <p>A lot of ranchers out here, I'll guarantee they'll say, man, I can't afford that. Yes, you're neutralizing the chemical, this sulfate, that you're going -- molten sulfur that you're going to turn into sulfuric acid that you're going to use to leach your clay, but that neutralization process and the dropping out of salts are sulfate salts and that's what this is talking about. And if you have a high rain event, you have snow, frozen ground, and an it all comes off at once, which this area is famous for, you're gonna have runoff. And so, we just want a lot of consideration on this and it is a pretty serious issue and that runoff can get into our water aquifer. And my brother had said, sulfates go quick into the water. He's had lots of experience with it. And we just appreciate you giving us the time and the extra time to do this. And I will -- I cut out this article and I -- I believe I'll be sending it to you on this comment period.</p>	<p><i>The Profile I reference value for sulfate is 500 mg/L and applied to all facilities including surface water monitoring, unless a higher background concentration has been established.</i></p> <p><i>Sulfate salts will be stored in the CTFS which is designed as a zero-discharge facility. Runoff will drain to the Reclaim Pond, a double-lined and leak-detected pond designed to contain runoff from the 100-year event with 3 feet of freeboard.</i></p>	<p>NAC 445A.424; NAC 445A.1236 and 445A.1312; NAC 445A.433</p>

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Oral comment from Ella Salvator of Saint Louis University School of Law.				
86	Permitting Process	So, I noticed in the presentation that only the first phase of the mine was really discussed as how much destruction of the land would -- would be happening. And so, I'm concerned about later phases of the project that often fly under the radar when these permits are being initially issued.	<p><i>Please see Response 75 regarding future permit modification. Mining activity beyond Phase 1 would require permit modification. If a modification meets the definition of a major modification under NAC 445A.417, a public comment period is required.</i></p> <p><i>A proposal to allow mining below the water table would require a permit modification that includes additional studies and plans to demonstrate that degradation of waters of the State will be prevented. Such a permit modification would be subject to NDEP review and approval after a public comment period.</i></p>	
87	Tribal	And I'm also concerned because I don't believe that the tribes, the Native American tribes, in the area have been properly consulted about this project or these permits being issued. It is their traditional ancestral homelands of the Paiutes and Shoshones, specifically the Fort McDermitt Paiute and Shoshone Tribe, the closest tribe to where the project would be. There is a lot of opposition to the project coming from the tribe. And I would hope that the NDEP would pay attention to that and think about that.	<i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i>	
88	Wildlife	There's also a problem with the project and these permits because of wildlife. This is, you know, a very unique ecosystem and it has unique animals, the antelope, the sage grass, and all of those important element would be lost if this mine were to go in. And these permits are important part of this mine moving forward. So, NDEP has a lot of power here to make -- take a stance against something that's pretty horrible. And so, I hope that you'll consider not issuing these permits. Thank you.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
Oral comment from Ka'ila Farrell Smith, resident of Chiloquin, OR.				
89		I am a clan [ph] of a tribal member. I do reside in Oregon. So, part of my comment will be, in regard to the concern for water -- water degradation, toxicity of the land on the Oregon side and the possible use of water on the Oregon side and -- I would like to start off though by commenting kind of on a larger -- a larger overview or bird's eye view of how I'm perceiving this presentation and I'd also like to say on the onset that thank you for allowing another week for comments on the water permit and I will be specifically responding to that via email or letter writing.	<i>Thank you for your written comments received on 8 December 2021.</i>	
90	Reclamation Permitting	<p>And -- but for tonight about the reclamation permit, what we're looking at here is a foreign transnational corporation, Lithium Americas, not needing -- what I believe what this presentation just said -- not needing to have any public comment to do anything on public lands, like that sounds absurd and insane to me and from -- from the beginning. So, on that, I'm just not -- it is not in general that this is a foreign transnational corporation, Lithium Americas.</p> <p>And so, like that -- that just seems upside down, you know, when it -- when it comes to the greater good for any of these big extraction projects to be deemed like for the public interest. I don't see it that way at all. I see this as massive resource grab and absolute -- from the beginning, even like before the presentation, everything that presentation was talking about destruction, extraction, you know, of -- of -- of natural resources on indigenous lands.</p>	<i>Please see the Reclamation NOFD regarding why a public comment period for the State Reclamation Permit is not required for an operation on public land.</i>	



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91	Tribal	<p>And I would like to reiterate what some of the other people who made public comment said, specifically regarding the United Nation Declaration on the Right of Indigenous People or UNDRIP. And I agree that none of these permits should even be considered to be granted or not granted until the outcome of the Bureau of land Management issue with the consultation of the tribes. So, three tribes were sent a letter during the COVID-19 pandemic when there are so many different sovereign nations and tribal -- and tribal nations who will be drastically impacted for generations with this mining project were to go through.</p> <p>So, that is my first concern. And on a personal note, I've traveled out to Fort McDermitt, family and friends and community, every summer with my father for ceremonies. So, for me Peehee mm'huh or Thacker -- a.k.a. Thacker Pass and this whole area, the whole McDermitt Caldera is sacred land. It's sacred spiritual grounds of the Sundance ceremonies, of the Ghost Dance. Let me say that again, the Ghost Dance, and that's what we're doing with ghost dancing. Also, for the Native American church, which is my father's court case, Native American Freedom of Religion Act of the amendment of 1994. So, all native people have the right to -- to do -- to have ceremony -- conduct ceremony, use their medicines on their ancestral sacred homelands.</p> <p>So, those are my main concerns and that consultation is not consent is extremely important in this case. And I had success today finding out that we successfully stopped the Jordan Cove energy projects in Southern Oregon. And I know that there's a larger lithium deposit on the Oregon side. And I -- my -- my community, like Max said, we will be there to stop any drilling or any shovels in the ground and we will -- we will be there in prayer. We will be there in community.</p> <p>And as an artist, I will be using my creative collaborations on the frontlines and doing everything I can support the rest of Shoshone and Northern Paiute people, the people of Red Mountain. I stand with the people and the -- and the elders and the ancestors and the youth in the next generation because this is poison and the toxic -- the toxicity of the land and the water. And I don't understand how you can offer a reclamation permit without consulting tribes and without even -- when this is supposed to be public land.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p> <p><i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445A and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i></p>	
Oral comment from Jennifer Cantley.				
92	NEPA Permitting/Hearing	<p>First of all, I just wanted to thank you for holding this hearing. I wanted to thank you at the air hearing as well, especially since many of these people were not able to be heard as you may know even under the BLM management hearings. Many of our NEPA rights have been taken away with this Thacker Pass permitting. So, this is really important for all Nevadans to be able to be heard right now. And I just really want to thank you for this time.</p>	<p><i>The public hearing was scheduled pursuant to NAC 445A.403 and NAC 445A.404.</i></p>	<p>NAC 445A.403 and NAC 445A.404</p>

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93	Permitting Process	<p>The one thing I did want to note, I saw that the state of Nevada was alerted about this in 2018. As a Nevadan, I wish we had a process where we were alerted about that around the same amount of time so we could have this in our attention faster other than finding out as I did just this year in March, especially as I am taking the Nevada State Water Plan Survey right now to look at water rights, reviewing construction and geothermal flood planning right now. It's really important. So, I just wanted to put that at the top...</p>	<p><i>The Division publishes a list of pending applications requiring a public comment period on our website as a convenience and not as a regulatory requirement. This includes all projects for which we have received an application but which have not yet entered the public comment period. The list may be accessed by navigating from our homepage at https://ndep.nv.gov/land/mining, clicking on "Database Reports and Map Resources", and clicking on "Regulation Branch Projects with Pending Public Notices", or via the link below.</i></p> <p>https://nvbureauofmining.ndep.nv.gov/Reports/ReportPopUp.aspx?ReportName=RGPUBLIC</p>	
94	Tribal Consultation	<p>The next part, I really wanted to bring into attention too as I'm getting to know the Paiute-Shoshone communities and call it by its name of Peehee Mu'huh. These are grave sites that we're talking about up there. And when I think about someone coming and digging up my ancestors, I wouldn't want anyone touching it and I would definitely want to be consulted about it. And I think the state needs to look at that process as well. So, when I hear the community's voice speaking up about that, I really hope that we look at respecting those voices better.</p> <p>Right now, as a mother, looking at the close to 8,000 claims with lithium mining across the state right now and the little water that we have with drought, it's really concerning to me with future generations what lithium mining is going to do to Nevada, how are we gonna keep track of this, especially with climate change already, not only on the water level.</p> <p>As you know, I work with Moms Clean Air Force with the air, what this is gonna be doing to our climate alone, how are we going to be keeping track of all this, and what is this going to be doing to our climate and making our situation work.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p> <p><i>NDEP appreciates the magnitude of the challenges faced by our region in response to climate change and the need to integrate sustainability and resiliency into state planning efforts. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/).</i></p>	
95	Water Quality; Historical Mining	<p>We already have high arsenic levels in most of our water area. In Douglas County, I also know and willing. I'm -- in this area, I'm just lately in the paper as well as in Winnemucca bearing problems with arsenic in the water. How are we going to be controlling chemicals not getting worse?</p> <p>McDermitt already has polluted water from a mining site that has not been cleaned up. I was there with the atmospheric river system, which I'm thinking Jean was alluding to, which gave over three inches of rain. It made me think about all those roots being pulled out with the sage brush. If all the sage brush is gone, how was it going to be soaking up the water and what's gonna happen to those communities when that water is going -- is it going to go down and cause huge floods? These are all these questions that I -- streaking [ph] through my mind as climate change is getting worse and it's worsening through fires in this atmospheric river systems.</p>	<p><i>Aside from the background concentrations that are already elevated at the Thacker Pass Project, groundwater must meet Profile I drinking water reference values. Water quality data is required to be submitted for Division review on a quarterly and annual basis under Parts II.B.1 and II.B.2 of the Permit.</i></p> <p><i>You are correct that the McDermitt and Cordero mercury mines caused environmental contamination. These facilities operated prior to the adoption of mining water pollution control regulations in 1989. NDEP acknowledges impacts of historical mining and has an Abandoned Mine Lands program to review, prioritize, and address those impacts with available resources. The Nevada mining regulations were established to prevent impacts like those of the McDermitt and Cordero mines. In the past, mines were not required to obtain permits or comply with regulations. The mining regulations and permitting processes were developed to prevent these types of issues. The record since the adoption of mining water pollution control regulations in 1989 and reclamation bonding regulations in 1990 shows that Nevada's regulations are highly effective at preventing release of contaminants to the environment. Nevada regulations also ensure that funds are set aside for mine closure and reclamation, as required for a safe and productive post-mining condition. Mine operators in Nevada are required to abide by the law and to operate in accordance with all permits issued.</i></p>	WPCP NEV2020104 Parts II.B.1 and II.B.2

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96		I really want our state to slow down and think about what we're doing and what we're bringing to Nevada. We've learned from mistakes as I work with this beautiful state and work with and dealt with like the asphalt factory who was not holding up to conditions that they're supposed to be following. And I thank you for the hard work that you did with shutting that down. But I don't want to keep chasing and cleaning up after dirty work. I want to stop these companies before it makes messes in our state. And everyone needs to be consulted in and I just ask that you take the time to look at everything and listen to everyone's concerns. Thank you.	<i>Please see Response 55 regarding BMRR regulatory requirements.</i>	
Oral comment from Carl Van Warmer.				
97	Tribal	So, Lithium America has a mine in Argentina, which had been operating since 2015. And indigenous people are being forced off their land as waterholes and wells run dry.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	
98	Permitting Process	The mining pit will be over 400 feet deep. Lithium America plans to dig a mining pit almost 6,000 acres in extent, roughly a half a mile wide, 2.5 miles long, and the deepest part of the pit will extend below groundwater level...	<i>The referenced dimensions are for the pit as approved by the BLM. With the Permit limitation in the WPCP, Part I.G.2 of the Permit restricts the level of mining to 15 feet above the water table.</i>	WPCP NEV2020104 Part I.G.2
99	Sulfuric Acid/Water Rights	Sulfur -- sulfur acid -- sulfuric acid plant will be built on the site. Thousands of tons of sulfuric acid will be produced on the site to leach lithium from the rock mined from the pit. Sulfuric acid production requires a lot of water. Mining lithium requires huge amounts of water. Thacker Pass Lithium America plans to pump 1.7 billion gallons of groundwater annually from the Quinn River, aquifer, which already 50% over allocated.	<i>Sulfuric acid is considered a process fluid and required to be in containment at all times because the WPCP is a zero discharge Permit in accordance with NAC 445A.385.</i> <i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	NAC 445A.376 NAC 445A.385
100	Water Quality	The mine will require continuously pumping ground water out of the mine pit. It is possible the mine will leach uranium, actinium [antimony], sulfuric acid, and other dangerous substances into the groundwater, especially if the pumping fails or stops once the mining is complete.	<i>Please see Response 55 regarding the Permit limitation. Part I.G.2 of the Permit restricts mining to remain 15 feet above the water table. With this restriction, degradation of waters of the State is not anticipated because the pit will not be dewatered. All mined materials with potential to leach the referenced contaminants will be placed on engineered containment.</i>	
101	Water Rights	This is -- this lithium mine is a water grab. Lithium America plans to take water from an already over allocated Quinn River Valley aquifer. 2,600 acre feet per year, this is the amount of the first four years. Then it would increase to 5,200 acre feet per year for the next 37 years. This is according to the Federal EIS. 30,271 acre feet per year, the amount the Orovida subarea hydrographic basin is current over allocated, also according to the FEIS.	<i>NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	



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102	Open Pit / Water Quality	This lithium mine will cause toxic ground water pollution. Lithium America's own test found that everything from [antimony] to mercury to uranium would be leached at concentrations above Nevada resource values, also according to the FEIS.	<i>Please see Response 55 regarding the Permit limitation. Part I.G.2 of the Permit requires mining to remain 15 feet above the water table. With this restriction, degradation of waters of the State is not anticipated. The comment references the plan authorized by the BLM, the WPCP contains a Permit limitation restricting mining below the water table and all mined materials with potential to leach the referenced contaminants will be placed on containment.</i>	
103	Water Supply / Sagebrush	<p>This is in the driest state in the United States. Both human and non-human communities are already facing challenges with limited water supply in Nevada. An imbalance to the delicate to the delicate sagebrush step ecosystem could have devastating effects. The people -- the city -- the town of Forth McDermitt already do not have a water supply and must used bottled water because of a mine that is close to their town, which has --</p> <p>This mine should not be allowed to operate.</p>	<p><i>NDEP appreciates the magnitude of the challenges faced by our region in response to climate change and the need to integrate sustainability and resiliency into state planning efforts. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/).</i></p> <p><i>NDEP has reviewed the status of bottled water for Ft. McDermitt with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department (FMPST ED). According to the FMPST ED, drinking water sources for the Ft. McDermitt municipal water system meet federal drinking water standards and tribal members may utilize bottled water as a preference but it is not a necessity.</i></p> <p><i>NDEP is also aware that the town of McDermitt (separate from Ft. McDermitt) previously provided bottled water due to presence of arsenic in its water sources, but that bottled water program has stopped as of October 12, 2021, due to the operation of the McDermitt Water System to address arsenic.</i></p> <p><i>While arsenic is naturally occurring in many parts of Nevada above the federal drinking water standard of 10 parts per billion, NDEP is not aware of any information that the arsenic in McDermitt or Ft. McDermitt drinking water sources resulted from previous mining activity.</i></p> <p><i>NDEP is aware of soil contamination from historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. The NDEP has coordinated with US EPA who has conducted soil and tailings assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from the historical Nevada mines.</i></p> <p><i>In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several engineering design and permitting approval requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada.</i></p>	
Oral comment from Toma Deavers of Oregon Water Protectors.				
104	Land	Hi. My name is Toma Devers. I'm with Oregon Water Protectors. I have Native American ancestors, Chalagi [ph], and European as well. I grew up in Southern Oregon. I'm a former wildland firefighter. I worked in Southern Oregon many years ago. I've had to evacuate my family too many times from that area. And every summer, I basically have to sit around and watch the news to offer my friends a place to evacuate to say, hey, I have a van, I can come help	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	



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		<p>you out if the fire is close. Hey, sis. How is it going? It's okay. I'm hosing everything down. I'm not leaving.</p> <p>Have you ever had to make one of those phone calls? Have you ever had to talk to a family member on the frontlines? Because it's really sick that you guys want to be mining in the heart of wildland territory. It's really sick, okay? And you know, I drove through that area several times this summer, visiting Peehee Mu'huh to visit the people around that and hear what these tribal people have to say about this mine and how much it means to them and to see the area and understand how beautiful and sacred it is. And that's so wrong on so many levels along with all of the lies from the Nevada BLM.</p>		
105	Trespassing / Water Levels	<p>And this EIS, you know, Matt -- Ed Bartell's in the last hearing, he made a comment and I read his comments in the EIS as well. And he -- his case, he is suing the Nevada BLM right now. And he -- what he states is that Lithium Nevada is -- or like the State of Nevada BLM just sent Lithium Nevada's people, their own hydrologist that Lithium Nevada has hired to go out on his property and trespass and then to actually lie about water levels. The baseline water levels, they lied about them. And Ed Bartell hired a lawyer and he also hired an independent hydrologist who -- and Ed Bartell's and his hydrologist are both saying, yes, they trespassed and they went on to this person's ranch and then they lied.</p>	<p><i>NDEP is aware of the concerns surrounding Ed Bartell's property. The data from a piezometer (PZ17-01) required correction and does not effect the Project's potential to degrade.</i></p>	
106	Global Warming/Tribal Consultation	<p>So, I find it really irksome that this multinational company that's primarily owned by China from what I understand and the research that I've done and the comments in EIS, I find it very irksome that this is happening to American citizens. But like it's really -- it's really a crime against humanity right now with all the wilds running dry, with the wildfires as bad as they are, because we all know this mine is not a green project. We know it's gonna cause further desertification, meaning it's going to cause global warming, okay.</p> <p>So, this is just a project that is built on conflict of interest, you know, thicker than you can imagine. And you know, it's just -- you all need to be sued. Anyone who approves these mines, you all need to be sued for the lies and the conflict of interest and for the lack of transparency to the people of Nevada and to especially the Fort McDermitt tribal people and all of the tribal people out there. And it's -- it's just outrageous that you can sit there and talk about this project like, you know, it's all cool and they got the permits because the State of Nevada thought, you know, everything was kosher [ph]. But if you look at the EIS and if, you know, you go talk to the tribal people who have actually a connection to the land because they claim it is -- not just another piece of land. It is actually the seat of their ancestry, the heart of it, the very heart of it. And it's also a massacre site --</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p>	
107	Permitting Process	<p>So, what I'm gonna strongly suggest is that you guys do a better job of going around and getting comments from everyone and that you give people as long as they need to speak about this.</p>	<p><i>The Division has exceeded the regulatory requirements for community outreach. Pursuant to NAC 445A.402, the Division shall provide a 30 day public comment period. Pursuant to NAC 445A.403, a public hearing may be requested by the public. Pursuant to NAC 445A.404, the Department may schedule a public hearing on an application for a permit if it determines that there is a significant degree of public interest in the matter. A public hearing was scheduled on December 1, and the public comment period was extended for one week until 8 December due to request from the public. The Division also</i></p>	<p>NAC 445A.402 NAC 445A.403 NAC 445A.404</p>



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			<i>preemptively held additional meetings prior to the public comment period as an effort of community outreach and to provide more opportunities for the community to engage during the permitting process.</i>	
108	Request to Deny	But what I'm going to strongly suggest is that you deny these permits for the water quality permit and the reclamation permit. And I strongly feel like the State of Nevada needs to be audited for this incredibly fraudulent project that Lithium Nevada is trying to put at Thacker Pass. So, I very much urge you to deny these permits. Thank you very much.	<i>Please see Response 55 regarding BMRR regulatory requirements.</i>	
Oral comment from Garrett Fowler				
109	Enforcement	My name is Garrett Fowler. I would just like to speak on the situation of the fines and thinking that even if this process does go through and that thinking that if things are not taken care of as they properly should be and you [inaudible] fines. Well, fines don't replace water. Fines don't replace habitat and everybody needs to drink fresh water when it comes down to it. And we were only fighting for these natural resources of lithium right now because that's the current issue and situation resource that everybody thinks that they need.	<i>NDEP agrees that fines do not replace water. The permit, monitoring, reporting and enforcement program is set up to prevent water quality degradation. The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i> <i>Fines would be assessed in the event of Permit violations. If a facility has recurring violations, a Permit may be suspended or revoked.</i>	NRS 445A.675 NRS 445A.680 NRS 445A.690 NRS 445A.695 NRS 445A.700 NRS 445A.705 WPCP NEV2020104, Parts I.D.1 through I.D.10, II.B.1 and II.B.2
110	Water Availability	And realistically, when it comes down to when those resources are gone or we get to a point where water is even more critical and even -- it could -- at this point in time, it's -- are very critical things. But when we get to a point where it is even more critical, when even the millionaires and billionaires are looking for water along with the poor people, it's -- will come down to the same issue of needing clean food, water and land to survive off of and continuing with the process like this is just going to either prolong the issue or really just -- it's just -- really just pushing things off the side until water becomes a thing that everybody is literally fighting for. Thank you.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	
Oral comment from Kelly, resident of Oregon.				
111	Federal Permitting; Reclamation Cost Estimate	Thank you. First of all, I want to say that I'm a resident of Oregon, and I know we're just across the line here and that the proposed plan for lithium mining does extend into Oregon in the future. And so, first thing I want to note right away is that the EIS and the NEPA requirements have not been done for a big enough area. You said that their site 300 -- 3 -- 3,100 something acres. I actually think your impact area is much bigger than that. You have not assessed the impact on our region adequately by any means. And I hear the details about your remediation fund. Right of the bat, we should be tripling them. That number is way too low, way too low, and you know it.	<i>The Division collaborates and shares information with Federal agencies pursuant to our existing our Memorandum of Understanding, however the Federal NEPA process is not within the State of Nevada's authority to direct. Please see the BLM's Record of Decision issued on 15 January 2021 for information regarding the EIS.</i> <i>Please see the Reclamation Permit Notice of Final Decision and response to comment regarding the reclamation cost estimate.</i>	
112		Nevada is already number one in toxic waste. Why do you want the golden crown of a lithium mine? Mining is the dirtiest thing we can do. The dirtiest thing we can do to our water is to make another mine. There are other ways to get this lithium and you all need to start investing in that yesterday.	<i>Please see Response 79 regarding the annual EPA toxic release inventory.</i>	



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113		So, the permits process needs to be extended. I have a master's degree in urban and regional planning with focus on public participation and you have not met the requirements of public involvement participation requirements of this process.	<i>Please see Response 55 regarding BMRR regulatory requirements.</i>	
114	Request for Information	You need to slow it down. I'm really glad you extended approximately [ph] one week because please email me the EIS and all of the related documents to greenninjapdx@gmail.com. That's G-R-E-E-N-N-I-N-J-A pdx@gmail.com because I have not had a chance to review all these and I got some work to do before the end of this comment period. So, you'll be hearing more from me. Please send me all the things that I need that are relevant to assess because this had not been adequately assessed by any means. You need to slow your role. You haven't met the legal requirements to do the permits. You need to delay the permits and extend the public involvement process. There's treaty rights and violation -- sovereignty issues the tribal people as we know. I heard some other women about that. I don't need to say more about that other than you're signing yourself up just an avalanche of lawsuits. So, I hope that's in your budget.	<i>Information regarding where to find NDEP documents were e-mailed to the provided e-mail address on 20 December 2021.</i> <i>Please see Response 55 regarding BMRR regulatory requirements.</i> <i>Please see Response 107 regarding public meetings community outreach during the permitting process.</i>	
115	General	I also want you to know that just like some of the other women who've been speaking, I, too, am willing to stand up to this even if it means just standing in front of you. You might have to arrest me. I don't know what. But where in the budget is the money that you are going to cost the State of Nevada for me to stand down with me because we're going to stand you down. So, that itself is not properly budgeted. You need to look at the police budget. You need to look at the jails budget. You need to look at the extra snacks that they have to buy at the gas station because we're in town and we need more Skittles or what not. So, there's some economic impact here that are not represented in your reports and documents. They're sadly lacking. One of those economic impact is the opportunity loss of all of that tourism. Right now, people are coming to a unique and beautiful ecosystem. I don't know where the money is for the county. The Thacker Pass is in, but let's list it a five-county area and say, what's the current tourist traffic? You can't throw all that down the drain because ain't nobody want to go see your (expletive) mining stuff to stop it. Anyway, that's the plan. I want to let you know that I spent [inaudible].	<i>Comment noted.</i>	
Oral comment from John Hadder, Director of Great Basin Resource Watch.				
116	Permitting Process	My name is John Hadder. I'm the director of Great Basin Resource Watch. And I do appreciate the NDEP extending the comment period on the water pollution control permit for a week. That's -- I know [ph] it's helpful. So, this is a large, complex project. I requires a lot of time. And quite frankly, a lot of documents were submitted to the state agency pretty late in the process. And so, it doesn't give the public a lot of time to review some very technical documents and dig through that. And so, I do appreciate the extra time.	<i>Comment noted.</i>	
117	Tailings Facility	I do want to point out -- I'm gonna focus a little bit on the tailing facility, which is called the -- which is called the clay tailings filter stack, which in my view is a [inaudible] basically a waste, which is what it is, you're putting waste on the land. But this -- this -- this -- just I noticed in the -- this facility, to the best of our knowledge, is going to be kind of a first of its kind. There are other similar ones being proposed, but we don't -- we're not aware of any real world experience on how these kinds of facilities are going to function, how they're gonna function according to the ways that are being presented.	<i>The CTFS is an engineered, zero-discharge component.</i> <i>There is one operating dry stacked tailings facility in Nevada at the Pumpkin Hollow Project. Two additional dry stacked tailings facilities have been proposed and approved in Nevada including at Mineral Ridge and Rhyolite Ridge. There are several other operating dry stacked tailings facilities including Greens Creek in Alaska, Pogo Gold Mine in Alaska, Bellekeno Mine in Canada, Minto Mine in Canada, Raglan Mine in Canada, and the Karara Mine in Australia.</i> <i>With the required moisture contents and compaction requirements, the CTFS is expected to function as designed.</i>	NAC 445A.433 WPCP NEV2020104 Parts I.D.7



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		<p>And so, there's not a lot of experience out there, which means that we need to be extra careful. We need to ask more questions. We need to require more analysis upfront. And I think that in this particular case, that has not been done. I know the agency has asked for a lot of documents and they have gotten some responses to some of those. But we feel there's still unanswered questions.</p>		
118	Tailings Facility / Neutralization	<p>One thing we noticed in the fact sheet initially was that the company is considering neutralizing the clay -- the clay tailings. Why wasn't this studied? It was submitted to the agency at the beginning of the project, at the beginning of the application process. That should have been already studied by now. In fact, we highly recommend that they neutralize everything that goes on to that tailings facility because if you look at the data that's provided, if any of that water or liquid, it infiltrates through that tailings, gets into the environments, it's enormously toxic. And we're concerned that we're setting up a time bomb for the future. How long in the future is unclear. And again, we feel like there isn't enough analysis that's been done. But that's an example of that study on feasibility for neutralizing all the tailings, including the filter tailings. It should have been part of the submission to begin with. And it's amazing to me that they would move forward in project not -- and not do this.</p>	<p><i>Please see Response 7 regarding tailings neutralization.</i></p>	
119	Tailings Facility / Seepage	<p>So, again, late -- late in process, the analysis that has been submitted, there are two analysis -- two analyses that I've seen in terms of the amount of seepage from that facility and they are vastly different. We're talking three orders of magnitude, what's the right answer? We feel like an independent assessment is needed for many aspects of the mine, but this particular facility, the tailings -- the tailings facility is -- definitely requires independent assessment. And we're going to be submitting comments on -- written comments on detailing all this. But again, we feel like there still is not -- there are still unanswered questions regarding this facility.</p> <p>If you look at the data on the kind of fluid that could come out of that tailings facility, it's alarming. And it's -- to us, it's irresponsible to place tailings as that acid content inherent in it without doing an analysis to determine how -- how it could be neutralized. So, I think the agency -- I know the agency is requesting that study, but it should have been already provided to the agency and I think that that needs to move forward also.</p>	<p><i>Please see response 2 regarding the two seepage analyses.</i></p> <p><i>Please see Response 160 regarding an independent assessment of the seepage analysis.</i></p> <p><i>Please see response 7 regarding tailings neutralization.</i></p>	
120	Tailings Facility	<p>In terms of the water, mining below the water table, we noticed in the permit that there is a -- it indicates 4,800 -- 4,840 level for mining above that. We noticed that there are areas of the pit that are definitely above -- water table is above 4,840. So, I think that the permit needs to be a little more clear on how it's delineating that restriction. The water level will probably change as mining goes forward in the area. So, it shouldn't rely -- I mean, it should -- I understand why you want to monitor in the short term, but there should be a defined area that's off limits based on pre-mining water -- groundwater levels. And I think that's the intent, but I think the permit could be clarified in that way as well. We have other --</p>	<p><i>The permit limitation I.G.2 has been modified to specifically cite the Piteau memo where the authorized pit that mining is required to remain above the 4,840 feet amsl elevation is outlined.</i></p>	<p>WPCP NEV2020104 Part I.G.2</p>

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Letter from Jean M. Williams, resident of Orovada, NV, received 6 December 2021 via standard mail.				
121	Permitting Process	<p>Thank you for extending the public comment period for the Water Pollution Control Permit of Thacker Pass Mine.</p> <p>I do hope you will honor my request to withhold permit decision until after the court decision with the BLM lawsuit. Lawyers do like to very pushy with another agency granting permits being a reason to rule in their favor. Also just because you have issued permits in the past with proper paperwork, does not mean you have to now.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445A and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i></p>	
122	Permitting Process	<p>Tim Crowley tried to show us in a community meeting that neutralizing the tailings meant all threat to the environment was gone and harmless. Neutralized is just a pH number or salt, in this case sulfate salts is very very large number. Phase 1 leads to Phase II, doubling sulfate salts. If a frozen winter with heavy precipitation occurs with quick thaw in the spring, the tailings will not be contained. Time and again there are floods associated with thaw and Thacker Pass is not immune from it.</p>	<p><i>Pursuant to NAC 445A.433, process components must contain the 25-year, 24-hour storm event, and withstand the runoff from the 100-year, 24-hour storm event. The Reclaim Pond is designed to contain the run off from the CTFS as a result of the 100-year event with 3 feet of freeboard.</i></p>	NAC 445A.433
123	Permitting Process	<p>We have made our home in Orovada. I appreciate all the people who wish to see Thacker Pass remain [what] it is. My husband says the BLM has made plenty of incorrect decisions that were detrimental. Many people in this area are not speaking up for fear of retribution by Federal and State entities. The thing I fear is what this Project will do to the quality of water which grows all things; plants, animal, and human here.</p> <p>I have enclosed a clipping from Western livestock Journal. It is timely about what sulfates do.</p> <p>I appreciate the Native American cultural aspect. About time the government granted their wish too. Thanks to Max and Will.</p> <p>Thanks and Seasons Greetings,</p> <p>Jean Williams</p> <p>PS. We also very much wish to thank John Hadder, Chelsey, and Always Edward Bartell who fights everyday for our way of life and Valley.</p>	<p><i>The BMRR program exists to protect waters of the State from degradation due to mining operations.</i></p> <p><i>Please see Response 55 regarding BMRR regulatory requirements.</i></p>	
Oral Comments from Tom Hoss (paraphrased from voice message), Winnemucca County Commissioner, received 7 December 2021.				
124	Permitting Process	<p>He recommends that we require the tailings to be neutralized before they are placed.</p>	<p><i>Please see Response 7 regarding tailings neutralization.</i></p>	

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125	Water Rights	He is concerned that the mine will pump more water than they have allocated and no one will be monitoring.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	
126	Air	He believes since this is a very large sulfuric acid plant it should be permitted as a Class 1 instead of Class 2 air permit.	<i>Please see the Bureau of Air Pollution Control Permit Notice of Decision and response to comments.</i>	
127	Compliance/Inspections	He is concerned NDEP will not have adequate oversight of day to day activities.	<i>BMRR inspects facilities such as Thacker Pass at least quarterly. Inspection frequency may increase if needed in response to compliance concerns or complaints received. Water quality will be monitored on a quarterly basis, with weekly leak detection monitoring.</i>	NRS 445A.465, NRS 445A.515, NRS 445A.655, NRS 445A.675, NRS 445A.690; NAC 445A.247 NAC 445A.251, NAC 445A.252, NAC 445A.440, NAC 445A.441, and NAC 445A.442 WPCP NEV2020104, Parts I.D.1 through I.D.10, II.B.1 and II.B.2
128	Permitting Process	He recommends that we do a lot more analysis of this before granting permit.	<i>Please see Response 55 regarding BMRR regulatory requirements.</i>	
Letter from Wendelyn Muratore, resident of Kings River, received 8 December 2021 via e-mail.				
129	Tailings Facility	<p>My family and I are longtime residents of Kings River, our home is approximately 7 miles from the proposed mine site, water quality is a concern of not only mine, but many other residents of Kings River and Orovada.</p> <p>I have taken the time to read LNC's Fact Sheet, and have also read many other publications on Lithium mining. From what I have read LNC's Fact Sheet has made more questions than answers. Without going into greater detail I will list a few.</p> <p>Their plan to use a Clay Tailings Filter Stack is a source of significant toxicity to the environment, there is only one other such operation in the state of Nevada. At that mine the soil does not contain the clay that Thacker Pass has.</p>	<p><i>There is one operating dry stacked tailings facility in Nevada at the Pumpkin Hollow Project. Two additional dry stacked tailings facilities have been proposed and approved in Nevada including at Mineral Ridge and Rhyolite Ridge. There are several other operating dry stacked tailings facilities including Greens Creek in Alaska, Pogo Gold Mine in Alaska, Bellekeno Mine in Canada, Minto Mine in Canada, Raglan Mine in Canada, and the Karara Mine in Australia.</i></p> <p><i>The filterability of the clay material at Thacker Pass has been demonstrated and described in the document titled Filterability of LNC Neutralized Clay Slurry V2.</i></p>	4 August 2021 Filterability of LNC Neutralized Clay Slurry v2



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130	Modeling	And LNC's models can't give the same results as what will happen in real situation.	<p><i>Predictive modeling is one of many tools utilized by the Division to provide an estimate of what will happen in the field by inputting the limited information and actual field data that can be acquired prior to full operations.</i></p> <p><i>With the routine monitoring and reporting required by Parts I.D and II.B of the Permit, and through routine inspections, the model can be verified or corrected if necessary. Additionally, closure plans and modeling must be updated with any modification which may affect the plan. If conditions arise that were not anticipated, investigation, additional modeling and stability analysis, and permit modification, if necessary, would be required. The type of modification would be assessed by NAC 445A.4155, 445A.416, and 445A.417.</i></p>	
131	Tailings Facility	The neutralization of the sulfur. LNC says it will neutralize the sulfur, sulfur doesn't disappear, it changes into a sulfur byproduct like sulfate salt, or sulfur dioxide gas. I wonder if 100% neutralization is even affordably possible.	<i>Please see Response 7 regarding tailings neutralization.</i>	
132	Tailings Facility	And what about the other toxins that are naturally occurring in the soil already, uranium, fluoride, antimony and arsenic. I have been told by a reliable source, "matter can neither be created or destroyed, it can only be changed," so to my understanding none of these toxins will be going away, they may be changed but will not disappear. They will be dumped into the pit where they will be exposed to the elements.	<i>All mined materials are required to be placed on containment due to elevated concentrations of Profile I constituents.</i>	NAC 445A.396 and 445A.397
133	Tailings Facility	I worry the acidic levels in the tailings will cause the liner to fail much sooner than expected, sulfuric acid is corrosive. Regulation of the tailings is not adequate, an investigation must be done before allowing a permit.	<i>Please see Response 150 regarding 80-mil HDPE geomembrane life expectancy.</i>	
134	Tailings Facility	I also, am worried about seepage, LNC has not really done their homework when it comes to seepage. Not taking into consideration the winter thaws that cause large amounts of water to flow, and what will happen when the surface is thawed but the ground is still frozen.	<i>The seepage analysis provides a scenario for a simulation considering on-site meteorological data collected from the past 7 years and also provides an analysis for a simulation which doubles that amount of precipitation.</i>	Piteau CTFS
135	Tailings Facility	Mining below the water table, we have been told by NDEP that the mine will not go below the water table. Tim Crowley the representative of LNC who frequents that community meetings has told everyone at one of the meetings. That LNC will get another permit to do just that.	<i>Please see Response 75 regarding Future Mining below the water table.</i>	
136	Pollution Control	All of these questions have the same ending scenario our water has a very good chance of being polluted by the toxins that will be in the tailings, if LNC could find a safe proven way to mine the lithium on Thacker Pass I could see it. It seems to me and many others who are much more educated than myself in the chemical, and mining field, see the process they are planning on using as an experiment, a very dangerous one if you happen to live too close...	<i>Please see Response 55 regarding BMRR regulatory requirements.</i>	



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137	Tribal	<p>My last concern is that of the Native Americans, I feel they have valid points, we need to support them. Thacker Pass is a beautiful area, its rich in Native American history, there should be a historical marker up on the pass, not a Lithium mine that will destroy its beauty and history, and make it just another mine site in the state, a mine that threatens our way of life, our clean water and air.</p> <p>I ask that the permit not be issued until the BLM hearing in the Federal Court is over and a decision rendered.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p> <p><i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445B and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i></p>	
Letter from Edward Bartell of Orovada, received 8 December 2021 via e-mail.				
138	Public Comment Period	Thank you for extending the deadline for members of the public to provide input into the NDEP permits.	Comment noted.	
139	Water Resources; Water Pollution	<p>Unfortunately, the NDWR hearing just got over today; with respect to our challenge of LNC's water rights for the Thacker Pass mine; and I am unable to submit meaningful comments on the NDEP permits.</p> <p>I would respectfully request that NDEP take notice of the NDWR water rights process before the State Engineer and specifically the hearing transcript; when it becomes available. LNC's consultant Mr. Cluff from Piteau admitted to not following key data gathering protocols with respect to surface flow; which Piteau claimed to have followed in documents; but were not followed according to his own testimony.</p> <p>While I understand that you are mainly dealing with groundwater; Piteau appears to have done much of the work and data gathering with respect to groundwater (in addition to surface water); which NDEP is relying on for the water quality permits. It does not appear NDEP has gathered data independently or spot checked Piteau water levels in wells (or other critical data); in order to make an independent determination of data accuracy.</p> <p>Likewise LNC has refused us access to their wells with the exception of a single well on a single day. Therefore NDEP appears to be taking LNC data at face value, without an independent determination of accuracy.</p>	<p><i>NDEP has reviewed the testimony of Tyler Cluff provided in the transcript for the water rights hearing conducted on Thursday December 2, 2021. We noted that under cross examination from attorney Dominic Carollo at transcript pages 308 to 319 (Volume 2 of Transcript of Proceedings), Mr. Cluff explained that he used the Stevens protocol for collection of certain spring survey data as part of his work on the Thacker Pass Project. NDEP noted that the questioning and testimony focused on:</i></p> <ol style="list-style-type: none"> <i>1) The use of "field notebooks" instead of "field datasheets" as specified in the Stevens protocol;</i> <i>2) Failure to contact all private landowners as required by the Stevens protocol, specifically the Bartell Ranch;</i> <i>3) Measurement of flow close to the orifice instead of at the point of maximum surface discharge required by the Stevens protocol at Spring SP35; and</i> <i>4) Taking a photograph instead of providing a sketch map of where flow was measured as required by the Stevens protocol.</i> <p><i>NDEP does not have direct oversight or jurisdiction on the collection and analysis of spring water quantity data that are the subject the testimony. The information provided in the testimony does not indicate that any data used as part of the water pollution control permit application was in error or that any data presented in the water pollution control permit application was used incorrectly. However, Part I.D.9 of the Permit requires flow and water quality monitoring at several surface water locations for continued data collection and incorporation into the next model update and an SOC item Part I.B.9 requires submittal of an engineering design change for Division review and approval proposing surface flow monitoring protocols or installation of a surface flow measuring device.</i></p> <p><i>Please see the Response 50 regarding data verification.</i></p>	WPCP NEV2020104 Part I.D.9



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140	Tailings Material / Independent Verification	LNC is going to import millions of tons of sulfur over the life of the mine; converting it to sulfuric acid and dumping the resulting sulfate waste on public lands. Likewise the mine contains many natural contaminants including radioactive elements. While we are assured the data shows we have nothing to worry about. However it appears NDEP is not independently verifying data to make sure it is accurate. This is critical for NDEP to do this given the scope of the project, and the substantial potential impacts	<i>The sulfate waste (tailings material) will be disposed on an engineered, zero-discharge process component, the CTFS, and all mined materials are required to be placed in containment due to the potential to liberate profile I constituents.</i> <i>Please see the Response 50 regarding data verification.</i>	NAC 445A.396 and 445A.397
Letter from John Hadder, Director of GBRW, Kevin Emmerich, Director of Basin and Range Watch, and Katie Fite, Public Lands Director Wildlands Defense, received 8 December 2021 via e-mail.				
141	Information Requests	Great Basin Resource Watch (GBRW), Basin and Range Watch, and Wildlands Defense (collectively - Commenters) appreciates the assistance of NDEP staff in our acquiring data on this project and taking time to discuss the permit.	<i>Comment noted.</i>	
142	Public Meetings	GBRW participated in the in-person NDEP facilitated public meeting held on April 22 2021, and encourages the agency to continue to be open to information processes for mining projects. We suggest that the agency consider more regular regional public information meetings, so that the public is generally better informed regarding mining in their region.	<i>NDEP appreciates the comment and will continue to provide information requested by the community as the project progresses.</i> <i>Pursuant to NAC 445A.404, the Department, 1. Shall schedule a public hearing on an application for a permit if it determines that there is a significant degree of public interest in the matter; or 2. May schedule a public hearing on its own initiative.</i> <i>Several meetings were scheduled for Thacker Pass including the April 22 meeting, May 25 in-person Q&A meeting, as well as the public hearing on December 1.</i> <i>Future projects may also prompt the need for additional meetings, but will be evaluated on a case by case basis.</i>	NAC 445A.404
143		We are disappointed that NDEP cancelled the in-person hearing on this permit, NEV2020104. GBRW was present during the November 18, 2021, hearing on the Class II air quality permit for Thacker Pass and understands that is was a difficult situation to try to facilitate. We recognize that some staff may have felt threatened and did not want to experience a repeat of this scenario on December 1, 2021. That being said, GBRW urges NDEP to develop an approach in managing and facilitating potentially contentious processes in which passions are high. Despite the emotions of participants and leveling of strong criticisms at NDEP and staff, it is important that the public is able to comment so long as it is not intended to incite violence. By shutting down the hearing during the public comment, NDEP reinforced a potential lack of trust of government and the permitting process that was first laid out in the federal permitting process. GBRW would like to discuss this further and may be able to help to develop a process that allows the public voices to be heard and does not threaten the safety of NDEP staff.	<i>NDEP stands by its decision to stop the November 18, 2021 in-person public meeting and to not hold further in-person meetings on the proposed Thacker Pass permit decisions after the November 18, 2021 in-person public meeting was disrupted repeatedly. It is not a good use of limited NDEP staff resources or fair to other members of the public who would like to provide public comment to allow continued disruptions. NDEP believes adequate opportunity for public input on all proposed permit decisions for the Thacker Pass project has been provided. NDEP appreciates the offer of assistance from GBRW.</i>	



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144	Permitting Process	<p>Phased State Level Permitting</p> <p>Commenters note that the mine plan permitted under this WPCP by NDEP is not the same mine plan permitted by the US Bureau of Management in its Record of Decision on the Thacker Pass mine signed on January 15, 2021. The state of Nevada should endeavor to develop a memorandum of understanding with the federal government of the timing of federal and state permitting. Since the state may only permit a portion of the full plan of operations that is submitted to the federal government as part of the NEPA process, Commenters recommends that state level permitting be completed prior to the initiation of the federal NEPA process. The NEPA process is more broad in scope involving cumulative assessments, which is a more meaningful if mine plan is not subject to changes imposed by the state. In this way the state and federal government will be permitting the same mine plan.</p> <p>It would seem to be in the public interest to fully evaluate the mine plan and consequences. There may be mitigation measures that will be deemed needed for the full mine plan that would be best determined and implemented at the beginning of the facility construction. Or, it may be clear that some changes to the mine will be needed to uphold environmental protection standards and public protection.</p>	<p><i>NDEP appreciates the comment regarding consistency and transparency of approved mine plans between federal and state processes. The NDEP Bureau of Mining Regulation and Reclamation operates under a Memorandum of Understanding (copy available at https://ndep.nv.gov/land/mining/reclamation/guidance-documents) with the Bureau of Land Management (BLM) and US Forest Service when permitting mining on public lands. The existing process allows for more stringent requirements (for example, prohibition on mining below the water table) to be placed on mine operations within each agency jurisdiction and the facility has an obligation to comply with the more stringent requirements. NDEP does not have authority to subject its permitting processes to the National Environmental Policy Act (NEPA). We refer the commenter to the BLM for requests of further review require under NEPA.</i></p>	
145	Waste Rock Management; Sulfide Oxidation	<p>Potential Poor Water Quality from Waste Rock</p> <p>Sulfide oxidation appears to be completely ignored in the analysis for potential releases from waste rock. For example, the model of arsenic and antimony release from backfilled waste rock does not account for the amount of sulfide sulfur that will oxidize in the waste rock prior to infiltration, nor the associated amount of solutes that will be released by this oxidation process. Even though the permit restricts operations to be above the pre-mining water table, there can still be infiltration of the waste rock by precipitation and the potential for toxic seepage. The analysis of seepage does not appear to account for some sulfide oxidation that could increase the toxicity and thus management needs to prevent degradation of waters of the State.</p>	<p><i>Due to the potential to liberate profile I constituents, the Division required containment for all mined materials including waste rock storage facilities and pit backfill. The facilities have incorporated the placement of a low hydraulic conductivity soil layer (LHCSL) with a permeability of 10⁻⁶ cm/sec which will have perforated pipes placed on top to collect infiltration through the waste rock and convey it to a HDPE-lined pond. This management will prevent degradation of waters of the State.</i></p>	NAC 445A.396 and 445A.397



146

Waste Rock Management;
Sulfide Oxidation

The waste rock that will be produced at the Thacker Pass mine was determined by Piteau as non acid generating, and so acidic drainage is not considered to be a significant source of pollutant release. Instead, the water quality study states that several solutes of concern (antimony, arsenic, fluoride, and molybdenum) are **probably released "through the process of ion-exchange and the mechanical increase of reactive areas through milling and mining."**¹ But the Thacker Pass waste rock does have appreciable sulfide sulfur. Ten of the 20 rock samples subjected to humidity cell tests contained over 1% sulfide sulfur (i.e., acid generating potential greater than 31 kg CaCO₃/tonne rock; Piteau 2020, Table 5.9, "HCT Sample Summary"). The effect of the sulfide sulfur in the waste rock can be seen in the initial sulfate concentrations in humidity cell effluents, some of which contain several thousand mg/L SO₄ (see BLM 2020, Apx P, Part 6, various figures for sulfate in humidity cell effluent).²

In fact, several of these pollutants of concern, in particular arsenic and antimony, are frequently found in sulfide phases, and these solutes can be released by the oxidation of sulfide minerals, even when the conditions are not acidic. Thus, while it is entirely possible that the pollutants of concern are being released by surface reactions such as desorption of ion exchange, NDEP must confirm this.

The SRK Baseline Geochemical Characterization Report for the Thacker Pass Project provides (pg 85/2916), a comparison of the termination (i.e. post-leach) data to the initial (i.e., pre-leach) data allows for an assessment of the geochemical properties of the samples and is interpreted along with the evolution of the leachate during the HCT. The pre-and post-leach ABA data "shows that the sulfide sulfur content of the majority of cells did not vary significantly between the pre-leach and post-leach material. The exception is cell HC-6 (WLC-90, 113.5-125.8) which contained 1.43% sulfur in the pre-leach and 0.6% sulfide in the post leach sample. Despite the depletion in sulfide, the mobilization of other metal(loid)s were limited and this cell maintained neutral conditions throughout the test."

The amount of leaching during the humidity cell test for sulfur, arsenic, and antimony are summarized below. In general, the magnitude of constituent mobilization during the humidity cell test was correlated to the initial concentrations in the solid, i.e. samples with higher initial concentrations in the solid showed greater levels of release during the humidity cell test.

HCT ID	Material Type	Sulfur % Mobilized during HCT	Arsenic % Mobilized during HCT	Antimony % Mobilized during HCT
HC-1	Basalt	21.8	0.85	0.99
HC-2	HPZ	16.5	0.26	0.22
HC-3	Claystone- Ore	14.6	0.14	0.97
HC-4	Ash	11.8	2.77	5.69
HC-5	Claystone/Ash	2.6	0.16	0.45
HC-6	Claystone/Ash	0.3	0.3	0.82
HC-7	Claystone- Ore	38.4	2.75	1.28
HC-8	Ash -Ore	13.4	0.03	1.01
HC-9	Claystone/Ash - Ore	16.3	0.09	1.74
HC-10	Claystone- Ore	10.2	0.8	5.13
HC-11	Claystone- Ore	12.6	0.02	0.26
HC-12	Claystone- Ore	32.1	4.29	1.76
HC-14	Alluvium	47	1.78	0.93
HC-15	Ash	16.6	0.14	0.93

Regardless of how pollutants of concern are being released, because the material has the potential to release Profile I constituents above Profile I reference values, containment will be constructed for the storage areas. Additionally, the humidity cell tests were conducted between 40 and 74 weeks and were terminated at neutral conditions.

Pyrite was found to occur as irregularly shaped drops, thin strings, cubes and small round framboids with a grain size that varies from <1 μm to 40 μm. Approximately 40% of the total pyrite showed mild to complete replacement by goethite. FE-SEM/EDS microanalysis confirmed that pyrite is commonly included in quartz fragments and contains arsenic in a range of ~1.5% to ~4%. The bulk of pyrite grains that were tested in Cell 14 (alluvium) contain a small amount of arsenic. In addition, the majority of iron oxide was found to contain a small amount of arsenic in the range of ~0.5% to ~1%. Although no arsenic was detected in unaltered pyrite, EDS microanalysis of goethite alteration associated with some pyrite grains contain detectable arsenic over 1%. However, the majority of iron oxide in Cell 15 (ash) was found to contain no detectable arsenic.



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147	Waste Rock Management; Sulfide Oxidation	<p>In response, the water quality study supporting the effects of the open pits and backfill on groundwater quality (i.e., Piteau 2020) should be refined with two actions:</p> <ol style="list-style-type: none"> 1. Estimate the cumulative amount of sulfide sulfur mineral oxidation that will occur in the pit backfill, and use this in the groundwater model to indicate the amount of sulfate that will be released to groundwater when the backfill is flooded or infiltrated. 2. Identify more reliably the source of the pollutants of concern, particularly arsenic and antimony, to confirm or alter the assumption that pollutants are not being released in proportion to the amount of sulfide mineral oxidation that occurs in the waste rock. One option would be mineralogic analysis (x-ray diffraction, electron microprobe, or other suitable spectroscopic method) to identify the specific phases containing arsenic and antimony. Another option would be statistical and chemical analysis using effluent from the humidity cell tests to determine whether pollutants of concern were released in proportion to sulfate. 	<ol style="list-style-type: none"> 1. <i>The backfill that would occur during this initial phase of mining would not be expected to become flooded since backfill will be occurring above the water table. During the initial phase of mining, the pit backfill will also have a compacted low hydraulic conductivity soil layer (LHCSL) to preclude infiltration. If future proposals to mine below the water table are approved, the model will need to account for infiltration through the backfill to demonstrate that waters of the State will not be degraded.</i> 2. <i>Please see Response 146.</i> 	
148	Tailings Facility	<p>Concerns Regarding the Tailings Facility</p> <p>The tailings facility called the Clay Tailings Filter Stack is a source of significant toxicity to the environment, and the question is: Can the tailings dump be designed and managed so that the pollution is contained?</p>	<p><i>The CTFS will be constructed as a zero-discharge facility which exceeds the minimum design criteria established in NAC 445A.437 being contained by an 80-mil HDPE geomembrane and with the incorporation of leak detection. With the facility being operated as a dry stacked facility, there is significantly less potential to degrade waters of the State, as it will not store solution. With the required monitoring, limitations, and annual stability analysis to incorporate new data acquired during operations, the facility will be managed to protect waters of the State.</i></p>	<p>NAC 445A. NAC 445A.437; WPCP NEV2020104 Parts I.D.7, I.G.11, I.G.12, II.B.2.a</p>
149	Tailings Facility	<p>To the best of our knowledge, there are no operating mines with this type of tailings dump. There are other similar proposals for lithium mines globally, but no data on how these facilities have performed.</p>	<p><i>There is one operating dry stacked tailings facility in Nevada at the Pumpkin Hollow Project. Two additional dry stacked tailings facilities have been proposed and approved in Nevada including at Mineral Ridge and Rhyolite Ridge. There are several other operating dry stacked tailings facilities including Greens Creek in Alaska, Pogo Gold Mine in Alaska, Bellekeno Mine in Canada, Minto Mine in Canada, Raglan Mine in Canada, and the Karara Mine in Australia.</i></p> <p><i>Through monitoring, reporting, and inspections required by Parts I.D. and II.B of the Permit, the Division can determine whether the facility is being operated as designed. If the Division determines the facility is not being operated as designed, additional analysis and permit modification, if necessary, will be required. The type of modification would be assessed by NAC 445A.4155, 445A.416, and 445A.417.</i></p>	<p>WPCP NEV2020104 Part II.B.2.g</p>



150	Tailings Facility	<p>The Meteoric Water Mobility Procedure for the waste destined for the tailings dump does show that very high levels of many constituents will be leached out of the filtered clay tailings, which contain residual acid. Even the sulfate salts and neutralization solids show very high levels of total dissolved solids and a few other toxic constituents (see Appendix I). It is agreed by all parties that an 80 mil HDPE³ liner is required to capture any seepage from the tailings dump, so it is clear that the seepage is an environmental risk and potentially very toxic, and must not be allowed to penetrate to the environment.</p> <p>What is the risk of toxic release associated with the tailings facility? In general, risk is a combination of the consequence and the probability of the consequence. In this case, the consequence of release to the environment is severe, so it is then critical that the probability of this occurrence is very, very small. The requirement of an 80 mil HDPE liner certainly reduces direct seepage into the environment in the short term. Eventually the liner will fail.</p> <p>Estimates of the containment lifetime of these liners are on the order of hundreds of years, but under acidic conditions (pH 2.4 at 20°C) this lifetime could fall to 60 to 80 years.⁴ Based on the Meteoric Water Mobility Procedure results, Commenters anticipates initial seepage from the tailings will be acidic as well, with a pH less than 2, and potentially remaining this acidic for many years, maybe hundreds of years. Therefore, the integrity of the liner over time is in question and the probability of the containment with the liner could be low in the long-term.</p>	<p><i>This comment cites a paper (Renken) that describes a study (Gulec) conducted on the lifetime of a 60-mil HDPE geomembrane, while 80-mil HDPE geomembrane is proposed for containment of the CTFS. Although the paper claims the lifetime of a 60-mil HDPE geomembrane is from 67.3 to 83.3 years when in contact with a pH 2.4 solution, other studies differ as described below.</i></p> <p><i>The GRI White Paper #6 on Geomembrane Lifetime Prediction: Unexposed and Exposed Conditions describes a geomembrane lifetime in stages:</i></p> <p style="padding-left: 40px;"><i>Stage A - Antioxidant Depletion Time</i></p> <p style="padding-left: 40px;"><i>Stage B - Induction Time to the Onset of Degradation</i></p> <p style="padding-left: 40px;"><i>Stage C - Time to Reach 50% Degradation (i.e., the Half-life)</i></p> <p><i>The Gulec study described in the Renken paper found the antioxidant depletion times to be 69 and 78 years depending on the initial Oxidative Induction Time (OIT), but also studied a one-sided exposure antioxidant depletion time where the antioxidant depletion time was 210 and 238 years depending on the initial OIT. The Gulec study also admits, "However, these lifetime estimates consider only the antioxidant depletion time and do not account for the induction time and time required for degradation of engineering properties."</i></p> <p><i>The article "Environmental Protection with HDPE Geomembranes in Mining Facility Constructions" summarizes papers studying the degradation of geomembranes. In one of the studies, a 60-mil HDPE geomembrane was immersed in a pH 0.5 solution and found that the antioxidant depletion time (Stage A of the total lifetime) was 250 years at 20 degrees Celsius.</i></p> <p><i>Another study (Rowe) examined the service life of an 80-mil HDPE geomembrane immersed in a pH 6 solution and found the service life likely to exceed 700 years and will probably be of the order of 1000 years (or longer) at 20 degrees C... The service life in a liner configuration may be expected to be longer than when immersed in leachate.</i></p> <p><i>While several studies provide a range of expected lifetime predictions under different conditions, the evaluations were conducted by completely immersing the liner into the solution, which is not representative of field conditions as stated above. Even a one-sided exposure analysis would not be completely representative of field conditions, as the CTFS 80-mil HDPE geomembrane will not be in consistent contact with the minimal amount of seepage that may reach the bottom of the facility. The perimeter areas that may experience more frequent contact with solution, precipitation, and UV rays can be visually inspected for damage and promptly repaired.</i></p> <p><i>The referenced studies can be found at the following links:</i></p> <p><i>GRI White Paper #6: https://geosynthetic-institute.org/papers/paper6.pdf</i></p> <p><i>Renken: https://www.geosynthetica.com/Uploads/RenkenMchainaYanful.pdf</i></p> <p><i>Gulec: https://www.researchgate.net/publication/245408317_Effect_of_acidic_mine_drainage_on_the_polymer_properties_of_an_HDPE_geomembrane</i></p> <p><i>Environmental Protection with HDPE Geomembranes in Mining Facility Construction: https://www.mdpi.com/2673-7108/1/2/9/htm</i></p> <p><i>Rowe: https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.583.5512&rep=rep1&type=pdf</i></p>
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151	Tailings Facility Seepage	The extent of toxic water escaping into the environment due to liner failure will depend on rate of seepage, and the seepage is an important factor in developing a management plan for tailings facility. During active mining, leaks in the tailings facility liner are highly unlikely, assuming the liner was installed correctly. There is no discussion on the amount of drainage expected during mining.	<i>Tailings material will be placed in the CTFS at the required moisture content and compacted to 95 percent of the maximum dry density according ASTM D1557. This is the same requirement used for soils when constructing an embankment where seepage is not observed. A scenario where seepage may occur is as a result of precipitation which would drain to the Reclaim Pond.</i>	WPCP NEV2020104 Part I.D.7
152	Tailings Facility Seepage	According to the fluid management plan, any drainage from the tailings facility will be directed to the processing facility, which is a standard practice and Commenters certainly have no objections. The longterm seepage analysis appears to assume that there is no drainage at the beginning of closure, since the Piteau report states that, "The wetting front via infiltration slowly migrated downward to approximately 20-meter depth during the 1,000 year simulation, confirming that there will be sufficient time before any infiltration reaches the CTFS bottom." This would seem to be an unsubstantiated conclusion, since there is no discussion of whether there would be any drainage during operations. If there is drainage during operations, then seepage may be continuing to occur at closure and continue for hundreds of years or longer. Given that the liner will fail eventually, some seepage will escape to the environment and eventually degrade waters of the State.	<i>The model was run with the goal of determining if/when seepage could occur from the CTFS. The model was run for a total of 1,000 years and demonstrated that over that timeframe, precipitation would only migrate to a depth 20 meters into the CTFS.</i> <i>The current plan is to place the clay tailings in one-foot-thick lifts so no major re-grading is required, or in a lift thickness as determined to be acceptable by the Engineer after testing trials are completed at the start of operations. The clay tailings will be comprised of a silty sand to a silty clay material and will meet the criteria for a clay cap and the clay tailings themselves will function as a low permeability cap which will impede infiltration, therefore no seepage is anticipated or expected during operations.</i> <i>The CTFS surface will be graded to match natural topography (~3% - 6%) which drains towards the southeast, encouraging runoff and reducing the presence of ponds forming on the surface. Compaction drying and stacking of clay tailings in the CTFS is anticipated to further reduce the hydraulic conductivity of materials.</i> <i>Based on the operational protocols for tailings material placement and the geotechnical properties of the in-place tailings material, no drainage is anticipated to occur from the CTFS during operations.</i>	
153	Tailings Facility Seepage	There is no practical experience with this specific type of tailings, so we have only model analysis to provide an estimation of the seepage. The most important practical experience that is missing is the ability of the filter presses to consistently meet the target water content for the filtered tailings. The hydraulic conductivity of the tailings and, thus, the seepage rates will be extremely sensitive to the water content of the tailings at the time of deposition in the tailings facility. When hard-rock tailings are filtered, the target water contents are typically 15%, but water contents can easily be 16-18% when everything is working, and 22-23% when the everything is not working. ⁵ So how well is the water content of the clay filtered tailings really known? The value of model analysis is to provide the range of outcomes. A good model will at least capture the best and least desirable outcomes, which can form a basis for the management plan.	<i>The ability of the filter pressed to consistently meet the target water content for the filtered tailings is described in the document titled, "Filterability of LNC Neutralized Clay Slurry V2". However, if it becomes apparent through the routine monitoring, reporting, and inspections required by Parts I.D and II.B of the Permit that there is a wide range of moisture contents, the model, closure plan, and ET Cell capacity can be updated accordingly.</i>	WPCP NEV2020104 Parts I.D. and II.B 4 August 2021 Filterability of LNC Neutralized Clay Slurry v2
154	Tailings Facility Seepage	The uncertainty in the range of outcomes on seepage is unacceptably large. The permit application submitted to the state of Nevada April 2, 2020 states that a maximum seepage rate of 74 gallons per minute (GPM) was calculated by Newfields. ⁶ However, associated analysis was not found, although the report stated that it was in Appendix E. GBRW could not find relevant analysis connected to this maximum seepage rate in the appendix. It is also not stated from this same document in the application the timeframe of expected seepage. Due to NDEP inquiries, Lithium Nevada Corp. (LNC) did produce another analysis dated January 26, 2021 and a final revision on September 21, 2021, a year and a half later, contracted by Piteau on the rate of seepage expected from the tailings dump. ⁷ The results of the Piteau analysis is over three orders of magnitude smaller for what Piteau defines as the "base case." Which is correct? The Newfield	<i>See Response 2 regarding the 74 gpm calculation. The 74 gpm calculation was only used to size the Reclaim Pond. After a further detailed analysis by Piteau, the Reclaim Pond sizing is highly conservative and the capacity is expected to be more than enough to collect any seepage and precipitation during operations.</i>	



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		analysis did not seem to be provided as stated above and the Piteau analyses are very short technical memos where many unaddressed questions remain.		
155	Tailings Facility Seepage	The Piteau analysis leaves many questions unnecessarily unanswered and Commenters view the results in serious question. The technical memo provides a target of residual water content in the tailings of 46%, but there was no analysis of the sensitivity of the seepage rate to the value of this residual or "in-situ" water content. It is highly likely that water content will vary and is a major source of uncertainty.	<p><i>See Response 11. The tailings material is required to be stacked at the required moisture content and included for monitoring in the Permit under Part I.D.7. Further, Permit limitations under Part I.G.11 and I.G.12 restricts the moisture content of the tailings material according to the specification in the design report.</i></p> <p><i>An additional SOC item (Part I.B.8) was added to the Permit requiring an additional sensitivity analyzing the effects of the water content in the tailings on the anticipated seepage rate.</i></p>	WPCP NEV2020104 Parts I.D.7, I.G.11, I.G.12, I.B.8
156	Tailings Facility Seepage	In addition, the analysis did not examine the combined effects of varying, say, the precipitation with changes in the transpiration rate or the in-situ water content.	<p><i>The purpose of a sensitivity analysis is to determine the robustness of an assessment by examining the extent to which results are affected by changes in values of estimated/unmeasured variables, with the aim of identifying results that are most dependent on those variables.</i></p> <p><i>In the sensitivity analysis, all conditions are held steady, then one parameter is varied at a time to determine its impact potential. By varying multiple parameters concurrently, there would be no way to determine which variable resulted in a change to the model outcome.</i></p> <p><i>Four sensitivity analyses were run for the infiltration model configuration to evaluate the potential variation that may be encountered during closure and included sensitivity analysis of "Alternate Clay Tailings", "No Transpiration", "Decreased Potential Evaporation/Transpiration", and "Precipitation X 2". Alternate Clay Tailings refers to the hydraulic conductivity being raised by 2 orders of magnitude, ultimately resulting in a lower saturated porosity (lower water content) as compared to the proposed in-place CTFS material.</i></p>	Piteau CTFS
157	Tailings Facility Seepage	The analysis is also a 1-D (one-dimensional) analysis, so lateral flow effects are ignored. It is unlikely (but not impossible) that cracking could occur from the top to the bottom of the facility. However, cracking could occur that could convey water from the interior to the exterior of the facility. This horizontal transport is not considered in the 1-D analysis.	<p><i>Due to the thickness and stacking of clay tailings, the material itself is not expected to develop desiccation cracks that would penetrate the full 190 ft profile. Composite salt/clay tailings materials were tested to have even lower hydraulic conductivity values than unmixed clay tailings (1.2×10^{-7} cm/s) owing to the hydration of salts.</i></p> <p><i>Hydrus 1D is listed on the BMRR guidance document titled "LISTING OF ACCEPTED CODES FOR GROUNDWATER AND GEOCHEMICAL MODELING AT MINE SITES" and is the preferred draindown model in analyzing draindown from tailings impoundment.</i></p>	BMRR GUIDANCE DOCUMENT: LISTING OF ACCEPTED CODES FOR GROUNDWATER AND GEOCHEMICAL MODELING AT MINE SITES
158	Tailings Facility Seepage	There are planned layers of more coarse waste rock material in the tailings, and water could flow laterally along these layers and seep out the sides of the dump. Furthermore, if some drainage is anticipated during mining operations, then the Piteau conclusion of 1,000 years of no seepage is not supported as discussed above. The assumed initial state of the tailings dump in the Piteau analysis is based on the "in-situ" moisture content (which is also variable) of the tailings as it is dispatched from the processing facility. However, during mining, the developing tailings dump will be infiltrated by precipitation, which would increase the moisture content, and the hydraulic conductivity at closure. If this is so, then the initial state of the tailings dump as modeled by Piteau is incorrect and the results are incorrect.	<p><i>Any waste rock placed within the tailings stack will not impact the meteoric water infiltration since the waste rock will be compacted between layers of low permeability tailings. The overall vertical permeability of the stack should not be impacted by isolated roadways of rock. However, monitoring for tons of waste rock placed in the CTFS has been added to the Permit under Part I.D.7 in order to track placement. If it is apparent that more waste rock is being placed than anticipated, revision to stability and seepage analysis will be required.</i></p> <p><i>The CTFS is to be graded to shed precipitation and limit infiltration throughout operations. With the moisture requirements, required compaction, and a compacted permeability of 10^{-6} cm/s that must be achieved prior to the placement of additional lifts of tailings material, very minimal draindown is expected as described in the Piteau memo. Draindown reporting to the Reclaim Pond will primarily be precipitation runoff from the CTFS.</i></p>	WPCP NEV2020104 Part I.D.7



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159	Tailings Facility Seepage	The Piteau analysis does show sensitivity to the annual precipitation. It appears as though Piteau did not model the annual precipitation as variable from year to year, but used the same value based on the average of 12.2 inches per year (in/yr). Doubling the average resulted in a 600 fold increase in the seepage rate, but it is not clear what would be the effect of some years high and some years low. The question of could a high year could produce a pulse of seepage is not addressed, and how does the variable precipitation in general affect the results.	<i>Please see Responses 12 and 13 regarding the precipitation inputs into the Hydrus 1D model.</i>	
160	Tailings Facility Seepage	An independent assessment of the seepage and management of the tailings dump is needed. Commenters cannot comment on the Newfields seepage estimation, since we do not have access to any details. However, based on the Piteau technical memo of September 21, 2021, it appears as though the full range of seepage has not been bounded, and the method of the analysis is lacking the rigor required of a first-of-its-kind tailings dump.	<i>The Nevada Administrative Code (NAC) 445A.350-NAC 445A.447 and NAC 519A.010 - NAC 519A.415 were specifically developed to implement the requirements of the Nevada Revised Statutes (NRS) 445A.300-NRS 445A.730 and NRS 519A.010 - NRS 519A.290. Per statute, the BMRR is the designated regulatory agency tasked to review application materials and design documentation and to conduct an independent assessment of the materials and documentation in support of the agency's mission to preserve and enhance the environment of the State in order to protect public health, sustain healthy ecosystems, and contribute to a vibrant economy.</i> <i>A third-party review is not required by the regulations as the only occurrence of third-party review in the regulations is under NAC 445A.415 when a lower level of engineered containment is being proposed. For the Thacker Pass Project the CTFS does not have a lower level of engineered containment with the incorporation of leak detection, being a dry stacked facility, and lined with 80-mil HDPE geomembrane. The CTFS would be constructed and operated in accordance with the applicable regulations; therefore, a third-party assessment is not required or necessary.</i>	NAC 445A.415
161	Tailings Facility Closure	Even if we assume that the 80 mil HDPE liner lasts indefinitely (thousands of years) there is still the issue of long-term management. The closure plan calls for the use of evapotranspiration cells (ET cells) to manage any long-term drainage. According to the factsheet provided by NDEP along with the permit, the tailings reclaim pond is designed to handle the 74 gpm for 7 days from the Newfields estimation, which may not capture the range of seepage. It is not clear what is the drainage rate capacity of the ET cells. What is needed is an estimation of how long seepage will need to be managed – will a long-term funding mechanism be needed to manage the tailings drainage?	<i>Please see Response 162.</i>	
162	Tailings Material Neutralization	The risk of damage to the environment by the tailings dump would be significantly reduced if all of the tailings are neutralized including the filtered clay tailings prior to disposal. According to the factsheet, Lithium Nevada Corp. is considering complete neutralization, and the permit does include under Continuing Investigations – “The Permittee shall initiate and continue neutralization studies of tailings material prior to its filtration and stacking on the CTFS.” This is a good addition to the permit, but Commenters would like to see the agency require a plan for complete neutralization of the tailings prior to mine construction. LNC needs to provide to NDEP and the public a complete neutralization feasibility analysis, which should have submitted as part of the permit application. The feasibility analysis needs to go beyond a cost analysis, but examine the effectiveness and technical capacity to fully neutralize all of the tailings including meteoric water mobility test on the fully neutralized tailings. Neutralization is a clear precautionary environmental protective measure that will also benefit closing and managing the mine site. To some extent, by not requiring complete neutralization, as planned, the tailings	<i>While the Division concurs that neutralization of the tailings materials prior to placement in the CTFS would result in an additional environmental protective measure, the Division can only strongly recommend that LNC modify its operation to include a neutralization process.</i> <i>As such and as you have stated, the Permit includes a continuing investigation item (Part I.N.3 of the Permit) requiring the Permittee to submit the findings of neutralization studies annually, which should at least include details of how neutralization is being evaluated, problems being encountered, and the effects of neutralization on tailings properties and stability. However, based on the approved tailings impoundment design, i.e., fully lined 80-mil high-density polyethylene containment (HDPE), once the HDPE is buried beneath the emplaced tailings, the potential for mechanical damage/failure of the liner system is reduced to near zero percent, so the potential for release of the material is essentially non-existent.</i> <i>As stated in previous response to comments. the CTFS will have its own seepage collection pond, a double-lined leak-detected facility, to capture and manage any potential seepage that may occur. Current model prediction indicate that, based on infiltration through the cover system alone, the seepage is anticipated to be maximum of 0.02 gpm. As the current</i>	



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		<p>facility would leave a perpetual risk to waters of the State caused by the release of concentrated acidic water when the tailings facility eventually fails. Even if the tailings facility is a long-term storage facility (decades to hundreds of years), it is not a truly permanent walk-away solution. Given that, there should be an analysis that estimates the eventual fate of the acidic tailings, and a requirement for funding the associated long-term management to prevent these impacts. Given the high degree of uncertainty and likely errors in the modeling and lack of on-the-ground experience requiring complete neutralization is a needed and reasonable measure.</p>	<p><i>process includes the drying, placement, and compaction of tailings at specified conditions with the CTFs., i.e. unsaturated conditions, no seepage from the emplaced tailings is expected or anticipated, therefore, long-term management of the tailings is not warranted.</i></p>	
163	Tailings Facility	<p>Recommendations:</p> <ol style="list-style-type: none"> 1. An independent assessment of the tailings dump and management of seepage is needed. This assessment needs to include a comparison of the Newfields and Piteau seepage estimations. 2. There needs to be information and associated analysis on the tailing drainage during mining operations. 3. Tailings dump seepage analysis needs to address prior saturation. 4. Tailings dump seepage analysis needs to capture the full range of outcomes by correcting errors and including more realistic 3-D analysis that fully explores changes in parameters and combinations of parameters. 5. There needs to be an analysis of the chemical profile of the drainage over time. One humidity cell test may be insufficient. 6. NDEP should require a plan for complete tailings neutralization before mine construction as a protective measure. Short of this requirement there needs to be a defensible feasibility analysis that neutralization of the tailings is technologically impossible or that it would be more protective of the environment to stack acidic tailings than to neutralize the tailings. 	<ol style="list-style-type: none"> 1. <i>Please see Response 160 regarding the request for an independent assessment.</i> 2. <i>Please see Response 2 regarding the two seepage analyses.</i> 3. <i>Please see Response 156 regarding an additional sensitivity analysis to assess moisture content.</i> 4. <i>Please see Responses 156 regarding the sensitivity analyses in the seepage analysis, 157 regarding the use of Hydrus 1D, and 156 regarding combination of sensitivity analysis</i> 5. <i>The humidity cell test conducted provides a worst case chemical profile of the tailings material and demonstrates that chemistry and pH improves over time. Please see Response 6 regarding kinetic testing.</i> 6. <i>Please see Response 7 regarding tailings neutralization.</i> 	
164	Water Level Permit Limitation	<p>Mining Below the Water Table</p> <p>Commenters agree that the mine plan involving excavation below the water table will degrade waters of the State. Lithium Nevada Corp. (LNC) has not provided sufficient details on a mitigation strategy that toxic elements that will leach from the backfilled pit will prevent groundwater degradation. There needs to be a clarification of the meaning of item 7 in the schedule of compliance and urge NDEP to rewrite this item for clarity. LNC must provide a defensible plan for how to avoid pollution degrading groundwater, and not be allowed to merely change its model to disappear the leaching problem. Commenters certainly support improvements to a groundwater model, but issue here is leaching of minerals into groundwater. The schedule of compliance item 7 should contain an additional stipulation that requires a</p>	<p><i>Yes, it is correct that LNC cannot simply change the inputs to the model. A new plan with a supporting groundwater model would have to be proposed and approved by the Division which demonstrates waters of the State will not be degraded. The schedule of compliance item I.B.7 has been modified for clarity.</i></p> <p><i>A proposal to allow mining below the water table would require a permit modification that includes additional studies and plans to demonstrate that degradation of waters of the State will be prevented. Such a permit modification would be subject to NDEP review and approval after a public comment period.</i></p>	WPCP NEV2020104 Part I.B.7



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		change in the mine plan to avoid the leaching of toxic elements or other wise degrades waters of the State.		
165	Water Level Permit Limitation	The permit states, "Mining below the 4,840 feet above mean sea level elevation, which is 15 feet above the pre-mining regional water table." However, the Thacker Pass Groundwater Levels contour map created by Piteau (see Appendix II below) appears to show contours within the outline of the mine pit well above 4,850 feet AMSL with water levels as high as 5,200 feet AMSL within the north subpit. Commenters recommend that NDEP clarify the restriction G. 2. By delineating those areas that can be mined to 4,840 feet AMSL .	<i>Please see Response 120 regarding revision of the permit limitation to cite the memo which delineates the pit perimeter.</i>	
166	Water Level Permit Limitation	We also note that there is a water protest process underway that could affect the estimation of the pre-mining groundwater level. If this pre-mining water level is revised based on the water protect or improved analysis will this be considered a minor or major modification to the permit? This is an important restriction in the permit and Commenters urge NDEP to public notice a change in the pre-mining water level.	<i>The Division would consider this instance a minor modification, as the intent would stay the same to maintain a 15 foot buffer above the regional water table.</i>	NAC 445A.417
167	Monitoring	<p>Monitoring Plan</p> <p>Commenters are basing their evaluation of the monitoring wells on the map shown in Appendix III, which is contained in the Reclamation permit application submitted on August 4, 2021. It appears as though there are sufficient groundwater monitoring wells downgradient of facilities that have the potential to degrade groundwater. However, NDEP should require at least 2 upgradient monitoring wells to allow for a comparisons with the downgradient wells just north of the pit outline, and another well directly upgradient of the CTFS and one or two along the east side of the CTFS.</p> <p>The wells need to screened and multiple levels to capture the full groundwater profile and account for the lowering of the water table.</p>	<p><i>Monitoring Well, MW 18-04, represents upgradient water quality north of the pit and is required for monitoring under Part I.D.8.</i></p> <p><i>Monitoring Well, MW-08, represents upgradient water quality for the tailings facility.</i></p> <p><i>The groundwater gradient is southeast; therefore for the first phase of the CTFS, monitoring wells MW 21-01, MW21-02, MW 18-02, and MW 21-03 are sufficient to monitor downgradient water quality. For future phases of the CTFS, additional monitoring wells may be installed; however, the Division typically discourages the use of multiple screen intervals. The future proposed design for additional monitoring wells will be reviewed to ensure a proper screen interval is selected.</i></p>	WPCP NEV2020104 Part I.D.8
168	Closure	<p>Long-term "Perpetuity Treatment"</p> <p>The potential for long-term management of the tailings dump creates a lack of clarity on the "Permanent Closure" of the mine. Nevada regulation (NAC 445A.446) states, "Permanent closure is complete when the requirements contained in NAC 445A.429, 445A.430 and 445A.431 have been achieved." NAC 445A.429 requires that, "The holder of the permit must institute appropriate procedures to ensure that all mined areas do not release contaminants that have the potential to degrade the waters of the State." In our view this mine falls outside of the ability of the state of Nevada to regulate and thus cannot be properly permitted.</p>	<i>The Division disagrees with this statement. The tailings facility will be constructed as a zero-discharge facility in accordance with NAC 445A.433 and to operate and close to meet all current regulations and design standards as required per NAC445A.350 through NAC445A.447, inclusive.</i>	NAC 445A.433

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169		<p>Conclusion</p> <p>We appreciate the constraints and ongoing investigations imposed by NDEP on the Thacker Pass Mine. However, we believe there needs to be increased clarity in some aspects of the permit, more required analysis, and increased environmental protection measures. At this time the Commenters do not support this permit as drafted.</p> <p>Great Basin Resource Watch (GBRW), Basin and Range Watch, and Wildlands Defense are available for continued discussions on the Thacker Pass mine.</p>	<p><i>Thank you for your comments on the draft Permit and Fact Sheet. Several revisions have been made in response to the comments including the revision of Parts I.G.2 and I.B.7 for clarity and the addition of I.B.8.</i></p>	
E-mail from Gina Amato and Karen Hogue, Co-chairs of Thacker Pass Concerned Citizens, received 8 December 2021.				
170	Public Monitoring Data	<p>When it comes to the issue of water quality and quantity, there is considerable community concern regarding the adequacy and accuracy of Lithium Nevada's measurements and monitoring methods. This is especially true for the agricultural communities of Kings River and Orovida. Therefore, Thacker Pass Concerned Citizens (TPCC) proposes that LNC be required to provide up-to-date information on the wells and springs being monitored on their website so that community members have the opportunity to go on and identify potential problems with the water quality/quantity and react in a timely manner to get those problems resolved.</p>	<p><i>Existing regulations do not require LNC to publish monitoring information on their website; however, the required monitoring data under Part I.D of the Permit is required to be submitted on a quarterly and annual basis under Parts II.B.1 and II.B.2 of the Permit.</i></p> <p>The Division has placed our records related to this project on our online document viewer, which is accessible to the public, at https://ecms.nv.gov/ndep. If you are unable to find the records you are looking for online, you may submit a public records request at https://ndep.nv.gov/resources/public-records-request.</p> <p><i>BMRR plans to post Thacker Pass related permit and project information online for review within 2 weeks of receipt.</i></p>	<p>NRS 445A.465, NRS 445A.515, NRS 445A.665, NAC 445A.247 NAC 445A.251, NAC 445A.252, and NAC 445A.440</p>
Letter from Maxine Redstar, Chairwoman of Fort McDermitt Paiute and Shoshone Tribe, received 9 December 2021 via e-mail.				
171	Design Storm Events	<p>Climate change has impacts to stormwater events, both frequency and severity. It is unclear in the permit what the State has done to account for the increased likelihood of severe stormwater events and how that impacts design criteria for the stormwater management structures throughout the site, but specifically in conveyance channels and ponds.</p>	<p><i>NAC 445A.433.1(c) requires containment for the 100-year, 24-hour storm event. NAC 445A.433.2.a applies to the permanent closure period and requires components to withstand the 500-year, 24-hour storm event. Revisions to the design storm events due to climate change would require regulatory revisions.</i></p>	<p>NAC 445A.433.1(c) NAC 445A.433.2(a)</p>
172	Waste Rock Characterization	<p>The concentration of contaminants is given based on statutory values; however, this does not speak to potential load to the system, particularly of those contaminants associated with waste rock piles. It is important to consider load of contaminants into our groundwater systems as the risk of concentration disbursement decreases with seasonal drought and increased drought severity due to climate change. It is unclear how this was taken into account in the permit considerations.</p>	<p><i>Because analysis of the waste rock presented exceedances of Profile 1 reference values, all waste rock is placed on containment. All runoff and infiltration from and through the waste rock will be contained and collected in an 80-mil HDPE geomembrane-lined stormwater and sediment pond.</i></p>	<p>NAC 445A.396 and 445A.397</p>
173	Monitoring	<p>The monitoring plan for groundwater quality is unclear in the permit. A map of the groundwater monitoring system should be included in the permit. Reference to the state reviewed monitoring plan, if applicable, would also assist the reader in understanding the longer-term process for monitoring efforts of the effect of the site.</p>	<p><i>Part I.D.8 includes the monitoring wells required for sampling and what component they are monitoring. The monitoring plan has been submitted and may be accessed on the public document viewer.</i></p>	<p>WPCP NEV2020104 Part I.D.8</p>
174	Mined Material Characterization	<p>Initial rock characterization efforts identify some increased concentrations of the Profile 1 Reference Values; it is unclear in the permit what is required throughout the monitoring effort to continue mineral profiling and assessment of impact to the aquifer and downgradient water quality to ensure there is action when contaminants meet screening levels.</p>	<p><i>Part I.D.7 of the Permit requires routine analysis of all mined materials, including waste rock, to be evaluated and compared with the initial characterization.</i></p> <p><i>Part I.D.8 of the Permit requires routine monitoring of all groundwater monitoring wells to evaluate trends of drinking water constituents. Data and trends in concentrations are evaluated in quarterly and annual monitoring reports. Investigation is required if increasing trends exceedances are observed.</i></p>	<p>WPCP NEV2020104 Part I.D.7 and I.D.8</p>

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175	Dust Suppression	The permit fact sheet states that the pit backfill runoff water is proposed to be used for dust suppression; however, the assessment of the quality of this water is unclear. Additionally, as this water is being proposed for use onsite with potential employee exposure. Is the risk to employees considered as a part of the determination to use this water for an onsite use?	<i>The Fact Sheet states pit backfill runoff water will be used for dust suppression on other contained facilities such as the CTFS.</i>	Fact Sheet Section "Waste Rock/Gangue Management and Pit Backfill"
176	Water Elevations	How does water use at the site potentially affect groundwater elevations considered in the limitations of depth of the pit relative to depth to groundwater? How is this considered in the Permit?	<i>Pre-mining water elevation data was used to establish the Permit limitation restricting mining to 15 feet above the water table; therefore, water use would not affect the groundwater elevations considered in the limitation.</i>	WPCP NEV2020104 Part I.G.2
177	Permit Limitation	The permit makes somewhat conflicting statements of depth of pit. The Permit limitations section states the limit is 4,840 feet amsl but references the 15 feet depth to groundwater. It is worth clarifying in the permit documents (both permit and fact sheet) which is the permitted bottom of the pit. Additionally, if water levels are seen to fluctuate over time, what is the response to depth of the pit if depth to groundwater increases?	<i>4,840 is the permitted bottom of the pit which was established with 10 years of pre-mining water elevation data. In the event water levels happened to increase, the Division would enforce a 15 foot buffer above the increased water elevation.</i>	WPCP NEV2020104 Part I.G.2
178	Groundwater Monitoring	The permit describes two piezometers used to determined depth to groundwater; however, two piezometers would limit the use of this data. An additional piezometer would assist in determining flow of water at the pit, which could assists in determination of impact to downgradient water use throughout the trends during project life and after closure or the use of alternative wells to meet this goal should be specified.	<i>The two piezometers are only necessary to confirm water levels at the pit. With the use of data collected from the rest of the monitoring network on site, groundwater flows can be determined.</i>	
179	Pond Sediment	It is unclear in the documentation whether only a single pond is designed to retain sediment space or if this pertains to all ponds. The Permit Limitations specifically states that no more than 2 feet of sediment is allowed in any pond, but only a single pond is discussed as having this design component. Is this justified in the design as other ponds are not expected to experience sediment loading across the site? If so, this would be a helpful justification to include in the permit.	<i>The referenced Permit limitation Part I.G.1 states, "The accumulation of more than 2 feet of sediment in any pond." This limitation pertains to all ponds.</i>	WPCP NEV2020104 Part I.G.1
180	Pond Names	It appears some of the pond names may be inconsistent within the permit and fact sheet text. It is useful for these to be reviewed and corrected to ensure consistent language throughout the permit.	<i>The Permit and Fact Sheet have been revised to ensure consistent naming conventions of the ponds at the Thacker Pass Project.</i>	
181	Design Storm Events	Some of the units are required to be designed for the 500-year, 24-hour storm event and other are to be designed for the 100-year, 24-hour storm event; however, it is unclear what the metrics are for determining the need for these design capacities. Please explain.	<i>Pursuant to NAC 445A.433.2(a), the 500-year, 24-hour storm event applies to the permanent closure period.</i>	NAC 445A.433.2(a)
182	Sulfur Dioxide	What is the likelihood of sulfur dioxide off-gassing in the event the molten sulfur tank leaks? What is the likelihood of the plant combusting in the event of a leak in the molten sulfur tanks?	<i>In the event molten sulfur leaks outside the tank, it will quickly solidify. Sulfur in its solid, elemental form, will not have the potential to off gas. The likelihood of molten sulfur combusting in the event of a tank leak is very small. If sulfur spills on the ground, it will quickly solidify. A concrete pad has been designed in this area, and any spilled sulfur would be cleaned up promptly by maintenance personnel. There will be no sources that can ignite solid sulfur in the area.</i>	



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183	Tailings Seepage	In discussions related to the Clay Tailings Filter Stack in the fact sheet, the liner is described, and a statement is made regarding the seepage rate. Please include the citation for the seepage calculation process used for this determination.	<i>Please see Response 2 regarding the 74 gpm seepage calculation.</i>	
184	Tailings ET-Cell	It is unclear if in the determination of pond lifetime potential for evapoconcentration resulting in precipitates or over-sedimentation resulting in reduction of capacity were considered and what those components were assumed to be at the permitted lifetime of the project.	<p><i>Based on a modeled seepage rate of 0.02 gpm and the conceptual ET-cell design based on a "Cover only" sensitivity analysis to manage an approximate drawdown rate of 15 gpm, a calculation to estimate the anticipated lifetime of the ET-cell storage capacity due to salt-loading/pore plugging was not conducted.</i></p> <p><i>The conceptual design of the ET-Cell is comprised of a storage zone consisting of a coarse grained material, possibly even coarse gangue, overlain by an evaporation/evapotranspiration zone which will consist of a one-foot-thick layer of growth media. The surface will be seeded to promote vegetation and evapotranspiration.</i></p>	
185	Monitoring	Parameters for presence of water in the pit should include depth of water when present.	<i>The footnote 12 for presence of water was modified to include the depth of ponded water.</i>	WPCP NEV2020104 Part I.D(12)
E-mail from Mary Thompson, received 5 November 2021.				
186	General	<p>I have resided in the great state of Nevada since 1969. I have hiked the majority of the state along with lake Mead and lake Tahoe.</p> <p>I remember when we released water from the dam until like me because of the abundance of water .Now look at it, it is sad isn't it! If only we had put more foresight and consideration into planning of these projects . The destruction of the wildlife, vegetation, the geology steadily declining.</p> <p>The scared historical site on the land that would be destroyed . How much more wrong do we do , before we clearly see our errors? How much more wrong can be undone?</p> <p>How can judge Miranda Du override the national historical ACT written in 1966? Why why was it written? And how can judge Miranda Du come to the decision that there was not enough evidence of the destruction. A process that takes 3 to 4 years that was done in 1 year. Sad, you wonder who's getting a kickback from this.</p> <p>Please tell me what the Nevada division of Environmental protection stands for? Do you truly believe this is the right thing to do ? And most of all why did you what your position at the Nevada division of the environmental protection .</p> <p>One year is not enough time to say that this lithium mine will be safe. And how will you protect the historical site that is located there?</p> <p>Thank you</p> <p>Mary Thompson</p> <p>180.000 active 200.000 closed mines in Nevada. Really!!</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445B and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i></p>	

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E-mail from Mary Thompson, received 5 November 2021.				
187	Outside of Scope of Decision	I would like to know how BLM got away with approving The largest lithium mine in the state of Nevada.?	<i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445B and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i>	
E-mail from Rheanna Lake, received 16 November 2021.				
188	Outside of Scope of Decision	Do not allow lithium mining. Prioritize water. How many times will the United States betray its Native Zpeoples? No more. Respect	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
E-mail from Carl van Warner, received 16 November 2021.				
189	Water Quality / Health	The Final Environmental Impact Statement prepared by the Bureau of Land Management notes that soil and water will be contaminated with sulfates, arsenic, antimony, and uranium, for example. Long term exposure to antimony can result in chronic bronchitis and chronic emphysema. And, this is in an area where wild fire smoke is already wrecking local air quality. Long term exposure to arsenic can lead to skin lesions and skin cancer. Long term exposure to uranium can lead to kidney damage and liver and bone cancer. And, this is in an area where Fort McDermitt tribal members have already been killed by cancer from working at the McDermitt and Cordero Mercury mines. Please do not Permit a mine at Thacker Pass.	<i>Please see Response 55 regarding the Permit limitation. Part I.G.2 of the Permit restricts mining to remain 15 feet above the water table. With this restriction, degradation of waters of the State is not anticipated. The comment references the plan authorized in the EIS.</i> <i>Please see the Bureau of Air Pollution Control Notice of Decision and response to comments.</i> <i>Please see Response 95 regarding the McDermitt and Cordero Mines.</i>	
E-mail from Allison Lowery, received 17 November 2021.				
190	General	I stand against the Thacker Pass Lithium Mine. Protect the air, land, water, people. My loyalty is to the land!	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
E-mail from Henry Guinn, received 17 November 2021.				
191	Indigenous Rights	For everyone's future, we need to uphold Indigenous rights to access and protect biodiversity in their territories as entitled in the UN Declaration of the Rights of Indigenous Peoples.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i> <i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i>	

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E-mail from Molly Willoughby, resident of Smith, NV, received 17 November 2021.				
192	Request to Deny	I am a citizen of Smith, Nevada, writing to ask you to take all necessary measures to halt the proposed mine by Lithium Americas Corp at Thacker Pass. I have done this before, and I am reiterating it now in anticipation of the air quality hearing scheduled for 11/18 regarding the project. I request that the Nevada Department of Environmental Protection deny air (and water) quality permits for the Thacker Pass Lithium Mine Project.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
193	Water Rights / Transportation	There are numerous ethical and environmental crises implicated in this project, as I am sure you are aware by now. Local rancher Edward Bartell has filed a lawsuit challenging the mine, claiming that Lithium Americas made multiple presentations and publications where it regularly stated the mine would use only half the amount of water that the approved Environmental Impact Statement (EIS) now claims. This does not constitute being honest with locals. Additional impacts on nearby communities would be drastic changes to the small town of Orovada, which would be expected to have 240-400 semi trucks (120-200 round trips) passing per day, or roughly one every 4 minutes, according to the EIS (Section 2.2.7.5, p. 2-14). More to the point, the environmental impacts of this mine would be devastating. The project would use 5200 acre-feet of groundwater per year for most of its 4 decade lifetime in an already over-allocated setting (FEIS Section 4.3.1, p. 4-7).	<i>NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	
194	Water Quality	There are also enormous pollution concerns with water and mine tailings. The EPA itself has criticized the official EIS approved by the BLM, noting that "the plans are not developed with an adequate level of detail to assess whether or how groundwater quality downgradient from the pit would be effectively mitigated" and that all action alternatives proposed by the EIS would result in "adverse effects to groundwater quality." The detailed comments on the EIS note serious concerns that its models for predicting the release of harmful pollutants, particularly antimony, are overly conservative, and that pollutants will be released into groundwater at levels exceeding state water quality standards (FEIS pp. R-116--R-124). The Thacker Pass mine would cause serious pollution risk to water resources,	<i>Please see Response 55 regarding the Permit limitation. Part I.G.2 of the Permit restricts mining to remain 15 feet above the water table. With this restriction, degradation of waters of the State is not anticipated.</i>	
195	Animal Habitat	and the open pit operation would destroy and fragment critical habitat used by greater sage grouse, pronghorn sheep, bighorn sheep, pygmy rabbits, golden eagles, ferruginous hawks, prairie falcons, western burrowing owls, spotted bats, red bats, little brown bats, and desert horned lizards, among others. How can the NDEP, whose mission is to "preserve and enhance the environment of the State" and "sustain healthy ecosystems" allow such a project to take place?	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
196	Air	Of course, all of this doesn't even begin to touch on the air permit concerns pertaining to the hearing tomorrow, though I'm sure you can anticipate that a company who cares so little for water resources likewise would endanger our clean air as well. The Thacker Pass project would import and burn thousands of tons of sulfur daily, along with over 10,000 gallons of diesel, the equivalent of a small city. In addition to furthering climate change at a time when mitigation is imperative, the wind patterns of the area will bring air polluted with nitrous oxides, volatile organic compounds, sulfur dioxide, particulate matter, and other Hazardous Air Pollutants to nearby Tribal populations.	<i>Please see the Bureau of Air Pollution Control Notice of Decision and response to comments.</i>	



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197	Tribal Consultation	<p>And this is only a small part of the damage done to Native people in this area. Lithium Americas has not consulted meaningfully with any of the Tribes who have regional ties to Peehee Mu'huh or Thacker Pass, which is a sacred area. Furthermore, it is a site where multiple Tribes collect traditional medicines and foods to this day, it is also a burial ground and the site of a historic Paiute massacre. I would think even the casual observer could understand that such a place holds historical and ongoing importance, especially to communities who have had much of their land and sovereignty continually stripped from them. And yet this project is just more of the same abusive, colonial and small-minded behavior. To pretend that Lithium Americas is attempting to acknowledge this land's historic narrative without taking any measures to talk to or listen to the Fort McDermitt Tribe or other Tribes with ties to this area is willfully ignorant. They want to dig here regardless, and so they pretend that nothing important is here.</p>	<p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p>	
198	Carbon Emissions	<p>Finally, as many environmental activists have noted, this mine will not even allow us to stop the progression of climate change. We will not turn our gas guzzling cars into electric paragons of sustainability based on lithium. According to an analysis by the Center for Interdisciplinary Environmental Justice, electrification of cars would only reduce national emissions by 5%. Meanwhile, extractive industries like Lithium Americas (whose contractor to build this mine is the North American Coal Corporation) are responsible for half the world's carbon emissions and more than 80% of extinctions. As summarized by Alex Eisenberg in their letter to the editor of the Elko Daily,</p> <p><i>The Thacker Pass mine alone would burn 11,000 gallons of diesel every day for onsite operations. Double that for off-site operations. Carbon emissions are expected to be 150,000+ tons per year, equating to 2.3 tons of carbon for every ton of lithium produced. Hundreds of tons of sulfur (ironically a waste product from oil refineries) would be used daily in mine operations.</i></p> <p>The greenwashed narrative of the proposed mine at Thacker Pass threatened to ensnare me in environmental platitudes, but by <i>listening</i> to the people, the land, and researched commentary of organizations like the Environmental Protection Agency, I have realized that this mine would be only the first step in a series of gambits to extract wealth for a few at the expense of local livelihoods, indigenous rights, and vulnerable biological diversity. Indeed, Lithium Americas spokesperson Tim Crowley has said that they are <u>"very confident that there will be more development"</u> beyond this project, and the company has staked claims expanding into the Montana Mountains. Yet these mining projects blatantly ignore reality. To address the profound damage we are doing to natural and social systems, we simply cannot continue business as usual, and allowing an exploitative industry to pillage natural resources and human rights for their own profit will fix nothing.</p> <p>As Jonathan Safran Foer has aptly written, "It's always possible to wake someone from sleep, but now amount of noise will wake someone who is pretending to be asleep." I do not think you are truly sleeping to the harsh realities of this project, so I can only hope that you will not <i>pretend</i> to be asleep to the damages it would cause, and to your power to prevent them.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). NDEP also acknowledges that no one strategy or technology will mitigate greenhouse gas (GHG) emissions, however, we do note that a global comparison of the life-cycle GHG of combustion engines and electric cars concluded that life-cycle GHG emissions of electric cars are 60 to 68% lower in the US. See at https://theicct.org/publication/a-global-comparison-of-the-life-cycle-greenhouse-gas-emissions-of-combustion-engine-and-electric-passenger-cars/.</i></p>	

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E-mail from Mary Thompson, received 18 November 2021.				
199	General	Protect Thacker Pass, Nevada from the largest lithium mine in Thacker Pass Nevada approved in less than 1 year. I want to help. So unbelievably wrong !	<i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445A and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i> <i>NDEP notes that the Water Pollution control Permitting process has been ongoing since April 2020.</i>	
E-mail from Mary Thompson, received 18 November 2021.				
200	General	Hope you make the right choice. Don't blindside Nevadans like BLM has . You can not approve in less than a year. Process takes 3 to 4 years. Wake up !	<i>Please see Response 199.</i>	
E-mail from Suzanna Davis, resident of Medford, Oregon, received 18 November 2021.				
201	Land	I have only just heard of this. I live in Medford Oregon and cannot make it to the meeting. This effects us all and should not be considered a local issue. Our beautifully diverse drylands do not need mining to survive financially and will in fact be harmed by such forays into destruction of our small piece of the planet to make money for already glutted mining companies. Refuse this and invest in climate supporting endeavors like solar and wind power. Please, do the right thing and refuse this mining of our beautiful drylands.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
E-mail from Stephany Seay, resident of St. Ignatius, Montana, received 18 November 2021.				
202	General	I humbly, urgently insist that the proposed lithium mine at Thacker Pass and all its permits be denied. We do not need or want this poison. This is wild land, sacred land, historic buffalo range and culturally important to the Piute and Shoshone People. NO LITHIUM MINE at THACKER PASS! Please see attached. *The attachment included a list of Air concerns titled "Thacker Pass will Poison the Air" and closes "Protect the Air, Land, Water, and People"	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i> <i>We also refer the commenter to responses regarding air quality concerns to the separate response to comments documents prepared by the Bureau of Air Pollution Control.</i>	
E-mail from Brian Gibbons, resident of Fairview Park, Ohio, received 18 November 2021.				
203	Water Rights / Brine / Air	Please deny Thacker Pass lithium mining permit. The lithium extraction process uses an excessive amounts of water when balanced against other local uses of water https://www.wired.co.uk/article/lithium-batteries-environment-impact . Lithium mining activities water consumption has a large impact on local farmers to the point that some communities have to get water elsewhere. The potential for toxic chemicals to leak from the evaporation pools into the water supply including hydrochloric acid, which is used in the processing of lithium, and waste products that are filtered out of the brine. Lithium extraction harms the soil and causes air pollution. Communities in the area have already suffered the deadly	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i> <i>Evaporation pools are not proposed at the Thacker Pass Mine, and the project is being permitted as a zero-discharge facility; therefore, all chemicals must be containment at all times.</i>	

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		effects of mercury and gold mining in prior years; now they will be subjected to reduced and potentially hazardous air quality. Permitting the mine means permitting the poisoning of people and the land.	<i>Please see the Bureau of Air Pollution Control Notice of Decision and Response to Comments document for Air Quality concerns.</i>	
E-mail from Tessa Carlton, received 18 November 2021.				
204	Environmental and Cultural Impacts / Transportation	I would like to make a comment on the proposed lithium mine at Thacker Pass. In no way should the state allow this mine to break ground or operate. It is an affront to tribal sovereignty on stolen land in so-called Nevada in the so-called United States. We should be preserving and protecting our increasingly scarce water and protecting important plant and animal habitat. We should be promoting and incentivizing the ceasing of driving individual cars and promoting walking, biking, and public transit as much as possible. We should not pretend that tearing up the earth and producing more extraction-intensive garbage (eg: electric vehicles) will solve the climate crisis. This mine will only be green for investors who will be stuffing their pockets while they gaslight us by saying the destruction is actually helping. It won't. I have a masters degree in geology focusing on paleoclimatology. I have worked in the mining industry, aerosol air quality monitoring, and the environmental consulting industry for the past four years, and I am not misinformed on the topic. This is inexcusable. This is not part of the solution at all. Please reject their permits and do anything possible to prevent Lithium Americas Corporation from desecrating and destroying land sacred to the true stewards and protectors of this country.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
E-mail from Karen Igou, resident of New Castle, Delaware, received 18 November 2021.				
205	Land	Please leave Thacker Pass intact. The world must not extract any more from mother earth if we are to have any livable future. Not to mention the moral obligation to protect species living on this land. Please do all you can to protect this land and not let it be mined for batteries that can be made from hemp and/or sea water. Please take the long view of the 7 generations and make good choices for how we treat our planet that sustains life.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
E-mail from Mary Thompson, received 21 November 2021.				
206	General / Permitting Process/Water Rights	The largest lithium mine in Thacker Pass Nevada approved in less than 1 year is unacceptable. We have been blindsided by BLM. Thacker Pass Nevada is beautiful. You will be destroying the wildlife, vegetation, ranging along the sacred land that is our history . Lithium mines uses tons of water and as we all know we have been in a drought for the last 10 years and it doesn't look like it's going to get any better. Nevadans feel blindsided by the government along with BLM. It makes me believe that there are kickbacks in this process. Nevadans don't want the largest lithium mine in Thacker Pass Nevada. Protect our lands. Thank you Mary Thompson	<i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445A and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i> <i>NDEP notes that the Water Pollution control Permitting process has been ongoing since April 2020.</i>	

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E-mail from Mary Thompson, received 22 November 2021.				
207	General; Permitting Process	<p>I apposed the largest lithium mine in Thacker Pass Nevada approved in than 1 year a process that takes 3 to 4.</p> <p>Why did you cancel the meeting? And why would you blind side Nevada'ns</p>	<p><i>See 208 regarding length of permitting process.</i></p> <p><i>Please see Response 143 regarding the decision to switch the public hearing from in-person to virtual.</i></p>	
E-mail from Mary Thompson, received 26 November 2021.				
208	Permitting Process / Water Rights	<p>BLM blindsided Nevadans in approval of the largest lithium mine in Thacker Pass Nevada approved in less than a year.</p> <p>Nevada has been in a drought for over 10 years.BLM knows how much water is used in mining for lithium.</p> <p>While we were all concerned in 2020 of covid 19 you approved. I don't know how you can sleep at nights .</p> <p>Protect Thacker Pass Nevada.</p>	<p><i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445A and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i></p> <p><i>NDEP notes that the Water Pollution control Permitting process has been ongoing since April 2020.</i></p>	
209	Permitting Process / Water Rights	<p>As a Nevadan I feel blindsided by BLM and the approval of the largest lithium mine in Thacker Pass Nevada a process that takes 3 to 4 years is done in less then 1. Blindsided by you also .</p> <p>Nevadans do not want this lithium mine.</p> <p>We I have been in a drought going on 11 years now and other than mine you're approving takes tons of water daily.</p> <p>Along with the destruction of the wildlife ,habitat ,ranging and a sacred historical site.</p> <p>Honestly I don't know how you sleep at night knowing what you know</p>	<p><i>See response at 208 regarding length of permitting process.</i></p>	
E-mail from Kurstin Graham, received 30 November 2021.				
210	Cultural Significance	<p>I recently toured the Thacker Pass area by bicycle. As an avid Nevada backroads explorer I found this area to be a unique Nevadan landscape with greater value to more people for a longer period of time than the proposed lithium mine. I hosted 3 other adventurers for an overnight trip making loop through the Montana Mountains into Kings River Valley. The experience was fantastic. The natural history combined with the cultural significance of the area would be forever tarnished if not destroyed by an open-pit mining and ore processing plant. The proposed mine represents a "permanent solution to a temporary problem." I hope there can be a better alternative to the proposed mine. To be clear I am opposed to the proposed Thacker Pass Lithium Mine.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p>	



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E-mail from Owen Lattin, received 30 November 2021.				
211	General Environmental Impacts	<p>Please do not move forward in granting the water pollution control or mine reclamation permits to the Thacker Pass Project. An open pit mine in Thacker Pass will do untold amounts of damage to the local ecosystem, and open up a Pandora's box of ecological disaster when the mine's lifespan is over. Examples like the Mount Polley disaster and the infamous Berkeley Pit leave me with little trust in the companies that operate mines like this to take responsibility for the damage they do and the pollution they emit. I've grown up in the internet age and have been shown time and time again that the companies at hand care little about the lasting environmental impact of their projects, and will continue to throw away the future of the earth for a profit.</p> <p>I hope to not see the future of the state and my generation sold away so an electric car and its battery waste away one day.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p>	
E-mail from Ella Salvator of Saint Louis University School of Law, received 1 December 2021.				
212	Tribal Consultation	<p>Please do not issue the Mining and Reclamation Permit or Mining Water Pollution Control Permit for Thacker Project. Mining is a destructive extractive process which will damage this beautiful place permanently, destroy vulnerable wildlife, and hurt the water table, the air, the people living nearby.</p> <p>Even if phase 1 seems reasonable, we do not know how much Lithium Americas will try to expand the destruction in later phases. This is unacceptable.</p> <p>Further, the Tribes who consider this their ancestral land are not in support of you issuing the permits. Please do not once again discard the indigenous voices that are speaking out against this project and you issuing these permits.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p> <p><i>Please see Response 75 regarding future phases and Permit modifications.</i></p>	
E-mail from Samantha Ryan of Storm Development Services LLC, received 1 December 2021.				
213	General	<p>Hello, I just attended the virtual meeting on the Thacker Pass and I would like to add a comment on the permit approvals.</p> <p>I sincerely hope that the mine permits are rejected entirely, water in this state is such a precious and dwindling resource I have to believe we are intelligent enough to not waste such a substantial amount on a project that will very likely result in environmental damage of sacred lands. It seems there is no public benefit to be realized from the approval of these permits, but substantial public and environmental harm.</p> <p>I am a developer so I am very, very rarely on the opposition side of the table in this situation; but in this case I really don't see any pros to this mine other than private profit, and a laundry list of cons that affect a significant amount of people.</p> <p>Not to mention the PR nightmare that will result from an approval on a national and likely global level..... Please don't help create that kind of bad press for Nevada.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p>	



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Oral comment from Deborah Struhsacker				
214	Public Meeting	Very briefly, I want to thank NDEP for making this meeting available via virtual meeting. I think that broadens the ability of the public to listen and to participate. So thank you very much.	<i>NDEP appreciates the comment.</i>	
Oral comment from Stacy Perish, resident of Eastern Oregon.				
215	Access to Tribal Land	<p>And my name is Stacey Parish [ph] and I'm [inaudible], the name of another nation's tribe given to me when my Paiute people were forcibly removed from our homelands of what you might call Eastern Oregon and Northern Nevada, and we were forcibly removed because we didn't want to leave because who wants to leave their homes and their lands their waterways, the vision questing places, or our only way of life since time and memorial. But we had to leave to prevent the genocide of our people.</p> <p>My three great grandfather, Tom Chaptoot [ph], also known as [inaudible], was the signer of the Treaty of 1864 and the Snake Treaty of 1865, official documents of the U.S. government's broken promises to my people, and I say this public comment for him. And I say these public comments because I see how permits like this go. And I want to apologize to the land and how they have talked about you tonight in such a disrespectful and ugly manner. And I write this as indigenous people and we'll hold our land.</p> <p>The lands of Thacker Pass in Northern Nevada and Eastern Oregon, they're my homelands, and they're the last lands left that I can see as my ancestors once did. They contained the last still intact wild and sacred skies and vision questing places for my son to practice our religion, the old traditions from our great lineage of medicine people in our family. And these old traditions are not taught to us a Paiutes from books or buildings and their ways that come back when we're led to canyons and creeks by visions we see only behind our eyes when our feet touched the lands our ancestors walked, and these are the lands of Northern Nevada and Eastern Oregon.</p> <p>It's in the darkness and the silence of the night in our homelands when our sacred animals share their spirits with us in the old way, in the old ceremony. Without the silence, without the solitude, and with this lithium mine, Lithium America would be attempting their tactical, targeted genocide of my people and other indigenous people yet again. And you will be disconnecting me from the land again and that separation is genocide. You would be knowingly violating my right to religious freedom given to me by the American Indian Religious Freedom Act, which explicitly states that I am ensured access to sites, use and possessions of sacred objects, and the freedom to worship through ceremonies and traditional rights.</p> <p>And as proud Paiute woman and my son, a young medicine carrier for our tribe, you need to know that our religion isn't practiced on a Sunday or in a building and visions don't come in accordance to calendar dates. So, when wild horses of Nevada an Oregon and mountain lions and sage grouse and dotslots [ph] and badger visit us in our dreams and tell us it's time for ceremony and those lands and sites and animals and water no longer exist, you're in direct violation of my freedoms.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p>	



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		<p>Silence that we get from the land, this land, is essential for old ceremony and silence is the basic for our old tradition. And solitude and dark skies in these wild and largely untouched lands is our right since time and memorial. And so, on behalf of my ancestors and my four-legged relatives and my winged relatives and the Umbo [ph], I ask that you deny these permits. And I submit to you as proof this public comment from a Paiute woman and a member of the clan of tribe and a mother of a young Paiute boy that every decision made in the name of progress and profit has impacted our lives, our lands, and all of my ancestors' bones that were reclaimed by Thacker Pass with the U.S. cavaliers' bullets in the dirt beside them from the Snake Wars, for the exact same reason as this, the extraction of minerals and the rape of our people and the land.</p> <p>I just want to say to all my relatives listening [inaudible] --</p> <p>This is a spiritual war and we will hold our land.</p>		
<p>Oral comment from Karen Igou, resident of Wilmington, Delaware.</p>				
216	Tribal	<p>Thank you. Yes. My name is Karen Igou. I live in Wilmington, Delaware. I'm involved with Extinction Rebellion Delaware and I have been following this movement for a really long time and watching all the people who are concerned about not only the land there and the species that lived there but, of course, the absurd violation of the rights of the native people who have a right to this land.</p> <p>And it's just really shocking that at this day and time when we know the horrific treatment that we've given to native people in our lands and we know how we've really disrespected and treated them with genocidal behavior that we are still even debating this type of -- of action.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p>	



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217	Climate Crisis	<p>That doesn't even call into question the fact that we cannot continue with extractive solutions to our global climate crisis where merely just compounding these problems in such a short-sided ways. So, to have powers that be, pretend like none of these things are happening and to continue pressing forward with these – these, you know, raping solutions to our problem is – is almost surreal.</p> <p>I hope that the people who are involved with this situation can have a moment of clarity and really look inside themselves and realize that these types of solutions have no end in site and we'll not stop until life is over on our planet.</p> <p>We have to stop at somewhere and what a beautiful place to stop with this be, with Thacker Pass, and respecting its people, respecting these wild species, respecting this ecosystem, and in reality, respect ourselves because everything we do to Earth is what we're doing to ourselves. And if anyone thinks that we can continue on with these extractive, genocidal, exploitive, murderous processes and live, then they are ignorant and need to educate themselves. Please do not go through with any of these permits. The water issue alone right there should stop it. The tribal rights issue alone, that right there should stop it. The species and ecosystem loss should stop it. And apparently, according to other people on this call, things have not even been done in an up and up manner.</p> <p>So, for every reason involved, there is no reason for this except for greed. That is the only thing that is keeping this going is greed for a handful of people and the comfortable lifestyles of westerners. You need to learn to do without and to learn to live like a lot of people in the world are who are not dependent upon things like lithium and things like that for their lives. They just want the mere right to live peacefully and simply. And we all need to learn to do that so that we can all share this precious Earth altogether and stop with this horrific treatment of our dear Earth and of our dear people that know the best how to protect it out of anyone. Thank you so much to all the people acting out on this and for speaking out on this and occupying the land to try to protect it. And thank you for my opportunity to speak tonight. I'm done.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>NDEP appreciates the magnitude of the challenges faced by our region in response to climate change and the need to integrate sustainability and resiliency into state planning efforts. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/).</i></p>	
<p>Typed comment in chat from Ted during the December 1 Public Hearing.</p>				
218	Permitting Process	<p>I was unable to come off mute. I want to thank you (NDEQ) for putting a tremendous amount of consideration and effort into this decision. I think it is important to remember the public trust and not to jeopardize that. As long as NDEQ believes this is the right thing to do and will not harm the environment, I support your decision.</p>	<p><i>NDEP appreciates the comment.</i></p>	
<p>E-mail from Ka'ila Farrell Smith, resident of Chiloquin, OR, received 7 December 2021.</p>				
219	Cultural Impacts	<p>My name is Ka'ila Farrell-Smith, I'm an enrolled member of the Klamath Tribes of Oregon, I reside in Chiloquin, Oregon. I am a professional artist, environmental activist, mentor and certified Wilderness First Responder. I am submitting a public comment regarding the Water Pollution Control Permit for Thacker Pass by the Nevada Division of Environmental Protection (NDEP) on December 7th, 2021 via electronic mail. I submitted a spoken public comment regarding the Mine Reclamation permit at the virtual NDEP public comment event on December 1, 2021.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this</i></p>	



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		<p>My father, the late Alfred Leo Smith (1919-2014) is a survivor of the Stewart Indian Boarding school, circa mid 1930's. My artwork commemorating this legacy of trauma, indentured servitude, and cultural abuse by the state and federal government of Indigenous youth, hangs in the Stewart Indian School Cultural Center (See attached PDF Image titled "After Boarding School: In Mourning") in Carson City, Nevada. I travelled to Ft. McDermitt tribal lands every summer with my father to attend cultural activities and ceremonies on the sacred ancestral lands of the Northern Paiute and Western Shoshone.</p> <p>I am deeply concerned about the drastic environmental and cultural impacts of the Lithium Nevada (subsidiary of Canadian corporation Lithium Americas) proposed lithium mine at Thacker Pass. I do not think proper or respectful consultation was conducted by the foreign trans-national corporation with any of the numerous Indigenous Tribes, Colony's, or Sovereign Nations as is required by the United Nations Rights of Indigenous Peoples (UNDRIP) during COVID-19 lockdowns and health crisis. Therefore, NDEP should not be approving either the Water Pollution Control permit or the Mine Reclamation permit at this time.</p>	<p>document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p>	
220	Health	<p>HEALTH CONCERNS: On page 6 of the Lithium Nevada corp. Thacker Pass Project NEV2020104 (New 2021, Fact Sheet Revision 00) the company describes the Sulfuric Acid Plant (SAP) processing: <i>Molten, elemental sulfur will be stored in the molten sulfur storage tank and heated to an elevated temperature to make it exist in the liquid form. Upon cooling well above ambient temperatures, it rapidly solidifies preventing it from spreading any appreciable distance from the source tank. In the event of a spill, molten sulfur would solidify upon reaching ambient conditions and prior to escaping the curbed concrete containment.</i></p> <p><i>Air is required to provide oxygen for the combustion and conversion reactions and will travel through a blower and ducting to the sulfur burners where it meets molten sulfur and is combusted to generate gaseous sulfur dioxide.</i></p> <p>According to the Government of Canada (the home Nation of the Corporation) website, the Canadian Centre for Occupational Health and Safety (CCOHS) describes Sulfuric Acid 1988 classification as:</p> <p><i>D1 A – Very Toxic; E – Corrosive. Clear colourless oily liquid. Odourless. Will not burn. VERY TOXIC. Fatal if inhaled. Can form very hazardous decomposition products. Highly Reactive. Incompatible with many common chemicals. Reacts violently with water. CORROSIVE. Causes severe skin burns and eye damage. Strong inorganic acid mists containing sulfuric acid are carcinogenic.</i></p> <p>I would like to know what NDEP and Lithium Americas plans are for workers at the mine who would be exposed to these extremely hazardous and possibly fatal conditions in the event of a spill, which the corporation states is a possibility in their fact sheet quoted above. The CCOHS advises workers in the event of an accidental release measures for Sulfuric Acid:</p>	<p><i>According to the Emergency Response Plan, in the event of a spill, all personnel will be evacuated. LNC will ensure that all ignition sources are eliminated and that the spill is neutralized with crushed limestone or soda ash. Spill material will be placed in sealed containers for disposal.</i></p> <p><i>LNC will coordinate with local emergency response agencies as necessary when responding to an emergency.</i></p>	

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		<ul style="list-style-type: none"> · Personal Precautions: Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Remove or isolate incompatible materials as well as other hazardous materials. · Methods for Containment and Clean-up: Small spills or leaks: contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Large spills or leaks: contain and soak up spill with absorbent that does not react with spilled product. Dike spilled product to prevent runoff. Remove or recover liquid using pumps or vacuum equipment. Place used absorbent into suitable, covered, labelled containers for disposal. Store recovered product in suitable containers that are: corrosion-resistant. Contaminated absorbent poses the same hazard as the spilled product. · Other Information: Large spills: contact supplier, local fire and emergency services for help. Report spills to local health, safety and environmental authorities, as required. <p>Please provide the public with your plan to monitor these severe threats to workers, whom the company states will benefit the community with "good jobs." The release of Sulfuric Acid as an airborne pollutant would cause irreparable damage to everyone living in the area, negatively impacting nearby Indigenous communities, who actively oppose the mine.</p>		
221	Water Rights	<p>WATER POLLUTION AND DROUGHT</p> <p>This mine would use a tremendous amount of water. For the first four years, the mine would use 2,600 acre-feet per year. Then for the next 37 years, the mine would use 5,200 acre-feet per year. (FEIS pg. 4-7) The Quinn-Production well in Orvada Subarea Hydrographic Basin is currently overallocated by 30, 271 acre-feet per year, before the mine. (FEIS, pg. 2-13) We are already living in a time of drought, water shortages and extreme wildfires in the West.</p>	<p>NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</p>	
222	Water Quality	<p>The mine is expected to pollute the groundwater. Lithium Nevada's own tests found that aluminum, arsenic, antimony, beryllium, cadmium, chromium, copper, fluoride, iron, lead, magnesium, mercury, nickel, sulfate, thallium, TDS, and zinc were leached at concentrations above Nevada Resource Values. LNC also found that for their clay tailings sample uranium, gross alpha and radium 226/radium 228 exceed Nevada Resource Values. (FEIS Appendix B, LNC Mine Plan, pg. 41)</p> <p>Federal law requires projects to comply with applicable state water quality standards. The Final Environmental Impact Statement prepared by Lithium Nevada and approved by BLM clearly states that "levels of antimony, a harmful pollutant, will be released into the groundwater at levels that will exceed state water quality standards." (FEIS, pg. R121)</p>	<p>Please see Response 55 regarding the Permit limitation. The comment references the plan authorized by the BLM, the WPCP contains a Permit limitation, Part I.G.2, restricting mining below the water table and all mined materials with potential to leach the reference contaminants will be placed on engineered containment to protect waters of the State. With this restriction, degradation of waters of the State is not anticipated.</p>	
223	Tribal	<p>INDIGENOUS COMMUNITIES AND WATER THREATENED</p> <p>According to a petition brought by Fort McDermitt tribal members to the tribal council, tribal members have sacred connections with the area known as PeeheeMu'huh. The petition also states the mine will destroy sacred burial grounds; will eliminate traditional ceremonial and spiritual medicine including toza; will destroy ceremonial roots, berries, and plants; and will disturb 12 golden eagle nests, deer, rabbits, sage grouse, Lahontan cutthroat, and essential ceremony old growth sage brush that tribal members need for survival. During my time at</p>	<p>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</p> <p>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this</p>	



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		<p>PeeheeMu'huh I engaged in ceremonies, singing, drumming, praying, and eating the biscuit root that local tribal members traditionally harvested via root digging.</p> <p>In the investigative reporting done by the Washington Post titled, "Tossed Aside in the 'White Gold' Rush: Indigenous People are left poor as tech takes lithium from under their feet," it is revealed that this same trans-national corporation Lithium Americas is a partner in the Minera Exar Chilean lithium corporation mining on sacred Indigenous lands (called Pachamama in Quechua) in South America. It was estimated in the story that Minera Exar would make about \$250 million annually from the Cauchari-Olaroz mine. Despite this, Minera Exar's contracts with six local communities promised only tiny amounts of money once production had started. For Example, while Minera Exar was likely to make \$250 million a year from the mine, they would only pay \$9,000 to the local town of Catua; \$12,000 to Susques; \$25,000 to Puesto Sey and Huancar; \$47,000 to Olaroz Chico; and \$59,000 to Pastos Chicos.</p> <p>Here are some excerpts from the Investigative reporting. The land is sacred to the Atacamas:</p> <p><i>Jujuy started formalizing land titles for indigenous communities in 2003, making it one of the first provinces to do so. Yet problems persist. Fifty miles from the Olaroz-Cauchari salt flats, also in Jujuy, indigenous groups have been fighting for six years to prevent lithium mining of the picturesque Salinas Grandes salt flat.</i></p> <p><i>"Our grandparents taught us that this is a sacred place. It's part of the Pachamama," said Nelda Lamas, 26, of Santuario de Tres Pozos, near Salinas Grandes. The Pachamama is the Incan goddess of the earth, revered by many indigenous people. "That's why we don't want to see this place destroyed."</i></p> <p><i>Recently, mining interest in the Salinas Grandes has renewed. And the provincial government said it intends to allow lithium mining there in the near future.</i></p> <p>Signing, then Regretting: <i>The Post sought to speak to several of the community leaders in the six villages who signed the Minera Exar agreement.</i></p> <p><i>Yolanda Cruz, one of the leaders of the village of Catua, said she signed the contract with Minera Exar but now regrets it. At the time, she valued the opportunity to create jobs for her village. But she now worries "we are going to be left with nothing," she said.</i></p> <p><i>"The thing is that the companies are lying to us — that's the reality. And we sometimes just keep our mouths shut," she said. "We don't say anything, and then we are the affected ones when the time goes by."</i></p>	<p><i>document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p>	



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224	Tribal Consultation	<p>I agree, the companies are lying to us. If Lithium Americas cares about community and Indigenous land and water rights they would have participated in respectful consultation with the Sovereign Nations, Tribes, Colony's, and Indigenous communities being impacted by this proposed lithium mine. They did not even attempt meaningful consultation. Nevada's Judges have dis-respected the ultimate relationship of the United States Government with the Tribal Governments by siding with the corporation. This foreign trans-national corporation will destroy the sacred sites, massacre sites of the Northern Paiute and Western Shoshone and pollute the ground water the entire community depends on. Not to mention the horror of a spill or leak at the Sulfuric Acid processing plant.</p> <p>I urge the NDEP to respect the community, the sacred ceremonial site of Peehee Mu'Huh and deny the Water Pollution Control and Mine Reclamation permits.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p> <p><i>Any spills or leaks at any processing facility must be reported and cleaned up pursuant to Parts II.B.3 and II.B.4 of the Permit.</i></p>	WPCP NEV2020104 Parts II.B.3 and II.B.4
E-mail from Cale Christi, resident of Oregon, received 8 December 2021.				
225	Land	<p>I write as an American citizen residing in the state of Oregon who is concerned about water and future generations. The proposed Lithium mine at Thacker Pass is in Nevada, but this mine is only one of many which will be proposed along a path stretching from northern Nevada to western Wyoming and resulting from plate tectonics and the shift of the Yellowstone hotspot. Just north of the Nevada border, in Oregon, we already face another Lithium mine being explored by another foreign corporation, Jindalee, out of Australia.</p> <p>Lithium Americas, the Canadian corporation applying to mine Thacker Pass under the name Lithium Nevada, proposes to exploit a project area of 17,933 acres of land (FEIS, pg. ES-1). The mine itself along with its related facilities would destroy 5,694.8 acres of land at Thacker Pass (FEIS, pg. 2-3) and this is only the surface.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p>	
226	Water Quantity	<p>The relevant topic here is water. The proposed mine pit would be roughly 400 ft. deep, extending well below the water table and requiring miners to pump out groundwater in order to keep the pit dry, according to the Nation (https://www.thenation.com/article/activism/thacker-pass-mine-protest/). Keep in mind that this is being proposed in a time of unprecedented drought and at a place where water supplies are already over-allocated.</p>	<p><i>Please see Response 55 regarding the Permit limitation. The comment references the plan authorized by the BLM. The WPCP contains a Permit limitation, Part I.G.2, restricting mining below the water table. With the Permit limitation restricting mining below the water table, the pit will not require groundwater pumping to keep the pit dry.</i></p>	
227	Water Quality	<p>Not only would this mine take water from a system that cannot afford to give water, it would also pollute the groundwater. Lithium Nevada's own tests found levels of aluminum, arsenic, antimony, beryllium, cadmium, chromium, copper, fluoride, iron, lead, magnesium, mercury, nickel, sulfate, thallium, TDS, and zinc would all be leached into the water table at concentrations above Nevada Resource Values (FEIS Appendix B, LNC Mine Plan, pg. 41).</p>	<p><i>Please see Response 55 regarding the Permit limitation. The comment references the plan authorized by the BLM, the WPCP contains a Permit limitation restricting mining below the water table and all mined materials with potential to leach the reference contaminants will be placed on engineered containment to protect waters of the State.</i></p>	
228	Permitting Process	<p>I write to ask you, Nevada Division of Environmental Protection, to live up to your name and protect the environment of Nevada by protecting its most valuable resource, water, and denying Lithium Americas (a.k.a. Lithium Nevada) the relevant Water Pollution Control Permit for the proposed Thacker Pass project. Granting these permits is not in the interest of the people of Nevada, nor is it in the interest of the people of America. The only ones standing to gain from this project are the foreign mining corporation and the corporations that, in the future, would profit from the Lithium produced. The people will only suffer the short and long-term consequences of the destruction of their land and water. Set a precedent, use your power to</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p>	

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		protect our most valuable resources (our land and water) and prevent the generational suffering of the people for the short-term profit of a select few.		
E-mail from Briana Rosen, resident of Portland, OR, received 8 December 2021.				
229	Tribal Consultation / Wildlife Habitat	<p>My name is BriAnna Rosen and I reside in Portland, Oregon. I am a professional artist and curator, a mentor for emerging artists, and the co-founder of Fuller Rosen Gallery.</p> <p>I am submitting a public comment regarding the Water Pollution Control Permit for Thacker Pass by the Nevada Division of Environmental Protection (NDEP) on December 7, 2021 via electronic mail.</p> <p>Thacker Pass (Peehee Mu'huh) is sacred land; ten regional tribes having historical and current connections to the Thacker Pass area. The ten tribes include the Fort McDermott Paiute and Shoshone Tribe, Locklock Paiute Tribe, Battle Mountain Band Colony of the Te-Moak Tribe of Western Shoshone, Pyramid Lake Paiute Tribe, and the Reno-Sparks Indian Colony.</p> <p>All of these tribes assert that Thacker Pass is a spiritually powerful place blessed by the presence of ancestors and spirits; contains their traditional foods and medicine; has been a place where their people have gathered obsidian to make arrowheads and other significant tools for thousands of years; provides habitat for wildlife they hunt including groundhog and mule deer; and is home to sacred golden eagles.</p> <p>Thacker Pass (Peehee Mu'huh) is critical wildlife habitat and approving the permits for the Thacker Pass lithium mine would directly contradict NDEP's mission "to preserve and enhance the environment of the State in order to protect public health, sustain healthy ecosystems, and contribute to a vibrant economy."</p> <p>I request that the Nevada Department of Environmental Protection deny air and water quality permits for the Thacker Pass Lithium Mine Project.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p>	
E-mail from Max Wilbert, Co-founder of Protect Thacker Pass, received 8 December 2021.				
230	Greenhouse Gas Emissions / Water Rights	<p>My name is Max Wilbert. I am a community organizer, author, wilderness guide, and photographer, and I reside in Oregon. For the last 11 months, I have dedicated my life to protecting Thacker Pass. I am submitting a public comment regarding the Water Pollution Control Permit for Thacker Pass by the Nevada Division of Environmental Protection (NDEP) on December 8th, 2021 via electronic mail. I submitted a spoken public comment regarding the Mine Reclamation permit at the virtual NDEP public comment event on December 1, 2021, and I look forward to NDEP's response.</p> <p>Like many people, I am deeply concerned about the Thacker Pass lithium mine and its impacts on the land, air, water, and people. I also have broader political and social concerns about the truth or falsehood of claims that lithium mining and a transition to electric vehicles will result in</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>NDEP appreciates the magnitude of the challenges faced by our region in response to climate change and the need to integrate sustainability and resiliency into state planning efforts. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/).</i></p> <p><i>NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i></p>	



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		<p>meaningful reductions in greenhouse gas emissions. I documented these claims in detail in my book, <i>Bright Green Lies: How The Environmental Movement Lost Its Way and What We Can Do About It</i>, which includes a chapter on energy storage.</p> <p>In that book, I wrote of the “land clearance; explosives; fleets of heavy machinery; truckloads of industrial solvents like sulfuric acid; water contamination; and high energy use for furnaces” required for clay lithium mining. I wrote about communities in Salar de Uyuni in Bolivia and Chile which have been grievously harmed by lithium mining drawing down water tables, destroying habitat, and leaving behind heavily polluted water. I quoted one member of a Chilean delegation on lithium mining as saying that ““Like any mining process it is invasive, it scars the landscape, it destroys the water table and it pollutes the earth and the local wells. This isn’t a green solution—it’s not a solution at all.”</p> <p>One report from Meridian International Research even casts doubt on the idea that there is even enough economically recoverable lithium in the world to power an EV transition.</p> <p>Nonetheless, according to one mining company CEO, “The future demand for lithium is truly staggering.... Battery demand is rising at the rate of one to two new lithium mines per year, growing to two to three mines per year by 2020.” There are thousands of mining claims for lithium in the state of Nevada. It’s been described in the mining press as a “feeding frenzy.”</p> <p>This region is on the chopping block as a new wave of industry sweeps the state. It is a new gold rush, and this is the sacrifice zone.</p> <p>Meanwhile, Nevada is the driest state in the country. The Orovada Subarea Hydrographic Basin is currently overallocated by 30,271 acre-feet per year. That’s nearly 10 billion gallons. NDEP needs to be overseeing reductions in water use, conservation, restoration of watersheds and wetlands, and other measures to actually protect the environment, not facilitate its pollution and destruction.</p>		
231	Transportation History/New Technologies	<p>Please indulge me for a moment while I share some history that informs my views on this matter. This is not the first time the United States has rapidly adopted a new transportation technology in hopes of avoiding a pollution issue. In fact, one of the biggest public health problems in cities of the 18th and 19th centuries was horse manure. The Times of London, for example, predicted in 1894 that by 1950 every street in London would be covered in nine feet of equine feces, while people in New York City believed that by 1930 horse manure would be piled even higher, up to third-story windows in Manhattan. “The stench,” according to urban planning expert Eric Morris, “was omnipresent.”</p> <p>At the time, the economy was dependent on horses. They dragged plows, skidded logs, pulled carts and carriages, and trans- ported individuals. In the late 1800s, when urban horses were at</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>NDEP appreciates the magnitude of the challenges faced by our region in response to climate change and the need to integrate sustainability and resiliency into state planning efforts. We refer to the Nevada’s Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/).</i></p>	



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		<p>their peak, about 15 million acres—an area the size of West Virginia—were needed to grow horse feed.</p> <p>The introduction of railroads was widely hailed as a technological solution to the horse problem. But instead, rail made these issues worse. More efficient transit by rail allowed more trade to take place, and since every item shipped by rail needed to be picked up and delivered by horse-drawn wagon, overall demand for horse transport and thus the scale of the problem went up.</p> <p>New technologies don't always displace older problems; sometimes they just pile on top.</p> <p>What finally did replace horse transportation was the automobile, which by 1912 outnumbered horses in many American states. Aided by new regulations on urban horses, cars took over the streets and were proclaimed to be an environmental savior.</p> <p>According to Morris, "Neither draconian regulations nor disincentives for travel were necessary to fix the horse pollution problem.</p> <p>Human ingenuity and technology did the job—and at the same time they brought a tremendous increase in mobility."</p> <p>But at what cost? Far from a triumphal tale about ingenuity and technology, the story of automobiles solving the problem of horse poop could be read as a cautionary tale on the perils of escalations in technology, and more fundamentally on the tendency within this culture to sidestep problems rather than solve them. In this case, the problem was not addressed; it was just transformed. Instead of feces-filled streets, we now have smog-filled skies and a greenhouse-gas filled climate. Trashing mountains, forests, wet-lands, and prairies to provide food for horses was replaced with trashing mountains, forests, wetlands, and prairies to provide steel to Henry Ford's factories, and oil for the automobiles.</p> <p>Now, in the face of a car culture that's ruining the climate, the response is to sidestep the issue again by developing technologies that will once more displace the destruction, not eliminate it.</p>		
232	Regulations / Tribal	<p>I recognize that NDEP is not traditionally responsible for setting policy and has a limited remit in these matters. Yet, every agency and government has a fiduciary duty to the people. According the constitution of the state of Nevada, "All political power is inherent in the people." NDEP, like all other government, is responsible for protecting the interests of people and communities, as well protecting in public trust the air, water, land, and non-human biotic communities which produce oxygen, filter water, create food, and otherwise make life possible for human beings and other life.</p> <p>I must admit, I am not optimistic that NDEP employees will do the right thing. The law as currently written is constrictive. Yet, as we accelerate deeper into the 6th mass extinction, the climate crisis, and the pollution crisis, and as ecosystems around the planet, from the sagebrush steppe to coral reefs to sequoia forests crumble, all people on Earth have a moral responsibility</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p>	



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		<p>to act directly to halt destruction of the planet. Our well-being and the lives of future generations depend on it. Rather than sitting back and comfortably collecting the salary of a government bureaucrat, I challenge you to take risks. Be bold. Have courage. Yes, there are costs associated with this. But action is the only way out of this nightmare.</p> <p>Thacker Pass, or Peehee Mu'huh as it is known in Paiute, is a very special place ecologically, culturally, and historically. It is a sacred site and the site of at least one massacre. There are bones in the soil there. How would you feel if you were asked to permit a mining operation on the graveyard where the remains of your grandmothers and grandfathers rested?</p> <p>I urge the NDEP to respect the community, the sacred ceremonial site of Peehee Mu'Huh and deny the Water Pollution Control and Mine Reclamation permits. Please inform me via email when you have responded to this comment.</p>		
E-mail from Mary Thompson, received 8 December 2021.				
233	Tribal Consultation / Water Rights / EIS	<p>I was at your meeting on December 1st and couldn't get muted in for my comments nor could 3 of my friends that were with me .</p> <p>Anyway I strongly disagree with the lithium mine in Thacker Pass Nevada because of the destruction it will do to the wildlife vegetation ranging along with the historical sacred site . We keep taking away from the native American Indians and that must stop . It's time we stand with them . We have taken enough from them.</p> <p>I cannot believe how much water is used for lithium mining or any other mining activity . We have been in a drought for over 10 years now and study's show its not going to get better.</p> <p>I remember in the 80s when Hoover dam released water into lake Mead because we had abundance of water. But it's been down hill ever since.</p> <p>I have been a Nevadan for 50 years and totally feel blindsided by BLM approval of the largest lithium mine in less than a year .</p> <p>It makes me wonder who is getting a kickback for this project. Plus BLM were so sneaky in 2020 because we heard nothing from BLM about this . The year we all we're worried about covid-19 and our loved ones BLM approved the LARGEST lithium mine. Not to mention the ranchers and and native American Indians not having internet service is shameful.</p> <p>I can't believe how many projects BLM has approved in the last 2 years in state of Nevada. Nevada will soon will not have anything beautiful anymore .</p> <p>Study's have shown the the damage lithium mines do , but you already know that . Can you imagine recycling batteries like we do plastic bags .</p> <p>Please do not give permit and save our precious water and our beautiful state of Nevada.</p> <p>Also please respond that you read this.</p> <p>Thank you Mary Thompson</p> <p>PS. Your position at NDEP is honorable. Not like BLM that I dishonest and blindsided by .</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p> <p><i>NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i></p> <p><i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445B and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i></p>	
E-mail from Mary Thompson, received 8 December 2021.				
234	Permitting Process	<p>Rumor has it that you already approved the water permit. I hope this isn't true. That would be the biggest betrayal on American people.</p>	<p><i>On 28 October 2021, NDEP published the Notice of Proposed Action to issue the Water Pollution Control Permit for the Thacker Pass Project. The Permit is not effective until 15 days after the date of the Notice of Decision.</i></p>	NAC 445A.408

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E-mail from Jason Blatzheim of Winnemucca, NV, received 8 December 2021.				
235	General	I am writing you this brief email to state my opposition to the Thacker Pass project. The last thing we need is another air/water/land polluting mine.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
E-mail from Tom Owens of Shelby, Michigan, received 8 December 2021.				
236	Request to Deny	Please deny water pollution control and mine reclamation permits for the proposed boondoggle Thacker Pass lithium mine which will destroy more of the surface of the earth--our Mother--and poison her life-giving waters. Modern industrial society is attempting, for some reason unbeknownst to me, to destroy all life on this tiny planet circling the sun. I would like to see that stop and although that is unlikely to happen, this mine is where we need to begin the process of real reclamation.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i>	
E-mail from Kaeyla Erway, resident of Nevada, received 8 December 2021.				
237	Indigenous Rights	I'am a concerned, deeply concerned resident of Nevada. I would like for my comment to be of the following: <ul style="list-style-type: none"> - Completely against any allowed permits for this SACRED SITE. - I strongly urge this division to reconsider any positive aspects stemming from this proposal. - I severely urge ALL parties to recognize all associated tribes and persons of this land. - Importantly, honor this sacred, historical, and cultural land rather than permit a solution for destruction! - My comment is to stand in solidarity with those who stand up and voice NO on permitting a water pollution control permit to Lithium Americas, Lithium Nevada corporation. There is an abundance of opposition, with crucial real data from the community, surrounding communities, tribal nations, residents; real living people want their land, water, and air protected now and for the future. No fees can reverse the damages or can create billions of irreplaceable CLEAN WATER OR AIR. Please say no, this citizen cares.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i> <i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i>	
E-mail from Maia Watkins, received 8 December 2021.				
238	Indigenous Rights	I'd like to submit a comment regarding Thacker Pass' mining proposals. I am friends with many Native people who hold this area sacred and I join with them in sharing my concerns about the environmental and cultural harm that the proposed lithium mine poses to Indigenous people, the environment, and the communities living in the area. I urge the NDEP to respect the ceremonial site of PeeheeMu'Huh and the environment-- please deny the water pollution control and mining permits.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i> <i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i>	

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E-mail from Mike Workman, resident of Southern Oregon, received 8 December 2021.				
239	Water Rights	I've heard this new lithium mine will be using 4.5 million gallons of water per day. I run a brewery in southern oregon and I will be letting the community know about this. Not to mention the carbon dioxide emissions. How and why are you ok with destorying the planet? Y'all get enough money that ya feel you dont need to care? Are your kids going to eat that money when our planet is wrecked? Stop being so selfish, please. I understand we all gotta look out for our selves and our families and this is not the way. Your small decisions have an impact.	<i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	
E-mail from Sarah Farahat, resident of Oregon, received 8 December 2021.				
240	Environmental/ Cultural Impacts / Sulfuric Acid	<p>My name is Sarah Farahat. I'm a professor, professional artist and a concerned Oregonian. I am submitting a public comment regarding the Water Pollution Control Permit for Thacker Pass by the Nevada Division of Environmental Protection (NDEP) on December 8th, 2021 via electronic mail.</p> <p>I am very concerned about the environmental and cultural impacts of the Lithium Nevada (subsidiary of Canadian corporation Lithium Americas) proposed lithium mine at Thacker Pass. I do not think proper or respectful consultation was conducted by the foreign transnational corporation with any of the numerous Indigenous Tribes, Colony's or Sovereign Nations as is required by the United Nations Rights of Indgenous Peoples during Covid 19 lockdowns and health crises. Therefore, NDEP should not be approving either the Water Pollution Control permit or the Mine Reclamation permit at this time.</p> <p>I feel very worried about the use of Sulfuric Acid as well as the water extraction that will aid in the mining process. I urge you to follow the lead of the People of Red Mountain, the Paiute and Western Shoshone and deny permitting on this project. Renewable energy is important but I believe we must listen to the land and the first tenders of the land when they say no to extraction and desecration.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p> <p><i>Sulfuric acid used at the Thacker Pass Project is considered a process solution and requires containment at all times because the Water Pollution Control Permit is a zero-discharge Permit.</i></p> <p><i>NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i></p>	NAC 445A.433
E-mail from Susanna Farahat, resident of Oregon, received 8 December 2021.				
241	Environmental/ Cultural Impacts / Sulfuric Acid	<p>My name is Susanna Farahat. I am a health care provider, a professor, an a concerned Oregonian. I am submitting a public comment regarding the Water Pollution Control Permit for Thacker Pass by the Nevada Division of Environmental Protection (NDEP) on December 8th, 2021 via electronic mail.</p> <p>I am very concerned about the environmental and cultural impacts of the Lithium Nevada (subsidiary of Canadian corporation Lithium Americas) proposed lithium mine at Thacker Pass. I do not think proper or respectful consultation was conducted by the foreign transnational corporation with any of the numerous Indigenous Tribes, Colony's or Sovereign Nations as is required by the United Nations Rights of Indgenous Peoples during Covid 19 lockdowns and health crises. Therefore, NDEP should not be approving either the Water Pollution Control permit or the Mine Reclamation permit at this time.</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</i></p> <p><i>Sulfuric acid used at the Thacker Pass Project is considered a process solution and requires containment at all times because the Water Pollution Control Permit is a zero-discharge Permit.</i></p>	NAC 445A.433



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		<p>I feel very worried about the use of Sulfuric Acid as well as the water extraction that will aid in the mining process. I urge you to follow the lead of the People of Red Mountain, the Paiute and Western Shoshone and deny permitting on this project. Renewable energy is important but I believe we must listen to the land and the first tenders of the land when they say no to extraction and desecration.</p>	<p><i>NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i></p>	
<p>E-mail from Johanna Emm, received 8 December 2021.</p>				
242	General / NEPA / Tribal Consultation	<p>I recommend you DENY WPC PERMIT 2020104 I pray this email reaches NDEP TODAY 12/8/2021 DENY THE PERMIT SINCE THE FEIS BLM AND EPA'S RECORD OF DECISION IS NOT FINAL. WHERE IS THE APPLICATION OR APPROVED PERMIT FOR FRACKING s. 785 NO FRAC INCLUDES ANY UNDERGROUND INJECTION CONTROL FOR CERTAIN PETROLEUM PROPPONENTS WHICH ARE NOT IDENTIFIED OR REFERENCED. ALL THOSE MONITORING WELLS CAN CAUSE EARTHQUAKES. FURTHERMORE, BLM (OR EPA) DID NOT ABIDE BY THEIR OWN APPENDIX D titled *NATIVE AMERICAN AND ALASKA NATIVE RESOURCE GUIDANCE DOCUMENT *USFWS NATIVE AMERICAN POLICY OF THE U.S. FISH AND WILDLIFE SERVICE UNDER POLICY PRINCIPLES III. GOVERNMENT TO GOVERNMENT THE SECOND SENTENCE "THE SERVICE WILL WORK DIRECTLY WITH NATIVE AMERICAN GOVERNMENTS AND OBSERVE LEGISLATIVE MANDATES, TRUST RESPONSIBILITIES AND RESPECT NATIVE AMERICAN CULTURAL VALUES WHEN PLANNING AND IMPLEMENTING PROGRAMS. THE BLM'S FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS) DOES NOT MEET THIS CRITERIA. On non-RESERVATION LAND "WHILE THE SERVICE RETAINS PRIMARY AUTHORITY TO MANAGE SERVICE LANDS, AFFECTED NATIVE AMERICAN GOVERNMENTS WILL BE AFFORDED OPPORTUNITIES TO PARTICIPATE IN THE SERVICE' S DECISION MAKING PROCESSES FOR THOSE LANDS." IV. SELF-DETERMINATION SUPPORT FOR SELF DETERMINATION "THE SERVICE FAVOR EMPOWERING NATIVE AMERICAN GOVERNMENTS SUPPORTING THEIR MISSIONS AND OBJECTIONS.." THE BLM GUIDANCE IS SPECIFIC TO SUBSISTENCE FISHING, GATHERING AND HUNTING. ALTHOUGH USACE MADE AN APPROVED JURISDICTIONAL DETERMINATION IT MUST STILL HAVE USEPA APPROVAL WHICH THERE IS NO RECORD. THE IMPACT OF MORE MONITORING WELLS AND BIFURACATED SURFACE WATER WILL DEplete WATER RESOURCES EVEN MORE DURING DROUGHT. THE FLOW TO QUINN RIVER WILL JEOPARDIZE THE WATER QUALITY PARAMETERS LIKE DISSOLVED OXYGEN AND TEMPERATURE TO ANY FISH, FLORA AND FAUNA AS WELL AS THE RIPARIAN ZONE FROM MINING EFFLUENT RUNOFF. THE BLM AND EPA DO NOT ABIDE BY THEIR OWN GUIDANCE DOCUMENTS WHEN IT COMES TO TREATY RIGHTS OR THE RESERVED RIGHTS TREATY DOCTRINE AS FAR AS THE DEFINITION OF TRIBAL CONSULTATION OR TRUST RESPONSIBILITY AS A FEDERAL AGENCY. THESE COMMENTS ARE IN SUPPORT OF THE DENIAL OF THE CLASS II AIR QUALITY OPERATING PERMIT APPLICATION AP14794334</p>	<p><i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations.</i></p> <p><i>The proposed issuance of Water Pollution Control Permit NEV2020104 does not include the approval of Underground Injection Wells.</i></p> <p><i>It is important to note that NDEP's decision on the water pollution control permit is separate from the National Environmental Policy Act and is based on state laws at Nevada Revised Statutes NRS 445A and associated regulations. BLM has separate obligations under federal acts including the National Historic Preservation Act and other requirements that provide for federal consultation with tribes. NDEP has appropriately considered all information related to water pollution control in making this permit decision.</i></p>	

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E-mail from Mary Thompson, received 8 December 2021.				
243	General / Water Rights	I hope NDEP does the right thing and not blindsided Nevadans like BLM has . You know the destruction the largest lithium mine in Thacker Pass Nevada is going to to ! But if you don't it will destroy Wildlife, Vegetation Ranging and a Sacred Historical Site . And the water lithium mines use is insane . Nevada is in a drought and has been over 11 years now with no end insight. I have been a Nevadan for 50 years and this State is beautiful. Please I beg you to stop the destruction of Nevada. 180.000 active 200.000 closed mines! Protect Thacker Pass Nevada and Nevada !!	<i>Please see Response 107. NDEP held several meetings prior to publication of the Notice of Proposed Action to issue the Thacker Pass Water Pollution Control Permit in an effort to engage with the community and address concerns.</i> <i>The proposed NDEP decision for the water pollution control permit is solely based on water quality protection considerations, as required by Nevada Revised Statutes 445A and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</i>	
Letter from John Hadder, Director of Great Basin Resource Watch, received 27 January 2022.				
244	Tailings Seepage	We now see a reasonable potential that the design specifications of the tailings facility and fluid management plan is inadequate. We are increasingly concerned about the potential that highly polluted water will not be contained with a fluid management plan maximum of 74 gallons per minute. In the interest of ensuring best protection of the environment and affected community GBRW recommends that NDEP review this independence assessment before issuing the final Permit.	<i>Please see Response 2 regarding the 74 gpm calculation.</i>	
245	Tailings Seepage	Piteau Associates did not use the Hydrus software correctly.	<i>The comment lacks specifics and is a matter of opinion. The Division has experience with the Hydrus Predictive Model and thoroughly reviewed the model input parameters, sensitivity analyses performed, and the model results generated. Although we agree there may be a level of uncertainty in the Hydrus model, there is uncertainty in every model. The Division believes the Hydrus model software was used correctly and the results to be conservative and acceptable. Furthermore, WPCP NEV2020104 Part I.B.8 states within 120 days of the effective date of the Permit, the Permittee shall submit for review and approval an additional sensitivity analysis of the moisture content effect on seepage rate.</i>	
246	Tailings Filtration	Given current technology, it is not likely that the mine will consistently meet its target water content of 46%.	<i>Please see Response 153 regarding the demonstration of filtration.</i>	
247	Tailings Seepage	Even slight increases of the water content in excess of the target water content will result in a large increase in seepage.	<i>Please see Response 155 regarding the additional sensitivity analysis required by schedule of compliance item Part I.B.#.</i>	
248	Tailings Seepage	Even slight increases of the annual precipitation in excess of the mean annual precipitation will result in a large increase in seepage.	<i>Please see Response 5 regarding the sensitivity analysis conducted which evaluated the seepage resulting from two times the mean annual precipitation.</i>	
249	Tailings Seepage	It is likely that compression of the tailings will cause the lower one-third to one-half of the filtered tailings stack to be saturated, so that the actual hydraulic conductivity will be much greater than was assumed by Piteau Associates.	<i>Please see Response 156 regarding the sensitivity of the "Alternate Clay Tailings" which raised the hydraulic conductivity of the tailings material by two orders of magnitude. The hydraulic conductivity was not assumed; the input was determined by lab testing.</i>	
250	Tailings Seepage	The seepage will probably range between negligible to thousands of gallons per minute depending upon the precipitation and the water content of the tailings.	<i>The Division disagrees that seepage may reach thousands of gallons per minute, as this rate of seepage is not realistic even for a conventional tailings impoundment with slurry deposition. As with every model, there may be a level of uncertainty in the rate of seepage from the tailings impoundment; however, the sensitivity analyses provide an acceptable range of conservative scenarios. The Reclaim Pond has an operational capacity to contain seepage of 74 gpm over a 7 day period plus the 100-year, 24-hour storm event, equating to a total capacity of approximately 30 million gallons, and seepage</i>	

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			<i>modeling and closure plans may be updated as more data is acquired through the routine monitoring, reporting, and inspections required by the Permit.</i>	
251	Independent Assessment	GBRW, including our consultant, is open to discussing this further with your bureau as you feel necessary. Again please consider reviewing the independent assessment before making a final decision on the Permit and issuance of the Notice of Decision.	<i>Please see Response 160 regarding an independent assessment.</i>	
E-mail from the Fort McDermitt Paiute Tribe of Nevada and Oregon, received 4 February 2022.				
252	Public Records	The Tribe again requests that NDEP share the site monitoring, reporting and notification efforts with the appropriate Tribal office (Environmental Office) for maintenance of record and review.	<i>NDEP plans to upload all formal correspondence for the Site to its online document repository within two weeks of receipt for documents from the facility and same day for issuance of documents from NDEP. NDEP suggests that the Tribe contact the Lithium Nevada directly to see if the company can arrange to copy the Tribal Environmental Office on formal correspondence from the facility as that may facilitate quicker receipt of information.</i>	
253	General	The Tribe would like to be included in the coordinated efforts regarding wildlife and wildfire efforts related to the increase in traffic, population and other resource management requirements that result from this Project.	<i>Although these are areas outside of this proposed permit decision, NDEP understands and acknowledges the Tribe's request. NDEP suggests that the Tribe contact other relevant agencies, including the Bureau of Land Management, Humboldt County, Nevada Department of Transportation, Nevada Highway Patrol, and other relevant government agencies.</i>	
254	Reclamation Seed Mix	As interim and final seed mixes are determined for the site, the Tribe would like to provide input to traditionally important vegetative species that either should be planted or avoided based on the potential for receptor use and risk of contaminant uptake.	<i>Please see the Reclamation Permit Notice of Final Decision and Response to Comments.</i>	
255	Tailings Design	The Tribe has concerns related to plastic that would be buried in place as part of remediation. As concerns regarding microplastics in our environment bring to light the impact of our plastics management, the Tribe would like to know how the state is considering this impact as it relates to the plastic waste related to project closure.	<i>The 80-mil HDPE geomembrane used to construct the Clay Tailings Storage Facility prevents the component from degrading waters of the State during operations and into closure. It is standard practice to reclaim lined components in place to provide a productive post-mining land use.</i>	
256	Power	The sulfur production maintenance requires the shut down of the system and a full restart using power from the regional grid. Will this system start up cause issues with transmission system capacity? Will the start up occur at night after peak hours to avoid overloading the regional system?	<i>NDEP suggests this question be reviewed with the company, the Nevada Public Utilities Commission and the electric utility for this region.</i>	
257	Pit Limitation	As mentioned in previous comments, the Tribe is concerned with the apparently arbitrary pit depth limitation. Based on the information presented, it appears that the value is derived from a one year monitoring effort. Upon further review, this monitoring occurred during a serious drought year which may not be indicative of seasonal water level fluctuations. The Tribe would like clarification regarding the State's anticipated management of water presenting in the pit in years where the water level may not be statically below the arbitrary pit bottom. Additionally, the Tribe would like the State to identify what monitoring effort will be utilized to identify potential risk to groundwater in the event groundwater expresses within the pit. Is there a backup dewatering system that could be initiated in the event groundwater is identified in the pit? What would the regulatory process for this situation be? What are the receptors that would	<p><i>The pit depth limitation was established upon review of the Piteau Associates Technical Memorandum titled "Thacker Pass Project Piezometric Hydrographs." In the memo, data is presented which shows that piezometric levels at locations across the initial west sub-pit range between 4822 ft amsl (MW18-01) to 4817 ft amsl (WSH-11). The key monitoring locations include PZ18-01, PZ18-08, MW18-01, MW18-04, and WSH-11. While PZ18-01 has a little over one year of monitoring data, all other locations have at least two years of data. Most notably, 10 years of data has been collected at WSH-11, located at the deepest portion of the pit.</i></p> <p><i>The proposed limitation restricting mining to 4,840 feet amsl provides a 15-foot buffer above the established water table. The permit also requires the installation and monitoring of two additional piezometers drilled within the pit to confirm water levels during mining and to ensure mining stays within the limitation.</i></p> <p><i>In the event groundwater expressed within the pit, determination of the source would be required as it could potentially be meteoric water. In the unlikely event that the regional water table was intercepted, the Division would require the operator</i></p>	28 April 2021 Piteau Associates Technical Memorandum Thacker Pass Project Piezometric Hydrographs



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		need to be managed prior to treatment and reclamation of potential downgradient impact? How will this be monitored and what are the action levels?	<i>to cease mining. The groundwater monitoring system would continue, likely at an increased frequency and with additional monitoring wells to be installed in order to assess potential degradation of waters of the State pursuant to NAC 445A.424. Action levels are the profile I drinking water standards as described in Response 260.</i>	
258	Landfill	There is discussion throughout the document regarding the use of the Waste Rock Storage Areas and Gangue Storage Area as a location for a solid waste landfill. Some of this discussion is that this is a potential use and others suggest it is definitive. Regardless, the permitting of a Class III landfill on either of these material piles suggests that these landfill materials may end up in the pit during backfill. There is very little, if any discussion of the closure of the landfill as part of the pit backfill and the treatment or monitoring as such. Will this be undertaken in a secondary permitting process related to the landfill? Or was this an inadvertent omission?	<i>Please see the Reclamation Notice of Final Decision and Response to Comments.</i>	
259	Growth Media	<p>a) Waste rock, gangue material, and sediment are all identified as potential additional resources for growth material. The Tribe is interesting in knowing what designates suitability of these materials for growth material. Will these materials be tested and compared to native top soil?</p> <p>b) Will sample testing be conducted to determine potential plant tissue uptake and assess for risk to wildlife and disposal requirements for that plant material if soils are used permanently or temporarily?</p> <p>c) If there is a state standard for this determination and metrics defined in NRS or NAC, please provide this reference.</p>	<p>a) <i>BMRR does not require agronomic testing of soils, however, the Permittee is required to characterize any potential cover source material. For additional details, see response b.</i></p> <p>b) <i>BMRR does not require plant tissue uptake testing of soils, however, the Permittee is required to characterize any potential cover source material utilizing the Nevada Modified Sobek Procedure (NMSP) to determine the acid-base accounting properties, the Meteoric Water Mobility Procedure (MWMP, ASTM E2242.21) with extract analysis for the NDEP Profile I analytical suite. These procedures are conducted by laboratories approved and/or certified by the State of Nevada Bureau of Safe Drinking Water - Laboratory Certification Program and conform to the National Environmental Laboratory Accreditation Program (NELAP), as applicable. If results indicate potential significant constituent exceedances, BMRR may request additional characterization and/or a Screening Level Ecological Risk Assessment (SLERA) for wildlife specific to the region; however, due to minimal or non-existent studies relative to native species, the BMRR accepts proxy species studies in lieu of studies of native species. (e.g. studies conducted by the Oak Ridge National Laboratory (ORNL)).</i></p> <p>c) <i>Pursuant to mining regulations as provided at Nevada Revised Statutes (NRS) 445A.300-NRS445A.730 and Nevada Administrative Code (NAC)445A.350 - NAC445A.430, there are no references or requirements specific to the Water Pollution Control Permit.</i></p> <p><i>In NAC 519A.040 "Growth medium" is defined as a material which is capable of supporting vegetation. –Pursuant to the LNC Reclamation Plan, pages 59-60, Section 3.19 Growth Media Stockpiles and pages 93-94, Section 6.4.1 Growth Media Salvage and Management discusses the steps that LNC will undertake to salvage and stockpile suitable growth media for reclamation activity. The text states that "LNC conducted growth media surveys within the Project area to generate growth media maps delineating the quality, extent and depth of soil resources available for use in reclamation. The surveys were designed to define the chemical and physical parameters of desirable materials to achieve reclamation goals and identify adverse properties or feature which preclude use in reclamation.</i></p>	
260	Groundwater Quality	Water impacts continue to be a priority concern for the Tribe. Naturally occurring elevated arsenic is a well documented problem throughout the middle of Nevada. It is important to note that arsenic is costly to remove from water and as such the addition of any arsenic should approved into a system should include an economic consideration to receiving water users. Who would be burdened with the cost of remediating this water and at what use is it expected downgradient? Uranium is similarly costly – what is the expected movement pattern of uranium	<i>Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of water quality as required by Nevada laws and regulations. Remediation of groundwater quality is not anticipated because all process solution and mined materials require containment. If the groundwater monitoring wells identified in Part I.D.8 of the Permit present exceedances of Profile I or background concentrations, it would be seen upon review of quarterly reports and investigation (including delineation of the contaminated area) and mitigation would be required at the cost of the Permittee.</i>	WPCP NEV2020104 Part I.D.8



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		in groundwater due to flush from the system based on the modeling? How will this be monitored and what are the action levels?	<p><i>The action levels are the Profile I Drinking Water standards found at the following link: https://ndep.nv.gov/uploads/land-mining-regs-guidance-docs/20210830_NDEP_Profile1_List_ADA.pdf</i></p> <p><i>The exception to this is for arsenic because, as mentioned, arsenic is naturally present and variable throughout the area. Arsenic will be evaluated by comparing ongoing monitoring to pre-mining background concentrations.</i></p>	
261	Groundwater Quality	The Tribe would like clarification on what background and downgradient water quality parameters are being assessed and how these are being used to determine exceedances of potential mine waste runoff. As is acknowledged within the document, the background concentrations of certain naturally occurring contaminants are up to, and in some cases exceed, the regulatory standards. What is the assessment undertaken by the State and Project Proponent to determine economic and environmental impact of the increased load into terminus water systems as applicable? If water is discharged from the site, what analysis was undertaken to assess the cost to downgradient receptors?	<p><i>Please see the previous response. All process solution and mined materials require containment. Containment is also required for runoff from a 25-year, 24-hour storm event.</i></p>	NAC 445A.433



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
12/6/2021	Fort McDermitt Paiute and Shoshone Tribe	NDEP Water Pollution Control Permit NEV2020104	<p>NDEP Water Pollution Control Permit NEV2020104 Thacker Pass Project Fort McDermitt Paiute and Shoshone Tribe Comment 12/6/2021</p> <p>The Fort McDermitt Paiute and Shoshone Tribe has developed the following comments and questions related to the Nevada Division of Environmental Protection Draft Water Pollution Control Permit NEV2020104 for the Thacker Pass Project.</p> <p>Overall, the Tribe would like to request that NDEP keep the Tribe apprised of any modifications, reports or notices from the Project related to water quality and the permit obligations.</p> <ol style="list-style-type: none"> 1. Climate change has impacts to stormwater events, both frequency and severity. It is unclear in the permit what the State has done to account for the increased likelihood of severe stormwater events and how that impacts design criteria for the stormwater management structures throughout the site, but specifically in conveyance channels and ponds. 2. The concentration of contaminants is given based on statutory values; however, this does not speak to potential load to the system, particularly of those contaminants associated with the waste rock piles. It is important to consider load of contaminants into our groundwater systems as the risk of concentration disbursement decreases with seasonal drought and increased drought severity due to climate change. It is unclear how this was taken into account in the permit considerations. 3. The monitoring plan for groundwater quality is unclear in the permit. A map of the groundwater monitoring system should be included in the permit. Reference to the state reviewed monitoring plan, if applicable, would also assist the reader in understanding the longer-term process for monitoring efforts of the effect of the site. 4. Initial rock characterization efforts identify some increased concentrations of the Profile I Reference Values; It is unclear in the permit what is required throughout the monitoring efforts to continue mineral profiling and assessment of impact to the aquifer and downgradient water quality to ensure there is action when contaminants meet screening levels. 5. The permit fact sheet states that the pit backfill runoff water is proposed to be used for dust suppression; however, the assessment of the quality of this water is unclear. Additionally, as this water is being proposed for use onsite with potential employee exposure. Is the risk to employees considered as a part of the determination to use this water for an onsite use? 6. How does water use at the site potentially affect groundwater elevations considered in the limitations of depth of the pit relative to depth to groundwater? How is this considered in the permit? 7. The permit makes somewhat conflicting statement of depth of pit. The Permit limitations section states the limit is 4,840 feet amsl but references the 15 feet depth to groundwater. It is worth clarifying in the permit documents (both permit and fact sheet) which is the permitted bottom of the pit. Additionally, if water levels are seen to fluctuate over time, what is the response to depth of the pit if depth to groundwater decreases. 8. The permit describes two piezometers used to determine depth to groundwater; however, two piezometers would limit the use of this data. An additional piezometer would assist in determining flow of water at the pit, which could assist in determination of impact to downgradient water use throughout the trends during project life and after closure or the use of alternative wells to meet this goal should be specified. 9. It is unclear if the documentation whether only a single pond is designed to retain sediment space or if this pertains to all ponds. The Permit Limitations specifically states that no more than 2 feet of sediment is allowed in any pond, but only a single pond is discussed as having this design component. Is this justified in the design as other ponds are not expected to experience sediment loading across the site? If so, this would be a helpful justification to include in the permit. <p><i>(continued on next page)</i></p>	<p>As these comments pertain to the NDEP Water Pollution Control permit NEV2020104; this response to comments document addresses Comment 12 regarding air emissions – See Below.</p>	NA



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12/6/2021	Fort McDermitt Paiute and Shoshone Tribe	NDEP Water Pollution Control Permit NEV2020104, Molten Sulfur Tanks	<p>NDEP Water Pollution Control Permit NEV2020104 Thacker Pass Project Fort McDermitt Paiute and Shoshone Tribe Comment 12/6/2021</p> <ol style="list-style-type: none"> 10. It appears some of the pond names may be inconsistent within the permit and fact sheet text. It is useful for these to be reviewed and corrected to ensure consistent language throughout the permit. 11. Some of the units are required to be designed for the 500-year, 4-hour storm event and other are to be designed for the 100-year, 24-hour storm event; however, it is unclear what the metrics are for determining the need for these design capacities. Please explain. 12. What is the likelihood of sulfur dioxide off-gassing in the event the molten sulfur tank leaks? What is the likelihood of the plant combusting in the event of a leak in the molten sulfur tanks? 13. In discussions related to the Clay Tailings Filter Stack in the fact sheet, the liner is described, and a statement is made regarding to the seepage rate. Please included the citation for the seepage calculation process used for this determination. 14. It is unclear if in the determination of pond lifetime potential for evapo concentration resulting in precipitates or over-sedimentation resulting in reduction of capacity were considered and what those components were assumed to be at the permitted lifetime of the project. 15. Parameters for presence of water in the pit should include depth of water when present. 	<p>Comment 12 NDEP understands that molten sulfur can pose a fire risk and could explode above 450°F and is shipped at 290 °F to keep it from solidifying. In the event of a leak, the molten sulfur would solidify quickly in ambient conditions; and the solidified sulfur would not produce emissions. NDEP has confirmed this information with the facility. Additionally, NDEP has determined based on the loading rates of the molten sulfur tanks, and assuming a 24-hour storage quantity, the expected H₂S emissions if there was a leak is estimated to be approximately 48 pounds (please note that the facility wide potential-to-emit from the facility for H₂S is 1.05 tons per year). To address the second part of the comment, as noted above, fire risk is minimized if the molten sulfur is kept below 450°F. In the event of a spill, containment and elimination of ignition sources would be required. NDEP has confirmed with the facility that a concrete pad has been designed in this area and there will be no sources that can ignite solid sulfur in the area.</p>	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
12/6/2021	Fort McDermitt Paiute and Shoshone Tribe	Minor Source Classification, Wildfire Impacts, Backgrounds	<p>NDEP Class II Air Quality Operating Permit Thacker Pass Project Fort McDermitt Paiute and Shoshone Tribe Comment 12/6/2021</p> <p>In addition to the draft comments provided at the in-person meeting on November 30th, the Tribe has the following comments:</p> <p>It should be made clear in the permit that the minor source classification is due to the reduced emissions from mechanical controls. If the controls fail or somehow results in violations, the state should acknowledge if this permit classification is contingent on functional and maintained controls.</p> <p>During the in-person meeting, the meteorological model was discussed, and the Tribe brought up a question regarding the inclusion of wildfire impacts on regional air quality and the impact to attainment parameters. Although this may not be a required component of the permit, wildfire impacts have been more severe and frequent in the region and some standard should be addressed for how these impacts are considered throughout the life of monitoring and in relation to permit requirements. This may be an existing general policy that could be included by reference.</p> <p>More specifically, in one of the agencies slides, a table showing background meteorological concentrations and modeled concentrations was included. It was unclear whether the background values for PM included in this table are measured concentrations and if they include the wildfire season inputs. Please clarify this and if wildfire data was eliminated from the background data, how will the state handle this going forward.</p>	<p><u>Minor Source Classification</u> The air quality operating permit only authorizes the facility to operate with controls. If the emission controls fail or if the facility doesn't operate the emission controls and the facility continues to operate the emission unit without the controls this is a violation of the permit.</p> <p><u>Inclusion of Wildfire Impacts on Regional Air Quality and the Impact to Attainment Parameters</u> From a monitoring perspective, air quality sensors that are measuring pollutants associated with wildfire smoke are able to record the impact of wildfires. This can take the form of significant upward spikes in concentrations (typical for PM_{2.5} and in vicinity of the fires), or less pronounced but more persisting signal for ozone and PM_{2.5} during conditions where a combination of distant wildfires is contributing to the impact. If the monitor is a continuous regulatory monitor the impact of wildfires is therefore included in the recorded dataset year after year. For the attainment and maintenance of the NAAQSs, the Clean Air Act provides exemptions for conditions that are not reasonably controllable by air quality agencies. These conditions are for instance international emissions, or events that are unusual or naturally occurring, like wildfires. During the attainment designation process, the impact of such exceptional and uncontrollable events is excluded from the calculations to determine if the given standards are being met. EPA has established regulations, policies, and guidance that regulate how the impact of exceptional events is determined and quantified. In conclusion, if the air quality agency can demonstrate and quantify the impact of an exceptional and uncontrollable event over air quality measurements, such impact does not by itself contribute to a non-attainment determination</p> <p><u>Background Meteorological Concentrations and Modeled Concentrations</u> Background concentrations are used during the evaluation of air quality impact and are intended to identify air quality conditions without the impact of the new or modified sources (i.e., the new or modified sources are added to the background conditions). There are two approaches to determine background concentrations. If the new source meets the conditions to be a major stationary source or the proposed modifications meet the conditions to be major modifications (as defined in 40 CFR 52.21), the facility must collect background concentrations for at least one year before the new emissions take place. These situations are not common, and usually are associated with large industrial complexes, like power plants. For all the other cases, NDEP uses measurements of concentrations collected by monitors at the Jarbidge Wilderness Area (Elko County, NV) and Great Basin National Park (White Pine County, NV), for PM_{2.5}, and PM₁₀, respectively. These concentrations are assumed to represent the average background concentrations in Nevada. Because these locations are remote and away from significant anthropogenic sources, they should exclude the impact of manmade emissions, but they still would record the impact of natural event, such as wildfires, dust storms, etc.</p>	<p><u>Minor Source Classification</u> NAC 445B.227</p> <p><u>Background Meteorological Concentrations and Modeled Concentrations</u> 40 CFR Part 52.21</p>



1/30/2021	Fort McDermitt Paiute and Shoshone Tribe of Nevada and Oregon	Excess Emissions, Consultation, Test Observation	<p>As outlined in the Fort McDermitt Paiute and Shoshone Tribe ETEP, the Tribe is committed to building capacity to enhance air quality and regional monitoring. It is well known that excess exposure to air pollutants is a recognized environmental justice issue that should be taken very seriously by the permittee. As such, the Tribe is requesting that the State of Nevada Division of Environmental Protection, Bureau of Air Quality Control continue to consult with the Tribal Environmental Department on reports (quarterly, annual and analytical), notices, violations, and modifications as the impact of these could affect Tribal members and lands in ways the Bureau is unequipped to assess.</p> <p>Specifically, the Tribe is making the following requests in conjunction with the permit commitments specified in each of the referenced permit sections:</p> <p>Section I General Provisions</p> <ol style="list-style-type: none"> 1. Subsection G - The Tribe would like to include notice to Tribal government of maintenance request. 2. Additionally, how should the Tribe contact NDEP in the event of excess emissions noticed by Tribal members? 3. Subsection H - Testing procedure. 4. The Tribe would like to request the opportunity to also provide an observer of testing. 7. The Tribe would like to request that analytical results be provided to the Tribal Environmental Office for our records. 4. Subsection I - The Tribe is requesting to be consulted with on any major modifications requested. 5. Subsection J - The Tribe would like to be informed of any violation identified by the State. <p>Section II</p> <ol style="list-style-type: none"> 6. Subsection C - The Tribe would like to receive copies of the annual reports. <p><i>(continued on next page)</i></p>	<p><u>Excess Emissions</u> NDEP takes excess exposure to air pollutants above Nevada and National Ambient Air Quality Standards seriously, including excess exposure to communities that may have environmental justice concerns. NDEP reviews each excess emissions notification. Additionally, the facility is required to submit a report within 15 days of an excess emission which will confirm that the excess emission occurred, what the magnitude was, the cause, and the method used to correct the excess emission, the steps taken to remedy the malfunction, and the steps taken or planned to prevent the recurrence of the malfunction. NDEP makes note of the excess emission and thoroughly reviews the emission unit and records during future inspections or investigations. If further action is required, the excess emission report is sent to the air enforcement branch.</p> <p><u>Consultation</u> NDEP will provide any official correspondence via our public document viewer within 2-weeks of the date of the correspondence. Additionally, NDEP will be available to meet with the Tribe when requested.</p> <p><u>Section I General Provisions</u></p> <p><u>Comment 1:</u> There are two instances when maintenance activities will trigger a reporting requirement to NDEP. The first is when maintenance, testing, or scheduled repairs may result in excess emissions; and the second is a determination of whether replacement of an emission unit (or one of its components) constitutes reconstruction. Either event requires a formal notification to NDEP and will be provided through the public document viewer.</p> <p><u>Comment 2:</u> Any excess emissions noticed can be called into the Bureau of Air Pollution Control (BAPC) directly at (775) 687-9349.</p> <p><u>Comment 3:</u> Lithium Nevada shall give notice to NDEP 30 days before the test of performance to allow NDEP to have an observer present; and this notification will be placed in NDEP's public document viewer as per the above. The Tribe will need to coordinate with Lithium Nevada to have their own observer present.</p> <p><u>Comment 4:</u> Any modification at the facility which increases emissions of a regulated pollutant will require a revision to the permit. Additionally, any revision which exceeds the thresholds listed in NAC 445B.3457.5 will require public notice.</p> <p><u>Comment 5:</u> Violations determined by the air enforcement branch will be available on the public document viewer.</p> <p><u>Section II</u></p> <p><u>Comment 6:</u> NDEP will provide any official correspondence via our public document viewer within 2-weeks of the date of the correspondence.</p>	<p><u>Excess Emissions</u> NAC 445B.232</p> <p><u>Comment 1</u> NAC 445B.232, NAC 445B.248</p> <p><u>Comment 3</u> NAC 445B.252</p> <p><u>Comment 4</u> NAC 445B.3457</p>
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1/30/2021	Fort McDermitt Paiute and Shoshone Tribe of Nevada and Oregon	Testing, Equipment Capacities, Backgrounds, Emission Limits and Concentration, Sulfate Tailings Circuit	<p>Section IV.</p> <ol style="list-style-type: none"> 7. Table IV-2 - The description states the duration of sampling; however, it is unclear if these testing methods/procedures are required at peak operation only that they are run after the equipment is run at peak operation? It appears that is the intent, but it is unclear if that is the expectation. 8. Subsection A.2. - Are the initial performance test runs (permit says three valid runs) to be run within a specific timeframe? 9. How do the capacities of the permitted equipment compare to the requested operating capacities? 10. How are emissions limits impacted by regional air quality? For example, in the case of a regional wildfire that impacts air quality. <p>Section V</p> <ol style="list-style-type: none"> 11. Subsection F. 2. When the permit mentions concentration shall not exceed a percent, is that a percent weight in concentration or percent volume in concentration? 12. Subsection L. Sulfate Tailings Circuit - Are sulfur dioxide and hydrogen sulfide not expected emissions from this system? <p><i>(continued on next page)</i></p>	<p>Section IV</p> <p>Comment 7: All facilities are required to operate the equipment at or near the permitted throughput limits during compliance testing. Test that are not performed at representative conditions may be invalidated or the facility may be required to accept permit conditions representative of the test conditions. A written testing procedure for the test must be submitted to NDEP at least 30 days before the test to allow NDEP to have an observer present and to review the proposed testing procedures. NDEP communicates any concerns to the facility prior to testing based on the proposed testing procedures, previous facility inspections, and records review; and any changes in testing method, if acceptable to NDEP, require written approval prior to testing.</p> <p>Comment 8: The initial performance test runs are required to be conducted 60 days after achieving the maximum rate of production at which the affected facility will be operated, but not later than 180 days after initial start-up of the facility and at such other times as may be required by NDEP. As for the spacing between the 3 valid runs, there are no regulations that specify when the testing runs should happen. However, these runs are typically done consecutively.</p> <p>Comment 9 Generally, a facility will permit emission units at or near the maximum capacities for the equipment; but the facility cannot exceed the maximum throughputs listed in the permit even if the equipment has a higher maximum capacity.</p> <p>Comment 10 Because NDEP is using background concentrations that are calculated using monitoring measurements, and these measurements are impacted by potential wildfires smokes that occurred during the measurement period, background concentrations carry the signal from wildfires (and other events that impact regional air quality). The background concentrations are then used in the permitting modeling process to verify the impact of the new or modified emissions sources and determine the new emission limits. Therefore, the overall impact of regional air quality is taken into consideration when establishing emission limits. However, the Clean Air Act allows to not consider air quality conditions that are unquestionably impacted by exceptional and uncontrollable events when assessing if an area is meeting the National Ambient Air Quality Standards. For the same reason, NDEP does not consider the additional impact of exceptional and uncontrollable events when determining the impact of new or modified sources and their emission limits. During these exceptional and uncontrollable events, and in particular during wildfires, pollutant concentrations are often much higher than the air quality standards (e.g., up to 10 times higher), over short period of time; often, pollutant concentrations caused by wildfires are so high, that even a significant reduction in emissions from the regulated industry would not change the level of severity of health impact.</p> <p>Section V</p> <p>Comment 11 The concentration is percent weight.</p> <p>Comment 12 For the sulfate tailings circuit, sulfur dioxide and hydrogen sulfide emissions are not expected to be present. For the production of sulfur dioxide, a combustion process to heat the material would be required. The production of hydrogen sulfide from sulfate</p>	<p>Comment 7 NAC 445B.252</p> <p>Comment 8 NAC 445B.232</p> <p>Comment 9 NAC 445B.281</p>
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DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
				salts would require both moisture and organic matter to be present for sulfur reducing bacteria to thrive; and these conditions are not expected.	



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
1/30/2021	Fort McDermitt Paiute and Shoshone Tribe of Nevada and Oregon	Permitting Process, Sulfur Storage, Climate, Disposal of Contaminated Media, VOC Emissions	<p>Section V</p> <ol style="list-style-type: none"> 13. Can you walk us through how the specific operating conditions emission limits are set for a project this size? 14. Subsection U. Sulfur Storage - Are there any other permits in the state for Sulfur Storage? How do they compare with the size and quantity and acceptable emissions proposed here? 15. Was an assessment completed on the impact of the proposed permitted emissions on the states ongoing greenhouse gas and climate change assessments? 16. What is the requirement for disposal of contaminated control materials such as scrubbers and bags? 17. What VOC's are expected to be seen in the emissions at the site? <p><i>(continued on next page)</i></p>	<p>Section V</p> <p>Comment 13 NDEP starts the permitting process by reviewing the application, prepared and submitted by the applicant. Proposed emission factors are reviewed and compared to EPA's AP-42 Compilation of Air Pollutant Emission Factors, material balances, and/or testing data (where available). Emission factors for facilities performing similar operations are also considered. When the permit conditions are drafted, NDEP requires that parameters used in these calculations are tracked by the facility to ensure compliance with the emission limits. The operating conditions, for example hours of operation and throughput rates, are initially requested by the facility. If modeling shows that operation using those parameters are within air quality standards, then those become the permitted operating conditions. However, if modeling shows an exceedance of the standards, then the facility must propose revised operating conditions that show compliance with the standards before the permitting process can continue.</p> <p>Comment 14 NDEP currently has no other air permits within our jurisdiction permitted for sulfur storage.</p> <p>Comment 15 An assessment on the impact of the proposed permitted emissions on the State's ongoing greenhouse gas and climate change assessments was not conducted. NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses from the stationary source be completed.</p> <p>Comment 16 Air pollution control media at mine sites often can be contaminated with metals which may then make the contaminated media an onsite generated hazardous waste. The facility is required to characterize this media and determine whether the media should be treated as a solid or hazardous waste. As a hazardous waste, the waste must be properly managed, labelled and shipped offsite for treatment and disposal.</p> <p>Comment 17 The majority of the VOC emissions will be generated from the Propane Fired Package Boiler and Gasoline tank. The VOC emissions will be made up of incomplete combustion of propane and gasoline vapor. The project is permitted to emit a total of 0.7 tons per year for all VOC emissions.</p>	<p>Comment 13 NAC 445B.346</p> <p>Comment 17 Sections V.V. and V.AA. of the AQOP, Emission Units S2.021 – System 22 – Package Boiler and S2.028 – System 27 – Gasoline Tank</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION												
1/30/2021	Fort McDermitt Paiute and Shoshone Tribe of Nevada and Oregon	Sulfuric Acid Plant	<p>Section V 18. Section V Subsection X Sulfuric Acid Plant - what is the expected disbursement or fallout of emission components from the nearly 200-foot stack? How do the proposed emission quantities compare to other similar permitted facilities in Nevada? Why is the annual performance testing allowed a 3 month grace period?</p> <p><i>(continued on next page)</i></p>	<p>Section V Comment 18 Emission disbursement from the Sulfuric Acid Plant was not evaluated on an individual basis. However, emission concentrations were evaluated for PM_{2.5}, PM₁₀, sulfur dioxide, nitrogen oxides, carbon monoxide, and hydrogen sulfide for the entire stationary source. The results of the modeling analysis compared to the Nevada and National ambient air quality standards are as follows:</p> <ol style="list-style-type: none"> 1. PM_{2.5}: 24-hr – 44%, Annual – 34%. The highest PM_{2.5} impacts are located along the south portion of the facility plant boundary 2. PM₁₀: 24-hr – 52%, The highest PM₁₀ impacts are located along the south portion of the facility plant boundary. 3. SO₂: 1-hr – 55%, 3-hr – 6%, 24-hr – 3%, Annual – 1%. The 1-hr impact is located approximately 0.8 miles south of the facility plant boundary. 4. NO₂: 1-hr – 63%, Annual – 4%. The 1-hr impact is located approximately 0.8 miles south of the facility plant boundary. 5. CO: 1-hr – 0.3%, 8-hr – 1%. The highest CO impacts are located along the south portion of the facility plant boundary. 6. H₂S: 1-hr – 6%. The highest H₂S impact is on a receptor just north of Hwy 293. <p>There is one similar facility with an air permit in NDEP’ jurisdiction, Loneer’s Rhyolite Ridge project (Facility Identification Number A2243 and Permit Number AP1099-4256), which is comparable to this project. The facility has not been built yet. Below is a table briefly comparing these two acid plants:</p> <table border="1"> <thead> <tr> <th>Project</th> <th>Throughput (tons/hour)</th> <th>Stack Height (fee)</th> <th>SO₂ Hourly Limits (pounds/hour)</th> </tr> </thead> <tbody> <tr> <td>Rhyolite Ridge</td> <td>160.8</td> <td>197.9</td> <td>17.6</td> </tr> <tr> <td>Thacker Pass</td> <td>51</td> <td>199</td> <td>10.2</td> </tr> </tbody> </table> <p>The permit language “annual performance testing within 90 days of the anniversary date of the previous initial performance testing or annual performance testing,” is provided to allow the facility to schedule a testing provider and provide notification to NDEP. A written testing procedure for the test must be submitted to NDEP at least 30 days before the test to allow NDEP to have an observer present and to review the proposed testing procedures. NDEP communicates any concerns to the facility prior to testing based on the proposed testing procedures, previous facility inspections, and records review; and any changes in testing method, if acceptable to NDEP, require written approval prior to testing.</p>	Project	Throughput (tons/hour)	Stack Height (fee)	SO ₂ Hourly Limits (pounds/hour)	Rhyolite Ridge	160.8	197.9	17.6	Thacker Pass	51	199	10.2	<p>Comment 18 NAC 445B.22097, Section V.X. of the AQOP, Emission Units S2.023 – System 24 – Sulfuric Acid Plant</p>
Project	Throughput (tons/hour)	Stack Height (fee)	SO ₂ Hourly Limits (pounds/hour)														
Rhyolite Ridge	160.8	197.9	17.6														
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DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
1/30/2021	Fort McDermitt Paiute and Shoshone Tribe of Nevada and Oregon	Testing, Propane, Consultation, Insignificant Activities	<p>Section V</p> <p>19. Subsection 6.c. states that for method 8, used to determine concentration of acid mist and SO₂, moisture content may be considered zero, please justify in this context.</p> <p>20. Where are they storing all the propane for fuel across the project? What does the permitting look like for this storage - both air and other required storage permits?</p> <p>Section VI</p> <p>21. Subsection A.7 - the Tribe would like an opportunity to review the QC procedure Subsection A. 13 - quarterly audits should also be shared with the Tribe. Subsection B. Monitoring system quarterly reports should also be shared with the Tribe.</p> <p>22. Please justify the Class II insignificant Activities List. Would the inclusion of these units resulted in any significant overall regional increase in emissions?</p> <p><i>(continued on next page)</i></p>	<p>Section V</p> <p>Comment 19 When using Method 8 to test for SO₂ emissions, this is generally done for combustion units, where the exhaust is made up of Nitrogen (59 - 73%), CO₂ (12%), Water (12%), O₂ (3-15%), with trace amounts of pollutants (that's what we're measuring). In the case of the sulfuric acid plant, the contents of the exhaust gas will be Nitrogen, and trace amounts of SO₂ and H₂SO₄. Because Sulfur is the only thing being burned, there is no water or CO₂ to compensate for to convert to dry standard (it's already dry). So that why Subpart H has this allowance. What this would mean from a testing perspective is that EPA Reference Method (RM) 3 or 3A would still need to be conducted to confirm the O₂ and CO₂ concentrations. However, RM 4 would not need to be conducted, and the moisture content can be considered zero percent.</p> <p>Comment 20 The propane tanks were not identified in the permit because they are not expected to be a source of air emissions because they are fully closed off with no venting.</p> <p>Section VI</p> <p>Comment 21 NDEP will provide any official correspondence via our public document viewer within 2-weeks of the date of the correspondence.</p> <p>Comment 22 The insignificant activities list is emission units, with no controls or limited operating parameters, will not emit emissions in excess listed in the requirements. Although these emission units do not have specific operating conditions, the emissions from these units are included in the facility's total potential-to-emit and modeled to demonstrate compliance with the Nevada and National Ambient Air Quality Standards.</p>	<p>Comment 22 NAC 445B.288</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
12/7/2021	Tom Hoss, County Commissioner, Winnemucca	NDEP Water Pollution Control Permit NEV2020104, Minor Source Classification	<p>Tom Hoss, County Commissioner, Winnemucca, called and relayed the following concerns.</p> <ol style="list-style-type: none"> 1. He recommends that we require the tailings to be neutralized before they are placed. 2. He is concerned that the mine will pump more water than they have allocated and no one will be monitoring. 3. He believes since this is a very large sulfuric acid plant it should be permitted as a Class 1 instead of Class 2 air permit. <p><i>(continued on next page)</i></p>	<p><u>Comment 1</u> Please refer to NDEP Water Pollution Control Permit NEV2020104: The tailings material and Clay Tailings Filter Stack Facility (CTFS) is described on page 10 in the Fact Sheet which can be found at the following link: https://ndep.nv.gov/uploads/documents/NEV2020104dfsFY22.pdf. Although NDEP agrees that neutralization of all tailings material prior to filtration is a more benign option, the CTFS is designed in accordance with the applicable regulations and will be constructed as a zero-discharge facility. The material will be stored on 80-mil geomembrane-lined containment, compacted to approximately 10-6 to 10-7 cm/sec, and covered with waste rock/growth media at closure; therefore, no degradation to groundwater will occur. Sulfuric acid is compatible with 80-mil HDPE geomembrane which still has a long-life expectancy when in contact with low pH solutions (see Response 150 regarding liner life expectancy). Therefore, neutralization prior to placement is not necessary or required to protect waters of the State. In addition, because the CTFS will be a dry-stack facility, a permit limitation (Part I.G.10) prohibits ponded water on the surface during operations. The reclaim pond for the CTFS is a double-lined pond with leak detection which will be converted to an ET-Cell at closure to passively evaporate any seepage, although minimal from the CTFS. The Division understands that Lithium Nevada has been evaluating the option to neutralize all tailings prior to filtration, briefly described in the document titled “Filterability of Neutralized Clay Tailings V2”, but these studies have not been finalized or officially proposed to the Division. The Permit includes a continuing investigation item (Part I.N.3) requiring the Permittee to submit these studies to the Division annually.</p> <p><u>Comment 2</u> NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</p> <p><u>Comment 3</u> A facility is required to apply for a Class 2 air permit when the emissions from the facility will be less than 100 tons per year for any regulated pollutant and there is no federal requirement to obtain a Class 1 permit. The facility will be required to continuously monitor its SO₂ emissions from the sulfuric acid plant to ensure that the concentration of the stack and the overall emission rate from the stack meets permitted limits.</p>	<p><u>Comment 1</u> NDEP Water Pollution Control Permit NEV2020104</p> <p><u>Comment 2</u> NDWR</p> <p><u>Comment 3</u> NAC 445B.037, NAC 445B.3453, Section V.X. of the AQOP, Emission Units S2.023 – System 24 – Sulfuric Acid Plant</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
12/7/2021	Tom Hoss, County Commissioner, Winnemucca	Compliance, Permitting Process	<p>Tom Hoss, County Commissioner, Winnemucca, called and relayed the following concerns.</p> <ol style="list-style-type: none"> 4. He is concerned NDEP will not have adequate oversight of day to day activities. 5. He recommends that we do a lot more analysis of this before granting permit. 	<p>Comment 4 The air permit requires, for example for the sulfuric acid plant, excess emission reporting within 24 hours and permit deviations within 15 days; monitoring, recordkeeping, and reporting (which includes hourly, daily, monthly, and quarterly monitoring and recordkeeping), performance and compliance testing (annual), federal requirements (continuous monitoring); and annual reports including throughput, production, fuel consumption, hours of operation, and emissions. NDEP's air compliance staff will review the reports and determine appropriate follow-up actions.</p> <p>Comment 5 The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Comment 4 NAC 445B.346</p> <p>Comment 5 NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Commissioner Ron Cerri, Chairperson, Humboldt County Board of Commissioners via Michelle Cook, michelle.cook@humboldtcountynv.gov	Modeling, Backgrounds, Meteorological Monitor	<p>November 18, 2021 Humboldt County, Nevada, Board of Commissioners Nevada Division of Environmental Protection., Bureau of Air Pollution Control. 901 S. Stewart Street, Suite 4001, Carson City, Nevada 89701</p> <p>To whom it may concern: Subject: Humboldt County Comments on NDEP New Class II Air Quality Operating Permit AP1479-4334 (A1270) for Thacker Pass Lithium Project</p> <p>The Humboldt County Board of Commissioners appreciates the opportunity to comment on the Nevada Division of Environmental Protection New Class II Air Quality Operating Permit AP1479-4334 (A1270) and submits the following comments for consideration:</p> <ul style="list-style-type: none"> • Comment 1: It is the County's understanding that dispersion is based on a worst-case emissions inventory and all standards (both national and the state of Nevada) were met. Is the specific modeling report available for review of concentration results and modeling inputs? • Comment 2: It is the County's understanding that the nearest met station, Winnemucca, was applied in the ambient air modeling and the nearest PM₁₀ monitor applied was Elko. It is also understood that gaseous emissions in the general area of the project is considered to be negligible. However, what background values were applied for PM_{2.5} and PM₁₀? • Comment 3: Does the site have monitors for meteorology and/or pollutants? Based on the information provided, it is unclear if there are onsite monitors for meteorology or specific pollutants. <p>If you have any questions regarding the comments, please contact the office of the County Manager, Dave Mendiola, at Humboldt County at (775) 623-6300.</p> <p><i>(continued on next page)</i></p>	<p>Comment 1: NDEP's modeling report will be part of the technical review document issued with the permit, and available via our public document viewer. The facility's permit application and modeling analysis have previously been made available through our public document viewer; however, NDEP performs our own independent modeling analysis to confirm the facility's modeling analysis. In the model, all sources were characterized in accordance with the most recent BAQP policy, EPA Guidance, and regulatory default options as described in 40 CFR Part 51 Appendix W. It includes any buildings that are going to be onsite, source locations, release heights, release temperatures, and flow rates.</p> <p>Comment 2: The following background concentrations were applied:</p> <ul style="list-style-type: none"> • PM_{2.5}, 24-hr averaging period: 8 µg/m³ (Jarbidge) • PM_{2.5}, annual averaging period: 2.3 10.2 µg/m³ (Jarbidge) • PM₁₀, 24-hr averaging. period: 10.2 µg/m³ (Lehman Caves) <p>MET data was used from an onsite meteorological monitor. Background concentrations are used during the evaluation of air quality impact and are intended to identify air quality conditions without the impact of the new or modified sources (i.e., the new or modified sources are added to the background conditions). There are two approaches to determine background concentrations. If the new source meets the conditions to be a major stationary source or the proposed modifications meet the conditions to be major modifications (as defined in 40 CFR 52.21), the facility must collect background concentrations for at least one year before the new emissions take place. These situations are not common, and usually are associated with large industrial complexes, like power plants. For all the other cases, NDEP uses measurements of concentrations collected by monitors at the Jarbidge Wilderness Area (Elko County, NV) and Great Basin National Park (White Pine County, NV), for PM_{2.5}, and PM₁₀, respectively. These concentrations are assumed to represent the average background concentrations in Nevada. Because these locations are remote and away from significant anthropogenic sources, they should exclude the impact of manmade emissions, but they still would record the impact of natural event, such as wildfires, dust storms, etc.</p> <p>Comment 3: There are no onsite monitors for specific pollutants; however, there is an onsite meteorological monitor that the facility installed in August 2011.</p>	<p>Comment 1 NAC 445B.310, NAC 445B.311, 40 CFR Part 51 Appendix W</p>



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11/18/2021	Commissioner Ron Cerri, Chairperson, Humboldt County Board of Commissioners via Michelle Cook, Michelle.Cook@humboldtcountynv.gov	CEMS, Transportation, Emission Spreadsheet	<p>November 18, 2021 Humboldt County, Nevada, Board of Commissioners Nevada Division of Environmental Protection., Bureau of Air Pollution Control. 901 S. Stewart Street, Suite 4001, Carson City, Nevada 89701</p> <p>To whom it may concern: Subject: Humboldt County Comments on NDEP New Class II Air Quality Operating Permit AP1479-4334 (A1270) for Thacker Pass Lithium Project</p> <p>The Humboldt County Board of Commissioners appreciates the opportunity to comment on the Nevada Division of Environmental Protection New Class II Air Quality Operating Permit AP1479-4334 (A1270) and submits the following comments for consideration:</p> <ul style="list-style-type: none"> • Comment 4: SO₂ emissions will be monitored with a CEMS unit on the acid plant to ensure continuous compliance with the permitted limits. Will any CEMS information be available for real time viewing? • Comment 5: Were potential increases in transportation emissions considered in the draft air permit? Based on the data provided it appears that transportation emissions were not explicitly analyzed as part of the NDEP permitting process. • Comment 6: Are the emission estimate calculations for potential to emit available for public review and comment? The County was not provided a copy of the emissions inventory spreadsheet by which the permit was based. <p>If you have any questions regarding the comments, please contact the office of the County Manager, Dave Mendiola, at Humboldt County at (775) 623-6300.</p> <p><i>(continued on next page)</i></p>	<p>Comment 4: NDEP will not have access to real time viewing of the CEMS information. The facility will be required to submit quarterly reports on the CEMS. These quarterly reports will be available via our public document viewer within 2-weeks of the date of the correspondence. In addition, any periods of excess emissions will need to be reported. These excess emissions shall be determined by three-hour periods (or the arithmetic average of three consecutive one-hour periods). NDEP reviews each excess emissions notification. Additionally, the facility is required to submit a report within 15 days of an excess emission which will confirm that the excess emission occurred, what the magnitude was, the cause, and the method used to correct the excess emission, the steps taken to remedy the malfunction, and the steps taken or planned to prevent the recurrence of the malfunction. NDEP makes note of the excess emission and thoroughly reviews the emission unit and records during future inspections or investigations. If further action is required, the excess emission report is sent to the air enforcement branch.</p> <p>Comment 5: The air permitting process only evaluates stationary emission sources. Air emissions from mobile sources engines and fuels are required to meet the standards set by federal EPA.</p> <p>Comment 6: The emission spreadsheet will be available with the issuance of the permit with the technical review document. However, the application and subsequent requests for information and responses are available for review on our public document viewer. The emissions in the emission spreadsheet will match what is provided in the application; if there are differences between the application and the emissions spreadsheet then they will be addressed in the requests for information and email correspondence.</p>	<p>Comment 4 Section V.X. of the AQOP, Emission Unit S2.023 System 24 – Sulfuric Acid Plant, Section VI of the AQOP, NAC 445B.232, NAC 445B.265</p> <p>Comment 5 NAC 445B.113, NAC 445B.187, 40 CFR Part 1068.30</p>



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11/18/2021	Commissioner Ron Cerri, Chairperson, Humboldt County Board of Commissioners via Michelle Cook, Michelle.Cook@humboldtcountynv.gov	Technical Review, Annual Emission Inventory, Testing Results, Inspection Frequency	<p>November 18, 2021 Humboldt County, Nevada, Board of Commissioners Nevada Division of Environmental Protection., Bureau of Air Pollution Control. 901 S. Stewart Street, Suite 4001, Carson City, Nevada 89701</p> <p>To whom it may concern: Subject: Humboldt County Comments on NDEP New Class II Air Quality Operating Permit AP1479-4334 (A1270) for Thacker Pass Lithium Project</p> <p>The Humboldt County Board of Commissioners appreciates the opportunity to comment on the Nevada Division of Environmental Protection New Class II Air Quality Operating Permit AP1479-4334 (A1270) and submits the following comments for consideration:</p> <ul style="list-style-type: none"> • Comment 7: Is there a technical memorandum or statement of basis that describes the rationale for each component of the permit. • Comment 8: Will annual emission inventories be available for public review? • Comment 9: Will any stack testing results be available as part of a public records request? • Comment 10: How often will the mine be inspection by NDEP compliance personnel? Will it be more often than the minimum requirement of every five years? <p>If you have any questions regarding the comments, please contact the office of the County Manager, Dave Mendiola, at Humboldt County at (775) 623-6300.</p>	<p>Comment 7: The technical review document will be available with the issuance of the permit and discusses the facility's processes, emission calculations, testing requirements, public outreach, modeling results, and State and federal requirements.</p> <p>Comment 8: Annual emissions inventories submitted by the facility can be obtained for public review by submitting a written request or filling out an online form. Instructions on how to submit a written request or the online form can be found here: https://ndep.nv.gov/resources/public-records-request</p> <p>Comment 9: The stack testing results, including NDEP's review of the test results, will be available for review on our public document viewer.</p> <p>Comment 10: The facility is a synthetic minor which means the facility has a potential to emit greater than 80 tons per year. Because of the synthetic minor classification, NDEP will conduct a Full Compliance Evaluation at a minimum of once every 5 years (this includes an onsite inspection and a review of records) and a Partial Compliance Evaluation every year (which is a review of records).</p>	<p>Comment 8 Section II.C of the AQOP</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/16/2021	Patrice Tullai alice dean@hotmail.com	Emissions	<p>Dear People, I am gravely opposed to the Thacker Lithium Mine. It is NOT green. It is highly toxic and a danger to people’s in the area and a gross addition to climate catastrophe. CO₂ Emissions from the mine will be 150,000 tons PER YEAR, equivalent to a small city. Along with CO₂, the mine will emit other hazardous chemicals including Hydrogen Sulfide (H₂S) which is extremely flammable and highly toxic; and PM_{2.5}, small particles of soot that can get deep into your lungs and blood to cause heart attacks, aggravated asthma, decreased lung function, and other respiratory symptoms. Let’s not destroy our air anymore, we are killing ourselves.</p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or “source category”). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada’s Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gases (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/17/2021	Bradley Berthold, bnb1370@gmail.com	Sulfur Dioxide	<p>To whom it may concern:</p> <p>I am concerned about the effects upon Nevada's air quality and increased SO₂ emissions that could result from the Thacker Pass Mine project. I understand the need to responsibly utilize Nevada's lithium resources but it at what long term cost to our most precious resource: Nevada's natural health. I am especially concerned about effects upon bird and wildlife populations around Winnemucca and further south. Other countries that extract lithium especially Chile, Argentina and Turkey have been using the safe and highly cost-effective methods of solar evaporation for processing without resorting to the costly and dangerous use of sulfuric acid. With its similar climate, Nevada could do the same. I sincerely hope NDEP will put the long term benefits to the health of our state in consideration. The economic benefits of this project will be limited and finite in scope.</p> <p>Thank you kindly.</p> <p>Bradley Berthold Manhattan, Nevada</p>	<p>Sulfur Dioxide Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants), that includes sulfur dioxide, which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p>For the proposed emissions of SO₂ from the stationary sources, percentage of the standard is: SO₂: 1-hr – 55% of the standard, 3-hr – 6% of the standard, 24-hr – 3% of the standard, and Annual – 1% of the standard.</p>	Sulfur Dioxide NAC 445B.22097
11/17/2021	Chanda Callao cjcallao@hotmail.com	Permitting Timeline	<p>November 17, 2021</p> <p>RE: Public Comment</p> <p>Nevada Division of Environmental Protection, We all know that the entire Thacker Pass Mining Proposal was fast tracked through the Trump Administration. With that said, how can you be positive and show facts to the public that the Air Quality Permit was not also fast tracked?</p> <p>Thank you for your time,</p> <p>Chanda Callao - cjcallao@hotmail.com Concerned Citizen for Thacker Pass/Peehee Mu'huh</p>	<p>Permitting Timeline The air quality operating permit application was received by NDEP on January 26, 2021. NDEP has 10-working days to determine if the application is administratively complete; the application was deemed administratively complete on February 9, 2021. Once administratively complete, NDEP has 90 days to issue or deny the application. During NDEP's technical review an additional 75 days were added to the timeline due to requesting additional information from the facility. Based on NDEP's regulatory review time of 90 days and the added 75 stop days, the potential issuance date was July 24, 2021.</p>	Permitting Timeline NAC 445B.3457



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/17/2021	Dorece Antonio (submitted via email by Chanda Callao)	Consultation, Permitting Timeline, Monitoring, Previous Mining Activity	<p>November 17th, 2021</p> <p>Dear Nevada Department of Environmental Protection,</p> <p>My questions to the Nevada Department of Environmental Protection are:</p> <ol style="list-style-type: none"> 1. Will you take into consideration that Thacker Pass is a Sacred Burial Site to Native Americans before you issue your Air Quality Permit? 2. Was your research and findings fast tracked like the approval for Thacker Pass Lithium Mine was? 3. How many air monitoring stations on the outside perimeter of the mine site have been monitored and recorded prior to your air standard findings and how many air monitoring stations will be issued on the outside perimeter if the mine is approved? <p>As a Fort McDermitt Tribal Descendant air quality is a concern for myself and many elders in the community. The Fort McDermitt Indian Reservation is still suffering from the aftermaths of other mines in the area. Many of our people experience cancer and respiratory issues. If these permits are issued, you will be contributing to the horrible mining affects Fort McDermitt Paiute-Shoshone Indian Reservation already faces.</p> <p>Thank you for your time.</p> <p>Sincerely, Dorece Antonio Fort McDermitt Tribal Member People of Red Mountain Member</p>	<p>Comment 1: The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations. As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p> <p>Comment 2: The air quality operating permit application was received by NDEP on January 26, 2021. NDEP has 10-working days to determine if the application is administratively complete; the application was deemed administratively complete on February 9, 2021. Once administratively complete, NDEP has 90 days to issue or deny the application. During NDEP’s technical review an additional 75 days were added to the timeline due to requesting additional information from the facility. Based on NDEP’s regulatory review time of 90 days and the added 75 stop days, the potential issuance date was July 24, 2021.</p> <p>Comment 3: See “Monitoring Considerations” at the end of this document.</p> <p>Previous Mining Activity NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada.”</p>	<p>Comment 1 NRS 445B, NAC 445B</p> <p>Comment 2 NAC 445B.3457</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/17/2021	Myron Smart (submitted via email by Chanda Callao)	Meteorological Data	<p>November 17th, 2021</p> <p>Dear Nevada Department of Environmental Protection,</p> <p>Thacker Pass is in an area that does not show up on the National Weather Report. I have spent more time there compared to others. When the weather states there is no wind, sometimes the wind is still blowing at Thacker Pass. How much research has been done regarding the wind always blowing at Thacker Pass? When the wind blows the chemicals come out of the smokestacks and will blow to the Fort McDermitt Paiute-Shoshone Indian Reservation and surrounding areas. As a Fort McDermitt Tribal Descendant, it is a concern about the wind always blowing. If these permits are issued, can NDEP prove the wind will not blow chemicals to the Fort McDermitt Paiute-Shoshone Indian Reservation?</p> <p>Thank you for your time.</p> <p>Concerned, Myron Smart Fort McDermitt Tribal Descendant People of Red Mountain Member</p>	<p>Meteorological Data</p> <p>There is an onsite meteorological monitor that Lithium Nevada installed in August 2011.</p> <p>For the modeling of pollutant dispersion, NDEP used meteorological data collected in the proximity of where the proposed facility will be (approximately 1 km or 0.6 miles apart, but within the boundaries of the proposed facility) for one year. This provides the optimal meteorological data for the pollutant dispersion model, as the weather conditions (wind, but also air temperature) are representative of the conditions where the emissions will occur. For reference, we are including the wind-rose obtained using those measurements. Noticeably, the fraction of wind measurements reported as 'calms' is very close to zero (0.27%), and a significant fraction of reported wind speeds is between 4 and 22 knots (approx. 5 to 25 miles per hours), confirming that the area is subject to consistent high winds.</p> <div style="text-align: center;"> </div> <p>Permitting Process</p> <p>The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Permitting Process NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/17/2021	Kristen Sartor, kls0004@tigermail.auburn.edu	General Comment	<p>Hello,</p> <p>I am writing today to make a public comment urging you to deny the NDEP air quality permit for the proposed lithium mining at Thacker Pass. If Thacker Pass is extracted through lithium mining, thousands of tons of sulfuric acid will be produced daily. The proposed mine would burn tens of thousands of gallons of diesel fuel every single day. This will result in the same amount of emissions that would come from a small city. This would exacerbate the climate catastrophe we are currently facing. The last thing we need is an open pit lithium mine of this scale when our world is on fire, we are running out of water and we are facing deadly floods and heatwaves. This is an immediate threat to breathable air.</p> <p>Please deny the NDEP air quality permit.</p> <p>Thank you for your time, Kristen Sartor</p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada’s Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gases (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/17/2021	Molly Willoughby, mmelindawilloughby@gmail.com	NDEP Water Pollution Control Permit NEV2020104, Transportation, Emissions	<p>To whom it may concern at the NDEP,</p> <p>I am a citizen of Smith, Nevada, writing to ask you to take all necessary measures to halt the proposed mine by Lithium Americas Corp at Thacker Pass. I have done this before, and I am reiterating it now in anticipation of the air quality hearing scheduled for 11/18 regarding the project. I request that the Nevada Department of Environmental Protection deny air (and water) quality permits for the Thacker Pass Lithium Mine Project.</p> <p>There are numerous ethical and environmental crises implicated in this project, as I am sure you are aware by now. Local rancher Edward Bartell has filed a lawsuit challenging the mine, claiming that Lithium Americas made multiple presentations and publications where it regularly stated the mine would use only half the amount of water that the approved Environmental Impact Statement (EIS) now claims. This does not constitute being honest with locals. Additional impacts on nearby communities would be drastic changes to the small town of Orovada, which would be expected to have 240-400 semi trucks (120-200 round trips) passing per day, or roughly one every 4 minutes, according to the EIS (Section 2.2.7.5, p. 2-14).</p> <p>More to the point, the environmental impacts of this mine would be devastating. The project would use 5200 acre-feet of groundwater per year for most of its 4 decade lifetime in an already over-allocated setting (FEIS Section 4.3.1, p. 4-7). There are also enormous pollution concerns with water and mine tailings. The EPA itself has criticized the official EIS approved by the BLM, noting that "the plans are not developed with an adequate level of detail to assess whether or how groundwater quality downgradient from the pit would be effectively mitigated" and that all action alternatives proposed by the EIS would result in "adverse effects to groundwater quality." The detailed comments on the EIS note serious concerns that its models for predicting the release of harmful pollutants, particularly antimony, are overly conservative, and that pollutants will be released into groundwater at levels exceeding state water quality standards (FEIS pp. R-116--R-124). The Thacker Pass mine would cause serious pollution risk to water resources, and the open pit operation would destroy and fragment critical habitat used by greater sage grouse, pronghorn sheep, bighorn sheep, pygmy rabbits, golden eagles, ferruginous hawks, prairie falcons, western burrowing owls, spotted bats, red bats, little brown bats, and desert horned lizards, among others. How can the NDEP, whose mission is to "preserve and enhance the environment of the State" and "sustain healthy ecosystems" allow such a project to take place?</p> <p>Of course, all of this doesn't even begin to touch on the air permit concerns pertaining to the hearing tomorrow, though I'm sure you can anticipate that a company who cares so little for water resources likewise would endanger our clean air as well. The Thacker Pass project would import and burn thousands of tons of sulfur daily, along with over 10,000 gallons of diesel, the equivalent of a small city. In addition to furthering climate change at a time when mitigation is imperative, the wind patterns of the area will bring air polluted with nitrous oxides, volatile organic compounds, sulfur dioxide, particulate matter, and other Hazardous Air Pollutants to nearby Tribal populations.</p> <p><i>(continued on next page)</i></p>	<p>Many of these comments pertain to the NDEP Water Pollution Control permit NEV2020104; this response to comments document addresses comments regarding air emissions – See Below.</p> <p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Transportation The air permitting process only evaluates stationary emission sources. Air emissions from mobile sources engines and fuels are required to meet the standards set by federal EPA and transportation regulations administered by the federal Department of Transportation.</p> <p>Emissions Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p>Hazardous (Toxic) Air Pollutants Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p>	<p>Permitting Process NRS 445B, NAC 445B</p> <p>Emissions NRS 445B, NAC 445B</p> <p>Hazardous (Toxic) Air Pollutants NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/17/2021	Molly Willoughby, mmelindawilloughby@gmail.com	Consultation, Climate	<p>And this is only a small part of the damage done to Native people in this area. Lithium Americas has not consulted meaningfully with any of the Tribes who have regional ties to Peehee Mu'huh or Thacker Pass, which is a sacred area. Furthermore, it is a site where multiple Tribes collect traditional medicines and foods to this day, it is also a burial ground and the site of a historic Paiute massacre. I would think even the casual observer could understand that such a place holds historical and ongoing importance, especially to communities who have had much of their land and sovereignty continually stripped from them. And yet this project is just more of the same abusive, colonial and small-minded behavior. To pretend that Lithium Americas is attempting to acknowledge this land's historic narrative without taking any measures to talk to or listen to the Fort McDermitt Tribe or other Tribes with ties to this area is willfully ignorant. They want to dig here regardless, and so they pretend that nothing important is here.</p> <p>Finally, as many environmental activists have noted, this mine will not even allow us to stop the progression of climate change. We will not turn our gas guzzling cars into electric paragons of sustainability based on lithium. According to an analysis by the Center for Interdisciplinary Environmental Justice, electrification of cars would only reduce national emissions by 5%. Meanwhile, extractive industries like Lithium Americas (whose contractor to build this mine is the North American Coal Corporation) are responsible for half the world's carbon emissions and more than 80% of extinctions. As summarized by Alex Eisenberg in their letter to the editor of the Elko Daily,</p> <p><i>The Thacker Pass mine alone would burn 11,000 gallons of diesel every day for onsite operations. Double that for off-site operations. Carbon emissions are expected to be 150,000+ tons per year, equating to 2.3 tons of carbon for every ton of lithium produced. Hundreds of tons of sulfur (ironically a waste product from oil refineries) would be used daily in mine operations.</i></p> <p>The greenwashed narrative of the proposed mine at Thacker Pass threatened to ensnare me in environmental platitudes, but by <i>listening</i> to the people, the land, and researched commentary of organizations like the Environmental Protection Agency, I have realized that this mine would be only the first step in a series of gambits to extract wealth for a few at the expense of local livelihoods, indigenous rights, and vulnerable biological diversity. Indeed, Lithium Americas spokesperson Tim Crowley has said that they are "very confident that there will be more development" beyond this project, and the company has staked claims expanding into the Montana Mountains. Yet these mining projects blatantly ignore reality. To address the profound damage we are doing to natural and social systems, we simply cannot continue business as usual, and allowing an exploitative industry to pillage natural resources and human rights for their own profit will fix nothing.</p> <p>As Jonathan Safran Foer has aptly written, "It's always possible to wake someone from sleep, but now amount of noise will wake someone who is pretending to be asleep." I do not think you are truly sleeping to the harsh realities of this project, so I can only hope that you will not <i>pretend</i> to be asleep to the damages it would cause, and to your power to prevent them.</p> <p>Thank you for your time.</p> <p>Regards, Molly Willoughby</p>	<p>Consultation As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p> <p>Climate NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gases from the stationary source be completed.</p>	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/17/2021	People of Red Mountain, peopleofredmountain@gmail.com	Emission Controls, Emissions, Monitoring	<p>Here are the People of Red Mountains comments about the Thacker Pass lithium mine DRAFT Air Quality permit. We would like to be named under Fort McDermitt Paiute and Shoshone tribal members. Thank you.</p> <p>People of Red Mountain / Atsa Koodakuh wyh Nuwu</p> <ol style="list-style-type: none"> 1. Explain further the function of a water spray and its role in controlling particulate matter. 2. I am highly concerned about the amount of particulate matter and discharge of sulfuric acid into the air. It states that, "The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 5.69 pounds per hour, nor more than 24.9 tons per 12-month rolling period." As well as, "The discharge of H₂SO₄ (Sulfuric Acid) to the atmosphere shall not exceed 5.69 pounds per hour, nor more than 24.9 tons per 12-month rolling period." One of the reasons I am concerned is that the PM_{2.5} and H₂SO₄ is significantly larger in quantity compared to other emission limits throughout the air quality permit. This should be very alarming to the local communities as the mine will be very dependent on using sulfuric acid to leach the lithium for years. I am concerned the sulfuric acid will greatly harm the people and animals. 3. It states in Section X Emission Units System 24 Sulfuric Acid Plant #4F that, "Monitor and record the pressure drop and water flow rate values for the Tail Gas Scrubber, when the Sulfuric Acid Plant is operating, at least once every hour." Will drilling, digging, the Sulfuric Acid Plant, as well as all processing plants stop if the Tail Gas Scrubber exceeds its emission limits? 4. In Section X Emission Units System 24 Sulfuric Acid Plant #4F, it states that it will, "compare the values to the minimum water flow rate and pressure drop established using the ... and/or historical data." What historical data would you be looking at? And how many years has the air quality been recorded? 5. This lithium mine will be burning sulfuric acid to leach the lithium out of the clay? Over the lithium mines lifetime, how do you estimate the air quality to be affected? 6. What is the efficiency of the Air Scrubbers? 7. While at Thacker Pass, I observed the weather station built by Lithium Nevada. I have watched the weathervane pointed in the direction of Fort McDermitt/McDermitt or aka North. How do you predict the air quality to change or worsen for these communities? Will there be air monitors set up on the Fort McDermitt reservation/McDermitt? If so, how often will they be checked? If the monitor goes past a certain air quality (AQ) will someone be notified and will something be done about it? 	<p>Comment 1 Water sprays function to suppress/control airborne dust that is generated by emissions sources.</p> <p>Comment 2 Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Additionally, the facility is required to comply with the federal standards for H₂SO₄ emissions under 40 CFR Part 60 Subpart H which require specific limits on acid production and acid mist emission rates as listed in the draft operating permit.</p> <p>Comment 3 If the operating parameters of the Tail Gas Scrubber are outside established limits the facility will be required to take corrective action which may include shutting down the Sulfuric Acid Plant. The facility is required to conduct initial testing and monitor all of the parameters related to the controls to establish limits. The Tail Gas Scrubber operation only affects the sulfuric acid plant and no other emission sources.</p> <p>Comment 4 The historical data will be the historical data for this Sulfuric Acid Plant once operation commences and will not be applicable at the startup of the plant. The facility is required to conduct initial testing and monitor all of the parameters related to the controls. It will be these controls parameters during the initial testing, operation, and yearly testing that will be used to determine the historical record.</p> <p>Comment 5 See the response to Comment 2 above.</p> <p>Comment 6 There are several scrubbers proposed to control emissions at the facility. The scrubber controlling the three leach tanks has an estimated control efficiency of 90% for Particulate Matter emissions and 99% for H₂SO₄ emissions. There are two scrubbers controlling the sulfur storage which are estimated to control about 99% of SO₂ emissions, each. There is one scrubber controlling the sulfuric acid plant which has an estimated control efficiency of 93% for SO₂ and 99% for H₂SO₄.</p> <p>Comment 7 See the response to Comment 2 above; and note that this modeling effort takes into account local weather conditions. See "Monitoring Considerations" at the end of this document.</p>	<p>Comment 2 NRS 445B, NAC 445B, 40 CFR Part 60 Subpart H</p> <p>Comment 3 Section V.X. of the AQOP, Emission Unit S2.023 System 24 – Sulfuric Acid Plant</p> <p>Comment 4 Section V.X. of the AQOP, Emission Unit S2.023 System 24 – Sulfuric Acid Plant</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	John Hadder, Great Basin Resource Watch	Backgrounds	<p>John Hadder Great Basin Resource Watch P.O. Box 207 Reno, NV 89504</p> <p>john@gbrw.org 775-348-1986 775-345-3575 (f)</p> <p>https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fwww.gbrw.org&c=E,1,YFh1QwCvoj8SjMjPHm26CE2A2BWTRUH-tQ2pz bqF6pxMoeMdBk5O7mff787S0rAV0hWpSRE6jwnjcMB6JacazOL29iPdTvQRgLKUcWHP-hN8zw,,&typo=1</p> <p>Letter: November 18, 2021 Nevada Division of Environmental Protection Bureau of Air Pollution Control 901 S. Stewart Street, Suite 4001 Carson City, Nevada 89701 Re: comments on the <i>Class II Air Quality Operating Permit to Lithium Nevada, AP1479-4334 (FIN A1270)</i> Great Basin Resource Watch (GBRW) thanks the staff at Bureau of Air Pollution Control (NDEP) for discussions on the air quality permitting process and fielding questions we have had on the permitting process and related details.</p> <p>Air Quality Baseline Did NDEP acquire actual baseline data from the regional around Thacker Pass? If so, please provide the public with this data, preferably as part of the permit. If not, GBRW assumes that NDEP used the same baseline as that used in the Environmental Impact Statement (EIS) for the Thacker Pass mine. GBRW questions how relevant is the baseline data for the air quality analysis in the EIS and thus for the air quality permit. Baseline data for CO and NO₂ was based on data from Yosemite National Park-Turtleback Dome, and for SO₂ from White Mountain Research Center-Owens Valley Lab. According to the EIS the baseline used, "may be considered representative of a rural area in Nevada for conservative SO₂ background concentrations. Both stations (Yosemite and White Mountain in California) are in relatively rural settings in terms of nearby population centers and traffic activity" (DEIS App K, p20). Does NDEP follow the same line of reasoning? If so, what is the justification of this assertion with technically defensible data and analysis. In fact, both Yosemite National Park-Turtleback Dome and White Mountain Research Center-Owens Valley Lab are significantly different than the region that contains Thacker Pass. Thacker Pass bridges two agriculturally intensive valleys, which is not the case for the locations used in the EIS. If NDEP did not use the same baseline, then what was used and what is the justification and lines of evidence for the baseline used by NDEP. In the case of H₂S, PM_{2.5}, and PM₁₀ the EIS simply states that Nevada-based, NDEP baseline values are use, how did NDEP arrive at baseline values for these constituents? Did NDEP also use a zero H₂S background level? If so, GBRW questions this in an agricultural area and were riparian zones exist.</p> <p><i>(continued on next page)</i></p>	<p>Air Quality Baseline NDEP did not use actual baseline data from Thacker Pass. For the modeling analysis, the NDEP used the standard background concentrations that are used in all modeling analysis that do not have actual background concentrations available (required for permitting for major stationary sources under the prevention of significant deterioration regulations).</p> <p>The following background concentrations were applied:</p> <ul style="list-style-type: none"> • PM_{2.5}, 24-hr averaging period: 8 µg/m³ (Jarbridge) • PM_{2.5}, annual averaging period: 2.3 10.2 µg/m³ (Jarbridge) • PM₁₀, 24-hr averaging. period: 10.2 µg/m³ (Lehman Caves) <p>MET data was used from an onsite meteorological monitor.</p> <p>The results on the ambient air quality with the applied backgrounds are as follows:</p> <ol style="list-style-type: none"> 1. PM_{2.5}: <ol style="list-style-type: none"> a. 24-hr – 15.5 µg/m³ (44%), b. Annual – 4 µg/m³ (34%). c. The highest PM_{2.5} impacts are located along the south portion of the facility plant boundary 2. PM₁₀: <ol style="list-style-type: none"> a. 24-hr – 77.9 µg/m³ (52%), b. The highest PM₁₀ impacts are located along the south portion of the facility plant boundary. 3. SO₂: <ol style="list-style-type: none"> a. 1-hr – 41.3 ppb (55%), b. 3-hr – 81.9 µg/m³ (6%), c. 24-hr – 10.3 µg/m³ (3%), d. Annual – 0.5 µg/m³ (1%). e. The 1-hr impact is located approximately 0.8 miles south of the facility plant boundary. 4. NO₂: <ol style="list-style-type: none"> a. 1-hr – 62.8 ppb (63%), b. Annual – 4.2 µg/m³ (4%). c. The 1-hr impact is located approximately 0.8 miles south of the facility plant boundary. 5. CO: <ol style="list-style-type: none"> a. 1-hr – 130 µg/m³ (0.3%), b. 8-hr – 60 µg/m³ (1%). c. The highest CO impacts are located along the south portion of the facility plant boundary. 6. H₂S: <ol style="list-style-type: none"> a. 1-hr – 6.4 µg/m³ (6%). b. The highest H₂S impact is on a receptor just north of Hwy 293. 	<p>Air Quality Baseline NAC 445B.22097</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	John Hadder, Great Basin Resource Watch	Monitoring, Minor Source Classification, Molten Sulfur	<p>Ambient Air Quality Monitoring The Thacker Pass mine, especially the presence of a chemical plant (acid plant) will lower the air quality in the areas surrounding the mine. There are sensitive populations near to the mine site including the agricultural operations that depend on clean air for food production. As an additional mitigation measure NDEP should implement or require is the implementation of ambient air quality monitoring around the perimeter of the mine site to ensure that US EPA air quality standards are not violated. In addition, judicious placement of air monitoring within the directly affected communities should also be implemented to ensure protection of those populations. GBRW understand that ambient air monitoring as discussed above is not typical, but given the nature of the proposed facility and proximity to affected people, and this has been a high level of concern for the directly affected communities NDEP needs to make an extra effort to ensure minimal environmental damage and protect public health.</p> <p>Phased Permitting Process Permit application appears to apply to Phase I of the mine plan calling for a 3,000 MTPD (Metric Tons Per Day) acid plant. Phase II of the mine plan is proposed to double the production of the mine, so that sulfuric acid production would ramp up to 6,000 MTPD. Based on the "Director's Review" by NDEP NO_x emissions are expected to be 88.7 TPY (tons per year), so during the expansion to Phase II is very likely to exceed 100 TPY for NO_x, which as GBRW understands the regulation would put the Thacker Pass facility into a Class I category, and fall under Title V Clean Air Act federal permitting, and a more involved process. The SO₂ emissions would be very close to the 100 TPY for Phase II also. Why doesn't NDEP require permitting of the entire proposed mine plan? It would seem to be in the public interest to fully evaluate the mine plan and the consequences for air quality. If there is clear evidence of increased emissions, which in our view there is given the Phase II aspect in the full mine plan, should not full emissions be determined before the facility is constructed to ensure optimal protection of the directly affected communities and their environment? There maybe mitigation measures that will be deemed needed for the full mine plan that would be best determined and implemented at the beginning of the facility construction. Or, it maybe clear that some changes to the mine will be needed to uphold air quality standards and public protection.</p> <p>Analysis of Sulfur GBRW did see the Safety Data Sheet on the molten sulfur provided by Chevron. According to that document the molten sulfur contains only sulfur and hydrogen sulfide. Given the source of the sulfur from oil and gas operations GBRW is concerned that there are small amounts of organic compounds present that were in some way outside of the scope of the analysis used to create the Safety Data Sheet. GBRW recommends that NDEP clarify the composition of the molten sulfur and ensure that there are no other compounds even if in very small amounts that could be a source of air pollution. Even very small amounts could be significant considering the amount of sulfur to be processed.</p> <p><i>(continued on next page)</i></p>	<p>Ambient Air Quality Monitoring See "Monitoring Considerations" at the end of this document.</p> <p>Phased Permitting Process A facility is required to apply for a Class 2 air permit when the emissions from the facility will be less than 100 tons per year for any regulated pollutant and there is no federal requirement to obtain a Class 1 permit. Based on the information in the BLM's EIS the facility would still be operating as a Class 2 facility for phase 2. If the facility needed to increase emissions to move to phase 2 then they cannot do so until they have a revised permit from NDEP that will analyze the increase in emissions to ensure that facility continues to meet all State and Federal Air Quality Standards. If the facility did end up revising the permit to increase emissions of any pollutant to greater than 100 tons per year, the facility will need to perform a full Prevention of Deterioration (PSD) analysis prior to submitting a new application.</p> <p>Analysis of Sulfur It is NDEP's understanding in working with Lithium Nevada that the sulfur proposed for this project is supplied by the fuel energy industry and that it is standard practice for sulfur sourced from the fuel industry to be treated above 1,550 °F. NDEP will add the condition to the permit that LNC notify NDEP within 72 hours if sulfur will be sourced from a different supplier than the fuel energy industry.</p>	<p>Ambient Air Quality Monitoring NAC 445B.0945, 40 CFR 52.21</p> <p>Phased Permitting Process NAC 445B.037, NAC 445B.3453</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	John Hadder, Great Basin Resource Watch	Sulfuric Acid Plant	<p>Capacity to Achieve Emission Control GBRW is still concerned regarding the ability to achieve the very low emissions for SO₂. Our attention to this first surfaced during our review of the EIS for Thacker Pass, which contained a confusing discussion of SO₂ emissions for Phase I and Phase II. We also note that Lithium Nevada Corp. (LNC) switched to DuPont for the control technology since the EIS process, which might explain the confusing text in the EIS. All of this did lead GBRW to investigate acid plants and the reported emissions. LNC is proposing SO₂ will be reduced to levels that appear to be rare nationally and internationally for sulfuric acid plants, which is why we have been advocating for there to be a proof of concept. GBRW did review the DuPont letter (Oct 13, 2021) to NDEP identifying the Freeport-McMoRan Copper & Gold Inc in Arizona as an example that "might be a good comparison point for Lithium NV." The directly affected communities have been waiting for this information for months, and it is concerning that it took until mid-October for this to be provided to NDEP and thus the public. The Freeport-McMoRan operation is a 1500 MTPD operation, which half the size of the Phase I Thacker Pass acid plant, but its SO₂ emissions are roughly twice those of those expected for Thacker Pass. Therefore, the Thacker Pass SO₂ scrubber needs to be about 4 times better than what is considered to be comparable scrubbing operation. NDEP should disclose to the public in an appendix to the permit that clarifies the line(s) of evidence that was used to confirm that the level of emissions reductions proposed for the Thacker Pass mine is reasonably achievable. Thank you for the opportunity to submit these comments. Please feel free to contact John Hadder if you have any questions or concerns.</p> <p>Sincerely, John Hadder, Director, Great Basin Resource Watch Kelly Fuller Energy and Mining Campaign Director Western Watersheds Project P.O. Box 779 Depoe Bay, OR 97341</p>	<p>Capacity to Achieve Emission Control Based on the information that was submitted, the sulfuric acid plant with additional catalyst passes to convert more of the SO₂ to SO₃, which then is converted to Sulfuric Acid. The uncontrolled SO₂ concentration in the resulting stack is expected to be less than 100 ppm. With the use of tail gas scrubber, the resulting SO₂ concentration will be less than 7.5 ppmw. NDEP is also requiring the use of Continuous Emission Monitoring System (CEMS) to ensure that the SO₂ concentration and stack flow rate is below the permitted limits to ensure that the emission limits are not exceeded as well as initial and annual testing.</p>	<p>Capacity to Achieve Emission Control Section V.X. of the AQOP, Emission Unit S2.023 System 24 – Sulfuric Acid Plant</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	John Hadder, Public Hearing	Permitting Process, Minor Source Classification	<p>Okay, good evening. My name is John Madder, Director of [inaudible]. I appreciate NGT [ph] holding this public hearing on this controversial project and has got a lot of people interested of things [inaudible]. You would consider ambient, you know, migrant. I know it's going to come a thing about mindset but if you think about it more and more, especially with the possibility of chronic injury not only off site but, you know, a lot of site working on place that [inaudible] over science. So, I think this would be something to consider as part of it. I also want to know that the application of this project heard here after the 11th, signed [inaudible] decision. So, this process is kind of screwed up. We think that the permits should be pretty much dissolved before EIS process begins. Is this Nevada's responsibility? I don't know for sure. Maybe there's some interagency discussion that could happen because basically this permit and the water pollution control permit that's coming out are going to be for me have a different plan in what the Land has approved. And so that's just as problematic and the EIS' process when all these revealed and yet there's a lot still not knowing this very product [inaudible] good example. Their announcement was in EIS but there's many changes as a result of this process. So, I think that's something that needs to be considered also as we go forward. Also -- what's also lead me to the -- concern me now about [inaudible] permit. We do appreciate the agency putting some control over the project but again we got [inaudible] monthly and state [inaudible] something a little bit different.</p> <p>And furthermore from this particular air quality permit, in stage 2 they're going to double the production. If you look at the numbers from your review, it looks like they're going to go over 100 times per year, at least one criterion [inaudible] which means it should be a class 1 facility. So, I would urge the agency also to think about looking at the entire permitting, the entire [inaudible] mine, if the project doesn't close and having that cooperative [inaudible] with BLM because that's what they do and why are they approving the entire plan of operations and the stage now, so a couple -- a couple of points on that.</p> <p>Oh and another thing, one of the comments I had is [inaudible] interesting, did you guys think you already approve d the permits? According to the filing by the -- by the -- by Lithium Nevada in their report, they filed in response to our brief in federal court and I quote, while BLM review the [inaudible] from the state's consideration, notably -- notably if I answered that, notably -- notably Lithium Nevada resolved this issue with NDP raised the state review and NDP approved the issue and issued it one, losing control permit and mine reclamation permit on October 28th, 2001 filed into the court. Interesting. Thank you very much for your time.</p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Phased Permitting Process</u> A facility is required to apply for a Class 2 air permit when the emissions from the facility will be less than 100 tons per year for any regulated pollutant and there is no federal requirement to obtain a Class 1 permit. Based on the information in the BLM's EIS the facility would still be operating as a Class 2 facility for phase 2. If the facility needed to increase emissions to move to phase 2 then they cannot do so until they have a revised permit from NDEP that will analyze the increase in emissions to ensure that facility continues to meet all State and Federal Air Quality Standards. If the facility did end up revising the permit to increase emissions of any pollutant to greater than 100 tons per year, the facility will need to perform a full Prevention of Deterioration (PSD) analysis prior to submitting a new application.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Phased Permitting Process</u> NAC 445B.037, NAC 445B.3453</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/17/2021	Michelle Mata, mmata0818@gmail.com	Emissions, Climate	<p>Dear Nevada Division of Environmental Protection,</p> <p>Thank you for allowing comments on the Thacker Pass Lithium Mining Proposal. I would like to submit my comment against mining for lithium in Thacker Pass. Lithium mining will make breathing, living and working in the greater area poisonous to all life.</p> <p>I understand that to operate this mine thousands of tons of sulfur will be imported daily and then burned to produce sulfuric acid into our shared air. Tens of thousands of gallons of diesel will also be required in mining, releasing 152,713 tons of carbon dioxide into our shared air a year. Mining will release CO₂e, NO_x, SO₂, H₂S, H₂SO₄, PM, PM₁₀, PM_{2.5}, all toxic greenhouse gases that your organization was designed to protect your constituents (me) from. These greenhouse gases present a public health crisis for breathing in these gases and particulate matter are known to cause: premature death in people with heart or lung disease, heart attacks, irregular heartbeat, asthma, decreased lung function, and increased difficulty in breathing.</p> <p>Your constituents are already impacted by the deadly effects of previous mercury and gold mining and supporting this project will subjugate our communities to worsened air quality and ultimately worse health outcomes. Please protect your constituents.</p> <p>Please protect your constituents. Please don't rubber stamp this lithium project. We want to breathe. Is our health, quality of life and air the appropriate cost? Will you follow your predecessors and choose to harm and kill your constituents, all for profit?</p> <p>Revoke the Thacker Pass Lithium Mine Proposal Now.</p> <p>Best, Michelle Mata</p> <p><i>(continued on next page)</i></p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gases (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Permitting Process</u> <u>NRS 445B, NAC 445B</u></p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



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11/17/2021	Michelle Mata, mmata0818@gmail.com	Permitting Process, Emissions, Climate	<p>Dear Nevada Division of Environmental Protection,</p> <p>Thank you for allowing comments on the Thacker Pass Lithium Mining Proposal. I would like to submit my comment against mining for lithium in Thacker Pass. Lithium mining will make breathing, living and working in the greater area poisonous to all life.</p> <p>I understand that to operate this mine thousands of tons of sulfur will be imported daily and then burned to produce sulfuric acid into our shared air. Tens of thousands of gallons of diesel will also be required in mining, releasing 152,713 tons of carbon dioxide into our shared air a year. Mining will release CO₂e, NO_x, SO₂, H₂S, H₂SO₄, PM, PM₁₀, PM_{2.5}, all toxic greenhouse gases that your organization was designed to protect your constituents (me) from. These greenhouse gases present a public health crisis for breathing in these gases and particulate matter are known to cause: premature death in people with heart or lung disease, heart attacks, irregular heartbeat, asthma, decreased lung function, and increased difficulty in breathing.</p> <p>Your constituents are already impacted by the deadly effects of previous mercury and gold mining and supporting this project will subjugate our communities to worsened air quality and ultimately worse health outcomes. Please protect your constituents.</p> <p>Please protect your constituents. Please don't rubber stamp this lithium project. We want to breathe. Is our health, quality of life and air the appropriate cost? Will you follow your predecessors and choose to harm and kill your constituents, all for profit?</p> <p>Revoke the Thacker Pass Lithium Mine Proposal Now.</p> <p>Best, Michelle Mata</p> <p><i>(continued on next page)</i></p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



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11/17/2021	Michelle Mata, mmata0818@gmail.com	Previous Mining Activity	Continued from Above.	<p><u>Previous Mining Activity</u> NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada.”</p>	NA



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11/17/2021	Brian Gibbons, btpg2252@yahoo.com	Permitting Process, Emissions, Climate	<p>NV Dept. of Environmental Protection</p> <p>Re: The Thacker Pass Proposed Lithium Mine Air Quality Hearing</p> <p>Please deny Thacker Pass lithium mining permit. The lithium extraction process uses an excessive amounts of water when balanced against other local uses of water https://www.wired.co.uk/article/lithium-batteries-environment-impact. Lithium mining activities water consumption has a large impact on local farmers to the point that some communities have to get water elsewhere. The potential for toxic chemicals to leak from the evaporation pools into the water supply including hydrochloric acid, which is used in the processing of lithium, and waste products that are filtered out of the brine. Lithium extraction harms the soil and causes air pollution Communities in the area have already suffered the deadly effects of mercury and gold mining in prior years; now they will be subjected to reduced and potentially hazardous air quality. Permitting the mine means permitting the poisoning of people and the land. Please deny Thacker Pass lithium mining permit. The lithium extraction process uses an excessive amounts of water when balanced against other local uses of water https://www.wired.co.uk/article/lithium-batteries-environment-impact.</p> <p>Thank you</p> <p>Brian Gibbons 19510 Lorain Rd # 106 Fairview Park OH 44126</p> <p><i>(continued on next page)</i></p>	<p>Many of these comments pertain to the NDEP Water Pollution Control permit NEV2020104; this response to comments document addresses comments regarding air emissions – See Below.</p> <p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada’s Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



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11/17/2021	Brian Gibbons, btgg2252@yahoo.com	NDEP Water Pollution Control Permit NEV2020104, Previous Mining Activity	Continued from Above.	<p><u>Water Quantity</u> NDEP notes that issues of water quantity are managed by the Nevada Division of Water Resources (NDWR) under applicable Nevada Revised Statutes and we refer you to that office for further information on water quantity concerns.</p> <p><u>Water Quality</u> Please refer to NDEP Water Pollution Control permit NEV2020104.</p> <p><u>Previous Mining Activity</u> NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada."</p>	<p><u>Water Quantity</u> NDWR</p>



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11/18/2021	Christina M. Burress, christinamburress@gmail.com	Emissions, Climate	<p>Do Not Rubber Stamp this vote! I stand against the Thacker Pass Lithium Mine for the following reasons: The Thacker Pass Lithium Mine will import thousands of tons of sulfur daily, and burn it, producing thousands of tons of sulfuric acid daily. and The Mine will burn tens of thousands of gallons of diesel fuel per day, releasing 152,713 tons of carbon-dioxide equivalent annually, the same emissions as a small city. CO2 is a powerful greenhouse gas, the main cause of climate change and Toxic and greenhouse gas air pollutants that will be released from this mine include: CO₂e, NO_x, VOC (volatile organic compounds), SO₂, H₂S, H₂SO₄, PM, PM₁₀, PM_{2.5}, and other Hazardous Air Pollutants (HAPs). and H₂S, Hydrogen Sulfide, is extremely toxic and flammable and effects on human health range from apnea, coma, convulsions, dizziness, and headaches to death, depending on exposure. and PM_{2.5} are tiny particles of soot that cause haze in the air, and when breathed, penetrate deep into the lungs and into the blood stream. Health impacts include premature death in people with heart or lung disease, heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as difficulty breathing and The air quality of the region will decrease, perhaps dramatically, which is allowed by law, both federal and state. Currently, no public information about current levels of the toxic and greenhouse gas pollutants is available, so we will not know how much the air quality has been degraded once mining begins. and Communities in the area have already suffered the deadly effects of mercury and gold mining in prior years; now they will be subjected to reduced and potentially hazardous air quality, thanks to a corporation that will make huge profits by polluting the air.</p> <p><i>(continued on next page)</i></p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Permitting Process</u> <u>NRS 445B, NAC 445B</u></p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



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11/18/2021	Christina M. Burress, christinamburress@gmail.com	Monitoring, Previous Mining Activity	Continued from Above.	<p>Ambient Air Quality Monitoring See “Monitoring Considerations” at the end of this document.</p> <p>Previous Mining Activity NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada.”</p>	NA



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11/18/2021	Soren Heartman, soren.heartman@gmail.com	Permitting Process, Emissions, Climate	<p>To whom it may concern,</p> <p>NDEP should refuse to issue the air quality permit to LAC. The Thacker Pass lithium mine will emit CO₂, diesel fumes, and sulfur dioxide, a toxic air pollutant that poses a danger to everyone, human and non-human, young and old. The air quality permit should be denied! Please listen to public outcry.</p> <p>Sincerely, Soren Heartman</p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



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11/18/2021	Ted Grandy, ted.grandy@lithiumamericas.com	Permit Conditions	<p>Email: Dear NDEP Bureau of Air Pollution Control:</p> <p>The attached comments on the public draft Class II Air Permit for the Thacker Pass Project are provided on behalf of Lithium Nevada Corp. Thank you for your consideration of these comments.</p> <p>Regards, Ted Grandy</p> <p>Letter: November 17, 2021</p> <p>Ms. Jennifer Schumacher Chief Bureau of Air Pollution Control Nevada Division of Environmental Protection 901 South Stewart Street, Suite 4001 Carson City, NV 89701</p> <p>RE: Lithium Nevada Corporation Comments on Thacker Pass Project Proposed Class II Air Quality Operating Permit AP1479-4334 (FIN A1270)</p> <p>Dear Ms. Schumacher,</p> <p>Lithium Nevada Corporation (LNC) is hereby providing the following comments on the proposed Class II Air Quality Operating Permit No. AP1479-4334 (Class II Permit) for the Thacker Pass Project. In addition to the written comments included below, to help clarify these comments, a copy of the draft Class II Permit with requested changes shown in redline is attached to this letter. The redline in the draft permit also identifies a few small typographical errors.</p> <p>Of particular concern, LNC would like to highlight the following comments:</p> <ol style="list-style-type: none"> 1. It appears that the Class II Permit includes several requirements that, in our experience, are typically only applicable to major source (i.e., Class I) permits. LNC is spending millions of dollars to control emissions below the major source thresholds and is requesting equitable treatment based on these controlled emission levels. Examples of the conditions typically only found in Class I permits include: <ol style="list-style-type: none"> a. Emissions and throughput limits in the draft permit are based on a 12-month rolling period rather than a calendar year, which is the typical requirement of a Class II permit. b. Each monthly observation of visible emissions requires a Method 9 visible emissions test if visible emissions are observed. In our experience, this language is used in Class I permits, whereas the typical permit language for a Class II facility states: "If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action." Given that Method 9 requires that the observer be certified in accordance with 40 CFR Part 60, Appendix A, a certification that must be renewed every 6 months, having a Method 9 visible emissions requirement on all controlled emission units would likely require additional staff and the time required to conduct all the Method 9 tests can be onerous for minor sources. <p><i>(continued on next page)</i></p>	<p>Comment 1 a) The Thacker Pass project is a synthetic minor source; NDEP will require the 12-month rolling requirements only System 1 and System 24 based on potential-to-emit. It will be removed from all other systems. b) NDEP will revise this language to the standard language for Class 2 permits.</p>	<p>Comment 1 40 CFR 52.21</p>



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11/18/2021	Ted Grandy, ted.grandy@lithiumamericas.com	Permit Conditions	<p>2. Section IV.A.1, Table IV-2 and Section V.F.5.d: LNC requests that Conditional Test Method (CTM) 013 be added as an alternate method for the measurement of sulfuric acid mist (H₂SO₄) from the System 6 – Leach Tanks, for both the initial and periodic performance testing. The exhaust following the wet scrubber on the leach tanks is expected to have a high moisture content, which can interfere with the sulfuric acid mist measurement using Method 8. CTM-013 is a widely accepted method for measuring sulfuric acid mist and is designed to accommodate saturated exhaust with the probe and filter heated above the stack temperature to prevent condensation.</p> <p>3. Section V.X.4.f, System 24 – Sulfuric Acid Plant: Unlike a venturi scrubber where control performance is indicated by pressure drop across the throat section, the Sulfuric Acid Plant tail gas scrubber is an open reverse jet design that relies on sufficient scrubbing liquid in the mixing zone to maintain proper performance. In the tail gas scrubber, gas pressure drop will remain relatively constant, irrespective of gas flow. LNC requests that the requirement to monitor and record pressure drop across the scrubber be removed from the permit, as it does not indicate scrubber performance. Instead of pressure drop, LNC proposes to monitor the scrubbing liquid pH and to retain the requirement to monitor water (i.e., scrubbing liquid) flow rate as these are good indicators of scrubber performance.</p> <p>4. Section VI.A, Continuous Emissions Monitoring System (CEMS) Conditions: LNC requests that the requirement for the NO_x CEMS be removed from the permit. While the SO₂ CEMS is required per 40 CFR Part 60, Subpart H, the requirement for additional CEMS is highly unusual for minor sources given the cost and complexity of operating a CEMS. Furthermore, there is no pollution control equipment for NO_x emissions from the Sulfuric Acid Plant, so the CEMS does not serve as a control performance monitor. As specified in the permit, compliance with the NO_x emission limit will be demonstrated initially and annually through the required performance testing. LNC believes that operating a NO_x CEMS in addition to this frequent performance testing is unnecessary and onerous for a minor source.</p> <p>In addition to the above highlighted comments, LNC is providing the following minor comments on the draft Class II Permit, in the order of appearance in the permit:</p> <p>5. Section IV.A.1, Table IV-1: LNC requests that System 1, PF1.003 - ROM Feed Hopper 2 Loading be listed with the emission units requiring a six-minute Method 9 test, rather than a thirty-minute Method 9 test. Per 40 CFR 60.672(d), truck dumping into a feed hopper is exempt from the standard for particulate matter in 40 CFR Part 60, Subpart OOO, and therefore, exempt from the performance testing requirements of Subpart OOO.</p> <p>6. Section IV.A.1, Table IV-2: LNC proposes the following changes to the Initial Performance Test requirements:</p> <ol style="list-style-type: none"> The neutralization and magnesium precipitation filter vents and filtrate blow vents (Systems 7, 8, 13, and 14) will operate only intermittently based on the filtration cycle. These sources “operate” each time an air pulse is used to clear out the filter or filtrate pipes. The neutralization vents (Systems 7 and 8) will exhaust for approximately 10 – 15 seconds every hour and the magnesium precipitation vents (Systems 13 and 14) will exhaust for approximately 10 – 15 seconds every 30 minutes. In all cases, given the limited and intermittent use, stack testing of these units is not practical. Therefore, LNC requests that the particulate matter (and H₂SO₄)¹ stack testing requirements be removed for these units. LNC proposes to retain the TDS sampling requirement for the filtrate blow vents (Systems 13 and 14). For the baghouse-controlled sources (Systems 15, 18, and 19), LNC requests that the requirement to conduct Method 202 testing be removed as these are not combustion sources and do not have the potential to emit condensable particulate matter. In addition, LNC requests that Table IV-2 be formatted so that the requirement to sample TDS content does not apply to Systems 15, 18, and 19. This appears to be a typographical error as these units do not process a solution. <p><i>(continued on next page)</i></p>	<p>Comment 2 LNC will be required to initially conduct both a CTM-013 test and Method 8 test on these two systems. For subsequent testing, CTM-013 testing will be listed as an alternate to Method 8 with prior approval by NDEP.</p> <p>Comment 3 NDEP agrees and will make the requested revision.</p> <p>Comment 4 NDEP only intended the CEMs unit to monitor for SO₂ emissions. We will modify the language to clarify this is only meant to be what is required by 40 CFR Part 60, Subpart H.</p> <p>Comment 5 NDEP agrees and will make the requested revision.</p> <p>Comment 6 a) NDEP agrees and will make the requested revision. b) NDEP agrees and will make the requested revision.</p>	<p>Comment 2 Section IV.A.1 of the AQOP, Table IV-2, Section V.F.5.d of the AQOP</p> <p>Comment 3 Section V.X. of the AQOP, Emission Unit S2.023, System 24 – Sulfuric Acid Plant</p> <p>Comment 4 40 CFR Part 60, Subpart H, (40 CFR 60.84)</p> <p>Comment 5 Section IV.A.1. of the AQOP, Table IV-1</p> <p>Comment 6a Section IV.A.1. of the AQOP, Table IV-2</p> <p>Comment 6b Section IV.A.1. of the AQOP, Table IV-2</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Ted Grandy, ted.grandy@lithiumamericas.com	Permit Conditions	<p>7. Section V.A.5, System 1 – Ore Handling Circuit: Table 3 to Subpart 60 of Part 60 requires a repeat performance test in accordance with 40 CFR 60.11 and 60.675 (i.e., a thirty-minute Method 9 test) be conducted every five years for fugitive emissions from affected facilities without water sprays. It appears this requirement applies to PF1.002 and PF1.004. If the Nevada Division of Environmental Protection, Bureau of Air Pollution Control (NDEP-BAPC) agrees, LNC requests that appropriate language be added to the permit.</p> <p>8. Section V.G.4.e, System 7 – Neutralization Filter Vents: LNC is not aware of a method to determine the PM concentration of the filter vent exhaust other than stack testing (e.g., Method 5), which, as discussed above, is not practical for these intermittently operating sources (operating approximately 15 seconds every hour). Therefore, LNC requests that the requirement to sample PM quarterly be replaced with a requirement to maintain a manufacturer guarantee that the mist eliminator² will not exceed 10 ppmw outlet concentration for particulate matter. This would be similar to a cooling tower drift eliminator guarantee.</p> <p>9. Section V.G.5, System 7 – Neutralization Filter Vents: As discussed above, the neutralization filter vents will only operate for approximately 15 seconds every hour, and therefore, particulate matter stack testing is not practical. Accordingly, LNC requests that the Method 5 and 201A testing requirements be removed from the permit. LNC proposes to retain the Method 9 opacity performance testing requirement, if deemed appropriate by NDEP-BAPC.</p> <p>10. Section V.L., System 12 – Sulfate Tailings Circuit, PF1.023: LNC requests that the source name for PF1.023 be corrected to “Na/K Sulfate Centrifuge discharge to Na/K Conveyor 1” removing the text stating “or Lithium Carbonate Dryer.” The Na/K Sulfate Centrifuge does not discharge to the Lithium Carbonate Dryer. The particulate emissions from the transfer to the dryer are controlled by the dryer baghouse identified in System 15 – Lithium Carbonate Dryer.</p> <p>1 The inclusion of H2SO4 testing in Table IV-2 for Systems 7 and 13 appears to be a typographical error as these units do not have H2SO4 emissions. 2 The draft permit appears to have a typographical error listing System 7 as uncontrolled, however as stated in the application, the neutralization filter vents will each be controlled by a mist eliminator. Based on this correction, it is assumed that a requirement for a monthly mist eliminator inspection will be added to the permit.</p> <p>11. Section V.M.4.e, System 13 – Magnesium Precipitation Filter Vents: LNC is not aware of a method to determine the PM concentration of the filter vent exhaust other than stack testing (e.g., Method 5), which, as discussed above, is not practical for these intermittently operating sources (operating approximately 15 seconds every 30 minutes). Therefore, LNC requests that the requirement to sample PM quarterly be replaced with a requirement to maintain a manufacturer guarantee that the mist eliminator will not exceed 10 ppmw outlet concentration for particulate matter. This would be similar to a cooling tower drift eliminator guarantee.</p> <p>12. Section V.O., System 15 – Lithium Carbonate Dryer, S2.012: LNC requests that the source name for S2.012 be corrected to “Lithium Carbonate Dryer” removing the text stating “transfer to Lithium Carbonate Material Handling.” The baghouse for S2.012 controls emissions from the drying process itself, not the subsequent transfer. The emissions from the transfer to the Lithium Carbonate Material Handling are controlled by the conveying hopper vent filter identified in System 16 – Lithium Carbonate Material Handling.</p> <p>13. Section V.P., System 16 – Lithium Carbonate Material Handling, S2.013: LNC requests that the source name for S2.013 be corrected to “Lithium Carbonate Material Handling” removing the text stating “transfer to Lithium Carbonate Storage Bin Loading.” The vent filter for S2.013 controls emissions from the conveyor hopper loading and material handling, not the subsequent transfer. The emissions from the transfer to the Lithium Carbonate Storage Bin are controlled by the storage bin vent filter identified in System 17 – Lithium Carbonate Storage Bin.</p> <p><i>(continued on next page)</i></p>	<p>Comment 7 NDEP agrees and the requested language will be added to the permit.</p> <p>Comment 8 NDEP agrees and will make the requested revision.</p> <p>Comment 9 NDEP agrees and will make the requested revision.</p> <p>Comment 10 NDEP will make the requested revision.</p> <p>Comment 11 NDEP agrees and will make the requested revision.</p> <p>Comment 12 NDEP will make the requested revision.</p> <p>Comment 13 NDEP will make the requested revision.</p>	<p>Comment 7 Section V.A.5. of the AQOP</p> <p>Comment 8 Section V.G.4.e. of the AQOP</p> <p>Comment 9 Section V.G.5. of the AQOP</p> <p>Comment 10 Section V.L. of the AQOP</p> <p>Comment 11 Section V.M.4.e. of the AQOP</p> <p>Comment 12 Section V.O. of the AQOP</p> <p>Comment 13 Section V.P. of the AQOP</p>



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11/18/2021	Ted Grandy, ted.grandy@lithiumamericas.com	Permit Conditions	<p>14. Section V.Q. System 17 – Lithium Carbonate Storage Bin, S2.014: LNC requests that the source name for S2.014 be corrected to “Lithium Carbonate Storage Bin loading” removing the text stating “transfer to Lithium Carbonate Packaging.” The vent filter for S2.014 controls emissions from the storage bin loading, not the subsequent transfer. The emissions from the transfer to the Lithium Carbonate Packaging are controlled by the packaging baghouse identified in System 18 – Lithium Carbonate Packaging.</p> <p>15. Section V.X.6.a.(1) and a.(2)(a), System 24 – Sulfuric Acid Plant: The specified standards for sulfur dioxide and acid mist in 40 CFR Part 60, Subpart H are in terms of pounds of emissions per ton of acid produced. Based on the sulfuric acid plant capacity of 3,307 tons of acid produced per day or 138 tons per hour, the Subpart H sulfur dioxide standard cannot exceed 551 pounds per hour and the acid mist standard cannot exceed 20.7 pounds per hour. The standards listed in the draft permit appear to be calculated using the sulfur feed rate rather than the acid production rate.</p> <p>16. Section V.Z., System 26 – Emergency Generators: The redline in the draft permit identifies a few corrections for the emergency generator regulatory requirements based on the 40 CFR Part 60, Subpart JJJJ applicability for engines with a maximum power rating of 168 hp (i.e., greater than 130 hp). In addition, LNC requests that the requirements from 40 CFR 60.4245(e), related to operation for emergency demand response or for a deviation of voltage, be removed from the permit as this type of operation is not applicable to these generators.</p> <p>17. Class II Insignificant Activity List: For simplicity, and given that permit fees are determined, at least in part, by the number of emission units including insignificant activities, LNC proposes to group the insignificant laboratory units (currently IA1.005 – IA1.019) into one insignificant activity (IA). Alternatively, insignificant laboratory units could be grouped into four IA’s based on equipment type (e.g., splitters, crushers). Given that IA units do not require permitting, it seems they should not have equal weight as permitted sources in determining fees. Grouping similar insignificant units is one way to address this.</p> <p>LNC appreciates NDEP-BAPC’s consideration of the above comments and our request that given LNC’s efforts, commitments, and expenditures to meet the Class II limits, the permit terms reflect minor source level requirements. If you have any questions or require any additional information regarding this submittal, please contact Jennifer Schonlau at (775) 440-6058.</p> <p>Sincerely,</p> <p>Edward Grandy VP of Legal and Regulatory Affairs Lithium Nevada Corporation</p> <p>Attachment: Redlined Draft Class II Air Quality Operating Permit AP1479-4334</p>	<p>Comment 14 NDEP will make the requested revision.</p> <p>Comment 15 NDEP has reviewed the suggested change, the limits set forth in 40 CFR Part 60 Subpart H are much higher than the requested permit limits. NDEP will remove the pounds per hour limits listed in this section as the facility cannot reach these limits without being in violation in the State limits set in Section V.X.3.</p> <p>Comment 16 Suggested changes made with the exception of the removal of the requirements from 40 CFR 60.4245(e), related to operation for emergency demand response or for a deviation of voltage, if this is not relevant then LNC does not need to do anything but in the future if this becomes applicable the appropriate language is in the permit.</p> <p>Comment 17 Each emission unit needs to be listed individually and each have a unique IA number.</p>	<p>Comment 14 Section V.Q. of the AQOP, Emission Unit S2.014, System 17 – Lithium Carbonate Storage Bin</p> <p>Comment 15 Sections V.X.6.a.(1) and a.(2)(a) of the AQOP, System 24 – Sulfuric Acid Plant, 40 CFR Part 60, Subpart H</p> <p>Comment 16 Section V.Z. of the AQOP, System 26 – Emergency Generators, 40 CFR Part 60, Subpart JJJJ</p> <p>Comment 17 Class II Insignificant Activity List, NAC 445B.288</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Meagan O'Farrell, meagan@renofoodsystems.org	Consultation, Permitting Process, Emissions, Climate	<p>To whom it may concern,</p> <p>My name is Meagan O'Farrell and I am a resident and voter in Nevada. I am writing you today to urge you to NOT issue the air quality permit to Lithium America for the proposed lithium mine at Peehee Mu'huh (Thacker Pass). This is sacred tribal lands, and the local tribes do not consent to this destructive mine that will destroy the land, water, air, and culture of the native peoples who have been stewards of this land for centuries. The Thacker Pass Lithium Mine will emit CO₂, diesel fumes, and sulfur dioxide, a toxic air pollutant that poses a danger to everyone, human and non-human, and particularly the young, the elderly, and those with heart and lung conditions. In this important time of climate crisis we must not perpetuate more impacts to our global nightmare. Please do not issue this permit, please do not sell Nevada's future to pollution and destructive mining. We do not get any more second chances.</p> <p>Meagan O'Farrell</p>	<p><u>Consultation</u> As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p> <p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Karen Hogue & Gina Amato, Thacker Pass Concerned Citizens (TPCC) Chairs, khogue@hcsdnv.com	Monitoring	<p>To: Nevada Division of Environmental Protection Bureau of Air Pollution Control,</p> <p>Residents of the Quinn and Kings River Valleys of Humboldt County have attended several mine-company sponsored public informational meetings over the past 10 plus years, but watched the development of the proposed Thacker Pass Project somewhat passively due to the information provided at those meetings. However, the Bureau of Land Management Environmental Impact Statement process, as well as subsequent public land and NDEP permit processes, have disclosed a significantly increased project size and complexity from what was originally proposed. These revelations caused considerable community concern, litigation, protests, and resulted in the formation of the Thacker Pass Concerned Citizens Committee (TPCC). TPCC held numerous informational meetings to learn more about the proposed project and developed a list of community concerns, which have been widely distributed and discussed in an effort to gain support to address these stated concerns. Air quality has always been near the top of the list.</p> <p>After considerable input, TPCC has decided that the Class II Air Quality Permit, as proposed at this time, is likely adequate to address mine/mill site concerns. However, off-site air quality monitoring is non-existent and must be addressed. The significant increase in vehicle traffic, fugitive dust, and area geography and weather patterns are only some of the concerns that, when coupled with mine/mill site discharges, pose considerable likelihood of diminished air quality. Therefore, TPCC proposes that Lithium Nevada Corporation be required to develop a system of air quality monitoring sites prior to initiation of construction in order to provide baseline data and regular reporting for the adjacent off-site areas. TPCC does not possess the technical knowledge of such systems/equipment, but would suggest that sites be developed 5 miles from the Thacker Pass Project in each direction (north, south, east, and west). Additionally, TPCC proposes that air quality sites be developed at the Orovada, Kings River, and McDermitt schools as part of a science curriculum to augment the already proposed greenhouse nursery program to grow native vegetation to restore lost rangelands and control fugitive dust.</p> <p>Sincerely, Karen Hogue & Gina Amato (TPCC Chairs)</p>	See "Monitoring Considerations" at the end of this document.	NA
11/18/2021	Gina Amato, Public Hearing	Monitoring	<p>I'm here to speak on behalf of Thacker Pass [inaudible] Assistance plus [inaudible] to personal and differences to support me as well in this [inaudible] committee in spring. I [inaudible] is relatively stable my life [inaudible]. We will be [inaudible] of parts operable to [inaudible] is that [inaudible] leads to presence of the [inaudible] and [inaudible] Valley from the county have attended several times at this [inaudible] meetings for the past 10 months [inaudible] now. The price of development of the [inaudible] Thacker Pass project somewhat passively due to the information provided at this meeting [inaudible] by the Bureau of Land Management environmental impact statement for [inaudible]. You're [inaudible] in management prior to [inaudible] statement as well as subsequent public land, NDEP for my processes have disclosed significantly increased charge of [inaudible] and complexity from what was originally proposed. These revelations caused [inaudible] and service, litigation, protest and resulted in the formation of Nevada [inaudible] and Services at play or TPCC. TPCC has held [inaudible] separation meetings covering more about post-project and develop a list of community reasons which had been riding this [inaudible] and discuss in an effort to gain support to address these daily concerns. Air quality has always been on top of that list. My main concern is that off-site air quality monitor is not able to send must be addressed. A significant increase in daily traffic due to the test [inaudible] or other finance or [inaudible] for concerns that would probably [inaudible] discharges post considerable landing that [inaudible]. Therefore, TPCC proposes that Lithium Nevada Corporation even prior to develop a system that air quality monitoring sites are a key to initiation of things in the [inaudible]. Prior to our initiation construction in order to provide baseline data and break their recording for the adjacent off-site areas. TPCC did not possess a technical [inaudible] discussion such a system or equipment but look to test that site [inaudible] development [inaudible] from the Thacker pass project in each direction, north, south, east, west. Additionally, TPCC proposes that air quality sites did not [inaudible] consider in the [inaudible] schools as part of the science curriculum to augment the already proposed... The augmented, already proposed greenhouse nursing program to coordinate with education to restore lost [inaudible] control of [inaudible]. Thank you.</p>	See "Monitoring Considerations" at the end of this document.	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Toma Deavers, tomadeavers@gmail.com	Sulfur Dioxide	<p>To whom it may concern:</p> <p>I am fully opposed to the proposed Thacker Pass lithium mine due to the harmful consequences of releasing exorbitant amounts of sulfuric dioxide into the atmosphere. This will cause many negative impacts to the air quality in a region already experiencing toxic air due to existing mining operations and wildfire smoke. Furthermore, the reservations in this area are suffering the worst impacts of COVID-19—a respiratory illness. Releasing exorbitant amounts of sulfuric dioxide into the air will only worsen the air quality and respiratory conditions and exacerbate the pandemic in the region. Please do not approve the air quality permits for the Thacker Pass lithium mine.</p> <p>Thank you for your thoughtful consideration,</p> <p>Toma Deavers</p>	<p>Sulfur Dioxide</p> <p>Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants), that includes sulfur dioxide, which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p>	<p>Sulfur Dioxide NAC 445B.22097</p>
11/18/2021	Randy Smith & Nancy Smith, rafterrn@gmail.com	Monitoring	<p>Before issuing a final air quality permit for LNC, NDEP needs to {by themselves or a third party} monitor the current air quality to establish a baseline for the surrounding area. In order for LNC to comply with air quality, it must meet permit standards but also meet current standards from a baseline air quality.</p> <p>Thank you Randy & Nancy Smith Resident Farm Owners in Kings River</p>	<p>See "Monitoring Considerations" at the end of this document.</p>	<p>NA</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Kayla Moreland, kayla.moreland@gmail.com	Emissions, Climate	<p>To whom it may concern,</p> <p>I urge you to oppose the air quality operating permit for Lithium Americas Corporation. The lithium mine will emit CO₂, diesel fumes, and sulfur dioxide which is a toxic air pollutant dangerous to humans. It is particularly dangerous to the elderly, young children, and people with heart and lung conditions.</p> <p>This mine would destroy the area for decades, causing irreparable damage to the land, water, and air, as well as the people, plants, and animals that call this area home.</p> <p>Sincerely, Kayla Moreland Sent from Gmail Mobile</p>	<p><u>Emissions</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or “source category”). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada’s Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Emissions</u> NRS 445B, NAC 445B,</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Natali Segovia - WPLC Legal Director defense@waterprotectorlegal.org	See Responses Below	<p>See Letter November 18, 2021 Via Electronic Mail Nevada Division of Environmental Protection Bureau of Air Pollution Control 901 S. Stewart St., Suite 4001 Carson City, NV 89701 ndepthackerpass@ndep.nv.gov</p> <p>Re: Public Comment on Air Quality Operating Permit for Thacker Pass</p> <p>The Water Protector Legal Collective (“WPLC”) is an Indigenous-led legal non-profit organization dedicated to providing legal support and advocacy for Indigenous peoples and Original Nations, the Earth, and climate justice movements. The WPLC submits this comment to the Nevada Division of Environmental Protection – Bureau of Air Pollution Control (“BAPC”) opposing the preliminary determination to issue a new Class II Air Quality Operating Permit (“AQOP”), AP1479-4334 (FIN A1270) to Lithium Nevada (“Li NV”) for an open-pit lithium mining and processing operation known as the Thacker Pass Project.</p> <p>The Thacker Pass Project is located approximately 25 miles from the reservation of the People of Red Mountain (Atsa Koodakuh wyh Nuwu – descendants from the Fort McDermitt Paiute Shoshone Tribe). As such, granting the proposed AQOP will have an immediate impact on the frontline communities that call the area surrounding the Thacker Pass Project home.</p> <p>WPLC urges the BAPC to rescind its preliminary determination and reconsider granting the AQOP to Li NV because doing so will inevitably: 1) violate the Clean Air Act and impact air quality of surrounding communities through excessive carbon emissions and contaminants in contravention of the State’s obligation to prevent air pollution; and 2) granting the AQOP will irreparably harm Peehee Mu’huh, a sacred burial site and cultural historical site for Indigenous communities closest to Thacker Pass.</p> <p>Sincerely, Natali Segovia, Esq. Legal Director & Staff Attorney, Water Protector Legal Collective <i>Mni Wiconi</i>. Water is Life. On behalf of the Water Protector Legal Collective, thank you for the opportunity to provide comments at this important juncture. May 6, 2021.</p> <p>¹ 42 U.S. Code § 7401 (a) (2). ² 42 U.S. Code § 7401 (a) (3). ³ Nevada Revised Statute 445B.100 ⁴ D, Von Seggern, <i>Green Energy Meets Mining</i>, Desert Report, March 9, 2021 (https://desertreport.org/green-energy-meets-mining-by-david-von-seggern/). ⁵ <i>Id.</i> ⁶ Roskill Information Services Ltd, CO2 emissions from lithium production set to triple by 2025, GlobeNewswire, October 5, 2020 (https://www.globenewswire.com/newsrelease/2020/10/05/2103285/0/en/Roskill-CO2-emissions-from-lithium-production-set-to-tripleby-2025.html). ⁷ I. Penn et al, <i>The Lithium Gold Rush: Inside the Race to Power Electric Vehicles</i>, New York ⁸ D. Hinkey, <i>Peehee Mu’huh speaks (opinion)</i>, ThisisReno, August 21, 2021.</p> <p><i>(continued on next page)</i></p>	See Responses Below.	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Natali Segovia - WPLC Legal Director defense@waterprotectorlegal.org	Emissions, Climate	<p>Specifically, WPLC notes the following:</p> <p>1) The Thacker Pass Project will impact the air quality of surrounding communities through excessive carbon emissions and other contaminants in violation of the Clean Air Act and the State’s responsibility to protect human health and safety.</p> <p>The Clean Air Act recognizes the growth in the amount and complexity of air pollution resulting in mounting dangers to public health and welfare.¹ “Air pollution prevention (reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the primary responsibility of States and local governments.”² This resonates with the public policy of the State of Nevada to achieve and maintain levels of air quality which will protect human health and safety, prevent injury to plant and animal life, prevent damage to property, and preserve visibility and scenic, esthetic and historic values of the State.³ Further, Nevada law states that “it is [within] the exercise of the police power of this State to protect the health, peace, safety and general welfare of its people.” Nevada Revised Statute 445B.115 defines air pollution as the presence in the outdoor atmosphere of air contaminants in such quantity and duration as may tend to (1) injure human health or welfare, animal or plant life or property, (2) limit visibility or interfere with scenic, esthetic and historic values of the State, and (3) interfere with the enjoyment of life or property.</p> <p>Here, while Lithium Americas sells the project as being “carbon neutral,” not all carbon emissions caused by the process are being taken into account. Dr. von Seggern, Ph. D., a retired seismologist from the Nevada Seismological Laboratory at the University of Nevada, has pointed out that “GHG emissions from the haulage of lithium carbonate equivalent out, the haulage of various supplies in, the mining of the pit, and the miscellaneous other uses of fossil fuels” are ignored.⁴ “In fact, their own estimate in the Final EIS (Appendix B, Table 3.9) is 26,000 gallons per day average of diesel fuel for the total of mine operations. On a yearly basis, this amounts to 9.5M gallons. Using Energy Information Agency figures for overall consumption of petroleum in Nevada, this mine would be responsible for 0.41% of Nevada’s entire annual consumption. This is substantial.”⁵ In addition, researchers have also calculated that “current levels CO2 emissions from lithium production are set to triple by 2025 and grow by a factor of six by 2030, with the vast majority of this coming from mineral concentrate production, shipping and refining.”⁶</p> <p>In addition, “[a] December assessment by the Interior Department found that over its 41-year life, the mine would degrade nearly 5,000 acres of winter range used by pronghorn antelope and hurt the habitat of the sage grouse. It would probably also destroy a nesting area for a pair of golden eagles whose feathers are vital to the local tribe’s religious ceremonies.”⁷ The impact of such effects will logically be felt most by those communities that are closest to the Thacker Pass Project, but this should be of concern to all residents of the State of Nevada and also a national issue of concern.</p> <p><i>(continued on next page)</i></p>	<p><u>Comment 1</u> <u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants (“criteria” air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of “sensitive” populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or “source category”). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada’s Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gases (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Natali Segovia - WPLC Legal Director efense@waterprotectorlegal.org	Permitting Timeline, Consultation	<p>Specifically, WPLC notes the following:</p> <p>2) The Thacker Pass Project lacks consent of impacted Indigenous Peoples and will irreparably harm Peehee Mu’huh, a sacred burial site and cultural historical site for the People of Red Mountain, descendants of Fort McDermitt tribal descendants closest to Thacker Pass mine threatening their homelands.</p> <p>In January 2021, the Bureau of Land Management issued a Record of Decision approving the Thacker Pass Mine and is expected to begin construction in early 2022. The mine was fast tracked, along with the analysis required under the National Environmental Protection Act, which was completed on a much shorter timeframe than is typical for the permitting of a mine in the United States. The company has failed to receive community consent for the project. The decision for approval were made despite deep concerns from local communities, as well as an array of wildlife and other issues. The severe environmental impacts the project could have were also not properly analyzed in the decision to permit the mine. For these reasons, Great Basin Resource Watch filed a lawsuit alongside the Western Watersheds Project, Basin and Range Watch, and Wildlands Defense on February 26th, 2021, over the Thacker Pass lithium mine.</p> <p>Prior to and after the Record of Decision on the Thacker Pass mine by the Bureau of Land Management in January 2021, large numbers of individuals from the various affected communities—such as the People of Red Mountain, the Fort McDermitt Paiute and Shoshone Tribe, The Reno-Sparks Indian Colony, the Burns Paiute Tribe, and the agricultural communities within Orovada and Kings River Valley—have voiced opposition. Members from these multiple frontline communities that will be directly and significantly harmed by the Thacker Pass Lithium mine have been fighting to prevent its construction through various peaceful avenues.</p> <p>The UN Declaration on the Rights of Indigenous Peoples (“UNDRIP”), adopted by the United Nations General Assembly in 2007 and recognized by the U.S. State Department as having both moral and political force, recognizes, among other things, that Free, Prior and Informed Consent (“FPIC”) is a pre-requisite for any activity that affects Indigenous ancestral lands, territories, or natural resources—not just mere consultation.</p> <p>FPIC “recognizes Indigenous peoples’ inherent and prior rights to their lands and resources” and respects their authority to “require that third parties enter into an equal and respectful relationship with them based on the principle of informed consent. Procedurally, free, prior and informed consent requires processes that allow and support meaningful choices by Indigenous peoples about their development path.”</p> <p>The People of Red Mountain and members of the agricultural communities have articulated many times in many different forms, the construction and operation of the Thacker Pass lithium mine would cause irreparable harm to a culturally significant area/sacred site on traditional Paiute and Shoshone land, to agricultural livelihoods, and to individual and communal ways of life.</p> <p>Importantly, “Peehee Mu’huh is a massacre site of a band of our people, making it a sacred burial ground. This place also holds medicines, first foods, stories, teachings, and animal habitat. Li NV plans to turn this sacred place into a hazardous dust bowl, impacting multiple generations to come.”⁸ The systematic destruction of culture that occurs with loss of access to historical, ancestral lands of cultural significance, will lead to irreparable harm amounting to cultural genocide when distinct peoples are dispossessed of their cultural values and identities.</p> <p>Thus, while the Thacker Pass Project is being introduced as essential for a greener future based on lithium, the production process is no better than other fossil fuels. Thacker Pass will pollute the air, use precious resources of water, will destroy sacred sites, and become yet another instance of government agencies approving a development project without the consent of Indigenous Peoples or sufficient analysis of the impact on the Earth.</p> <p>We urge BAPC to reconsider the issuance of the AQOP as granting the permit will be in direct contravention of its obligations to prevent, reduce, or control air pollution throughout the State of Nevada.</p>	<p>Comment 2 Permitting Timeline The air quality operating permit application was received by NDEP on January 26, 2021. NDEP has 10-working days to determine if the application is administratively complete; the application was deemed administratively complete on February 9, 2021. Once administratively complete, NDEP has 90 days to issue or deny the application. During NDEP’s technical review an additional 75 days were added to the timeline due to requesting additional information from the facility. Based on NDEP’s regulatory review time of 90 days and the added 75 stop days, the potential issuance date was July 24, 2021.</p> <p>Consultation As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p>	<p>Permitting Timeline NAC 445B.3457</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Edward Bartell, edwardab@aol.com	Sulfuric Acid Plant, Minor Source Classification, Sulfate Tailings Circuit, Monitoring	<p>See Letter Edward Bartell PO Box 130 Orovada, NV 89425 11/1812021</p> <p>Nevada Division of Environmental Protection, Bureau of Air Pollution Control 901 S. Stewart Street, Suite 4001 Carson City, Nevada 89701</p> <p>RE: Lithium Nevada Corporation Class II Air Quality Operating Permit, AP1479-4334 (FIN A1270)</p> <p>Dear Sir or Madam,</p> <p>Thank you for the opportunity to comment on the Lithium Nevada Corp (LNC) Air Quality permit.</p> <p>I have the following concerns about the permit, and I would urge NDEP to reject the permit and send it back to LNC for the following corrections.</p> <ol style="list-style-type: none"> 1) In reviewing the Acid Plant Database; located at http://www.sulphuricacid.comsulphuric-acid-on-the-web/Acid%20Plants/AcidPlantIndex.htm. I was unable to locate any sulfuric acid plants anywhere in the US (where emission data can be validated) that are achieving anywhere near the emissions claimed to be emitted at Thacker Pass. According to documents on NDEP's document viewer NDEP requested details of how these emissions were going to be achieved; in which LNC's plant contractor refused to provide details saying they were "proprietary". Given that NDEP was not provided the necessary information to validate LNC's projected emissions, approval of the project would be arbitrary and capricious. 2) A review of similarly situated plants on the above database; would indicate that this plant should have been filed under a Class 1 permit; which would have triggered EPA involvement. I am concerned that NDEP lacks sufficient staff and budget to adequately police LNC's emissions, without the assistance of EPA. NDEP erred in granting this permit without sufficient data to validate projected emissions, and should have permitted it under a Class 1 permit. 3) LNC is planning on importing roughly 1000 tons of sulfur a day; the resulting sulfate waste will be dumped on the Clay Tailings Filter Stack (CTFS). This equates to literally millions of tons of sulfur waste over the life of the project. Sulfate waste such as gypsum has been shown to break down into dangerous quantities of Hydrogen Sulfide, and other dangerous gas, in landfills. Incredibly NDEP failed to note any emissions from the CTFS. While there are emission standards for conveyors and ect., (directing waste to the CTFS) there does not appear to be any review of emissions produced directly from the CTFS via gas breakdown. Ignoring millions of tons of sulfate salt waste, and its ability to produce harmful emissions, makes approval of the permit arbitrary and capricious. <p>In the event the permit is granted the following additional conditions should be imposed.</p> <ol style="list-style-type: none"> A) Require 3rd party independent monitoring, paid for by LNC but selected by NDEP to ensure compliance. <p><i>(continued on next page)</i></p>	<p>Comment 1 The facility provided a manufacturer's guarantee for the Acid Plant emissions. Based on the information that was submitted, the sulfuric acid plant with additional catalyst passes to convert more of the SO₂ to SO₃, which then is converted to Sulfuric Acid. The uncontrolled SO₂ concentration in the resulting stack is expected to be less than 100 ppm. With the use of tail gas scrubber, the resulting SO₂ concentration will be less than 7.5 ppmw. NDEP is also requiring the use of Continuous Emission Monitoring System (CEMS) to ensure that the SO₂ concentration and stack flow rate is below the permitted limits to ensure that the emission limits are not exceeded as well as initial and annual testing.</p> <p>Comment 2 A facility is required to apply for a Class 2 air permit when the emissions from the facility will be less than 100 tons per year for any regulated pollutant and there is no federal requirement to obtain a Class 1 permit. The facility will be required to continuously monitor its SO₂ emissions from the sulfuric acid plant to ensure that the concentration of the stack and the overall emission rate from the stack meets permitted limits.</p> <p>Comment 3 For the sulfate tailings circuit, sulfur dioxide and hydrogen sulfide emissions are not expected to be present. For the production of sulfur dioxide, a combustion process to heat the material would be required. The production of hydrogen sulfide from sulfate salts would require both moisture and organic matter to be present for sulfur reducing bacteria to thrive; and these conditions are not expected.</p> <p>Comment A For testing, Lithium Nevada shall give notice to NDEP 30 days before the test of performance to allow NDEP to have an observer present; and this notification will be placed in NDEP's public document viewer as per the above. See "Monitoring Considerations" at the end of this document.</p>	<p>Comment 1 Section V.X. of the AQOP, Emission Unit S2.023 System 24 – Sulfuric Acid Plant, Section VI of the AQOP</p> <p>Comment 2 NAC 445B.037, NAC 445B.3453, Section V.X. of the AQOP, Emission Units S2.023 – System 24 – Sulfuric Acid Plant</p> <p>Comment A NAC 445B.252</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Edward Bartell, edwardab@aol.com	NDEP Water Pollution Control Permit NEV2020104, Monitoring	<p>In the event the permit is granted the following additional conditions should be imposed.</p> <ul style="list-style-type: none"> B) Establish mandatory monitoring of the CTFS to ensure it is not producing emissions. C) Establish independent perimeter ambient air monitoring to ensure LNC is measuring all emissions released. <p>Sincerely</p>	<p><u>Comment B</u> Please refer to NDEP Water Pollution Control Permit NEV2020104: The tailings material and Clay Tailings Filter Stack Facility (CTFS) is described on page 10 in the Fact Sheet which can be found at the following link: https://ndep.nv.gov/uploads/documents/NEV2020104dfsFY22.pdf. Although NDEP agrees that neutralization of all tailings material prior to filtration is a more benign option, the CTFS is designed in accordance with the applicable regulations and will be constructed as a zero-discharge facility. The material will be stored on 80-mil geomembrane-lined containment, compacted to approximately 10-6 to 10-7 cm/sec, and covered with waste rock/growth media at closure; therefore, no degradation to groundwater will occur. Sulfuric acid is compatible with 80-mil HDPE geomembrane which still has a long-life expectancy when in contact with low pH solutions (see Response 150 regarding liner life expectancy). Therefore, neutralization prior to placement is not necessary or required to protect waters of the State. In addition, because the CTFS will be a dry-stack facility, a permit limitation (Part I.G.10) prohibits ponded water on the surface during operations. The reclaim pond for the CTFS is a double-lined pond with leak detection which will be converted to an ET-Cell at closure to passively evaporate any seepage, although minimal from the CTFS. The Division understands that Lithium Nevada has been evaluating the option to neutralize all tailings prior to filtration, briefly described in the document titled “Filterability of Neutralized Clay Tailings V2”, but these studies have not been finalized or officially proposed to the Division. The Permit includes a continuing investigation item (Part I.N.3) requiring the Permittee to submit these studies to the Division annually.</p> <p><u>Comment C</u> See “Monitoring Considerations” at the end of this document.</p>	<p><u>Comment B</u> NDEP Water Pollution Control Permit NEV2020104</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Ed Bartell, Public Hearing	Sulfuric Acid Plant	<p>Okay. Thank you for the meeting. You had mentioned that the company answered every one of your questions. I was looking online and that doesn't really look like its true. Um you had inquired as to what the process that , DuPont was going to use and they informed according to document [inaudible] , they informed NDEP that it was proprietary and they wouldn't tell you how, how they're gonna make all this happen.</p> <p>So it looks like you guys decided to approve the permit anyway, even though you didn't apparently get that information unless it recently got posted. And -- and this this plan is going to be according to the numbers that are being provided is going to be supposedly about 10 times cleaner than any other acid [ph] plant. But then we can't look at the numbers to see whether that's really true or not, because those are proprietary.</p> <p>So and, and I looked at the acid [ph] plant database, and I can't find any plant within the United States that's -- that's anywhere near this low of pollutants that are being produced. Maybe it's the best plant in the world, but maybe we're being told the story too. And my history with the company they trespassed on my land. They killed and claim. By spring we had has zero flow. It flows every year, about 45 gallon a minute.</p> <p>So they -- this is the kind of companies we deal with. So we're not feeling real warm and fuzzy that that you're going to go out and monitor 'em because it seems like no matter what they do, permit gets approved anyway. It doesn't matter how -- how much trespassing, how many stories they tell an agency, everything just gets approved.</p> <p>So that's kind of what -- what we're looking at right now. And this they're going to import we can't get the exact numbers, but roughly a thousand tons of silver every single day, and they're gonna burn it in our community. And then they're gonna dump the waste on public lands. And these sort of waste dumps when you dump these sulfite salts in landfills, they've been shown to produce toxic, toxic hydrogen sulfide because it -- bacteria starts to work it.</p> <p>Well, you say, well, it's not anticipated that it's gonna happen here and it doesn't even appear that you even have in have any plans for installing monitors in this, in this massive waste dump that's going to amount to literally millions of tons of sulfur waste that's going to be dumped on public lands and stay there. So I think in terms of a thorough review, it just hasn't happened. Its gives another river stamp.</p> <p>I made comments to the BLM and it turns out that the company responds to my comments. We found this in the recent administrative record and then they -- then they used those BLM comments that say -- that make it look like BLM was actually reviewing things, but it was actually the companies.</p> <p>And then that goes to NDEP and then we get another rubber stamp. So, this is why we're not feeling very warm and fuzzy that we're gonna get the monitoring that we need. And thank you.</p>	<p>Comment 1 The facility provided a manufacturer's guarantee for the Acid Plant emissions. Based on the information that was submitted, the sulfuric acid plant with additional catalyst passes to convert more of the SO₂ to SO₃, which then is converted to Sulfuric Acid. The uncontrolled SO₂ concentration in the resulting stack is expected to be less than 100 ppm. With the use of tail gas scrubber, the resulting SO₂ concentration will be less than 7.5 ppmw. NDEP is also requiring the use of Continuous Emission Monitoring System (CEMS) to ensure that the SO₂ concentration and stack flow rate is below the permitted limits to ensure that the emission limits are not exceeded as well as initial and annual testing.</p> <p>Sulfate Tailing Circuit For the sulfate tailings circuit, sulfur dioxide and hydrogen sulfide emissions are not expected to be present. For the production of sulfur dioxide, a combustion process to heat the material would be required. The production of hydrogen sulfide from sulfate salts would require both moisture and organic matter to be present for sulfur reducing bacteria to thrive; and these conditions are not expected.</p> <p>See "Monitoring Considerations" at the end of this document.</p>	<p>Comment 1 Section V.X. of the AQOP, Emission Unit S2.023 System 24 – Sulfuric Acid Plant, Section VI of the AQOP</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Jackson Hart jackson.r.hart@gmail.com	NDEP Water Pollution Control Permit NEV2020104, Transportation, Emissions	<p>To whom it may concern at the NDEP,</p> <p>I am a citizen of Reno, Nevada, and although I do not think you will bother to read this, I am writing to ask you to take all necessary measures to halt the proposed mine by Lithium Americas Corp at Thacker Pass. I am writing now in anticipation of the air quality hearing scheduled for 11/18 regarding the project. I request that the Nevada Department of Environmental Protection deny air (and water) quality permits for the Thacker Pass Lithium Mine Project. Our future and our people are at stake here.</p> <p>There are numerous ethical and environmental crises implicated in this project. Local rancher Edward Bartell has filed a lawsuit challenging the mine, claiming that Lithium Americas made multiple presentations and publications where it regularly stated the mine would use only half the amount of water that the approved Environmental Impact Statement (EIS) now claims. This does not constitute being honest with locals.</p> <p>More to the point, the environmental impacts of this mine would be devastating. The project would use 5200 acre-feet of groundwater per year for most of its 4 decade lifetime in an already over-allocated setting (FEIS Section 4.3.1, p. 4-7). There are also enormous pollution concerns with water and mine tailings. The EPA itself has criticized the official EIS approved by the BLM, noting that "the plans are not developed with an adequate level of detail to assess whether or how groundwater quality downgradient from the pit would be effectively mitigated" and that all action alternatives proposed by the EIS would result in "adverse effects to groundwater quality." The detailed comments on the EIS note serious concerns that its models for predicting the release of harmful pollutants, particularly antimony, are overly conservative, and that pollutants will be released into groundwater at levels exceeding state water quality standards (FEIS pp. R-116--R-124). The Thacker Pass mine would cause serious pollution risk to water resources, and the open pit operation would destroy and fragment critical habitat used by greater sage grouse, pronghorn sheep, bighorn sheep, pygmy rabbits, golden eagles, ferruginous hawks, prairie falcons, western burrowing owls, spotted bats, red bats, little brown bats, and desert horned lizards, among others. How can the NDEP, whose mission is to "preserve and enhance the environment of the State" and "sustain healthy ecosystems" allow such a project to take place?</p> <p>Of course, all of this doesn't even begin to touch on the air permit concerns pertaining to the hearing tomorrow, though I'm sure you can anticipate that a company who cares so little for water resources likewise would endanger our clean air as well. The Thacker Pass project would import and burn thousands of tons of sulfur daily, releasing noxious H₂S and H₂SO₄ gases (H₂S is highly flammable and carcinogenic, and H₂SO₄ (sulfuric acid) which is the cause of acid rain and is extremely bad for respiratory health). It would also burn over 10,000 gallons of diesel daily, the equivalent of a small city. In addition to furthering climate change at a time when mitigation is imperative, the wind patterns of the area will bring air polluted with nitrous oxides, volatile organic compounds, sulfur dioxide, particulate matter, and other Hazardous Air Pollutants to nearby Tribal populations.</p> <p><i>(continued on next page)</i></p>	<p>Many of these comments pertain to the NDEP Water Pollution Control permit NEV2020104; this response to comments document addresses comments regarding air emissions – See Below.</p> <p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Transportation The air permitting process only evaluates stationary emission sources. Air emissions from mobile sources engines and fuels are required to meet the standards set by federal EPA.</p> <p>Emissions Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p>Hazardous (Toxic) Air Pollutants Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p>	<p>Permitting Process NRS 445B, NAC 445B</p> <p>Emissions NRS 445B, NAC 445B</p> <p>Hazardous (Toxic) Air Pollutants NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Jackson Hart jackson.r.hart@gmail.com	Consultation, Climate	<p>And this is only a small part of the damage done to Native people in this area. Lithium Americas has not consulted meaningfully with any of the Tribes who have regional ties to Peehee Mu'huh or Thacker Pass, which is a sacred area. Furthermore, it is a site where multiple Tribes collect traditional medicines and foods to this day, it is also a burial ground and the site of a historic Paiute massacre. I would think even the casual observer could understand that such a place holds historical and ongoing importance, especially to communities who have had much of their land and sovereignty continually stripped from them. And yet this project is just more of the same abusive, colonial and small-minded behavior. To pretend that Lithium Americas is attempting to acknowledge this land's historic narrative without taking any measures to talk to or listen to the Fort McDermitt Tribe or other Tribes with ties to this area is willfully ignorant. They want to dig here regardless, and so they pretend that nothing important is here.</p> <p>Finally, as many environmental activists have noted, this mine will not even allow us to stop the progression of climate change. We will not turn our gas guzzling cars into electric paragons of sustainability based on lithium. According to an analysis by the Center for Interdisciplinary Environmental Justice, electrification of cars would only reduce national emissions by 5%. Meanwhile, extractive industries like Lithium Americas (whose contractor to build this mine is the North American Coal Corporation) are responsible for half the world's carbon emissions and more than 80% of extinctions. As summarized by Alex Eisenberg in their letter to the editor of the Elko Daily,</p> <p><i>The Thacker Pass mine alone would burn 11,000 gallons of diesel every day for onsite operations. Double that for off-site operations. Carbon emissions are expected to be 150,000+ tons per year, equating to 2.3 tons of carbon for every ton of lithium produced. Hundreds of tons of sulfur (ironically a waste product from oil refineries) would be used daily in mine operations.</i></p> <p>The greenwashed narrative of the proposed mine at Thacker Pass threatened to ensnare me in environmental platitudes, but by <i>listening</i> to the people, the land, and researched commentary of organizations like the Environmental Protection Agency, I have realized that this mine would be only the first step in a series of gambits to extract wealth for a few at the expense of local livelihoods, indigenous rights, and vulnerable biological diversity. Indeed, Lithium Americas spokesperson Tim Crowley has said that they are "very confident that there will be more development" beyond this project, and the company has staked claims expanding into the Montana Mountains. Yet these mining projects blatantly ignore reality. To address the profound damage we are doing to natural and social systems, we simply cannot continue business as usual, and allowing an exploitative industry to pillage natural resources and human rights for their own profit will fix nothing.</p> <p>As Jonathan Safran Foer has aptly written, "It's always possible to wake someone from sleep, but now amount of noise will wake someone who is pretending to be asleep." I do not think you are truly sleeping to the harsh realities of this project, so I can only hope that you will not <i>pretend</i> to be asleep to the damages it would cause, and to your power to prevent them.</p> <p>Thank you for your time. Regards, Jackson Hart</p>	<p>Consultation As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p> <p>Climate NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses from the stationary source be completed.</p>	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	BEVERLY HARRY Testimony via Christine Saunders csaunders@plnevada.org	Monitoring, Backgrounds, Emissions, Teflon	<p>TESTIMONY SUBMITTED BY THE BEVERLY HARRY, NATIVE COMMUNITY ORGANIZER FOR THE PROGRESSIVE LEADERSHIP ALLIANCE OF NEVADA FOR NDEP AIR QUALITY HEARING FOR THACKER PASS PROJECT</p> <p>THURSDAY, NOVEMBER 18, 2021 (WINNEMUCCA, NV)</p> <p>Good evening, my name is Beverly Harry, and I am the Native Community Organizer for the Progressive Leadership Alliance of Nevada. At the present time, Nevada Tribes and the lands that belong to Indigenous Peoples, require stronger protections from Nevada Department of Environmental Protection (NDEP) and the Bureau of Land Management. The following four reasons are why we, the Progressive Leadership Alliance of Nevada, oppose the air quality permit to Lithium Nevada for the Thacker Pass Project:</p> <p>1) Lack of Air Quality Program Monitoring Systems The Environmental Protection Agency (EPA) Region 9 has helped institute Tribal Air Quality Monitoring Programs through the Institute of Tribal Environmental Professionals (ITEP). The importance of Tribes being provided the access to funding and the capability to monitor on-site PM2.5 and PM10 is critical. Yet, throughout the years of various administrations, we have seen less available funding for the 148 Tribes in Region 9 including the Fort McDermitt Paiute and Shoshone Tribe.</p> <p>2) Lack of Air Quality Baseline Data In rural areas, there is no baseline data set that shares the present values of air quality indices with real-time air pollution, that can develop historical data and add to possible modeling of impacts from air pollution. We want to assure that reservations are not being disproportionately impacted by air quality permitting decisions and critical air quality pollutants defined by National Ambient Air Quality Standards (NAAQS)</p> <p>3) Future Impacts of Toxic Emissions Particulate matter is proven to have major impacts on the human body and has manifested problems to people who have cardiovascular diseases, respiratory illnesses, cancer, and birth defects. Native people are in need of better access to reproductive justice. Our communities are in need of protection from breast cancer and ovarian cancer so we can bring our children into this world without contaminants entering our body. In the rural parts of Nevada, hospitals, health clinics and services are hit tremendously hard because of the lack of funding, planning, communications and technology. This becomes a social justice and environmental justice problem where the health and welfare of Indigenous Peoples in rural areas would be disproportionately impacted by the air quality permitting by NDEP.</p> <p>4) A Toxic Legacy Courtesy of DuPont Finally, we are disturbed by products like Teflon and the lethal 8-carbon chain “forever chemicals.” Nevadans can’t afford to pay for additional sick time off, for the cost of healthcare and rising cost of prescriptions; as the agency allows Lithium Nevada to bring in another round of toxic legacies. The Clean Air Act cannot help to address Washoe and Clark County with non-attainment for lead, carbon monoxide, PM10, and 8-Hr ozone. Rural areas, like White Pine County in the Central Steptoe Valley, had been in non-attainment status for Sulfur Dioxides up until 2002.</p> <p><i>(continued on next page)</i></p>	<p><u>Lack of Air Quality Program Monitoring Systems</u> See “Monitoring Considerations” at the end of this document.</p> <p><u>Lack of Air Quality Baseline Data</u> Background concentrations are used during the evaluation of air quality impact and are intended to identify air quality conditions without the impact of the new or modified sources (i.e., the new or modified sources are added to the background conditions). There are two approaches to determine background concentrations. If the new source meets the conditions to be a major stationary source or the proposed modifications meet the conditions to be major modifications (as defined in 40 CFR 52.21), the facility must collect background concentrations for at least one year before the new emissions take place. These situations are not common, and usually are associated with large industrial complexes, like power plants. For all the other cases, NDEP uses measurements of concentrations collected by monitors at the Jarbidge Wilderness Area (Elko County, NV) and Great Basin National Park (White Pine County, NV), for PM_{2.5}, and PM₁₀, respectively. These concentrations are assumed to represent the average background concentrations in Nevada. Because these locations are remote and away from significant anthropogenic sources, they should exclude the impact of manmade emissions, but they still would record the impact of natural event, such as wildfires, dust storms, etc.</p> <p><u>Future Impacts of Toxic Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants (“criteria” air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of “sensitive” populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>A Toxic Legacy Courtesy of DuPont</u> The facility’s proposed scrubber will have a Teflon outlet nozzle. Per NDEP’s research, Teflon off-gases toxic particulates at 464°F. The temperature of the outlet is permitted to be approximately 79°F with a maximum temperature of 230°F. Per the facility: the Teflon outlet nozzle is manufactured from “Virgin” grade PTFE; PTFE is chemically inert, weatherable, and high temperature resistance; “Virgin” grade PTFE is FDA approved and is used in high temperature applications including in the food processing and services; Teflon nozzles in the DynaWave application last about 20 years; and the facility only replaces these nozzles due to any damage done to them during maintenance work.</p>	<p><u>Lack of Air Quality Baseline Data</u> 40 CFR Part 52.21</p> <p><u>Future Impacts of Toxic Emissions</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	BEVERLY HARRY Testimony via Christine Saunders csaunders@planevada.org	Attainment	<p>Continued from Above.</p> <p>We do not need more problems for rural Nevada and Indigenous communities who continue to care for the land. We urge you to oppose this permit. Thank you.</p> <p>###</p> <p>The Progressive Leadership Alliance of Nevada is a social justice coalition founded by Nevada activists. Made up of over 30 organizations, we organize to deepen democracy and to create a more fair and just Nevada that puts people and planet first.</p>	Currently, only the Las Vegas Valley (in Clark County) is designated as in marginal non-attainment for the 2015 Ozone NAAQS. All the other areas in Nevada are designated as in attainment/unclassifiable.	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Kailafarrellsmith, kailafarrellsmith@protonmail.com	Permitting Process, Emissions, Climate	<p>To Nevada Division of Environmental Protection (NDEP), As a Klamath Tribal member and concerned citizen for the Northern Paiute and Western Shoshone tribal peoples sacred ancestral homeland, I'm writing to ask NDEP to refuse issuance of the air quality permit for the Thacker Pass Lithium mine.</p> <p>Lithium Nevada wants to turn 17,933 acres of PeeheeMu'huh into a toxic wasteland. The mining project will impact the land, air and water quality, animal habitats, tribal peoples' way of life, and surrounding ranching communities.</p> <p>The Thacker Pass Lithium Mine will emit CO₂, diesel fumes, and sulfur dioxide, a toxic air pollutant that poses a danger to everyone, human and non-human, and particularly the young, the elderly, and those with heart and lung conditions.</p> <p>Sincerely, Ka'ila Farrell-Smith (Klamath Tribal Member)</p> <p>Ka'ila Farrell-Smith (She/Her) Klamath Modoc Artist Activist Mentor www.kailafarrellsmith.com</p> <p>Sent with ProtonMail Secure Email.</p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gases (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Beverly Harry, Public Hearing	Monitoring	<p>Good evening. My name is Beverly Harry and at the present time I want to state that the Nevada tribe [inaudible] a lot of stuff, a law indigenous seat are required [inaudible] protections from [inaudible] protection, and the Bureau of Land Prevention as well or the five reasons that's why are fine -- we -- you should [inaudible] or we're opposing the fact that my [inaudible] permission with the Nevada and I want to state that the Nevada Protection Agency region 9 has held two-tribal air quality [inaudible] has instituted body [inaudible]programs through four programs to help tribes that --throughout the [inaudible] River Valley to allow Paradise Valley.</p> <p>There is no monitoring stations and it's really important that the state begin to look at what is -- what's critical and is looking at the respiratory issues. You're granting this permit, you know, exactly what that soil assay is about. And so you try to transition [inaudible], tri-chromium [ph], nickel, those are the things I should [inaudible] everyday a person that's [inaudible] how this and then they do have issues that they're studying related to lithium which is a heavy metal.</p> <p>So, those [inaudible] are going to have other problems for those humidities. There's going to be chronic problems there and there's no safety net for the people and the -- at [inaudible] Valley there's no safety net for the [inaudible] they try, all the areas that are currently being looked at right around the Pass area. The prevailing [inaudible] are there, that run through that -- that particular area, outside the town and put those particular areas are going to be excavated. You have fugitive destinations that are going to be [inaudible] all over the place. You have a safety net, you're not applying any safety net for the people that have to [inaudible] and just or reason that [inaudible] of air and it's important that you get chromium and you got nickel, you get all of the transition on metals as well as the heavy metals and make sure that [inaudible] go to the people that have to [inaudible] denotes [inaudible]. And these rural communities are not equip to have any type of monitoring systems that look at the National Air Ambient Air Quality Systems. We could end up having problems like the [inaudible] Valley right now really [inaudible] with sulfuric [inaudible] and I asked you to not approve this permit. It could cause a lot of problems. And so I just want to ask Greg, look at the indigenous people, these are [inaudible] there. These are requests to launch them and we had [inaudible] from this room [inaudible] system. Now let's begin to talk about how we can improve and proper protection from [inaudible]Nevada. Let's begin now, let's sit down and talk, that's ...</p>	See "Monitoring Considerations" at the end of this document.	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/16/2021	Carl van Warmerdam lafongcarl@yahoo.com	NDEP Water Pollution Control permit NEV2020104, Permitting Process, Emissions	<p>To Whom it may concern, The Final Environmental Impact Statement prepared by the Bureau of Land Management notes that soil and water will be contaminated with sulfates, arsenic, antimony, and uranium, for example. Long term exposure to antimony can result in chronic bronchitis and chronic emphysema. And, this is in an area where wild fire smoke is already wrecking local air quality. Long term exposure to arsenic can lead to skin lesions and skin cancer. Long term exposure to uranium can lead to kidney damage and liver and bone cancer. And, this is in an area where Fort McDermitt tribal members have already been killed by cancer from working at the McDermitt and Cordero Mercury mines. Please do not Permit a mine at Thacker Pass. Sincerely, Carl van Warmerdam</p> <p><i>(continued on next page)</i></p>	<p>Many of these comments pertain to the NDEP Water Pollution Control permit NEV2020104; this response to comments document addresses comments regarding air emissions – See Below.</p> <p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/16/2021	Carl van Warmerdam lafongcarl@yahoo.com	Backgrounds, Previous Mining Activity	Continued from Above.	<p>Backgrounds Background concentrations are used during the evaluation of air quality impact and are intended to identify air quality conditions without the impact of the new or modified sources (i.e., the new or modified sources are added to the background conditions). There are two approaches to determine background concentrations. If the new source meets the conditions to be a major stationary source or the proposed modifications meet the conditions to be major modifications (as defined in 40 CFR 52.21), the facility must collect background concentrations for at least one year before the new emissions take place. These situations are not common, and usually are associated with large industrial complexes, like power plants. For all the other cases, NDEP uses measurements of concentrations collected by monitors at the Jarbidge Wilderness Area (Elko County, NV) and Great Basin National Park (White Pine County, NV), for PM_{2.5}, and PM₁₀, respectively. These concentrations are assumed to represent the average background concentrations in Nevada. Because these locations are remote and away from significant anthropogenic sources, they should exclude the impact of manmade emissions, but they still would record the impact of natural event, such as wildfires, dust storms, etc.</p> <p>Previous Mining Activity NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada.”</p>	<p>Backgrounds 40 CFR Part 52.21</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Drake McElroy, smokingseagulls@gmail.com	Consultation, Permitting Process, Emissions, Climate	<p>To whom it may concern,</p> <p>My name is Drake McElroy and I am a resident in Nevada. I am writing you today to urge you to NOT issue the air quality permit to Lithium America for the proposed lithium mine at Peehee Mu'huh (Thacker Pass). This is sacred tribal lands, and the local tribes do not consent to this destructive mine that will destroy the land, water, air, and culture of the native peoples who have been stewards of this land for centuries. The Thacker Pass Lithium Mine will emit CO₂, diesel fumes, and sulfur dioxide, a toxic air pollutant that poses a danger to everyone, human and non-human, and particularly the young, the elderly, and those with heart and lung conditions. In this important time of climate crisis we must not perpetuate more impacts to our global nightmare. Please do not issue this permit, please do not sell Nevada's future to pollution and destructive mining. We do not get any more second chances.</p> <p>Sent from my iPhone</p>	<p><u>Consultation</u> As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p> <p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION												
11/18/2021	doug barto, dougbarto@hotmail.com	Water Sprays	<p>The control system on the crushing and grinding circuit is proposed to be water sprays and moisture content. The winter conditions at Thacker Pass get well below freezing. This can cause water spray systems to freeze and ice to form within ore. I urge Lithium Nevada to install a very robust water system to withstand the winter conditions.</p> <p>The air permit is comprehensive, complete and well prepared.</p> <p>Thank you for the opportunity to comment on this project. Doug Barto. Sent from my Verizon, Samsung Galaxy smartphone</p>	<p>Water Sprays Lithium Nevada is required to install and operate the control systems at all times as described in the draft operating permit. Failure to operate controls is a violation.</p>	<p>Water Sprays NAC 445B.227, NAC 445B.281</p>												
11/18/2021	Vanessa Butler, vbutlervlb@gmail.com	Emissions, Sulfuric Acid Plant	<p>NDEP,</p> <p>Based on the proposed regulations provided in NDEP's presentation and its estimates of particular output, I would be curious to know:</p> <p>How these estimates were derived, specifically, with consideration to how much lower they are than output from existing mines.</p> <p><i>(continued on next page)</i></p>	<p>Emission Inventory NDEP starts the permitting process by reviewing the application, prepared and submitted by the applicant. Proposed emission factors are reviewed and compared to EPA's AP-42 Compilation of Air Pollutant Emission Factors, material balances, and/or testing data (where available). Emission factors for facilities performing similar operations are also considered. When the permit conditions are drafted, NDEP requires that parameters used in these calculations are tracked by the facility to ensure compliance with the emission limits. The operating conditions, for example hours of operation and throughput rates, are initially requested by the facility. If modeling shows that operation using those parameters are within air quality standards, then those become the permitted operating conditions. However, if modeling shows an exceedance of the standards, then the facility must propose revised operating conditions that show compliance with the standards before the permitting process can continue. Any data based on a manufacturer's guarantee or engineering estimates will need to be verified by testing that is outlined in the permit.</p> <p>Sulfuric Acid Plant NDEP did not do a comparison with other mining facilities; however, there is one similar facility with an air permit in NDEP' jurisdiction, Loneer's Rhyolite Ridge project (Facility Identification Number A2243 and Permit Number AP1099-4256), which is comparable to this project. The facility has not been built yet. Below is a table briefly comparing these two acid plants:</p> <table border="1"> <thead> <tr> <th>Project</th> <th>Throughput (tons/hour)</th> <th>Stack Height (fee)</th> <th>SO₂ Hourly Limits (pounds/hour)</th> </tr> </thead> <tbody> <tr> <td>Rhyolite Ridge</td> <td>160.8</td> <td>197.9</td> <td>17.6</td> </tr> <tr> <td>Thacker Pass</td> <td>51</td> <td>199</td> <td>10.2</td> </tr> </tbody> </table>	Project	Throughput (tons/hour)	Stack Height (fee)	SO ₂ Hourly Limits (pounds/hour)	Rhyolite Ridge	160.8	197.9	17.6	Thacker Pass	51	199	10.2	<p>Emission Inventory NAC 445B.346</p> <p>Sulfuric Acid Plant Section V.X. of the AQOP, Emission Units S2.023 – System 24 – Sulfuric Acid Plant</p>
Project	Throughput (tons/hour)	Stack Height (fee)	SO ₂ Hourly Limits (pounds/hour)														
Rhyolite Ridge	160.8	197.9	17.6														
Thacker Pass	51	199	10.2														



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Vanessa Butler, vbutlervlb@gmail.com	Compliance, Quarterly Audit, Complaint Response	<p>What does response look like when those numbers are not met?</p> <p>What do the quarterly audits entail, specifically?</p> <p>What response time can the public expect of the Bureau of Air Pollutant Control after submitting an air quality complaint?</p> <p>The Mcdermitt reservation sits north of the site. Winds run exactly this direction from the site. This offers significant concern as to what their quality of air will look like and how it will be audited there, where it will hold drastic health impacts to the Indigenous community that resides there. Will NDEP be installing air monitoring stations there?</p> <p>I look forward to your response and your attention to accountability to your impact on the health of the Indigenous as Lithium NV profits on stolen land.</p> <p>Thank You, Vanessa Butler</p>	<p><u>Compliance</u> If the facility exceeds any of the limits listed in the permit they are subject to violations. The base penalties are determined by the Class of permit and the regulatory or permitting condition that has been violated. The base penalties are used in conjunction with the penalty calculation worksheet found as Attachment 9 of the SEC Information Packet. The penalty calculation worksheet considers the number of violations, the severity of the violations, and the facility’s compliance history. If, for example, a facility fails a source test the penalty for a facility the size of the Thacker Pass Mine is \$5,000 per “synthetic minor” pollutant or \$3,000 for all other pollutants. If an emission unit at a facility was found emitting a synthetic minor pollutant at 150% of the permitted limit the penalty would increase from \$5,000 to \$7,500. If the facility has been issued any violations within the last 5 years, the recommended penalty increases by 5% for each prior violation and an additional 150% to 300% if a violation was issued for a similar issue (i.e., failed source test). The limit on penalties that can be levied is \$10,000 per day per violation pursuant to Nevada Revised Statutes (NRS) 445B.470.</p> <p><u>Quarterly Audit</u> There is specific monitoring, recordkeeping, and reporting for each emission unit listed in the permit. Quarterly audits are specific to the CEMS; and require “Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months.</p> <p><u>Complaint Response</u> NDEP will respond to all complaints within one week of the complaint. Please also note that the facility is required to notify NDEP of any excess emissions within 24 hours after any malfunction or upset of the process equipment or equipment for controlling pollution or during start-up or shutdown of that equipment.</p> <p>See “Monitoring Considerations” at the end of this document.</p>	<p><u>Compliance</u> NRS 445B.470</p> <p><u>Quarterly Audit</u> Section VI of the AQOP, 40 CFR Part 60, Appendix F, Procedure 1</p> <p><u>Complaint Response</u> NAC 445B.232</p>
11/18/2021	Cale Christi, cale.austin@gmail.com	Permitting Process	<p>Nevada Division of Environmental Protection,</p> <p>I am writing as a concerned citizen and friend to Paiute people. I ask that you refuse to issue the air quality permit for the proposed Thacker Pass Lithium Mine. This mine would gravely impact the land, air, and water quality for local animals, tribal communities, and surrounding ranching communities. The emissions from the project would put our most vulnerable at risk. Please protect our elders.</p> <p>Sincerely, Cale Christi Chiloquin, OR</p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Submitted on behalf of Rogue Climate by Hannah Sohl, hannah@roguclimate.org	Permitting Process, Emissions, Monitoring	<p>See Letter November 18, 2021</p> <p>Via Electronic Filing</p> <p>Nevada Division of Environmental Protection Bureau of Air Pollution Control 901 S. Stewart Street, Suite 4001 Carson City, Nevada 89701</p> <p>Re: Proposed Air Pollution Control Permit for the Thacker Pass Lithium Mine</p> <p>Attention: Nevada Division of Environmental Protection</p> <p>Rogue Climate is writing to express our concerns regarding the NDEP's preliminary determination to issue an Air Pollution Control Permit for the Thacker Pass lithium mine and requesting the NDEP to reconsider this decision and deny the Air Pollution Control Permit for the Thacker Pass Lithium Mine.</p> <p>As a climate justice organization working with communities across the region to transition off of fossil fuels and to clean energy and greater energy efficiency, we have serious concerns about the impacts of the proposed Thacker Pass Lithium Mine on Indigenous communities and other local residents, and specifically the air quality impacts that this mine will have.</p> <p>The air pollutants that will be released from this mine include CO₂e, NO_x, VOC (volatile organic compounds), SO₂, H₂S, H₂SO₄, PM, PM₁₀, PM_{2.5}, and other Hazardous Air Pollutants (HAPs) - many of which are known to cause severe health and environmental impacts. In addition, H₂S, Hydrogen Sulfide, is extremely toxic and flammable and is known to have potentially severe effects on human health.</p> <p>Prior to approving this permit, the NDEP should ensure a clear assessment of environmental justice determinants and do an in-depth air quality assessment to create a baseline for air quality and existing air pollutants in the region. It is critical that the increase in air pollution from wildfires is also included in this assessment since, wildfire smoke is more and more common and can contribute to cumulative air quality issues.</p> <p>Local communities have already been impacted by mercury and gold mining in prior years, and it is critical that any air quality assessments take into account these cumulative health and environmental impacts.</p> <p>The Nevada Division of Environmental Protection (NDEP) must deny this air quality permit to protect the health and safety of local communities.</p> <p>Sincerely, Hannah Sohl Executive Director Rogue Climate</p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Emissions</u> Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Monitoring</u> See "Monitoring Considerations" at the end of this document.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Emissions</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Submitted on behalf of Rogue Climate by Hannah Sohl, hannah@rogueclimate.org	Previous Mining Activity	Continued from Above.	<p><u>Previous Mining Activity</u> NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada.”</p>	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Johanna Emm, johannaemm50@hotmail.com (resubmitted)	Air	<p>See Letter and Attachments</p> <p>November 18th 2021 Nevada division of Environmental Protection The Bureau of Air Pollution Control 901 S. Stewart Street, Suite 4001 Carson City, NV 89701</p> <p>Dear Nevada Division of Environmental Protection: Thank you for allowing me the opportunity to make a public comment regarding Atsa-ggweddadu Koodakuh wyh nuwu People of Red Mountain known to you as Thacker Pass. I demand and recommend the State of Nevada deny the proposed Class II Air Quality Operating permit application AP14794334 as none of the 27 reservations with tribal members of the Four Nation Great Basin Indians that include the Goshute, Newe, Numma, and Washo Tribes have not made a formal comment in opposition to NDEP and Nevada Lithium Mining does not mean consent to proceed.</p> <p>The USEPA under the Clean Air Act set an Air Quality Standard of 0.03 ppm for long term one year average concentrations for sulfur dioxide. Short-term 24-hour air concentrations should not exceed 0.14 ppm more than once per year. On page 50 of the Class II Air Quality Operating Permit(3.) Emission limits (d.) The discharge of Sulfur Dioxide to the atmosphere shall not exceed 0.34 pounds per hour, nor more than 1.49 tons per 12-month rolling period. Rolling period can not be defined according to Ambient Air Quality Standards NAAQS.</p> <p>I object to the potential cumulative impacts during phase 1 and phase 2 of the Bifuracted approach that will impact the flow of surface water to cultural properties such as gathering and hunting areas for subsistence by self-preservation practices of the Fort McDermitt Indians found in BLM's NEPA guidance document Appendix D titled Native American and Alaska Native Resource Uses and identified areas of subsistence by Burns Oregon Tribe and Reno Sparks Indian Colony court that requested NHPA action to protect sacred sites according to tribal consultation.</p> <p>There has not been any attempt by the Bureau of Land Management BLM or Nevada Lithium Corporation at meeting Tribal Consultation Executive Order 13175 by definition of "Meaningful Consultation" that is by a unique government-to-government relationship. These tribal governments represent the Indigenous people whose lives will be affected by heavy equipment, landscape and water quality degradation from the use of sulfuric acid processing and HDPE in Brine lithium salt evaporation ponds for an estimated 41 years identified in Lithium Nevada Corporation draft Water Pollution Control permit NEV2020104.</p> <p>There is no benefit to the Indigenous people of Fort McDermitt Paiute Reservation designated Trust Lands by the Indian Reorganization Act 1934, therefore; for the above comments we demand you deny the Air Quality Operating Permit AP1479-4334. I have attached supporting tribal court presumptive rebuttal documents.</p> <p>Sincerely, Johanna Emm Electronically signed 11-18-2021</p>	<p>Consultation As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p> <p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Emissions Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p>Rolling Averages The most recent primary NAAQS for SO₂ is the 2010 1-hour SO₂ NAAQS. The 3-year average of the 99th percentile cannot exceed 75 ppb. The annual NAAQS was revoked by EPA in 2010 (https://www.epa.gov/so2-pollution/timeline-sulfur-dioxide-national-ambient-air-quality-standards-naaqs). NDEP used the proposed hourly emission limits of 0.34 pound per hour to perform the analysis of air quality impact (i.e. pollution dispersion modeling), and verified that under those hourly limits, there will be no exceedance of the 2010 SO₂ NAAQS. The 12-month rolling average limit is provided to allow for potential variation in throughput while allowing for practical enforceability of the compliance requirements. The 12-month rolling average limit is as stringent as the hourly limit, which guarantees that the NAAQS is met.</p> <p>Water Concerns Please see NDEP Water Pollution Control permit NEV2020104.</p>	<p>Permitting Process NRS 445B, NAC 445B</p> <p>Emissions NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Kaeyla Erway, kerway88@gmail.com	Air General	<p>Bureau of Air Pollution Control,</p> <p>I stand against any Air permits for Thacker Pass/ Peewee Mu'Huh. I stand against these proposals or offers that will affect numerous groups both human and non human.</p> <p>The data provided, does not meet high quality standards of integrity or even close to honesty. What your ethics are in is completely misleading and in the wrong direction of success. There are people, like myself whom have stepped foot on this land and do not feel the need to take, destroy, lie about my intentions when speaking about lively, beautiful places.</p> <p>I, WE, do not want this lithium mine to begin, to multiply, to only destroy and be abandoned after its resources, "laws" are max. What a poor, poor excuse to continue such ways of business and success for all. The evidence proves this does more dangerous harm than good it will ever produce. I say NO !</p> <p>Kaeyla Erway Boulder City, NV</p>	<p>Permitting Process</p> <p>The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Permitting Process</p> <p>NRS 445B, NAC 445B</p>
11/18/2021	Garrett Flower, garrflower@gmail.com	Air General	<p>Hello NDEP,</p> <p>I am involve in protecting Thacker Pass because it is a beautiful and peaceful place that needs our forever protection. It is confusing and very wrong that you can issue air quality permits in areas that you have never collected air quality data. We the american people trust you to control dirty industries from contaminating and destroying the natural environment. You are failing to do your job by letting sulfuric acid plants contaminate our air. Air quality permits should not be issued when you have no base line data for that geographic area that the lithium mine will be located at. The damaging health affects on natives and the other local people is not being seriously taken into account. This is sad that you issue permits that will hurt the health of our locals but allow dirty industry to line their pockets.</p> <p>Please take these issues and concerns into serious consideration when making a decision for our beautiful Thacker Pass.</p> <p>Thank you, Garrett Flower</p>	<p>Backgrounds</p> <p>Background concentrations are used during the evaluation of air quality impact and are intended to identify air quality conditions without the impact of the new or modified sources (i.e., the new or modified sources are added to the background conditions). There are two approaches to determine background concentrations. If the new source meets the conditions to be a major stationary source or the proposed modifications meet the conditions to be major modifications (as defined in 40 CFR 52.21), the facility must collect background concentrations for at least one year before the new emissions take place. These situations are not common, and usually are associated with large industrial complexes, like power plants. For all the other cases, NDEP uses measurements of concentrations collected by monitors at the Jarbidge Wilderness Area (Elko County, NV) and Great Basin National Park (White Pine County, NV), for PM_{2.5}, and PM₁₀, respectively. These concentrations are assumed to represent the average background concentrations in Nevada. Because these locations are remote and away from significant anthropogenic sources, they should exclude the impact of manmade emissions, but they still would record the impact of natural event, such as wildfires, dust storms, etc. See "Monitoring Considerations" at the end of this document.</p>	<p>Backgrounds</p> <p>40 CFR Part 52.21</p>



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11/18/2021	Jennifer Cantley, Moms Clean Air Force, jcantley@moms-clean-air-force.org	Permitting Process, Emissions, Ambient Air Quality Standards	<p>See Letter and Attachment</p> <p>To the attention of the Nevada Division of Environmental Protection, My Name is Jennifer Cantley, and I am testifying on behalf of the following seven generations, the next who will not have a say, based on the decisions adults make today. When I first heard about lithium mining, I will admit, I thought it might be a necessary evil that we would need to use to get to where we need to go to protect this planet and reduce our carbon footprint, but the more research I do. The more I hear about how this will impact our home in Nevada, or better yet, Mother earth, I am convinced that this will not be the answer, and we must keep looking for real clean solutions. Lithium mining is not green; in Nevada, we will still have to use fossil fuels to extract the lithium out of the earth's soil by using sulfur from the oil refineries to make sulfuric acid plants that will emit about 5,800 tons of sulfuric acid per day, per plant, that can potentially produce acid rain. Acid Rain Can Cause Health Problems in People; air pollution like sulfur dioxide and nitrogen oxides can cause respiratory diseases or make these diseases worse. Respiratory diseases like asthma or chronic bronchitis make it hard for people to breathe and can potentially even lead to death; this isn't something to be looked at lightly, especially when we are sitting in the middle of a pandemic in a county that had the highest impact of covid per capita in the who state of Nevada.</p> <p><i>(continued on next page)</i></p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Emissions Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p>Ambient Air Quality Standards The results on the ambient air quality with the assumed backgrounds are as follows:</p> <ol style="list-style-type: none"> 1. PM_{2.5}: <ol style="list-style-type: none"> a. 24-hr – 15.5 µg/m³ (44%), b. Annual – 4 µg/m³ (34%). c. The highest PM_{2.5} impacts are located along the south portion of the facility plant boundary 2. PM₁₀: <ol style="list-style-type: none"> a. 24-hr – 77.9 µg/m³ (52%), b. The highest PM₁₀ impacts are located along the south portion of the facility plant boundary. 3. SO₂: <ol style="list-style-type: none"> a. 1-hr – 41.3 ppb (55%), b. 3-hr – 81.9 µg/m³ (6%), c. 24-hr – 10.3 µg/m³ (3%), d. Annual – 0.5 µg/m³ (1%). e. The 1-hr impact is located approximately 0.8 miles south of the facility plant boundary. 	<p>Permitting Process NRS 445B, NAC 445B</p> <p>Emissions NRS 445B, NAC 445B</p> <p>Ambient Air Quality Standards NAC 445B.22097</p>

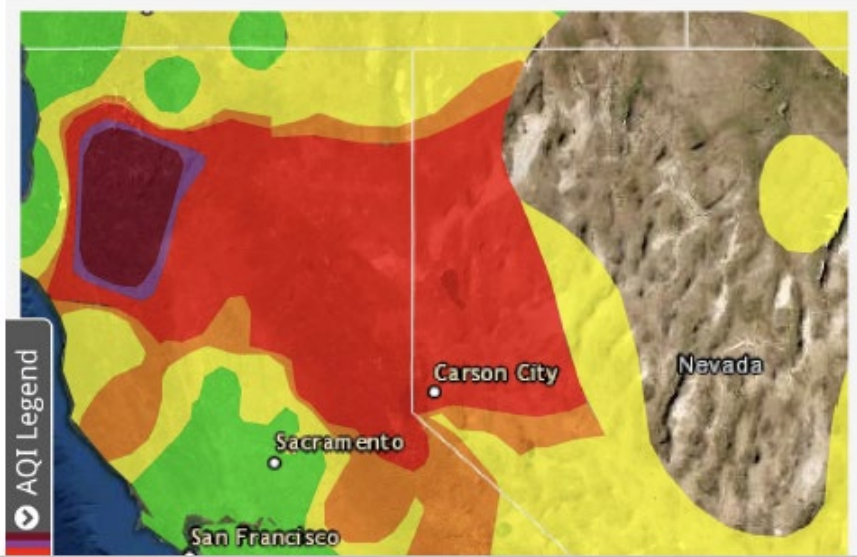


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11/18/2021	Jennifer Cantley, Moms Clean Air Force, jcantley@moms-clean-air-force.org	Permitting Process, Emissions, Ambient Air Quality Standards	(continued on next page)	<p>Continued from Above.</p> <p>4. CO:</p> <ul style="list-style-type: none"> a. 1-hr – 130 µg/m³ (0.3%), b. 8-hr – 60 µg/m³ (1%). c. The highest CO impacts are located along the south portion of the facility plant boundary. <p>5. NO₂:</p> <ul style="list-style-type: none"> d. 1-hr – 62.8 ppb (63%), e. Annual – 4.2 µg/m³ (4%). f. The 1-hr impact is located approximately 0.8 miles south of the facility plant boundary. <p>6. H₂S:</p> <ul style="list-style-type: none"> g. 1-hr – 6.4 µg/m³ (6%). h. The highest H₂S impact is on a receptor just north of Hwy 293. <p>Acid Rain The Acid Rain Program was established in 1995 from EPA. The main contributors are Sulfur Dioxide and Nitrogen Oxides from the power sector. The program sets caps and requires reductions on emissions. The Li NV plant emissions are less than 100 tons per year that would make them applicable to the Acid Rain Program and additionally is not a coal fired plant. For more information on the Acid Rain Program, please see https://www.epa.gov/acidrain/acid-rain-program.</p>	
11/18/2021	Jennifer Cantley, Moms Clean Air Force, jcantley@moms-clean-air-force.org	Permitting Process, Emissions, Ambient Air Quality Standards	<p>If we let go of the fact that Nevada is looking at about 8,000 claims for Lithium mining across the state right now for the 25% of the worlds lithium, and focus just on the coldora of thacker pass and currently the potential of the Jindalee mine one the other side of the mountains of thacker pass and that this will potential put 6 sulfuric acid plants just outside of Mcdermitt Nevada, Fort Mcdermitt tribal reservation when we know that Indigenous children suffer from asthma at much greater rates compared to other American children and 13% of Indigenous children have asthma, compared with 8.6% of children of non-Indigenous descent, this means we have the science and we know the facts and we need to take this into consideration before we make any decision about their futures and how their lungs and heart will react to the chemicals we are putting in the air, this on top of the wildfire smoke we are suffering with each year and other allergies and chemicals we aren't even aware of because we know states do not have actual borders that keep the air out, and can we see this with the wildfire smoke hitting the east coast the last two years, we need to take this seriously and look at all sides of the equation, not just how we think how it will help, this is literally life or death, science have already warned us we only have about 10 years to get this right, to lower our carbon emission, and my these numbers it looks like we will be raising emissions, and not dropping them more than 6% even with putting 25,000,000 ev cars on the road, is it worth messing up our air and water for this, where is the math, where is the science.</p> <p>(continued on next page)</p>	<p>Climate NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gases (e.g. CO₂) from the stationary source be completed.</p>	NA



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11/18/2021	Jennifer Cantley, Moms Clean Air Force, jcantley@moms-cleanairforce.org	Monitoring	<p>I have recently set up an air monitoring system on my sister's land in McDermitt, Nevada. Our Purple Air monitor reports from May 2021 to now showing that the air is not consistently clean, showing from particulate matter 2.5 in yellow and orange most days; no, you are reporting that the air quality has passed federal guidelines for clear air no there is set an all standard air monitoring system set up at this time in this caldera. As you can see from the map below, showing August 8, 2021, the air monitoring systems from our purple air monitoring system shows where the EPA monitors are not. People like myself, Who have severe lung damage from coronavirus or other causes, need to know this information; it could be life or death, but not having an EPA-certified air morning system here but allowing an air permit to go through without having to correct status to be very consequential. Orovada, Kings River Valley, McDermitt, Winnemucca all need to know what type of air they are breathing, especially with the world's largest cyanide plant in Winnemucca. What would cyanide, sulfuric acid, and nitro oxides do to this community when combined, let alone the possible acid rain? These answers for this community deserve to be answered before an air permit is permitted</p> <div> </div> <p>(continued on next page)</p>	See "Monitoring Considerations" at the end of this document.	NA



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11/18/2021	Jennifer Cantley, Moms Clean Air Force, jcantley@moms-clean-air-force.org	Monitoring	<p>Latest PM2.5 NowCast AQI: 160 at 8/8/21 6pm PDT</p>  <p>By almost any measure, public health among Indigenous people lags behind public health among other groups. The life expectancy of Indigenous people is five years shorter than it is for other Americans; Indigenous people die at higher rates from a range of causes including liver disease, diabetes, and respiratory diseases.¹² Health disparities are rampant and reflect centuries of genocide, persecution, discrimination, and neglect. Unfortunately, air pollution causes or exacerbates almost all of the major health disparities experienced by Indigenous people, making it even more urgent to improve air quality on tribal lands.</p> <p>Indigenous children suffer from asthma at much greater rates compared to other American children. 13% of Indigenous children have asthma, compared with 8.6% of children of non-Indigenous descent.¹³ High rates of poverty and inadequate access to health care compound the impact that asthma has on Indigenous children.¹⁴ Air pollution is a well-established trigger of asthma attacks. It can cause the development of asthma and interfere with lung growth.</p> <p>My final statement is that if we are going to tell the American people that this is a clean energy, then this cannot be a lie, this has to be truly clean, and it has to truly lower emissions and right now the math is not adding up, with emissions we will be adding in the air with sulfuric acid plants and emissions from heavy duty diesel trucks and trains, we need to see the math, especially if we are looking at 8,000 claims across Nevada, because Nevada does not need to become America's waste land.</p> <p><i>(continued on next page)</i></p>	Continued from Above.	NA



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11/18/2021	Jennifer Cantley, Moms Clean Air Force, jcantley@moms-cleanairforce.org	Monitoring	<p>I would like to add a comment about cultural sensitivity about tonight. I would like the state department of environmental protection to think about their actions, you are dealing with a native community that is often not consulted about environmental impact statements that have to do with their ancestral lands! They may not know how to act in a formal way but you must remember that there is much pain and hurt behind their actions, and that we are talking about digging up their ancestry or graves for this and for lithium mining, how would you feel if someone strolled into your cemetery and dug up your ancestors, what would that mean to your family and your religion!? I ask you to have some cultural sensitivity and not speak to them that way ever again and learn to speak to them much more respect and not think about your perspective only in the situations!</p> <p>I will be attaching my air report to you and I have sent it to the ETA as well I look forward to hearing back from you. Sincerely Jennifer Cantley Moms Clean Air Force Field consultant</p> <p><i>From 2nd Email with attachment:</i> I thought that I would also attach our native American air fact on air pollution. Moms Clean Air Force works with the National tribal air council and is highly interested in this as we will be sitting in a meeting with secretary Haaland here shortly and they will be joining us</p>	Continued from Above.	NA
11/19/2021	Kelsey Hoffman, kelseyhoffman.or@gmail.com	Consultation, Permitting Process	<p>Hello,</p> <p>My name is Kelsey Hoffman and I am a concerned citizen that lives in Reno Nevada. Over the past few years I have watched the People of Red Mountain (Paiute and Shosone tribes) camp at Thacker pass, spread the word about not wanting the lithium mine there, and bring in soooo many non-native folks in on this process. I cannot stress enough that this land is important. It has cultural ties that go back thousands of years, it is part of the tribe's history and stories and wellbeing. Paiute and Shoshone peoples see themselves as responsible for taking care of ancestral land. The land is not healthy without their presence and their protection. Lithium mining, although beneficial in the short term for electric vehicles, will destroy this land. Make it inhabitable and not allow the keepers of this land to visit, pray and take care of it. I urge you to stand by the folks who know this land best, who understand what it needs, and who care about it's availability for future generations. Air pollution from this mine will be significant. Mining dirties the air and carries chemicals through the wind to nearby residences. This project cannot move forward. Especially with the current taxes that mining corporations pay in Nevada. This mine will only benefit a few and not provide economic relief or livelihood for the true owners of this land.</p> <p>Thank you,</p> <p>Kelsey Hoffman Garden Classrooms Coordinator Urban Roots MPH Candidate 2022 - Tulane School of Public Health & Tropical Medicine 541.261.4643 @kelshoff</p>	<p>Consultation As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p> <p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Permitting Process NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Jean Williams, Public Hearing	Permitting Process, Transloading Facility, Minor Source Classification, Odors	<p>I wrote up some stuff tonight or this morning about 4 o'clock [inaudible] as I love to say it's pretty [inaudible] to mean when we got [inaudible] to spend a lot of money on was more than [inaudible] and the other storm on how the town by me, support for being there, complaining when [inaudible]. [Inaudible] all the time, number one I believe that commence for error and work of all these should not be [inaudible] until the other [inaudible] is heard and determined in the court.</p> <p>The granting of the permits prior to the court outcome may put pressure on the court to rule in favor of [inaudible] that and surely it would be brought in court by the [inaudible] attorneys if permits have been granted. There are three permits [inaudible] tell and they're based on resource watch and the Native American people that [inaudible] for things that happened in so many process.</p> <p>Number two, rock and sulfur generated from their finding this less stable and more prone to generating [inaudible] like this during transportation and [inaudible]. The air permit should also include an air permit [inaudible] loading site of the rail to truck depot for the molten [ph] sulfur. I saw those [inaudible] thought about that and that particular spot, they don't have the permit unless there was a [inaudible] a thin layer there. I don't know if a hose [ph] is considered advanced but it is advanced.</p> <p>And also there are lithium oil in there because they have to steam deck [ph] at those valves in order to open around them, to level the [inaudible] into the truck. And it is presented that the site, it's very near Winnemucca, hydrogen sulfide gas is heavier now and what is called air dispenser and [inaudible]. My brother, a construction engineer his whole career have told [inaudible].</p> <p>I haven't been here that long, sorry, 680,000 tons and he said, Jean, we don't want this. We do not want this and [inaudible] were mining industry as well. I believe the [inaudible] should be a class 1 at the first, at the beginning unless lithium and other can demonstrate they will have not [inaudible] conditions at full operating [inaudible]. That would be after phase 2 operations are fully functional.</p> <p>Twenty people are 75% complained of the smell and several of those people are involved with the mine. It could skew data of what people are seeing them. There's no air monitor and stations in the Valley of [inaudible] or in Winnemucca. I understand [inaudible] is close to air monitoring and that leaves us pretty wide open for us.</p> <p>Okay and then who, help me, if I have damaged [inaudible] land when raising [inaudible], my golden [ph]. It, you know, where am I going to be able to get mining closed but I appreciate your time. Thank you.</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Transloading Facility A facility is not required to apply for or obtain a Class 2 Permit when its potential to emit is below the levels listed in NAC 445B.037.</p> <p>Minor Source Classification A facility is required to apply for a Class 2 air permit when the emissions from the facility will be less than 100 tons per year for any regulated pollutant and there is no federal requirement to obtain a Class 1 permit.</p> <p>Odors The odors regulations provide for:</p> <ol style="list-style-type: none"> 1. No person may discharge or cause to be discharged, from any stationary source, any material or regulated air pollutant which is or tends to be offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents the comfortable enjoyment of life or property. 2. The Director shall investigate an odor when 30 percent or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy. The sample must be at least 20 people or 75 percent of those exposed if fewer than 20 people are exposed. 3. The Director shall deem the odor to be a violation if he or she is able to make two odor measurements within a period of 1 hour. These measurements must be separated by at least 15 minutes. An odor measurement consists of a detectable odor after the odorous air has been diluted with eight or more volumes of odor-free air. 	<p>Permitting Process NRS 445B, NAC 445B</p> <p>Transloading Facility NAC 445B.037</p> <p>Minor Source Classification NAC 445B.037, NAC 445B.3453</p> <p>Odors Section I.D. of the AQOP, NAC 445B.116, NAC 445B.22087</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Junice Uy, juniceuy@gmail.com	Emissions, Climate, Consultation	<p>Dear NDEP,</p> <p>I ask that you NOT approve the Air Quality permit for the proposed Thacker Pass lithium mine project. Approving this permit would continue the trajectory of environmental racism in this country, particularly starting with settler colonialism and expansion into the western United States through what is now known as Nevada but continues to be Paiute and Western Shoshone territories.</p> <p>Sitting at about 1 mile above sea level and with winds blowing primarily east towards the valley where ranches, the town of Orovada, and Fort McDermitt Indian Reservation are located, the proposed mine would increase the percentage of PM_{2.5} particulates, sulfuric acid, and carbon dioxide in the air to these already burdened communities. These communities are already breathing the poor air quality from mercury and gold mining from previous years.</p> <p>President Biden's initiative to make environmental justice a priority would be relevant here. He's committing to addressing these continuing environmental injustices. And as you may be aware, the EPA's Environmental Justice policies ask for fair treatment (no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial and commercial operations) and meaningful involvement (community concerns will be considered in the decision making process).</p> <p>A broad group of Paiute and Shoshone communities, ranchers, and concerned citizens are asking you to not approve the proposed mine's air quality permit. Please deliberate on their concerns and also the negative environmental and social legacies that this proposed mine will have directly on these communities and to the collective health of humans and more-than-human.</p> <p>Thank you, Junice Uy</p> <p><i>(continued on next page)</i></p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p> <p><u>Consultation</u> As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Junice Uy, juniceuy@gmail.com	Previous Mining Activity	Continued from Above.	<p>Previous Mining Activity NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada."</p>	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Michelle Galecki, michellegalecki@gmail.com	Emissions, Climate, Previous Mining Activity	<p>Good evening,</p> <p>My name is Michelle Galecki and I'm writing to give a public comment opposing the proposed Lithium Nevada Mine at Thacker Pass (Peehee mu'huh). I am an environmental advocate with a background in environmental studies and have been following the proposed mine closely. From what I have read, and given the current realities of the climate crisis, it's clear there are no scientific groundings in approving a permit for this mine. The proposed plans will pollute the environment with sulfuric acid, carbon dioxide, nitrous oxide, volatile organic compounds, particulate matter, sulfur dioxide, and other toxic air pollutants.</p> <p>If the purpose of the permitting process is to ensure that there are no adverse effects on public health or welfare (as stated on your website), then I don't see how you could approve a permit for this mine given the clear risks it poses to communities who have already suffered from the deadly effects of mercury and gold mining in the area.</p> <p>At this moment in time, it's critical that we do everything possible to mitigate the climate crises and prevent further destruction. Recently we all watched world leaders gather for COP26 and talk about the dangers facing all of us and the importance of giving decision-making power back to the Indigenous stewards of the land who know how to live in a way that protects the air, land, water, and people. You have the option here: listen to the indigenous people at Thacker Pass and join the global community in protecting us all, or approve a permit that will lead to further devastation of the land, air, and health of everyone in the area. Please listen to us all as we ask you to take the scientifically and morally reasonable route to reject this permit.</p> <p>Thank you, Michelle</p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p> <p><u>Previous Mining Activity</u> NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada."</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Ashley Wagner, ashley_wagner@berkeley.edu	Emissions, Climate, Previous Mining Activity	<p>Dear Bureau of Air Pollution Control,</p> <p>I hope that this email finds you well. I am writing to give public comment regarding the proposed lithium mine at Thacker Pass (Peehee mu'huh).</p> <p>My name is Ashley Wagner and I am a health researcher with masters degrees in environmental health sciences and environmental planning. From everything I have read about the proposed Lithium Nevada Mine at Thacker Pass and what we know about ecosystems and climate systems, the decision to approve the permit for a mine here does not seem scientifically sound. The plans for the mine will pollute the environment with sulfuric acid, carbon dioxide, nitrous oxide, volatile organic compounds, particulate matter, sulfur dioxide, and other toxic air pollutants. As you note on your website, "NDEP is tasked with the stewardship of the natural resources of the State, including air quality. The quality of the air has effects on human health, plant and animal life, and the aesthetic beauty of Nevada." The purpose of the permitting process is to ensure that proposed projects and land uses do not produce adverse effects on public health or welfare. The proposed lithium mine poses many risks to communities that have already suffered from the deadly effects of mercury and gold mining in the area. This is a critical moment and I hope you will prioritize people and the planet in your decisions. Better yet, give decision-making power back to the Indigenous stewards of Thacker Pass who know how to live in a way that protects the air, land, water, and people. Thank you.</p> <p>Be well, Ashley</p> <p>Ashley Wagner (she/her/hers) ashley_wagner@berkeley.edu Unceded Lisjan (Ohlone) land</p>	<p><u>Permitting Process</u> The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p><u>Hazardous (Toxic) Air Pollutants</u> Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p> <p><u>Climate</u> NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p> <p><u>Previous Mining Activity</u> NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada.</p>	<p><u>Permitting Process</u> NRS 445B, NAC 445B</p> <p><u>Hazardous (Toxic) Air Pollutants</u> NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
10/18/2021	Jim Christison, jimchristison028@gmail.com	Permitting Process	<p>Nevada Dept. of Environmental Protection, Thacker Pass,</p> <p>Sirs,</p> <p>As a lifelong resident rancher of Nevada, I want to voice my objection to the Thacker Pass Lithium project. I'm not a scientist, but rather an artist and I think that such landscapes should be preserved for their natural pristine nature. I think there are other ways of obtaining lithium that are not as aesthetically disturbing or expansive as suggested by the project and its high time we started prioritizing visual values as one of the protections of the agency.</p> <p>Sincerely, Jim Christison Christison Ranch</p>	<p>Permitting Process</p> <p>The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Permitting Process</p> <p>NRS 445B, NAC 445B</p>
10/18/2021	Shannon Scott, sscottpogoda@icloud.com	Permitting Process	<p>Given that the emissions from the Lithium extraction will bear no worse than gold, copper, or other mineral extractions it seems prudent to go forth with the project. It would mean more jobs for the local community and supply much needed lithium for the imminent mass scale production of electric vehicles. Currently much lithium is extracted from Chile and China, so American companies like Ford, Tesla and others manufacturing electric vehicles must source from abroad. Let's keep the money in the U.S. and employ Nevadans.</p>	<p>Permitting Process</p> <p>The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Permitting Process</p> <p>NRS 445B, NAC 445B</p>
10/27/2021	Chris Edwards, emaileedwards@gmail.com	Permitting Process	<p>Mining is an imperfect industry and digging in the ground isn't an ideal situation. However, if it must be done, and it does, then I believe Lithium Americas is the ideal company to do so. They have obviously put in years of deliberate work to do things the right way and aren't just rushing the project to make the most money as quickly as possible. I'm pleased the solutions proposed have resulted in the preliminary air permit decision. As a lithium sector investor and environmentalist, I'm worried Nevada won't be so lucky with many other companies in this upcoming lithium boom. But that makes me equally grateful for a conscientious group like Lithium Americas. Until they prove otherwise, I'm optimistic they'll leave things as good as they found them.</p> <p>Thanks, Chris Edwards</p>	<p>Permitting Process</p> <p>The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Permitting Process</p> <p>NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
10/19/2021	Isabelle Minder, izzyminder2@gmail.com	Consultation	<p>To whom it concerns,</p> <p>I believe it is no coincidence that the communities affected by this mine are the people's voices who are most unheard. Where this mine is supposed to go is on culturally significant land to the Paiute Shoshone Tribe. They have gathered resources from this land for centuries and this land was blessed by their ancestors. This land is connected to their Creator as the Golden Eagles live here. The environmental impact the mine has will destroy resources and force the migration of the Tribe and animals that live there. Would you bud a lithium mine on Jerusalem? An existing church people attend? Nevada's rural beauty is something to behold, not suck every bit of life out of. It is despicable that rural communities in Nevada continue to be taken advantage of, trampled on and thrown out. Rural communities are the backbone of Nevada, don't you dare forget us.</p> <p>Sincerely, Fellow Nevada Lover</p>	<p>Consultation</p> <p>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p>	
10/21/2021	Susan, susancantley@yahoo.com	Permitting Process, Consultation	<p>I would like to express my opinion on the open pit mining/ air permit for Thacker Pass. I am completely against mining on Thacker Pass. There has been already so much damage done to this area because of pass mining. And the mining of Lithium is extremely destructive to the air and water that we all breathe, air especially has no boundaries. And I do not believe you have the right to go around the Indigenous People who this land really belongs to. Human and Animal lives are all at stake, you will be responsible for deaths of all living things in that area, it will happen on your watch if you allow the permits to be issues. The mining of Lithium is extremely dangerous for the environment, it will cause more damage to the environment and put us all in worst shape environmentally then we currently are, it is not the solution. I am urging you not to give into the big corporation, and give up the air that we breathe and the water that we need to live just so that they can make money. Someone needs to be the responsible adult, look ahead and say NO! Do not give into the greed in exchange for our future.</p>	<p>Permitting Process</p> <p>The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Consultation</p> <p>As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p>	Permitting Process NRS 445B, NAC 445B
11/18/2021	Susan Misgen, susan.misgen@yahoo.com	Permitting Process	<p>Dear Nevada Environmental Protection Division:</p> <p>Please consider the facts regarding the proposed mine at Thacker Pass. It isn't "green" energy. It will destroy the air quality, which is passing the costs of production onto non-stakeholders. The public would be on the hook for the environmental destruction that would be left behind. (Mine owners, from my research, always file bankruptcy or change ownership to avoid restoration and cleanup costs. In the US, we call them Superfund sites.) Protect the people and land of Nevada and make the right decision. This mine needs to be denied.</p> <p>Sincerely, Susan Misgen PO Box 537 St. Ignatius, MT 59865</p>	<p>Permitting Process</p> <p>The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	Permitting Process NRS 445B, NAC 445B



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Suzanna Davis, suzannadavi@gmx.com	Permitting Process, Climate	<p>I have only just heard of this. I live in Medford Oregon and cannot make it to the meeting. This effects us all and should not be considered a local issue. Our beautifully diverse drylands do not need mining to survive financially and will in fact be harmed by such forays into destruction of our small piece of the planet to make money for already glutted mining companies. Refuse this and invest in climate supporting endeavors like solar and wind power. Please, do the right thing and refuse this mining of our beautiful drylands.</p> <p>Suzanna Davis RN 1220 Woodrow LN Medford, OR 97504</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Climate NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p>	Permitting Process NRS 445B, NAC 445B
10/25/2021, 11/5/2021, and 11/18/2021	Mary Thompson, maryt7171@gmail.com	Permitting Process	<p>Protect Thacker Pass, Nevada from the largest lithium mine in Thacker Pass Nevada approved in less than 1 year. I want to help. So unbelievably wrong! Mary Thompson</p> <p>To whom it may concern. Hope you make the right choice. Don't blindsides Nevadans like BLM has. You can not approve in less than a year. Process takes 3 to 4 years. Wake up! Mary Thompson</p> <p>I would like to know how BLM got away with approving The largest lithium mine in the state of Nevada? Thank you Mary Thompson</p> <p>To whom it may concern I have resided in the great state of Nevada since 1969. I have hiked the majority of the state along with lake Mead and lake Tahoe. I remember when we released water from the dam until like me because of the abundance of water. Now look at it, it is sad isn't it! If only we had put more foresight and consideration into planning of these projects. The destruction of the wildlife, vegetation, the geology steadily declining. The scared historical site on the land that would be destroyed. How much more wrong do we do, before we clearly see our errors? How much more wrong can be undone? How can judge Miranda Du override the national historical ACT written in 1966? Why was it written? And how can judge Miranda Du come to the decision that there was not enough evidence of the destruction. A process that takes 3 to 4 years that was done in 1 year. Sad, you wonder who's getting a kickback from this. Please tell me what the Nevada Division of Environmental protection stands for? Do you truly believe this is the right thing to do? And most of all why did you what your position at the Nevada Division of the Environmental Protection. One year is not enough time to say that this lithium mine will be safe. And how will you protect the historical site that is located there? Thank you Mary Thompson 180.000 active 200.000 closed mines in Nevada. Really!!</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	Permitting Process NRS 445B, NAC 445B



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/10/2021 (letter attachment dated 11/1/2021)	Deland Hinkey, dayhinkey@icloud.com via Email Service cjcallao@hotmail.com	Permitting Timeline, Consultation, Previous Mining Activity	<p>November 1, 2021</p> <p>To Whom It May Concern,</p> <p>Please DO NOT issue the Air Pollution Permits to Lithium Nevada. All the permits for this Mine project have been fast tracked by the US Government without proper consolidation for many people. Fort McDermitt Paiute-Shoshone Tribal Members oppose the Lithium Mine. Our Reservation border is just 15 miles from where the Lithium Mine will have an open pit. The wind never stops blowing at Peehee Mu'huh/Thacker Pass. Mines have already harmed the Fort McDermitt tribe. Several tribal members were diagnosed with cancer after working in the nearby Cordero Mercury Mines. Tribal members are still suffering from the after math of the Cordero Mercury Mine. Many Tribal members have ongoing respiratory problems still. Peehee Mu'huh/Thacker Pass is sacred to our people. Peehee Mu'huh/Thacker Pass is a spiritually powerful place blessed by the presence of our ancestors, other spirits, and golden eagles – who we consider to be directly connected to the Creator. There was a Massacre on September 12, 1865, of our ancestors in Peehee Mu'huh/Thacker Pass. To build a lithium mine over this massacre site in Peehee Mu'huh/Thacker Pass would be like building a lithium mine over Pearl Harbor or Arlington National Cemetery. If the air permits are issued you are doing the same thing. We would never desecrate these places and we ask that our sacred sites be afforded the same respect. Please do the right thing and DO NOT issue the Air Pollution Permit to Lithium Nevada Corporation.</p> <p>Thank you, Deland Hinkey dayhinkey@icloud.com Atsa Koodakuh wyh Nuwu - People of Red Mountain Member Fort McDermitt Tribal Enrolled Member</p> <p><i>(continued on next page)</i></p>	<p><u>Permitting Timeline</u> The air quality operating permit application was received by NDEP on January 26, 2021. NDEP has 10-working days to determine if the application is administratively complete; the application was deemed administratively complete on February 9, 2021. Once administratively complete, NDEP has 90 days to issue or deny the application. During NDEP's technical review an additional 75 days were added to the timeline due to requesting additional information from the facility. Based on NDEP's regulatory review time of 90 days and the added 75 stop days, the potential issuance date was July 24, 2021.</p> <p><u>Consultation</u> As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p> <p><u>Previous Mining Activity</u> NDEP is aware of historical mining in this northern area of Humboldt County, including at the former Cordero and McDermitt mercury mines in Nevada and the Opalite mercury mine located just across the Oregon border. NDEP has coordinated with US EPA who has conducted assessment and cleanup actions to address historical releases associated with the Nevada mines in 2013 and 2018 and we are aware that EPA conducted cleanup action in 2020 at the Oregon mine. NDEP staff are in communication with the Ft. McDermitt Paiute Shoshone Tribe Environmental Department on remaining concerns and options for addressing impacts from these historical mines. In general, it is important to distinguish between mining activity that occurred prior to enactment of modern environmental regulations and modern mining. Modern mining regulations include several requirements and accountability measures that did not exist prior to laws and regulations enacted in Nevada in the early 1990s. The Nevada Department of Conservation and Natural Resources has a blog series that explains the increased protection from modern mining regulation, including regulations that would apply to the Thacker Pass Project, at http://dcnr.nv.gov/blogs/how-past-mining-practices-led-to-todays-permitting-rules-in-nevada.</p>	<p><u>Permitting Timeline</u> NAC 445B.3457</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/10/2021 (letter attachment dated 11/1/2021)	Deland Hinkey, dayhinkey@icloud.com (via email cjcallao@hotmail.com)	Permitting Process, Emissions	<p>November 1, 2021</p> <p>To Whom It May Concern,</p> <p>Please DO NOT issue the Air Pollution Permits to Lithium Nevada. All the permits for this Mine project have been fast tracked by the US Government without proper consolidation for many people. Fort McDermitt Paiute-Shoshone Tribal Members oppose the Lithium Mine. Our Reservation border is just 15 miles from where the Lithium Mine will have an open pit. The wind never stops blowing at Peehee Mu'huh/Thacker Pass. Mines have already harmed the Fort McDermitt tribe. Several tribal members were diagnosed with cancer after working in the nearby Cordero Mercury Mines. Tribal members are still suffering from the after math of the Cordero Mercury Mine. Many Tribal members have ongoing respiratory problems still. Peehee Mu'huh/Thacker Pass is sacred to our people. Peehee Mu'huh/Thacker Pass is a spiritually powerful place blessed by the presence of our ancestors, other spirits, and golden eagles – who we consider to be directly connected to the Creator. There was a Massacre on September 12, 1865, of our ancestors in Peehee Mu'huh/Thacker Pass. To build a lithium mine over this massacre site in Peehee Mu'huh/Thacker Pass would be like building a lithium mine over Pearl Harbor or Arlington National Cemetery. If the air permits are issued you are doing the same thing. We would never desecrate these places and we ask that our sacred sites be afforded the same respect. Please do the right thing and DO NOT issue the Air Pollution Permit to Lithium Nevada Corporation.</p> <p>Thank you, Deland Hinkey dayhinkey@icloud.com Atsa Koodakuh wyh Nuwu - People of Red Mountain Member Fort McDermitt Tribal Enrolled Member</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Emissions Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p>Hazardous (Toxic) Air Pollutants Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p>	<p>Permitting Process NRS 445B, NAC 445B</p> <p>Emissions NRS 445B, NAC 445B</p> <p>Hazardous (Toxic) Air Pollutants NRS 445B, NAC 445B</p>
11/18/2021	Deland Hinkey, Public Hearing	Permitting Process	<p>I'm Deland Hinkey. You guys are the Nevada Department of Environmental Protection, you guys [inaudible] corporation protection, you go against [inaudible] about earth, think for the land and [inaudible] so as evident. Instead of agreeing with that, it's [inaudible] as reasonably [inaudible] the effort [inaudible]. So, is that chance, is that particular [inaudible] would it be there will my grandchildren protect [inaudible] defects. When will my grandchildren will have birth defects is -- is that question. Will they happen? When it will happen? When will they start [inaudible] cancer? Is that protecting? That's your job to protect. Well, it's not on here [inaudible] gang. I'm worried about my grandchildren having birth defects and cancer. The water -- the water that's left is going to be [inaudible] for how long? Millennium, radioactive waste is going to do that. That's your job to protect a [inaudible], not to protect corporations. You [inaudible] for once. This is [inaudible] to pursuing, I don't know, have you guys ever been there? Have you guys been to [inaudible] Valley? It's a [inaudible] valley, we have to protect it. I'm like the devil [inaudible] in my mind, the particular matter, the whole [inaudible] is that they reduced [inaudible] that those do the daily [inaudible] in California and these are [inaudible]. It's not [inaudible]. Folks can have [inaudible] is given to our aids. You take his [inaudible], you go to [inaudible], you've taken the community of Nevada, take [inaudible], the people who's worked through all their life [inaudible] volunteers. You've taken them away from them over this man [inaudible] away. Thank you.</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Permitting Process NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/16/2021	Rheanna Lake, whichmary3@gmail.com	Permitting Process	Do not allow lithium mining. Prioritize water. How many times will the United States betray its Native Peoples? No more. Respect Sent from my iPhone	Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.	Permitting Process NRS 445B, NAC 445B
11/17/21	Allison Lowery, allypadoaaa78@gmail.com	Permitting Process	I stand against the Thacker Pass Lithium Mine. Protect the air, land, water, people. My loyalty is to the land!	Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.	Permitting Process NRS 445B, NAC 445B
11/17/2021	Henry Guinn, hguinn77@gmail.com	Permitting Process, Consultation	For everyone's future, we need to uphold Indigenous rights to access and protect biodiversity in their territories as entitled in the UN Declaration of the Rights of Indigenous Peoples. Henry Guinn	Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations. Consultation As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.	Permitting Process NRS 445B, NAC 445B



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Tessa Carlson, tessaboe@gmail.com	Permitting Process, Consultation, Climate	<p>Hello,</p> <p>I would like to make a comment on the proposed lithium mine at Thacker Pass. In no way should the state allow this mine to break ground or operate. It is an affront to tribal sovereignty on stolen land in so-called Nevada in the so-called United States. We should be preserving and protecting our increasingly scarce water and protecting important plant and animal habitat. We should be promoting and incentivizing the ceasing of driving individual cars and promoting walking, biking, and public transit as much as possible. We should not pretend that tearing up the earth and producing more extraction-intensive garbage (e.g. electric vehicles) will solve the climate crisis. This mine will only be green for investors who will be stuffing their pockets while they gaslight us by saying the destruction is actually helping. It won't. I have a masters degree in geology focusing on paleoclimatology. I have worked in the mining industry, aerosol air quality monitoring, and the environmental consulting industry for the past four years, and I am not misinformed on the topic. This is inexcusable. This is not part of the solution at all. Please reject their permits and do anything possible to prevent Lithium Americas Corporation from desecrating and destroying land sacred to the true stewards and protectors of this country.</p> <p>Sincerely, Tessa Carlson</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Consultation As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.</p> <p>Climate NDEP appreciates the significant challenges associated with climate change. We refer to the Nevada's Climate Strategy as a starting point for additional discussion on this topic (https://climateaction.nv.gov/our-strategy/). Currently, the air permitting process only requires an inventory of greenhouse gasses (e.g. CO₂) from the stationary source be completed.</p>	Permitting Process NRS 445B, NAC 445B
11/18/21	karenlienau@aol.com	Permitting Process	<p>To whom it may concern,</p> <p>Please leave Thacker Pass intact. The world must not extract any more from mother earth if we are to have any livable future. Not to mention the moral obligation to protect species living on this land. Please do all you can to protect this land and not let it be mined for batteries that can be made from hemp and/or sea water. Please take the long view of the 7 generations and make good choices for how we treat our planet that sustains life.</p> <p>sincerely, Karen Igou New Castle, DE XR Delaware</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	Permitting Process NRS 445B, NAC 445B



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Stephany Seay, stephanyseay71@gmail.com	Permitting Process, Consultation	Attached Screen shot I humbly, urgently insist that the proposed lithium mine at Thacker Pass and all its permits be denied. We do not need or want this poison. This is wild land, sacred land, historic buffalo range and culturally important to the Paiute and Shoshone People. NO LITHIUM MINE at THACKER PASS! Please see attached. Respectfully, Stephany Seay St. Ignatius, Montana	Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations. Consultation As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.	Permitting Process NRS 445B, NAC 445B
11/18/2021	Ruby Barrientos, rbarr877@gmail.com	Permitting Process, Consultation	My name is Ruby Barrientos and I am a resident and voter in Nevada. I am writing this to urge you to NOT issue the air quality permit to Lithium America for the proposed lithium mine at Peehee Mu'huh (Thacker Pass). The local tribes do not consent to the mine that will destroy the water, air, just to create a pit mine to extract lithium for profit which does not only pollute the land, water, and air but also creates man camps which increases the crime rates and where indigenous woman go missing and are murdered by the men at these camps. Please do not issue this permit. It is important that these lands are respected for they are not yours to destroy for profit which only benefits greed. Will money save our planet for our future generations?	Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations. Consultation As part of our evaluation of this project, NDEP has reached out to and met with representatives of the Ft. McDermitt Paiute-Shoshone Tribe (Tribe) and their Environmental Department and responds to comments received from the Tribe in this document. NDEP acknowledges that members of the community have concerns about the project and we have attempted to address all concerns that relate to areas of NDEP jurisdiction.	Permitting Process NRS 445B, NAC 445B
11/18/2021	Brock Rudlaff, Public Hearing	Public Hearing	Yes, close enough. I'll try to keep it short. I just want to say I'm really disappointed into this meeting. I don't want to cancel this, in their outburst. You -- let me remind you why you're here. You got residents, these people, everyone needs to be here and listened to. Outburst, you're not a teacher, this is not classroom. This is not the time for you to say you're going to cancel it and send us all home, that should be a [inaudible] these outbursts. I mean people are passionate about this. We're passionate, [inaudible] will be, we're not connected to this issue and the way to get more effective, start listening, get your [inaudible]. I want these [inaudible], I want to hear everybody say [inaudible]. That's all I have.	Public Hearing NDEP stands by its decision to stop the November 18, 2021, in-person public meeting and to not hold further in-person meetings on the proposed Thacker Pass permit decisions after the November 18, 2021, in-person public meeting was disrupted repeatedly. It is not a good use of limited NDEP staff resources or fair to other members of the public who would like to provide public comment to allow continued disruptions. NDEP believes adequate opportunity for public input on all proposed permit decisions for the Thacker Pass project has been provided.	NA



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Martin Tomas, Public Hearing	Permitting Process	<p>My family is from South American, and we've already seen construction of [inaudible] and it's [inaudible] in South America and are taking us and this is [inaudible] just in general around and is a violent and [inaudible] process from colonization and [inaudible] the second [inaudible] of [inaudible] the natives at [inaudible] in this area. And as a result, you're taking up, you're digging up, you're doing all this construction and [inaudible] you're bringing all this energy and this negative that should just -- you just like, you know, which were second benefit and you should fight for the little of what we have left here, you know because you see the dwindling planet, you see -- we see things happened. You know, if you go [inaudible] you see why I agree, you destruction that -- that time. We have [inaudible] stage out here, you know, atmosphere [inaudible] systems. And you talk about monitoring and what are you monitoring, you know, and this is passive, and you can [inaudible] the responses and hostility and we just want a resolution. We just want accountability, and we want [inaudible] that we still have there while [inaudible] and that's it. Thank you.</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Permitting Process NRS 445B, NAC 445B</p>
11/18/2021	Max Wilbert, Public Hearing	Permitting Process, Emissions	<p>So, I don't know if people already know this, but I learned that the first regulatory agency in the country was set up to regulate the railroads. And at the time the big railroad barons were very upset about it. They didn't want to be regulated. The Secretary of State at the time went to those railroad barons and reassured them and said, this is actually going to be a good thing for your business because we're going to create a stable, predictable investment client for your business. And I just want to point out that that's exactly what agencies like and the key function to do. They make it illegal for corporations to pollute and to release toxic substances into the [inaudible] to provide permits for this sort of behavior. That without a regulatory agency, the people might object to and prevent it from happening. Just because it has been that way in the past doesn't mean it has to continue being happen. I think agencies can change all the time. And I hope that this one does. Mr. Lovato, you said that it's not entirely true that your agency approves all permits. But my understanding is that you are legally required to approve permits that meet the criteria set out in the law. So, there's no moral function of your agency. You're purely a technical body, right? You're looking at numbers. And if the numbers say that it's acceptable to the least, this much poisonous material, and this many people are going to get sick this much land and air and water is going to get poisoned. We saw those numbers on there, the tons and tons and tons and tons of toxic substances that you're going to sign off on and make it legal for Tim Crowley here and his company to release into the environment and release into the community of any of these people. And I just want us to all be clear on exactly what has happened. You know, I think it's easy for people to say, look at other mines, they pollute even more like that somehow makes it okay to do it here, right. This is not a very complicated situation. And, you know, when it comes to these public comment periods, I'm always on the fence about whether it's even worth coming, whether it's even worth speaking out because so often it feels like our words just go into a black box and disappear, but I always end up coming anyway. And I don't know if that's naive, but I do know that our system is, is broken on these issues. It's completely broken. If it wasn't broken, we wouldn't have a climate crisis. We wouldn't have toxins in every mother's breast milk around the world. We wouldn't have Teflon as Gary mentioned in every single person's body. If regulation worked, then we wouldn't be having the sixth mass extinction crisis that we're living in right now. It's not working.</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p> <p>Emissions Modeling for the facility demonstrates that the proposed operation will be in compliance with the Nevada and National Ambient Air Quality Standards. The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six principal pollutants ("criteria" air pollutants) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.</p> <p>Hazardous (Toxic) Air Pollutants Additionally, the proposed operation will be compliance with regulations for hazardous (toxic) air pollutants. EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry. The Clean Air Act also requires EPA to review and revise the standards on a regular basis, if necessary, to account for improvements in air pollution controls and/or prevention.</p>	<p>Permitting Process NRS 445B, NAC 445B</p> <p>Emissions NRS 445B, NAC 445B</p> <p>Hazardous (Toxic) Air Pollutants NRS 445B, NAC 445B</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
11/18/2021	Karen Iqou, karenlienau@aol.com	General Comment	<p>To whom it may concern, Please leave Thacker Pass intact. The world must not extract any more from mother earth if we are to have any livable future. Not to mention the moral obligation to protect species living on this land. Please do all you can to protect this land and not let it be mined for batteries that can be made from hemp and/or sea water. Please take the long view of the 7 generations and make good choices for how we treat our planet that sustains life. sincerely, Karen Iqou New Castle, DE XR Delaware</p>	<p>Permitting Process The proposed NDEP decision for the air pollution control permit is solely based on air quality protection considerations, as required by Nevada Revised Statutes 445B and associated implementing regulations. Based on our review of the permit application, we have determined that the proposed permit conditions provide protection of air quality as required by Nevada laws and regulations.</p>	<p>Permitting Process NRS 445B, NAC 445B</p>
	Monitoring Considerations				



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
		Monitoring Considerations	<p>Permitting Process and Modeling The NDEP's Air Program requires every permit application to include an evaluation of the impact on air quality. For minor permit applications such as general permits (e.g., small crushing and screening operations) the evaluation is performed by NDEP based on a conservative set of likely facility and equipment designs and operational conditions. NDEP's air program is also required to provide the evaluation of impact on air quality for small-source permit applicants that fall below a specific threshold. For all other sources, minor and major, NDEP's carefully review the evaluation provide by the applicant to verify its consistency with federal and state policies and regulations, and ultimately compliance with the NAAQS, and if applicable, with the incremental deterioration standards (major stationary sources).</p> <p>An air pollution dispersion modeling is the critical component of any air quality impact evaluation. Air pollution dispersion models use peer-reviewed and scientifically accepted mathematical models to simulate the dispersion of the pollutants based on the specific emission rates, type and characteristic of the emission units, and atmospheric conditions. The result is a map of predicted concentrations in the areas surrounding the stationary source and accessible to the public (i.e., ambient air). Such concentration maps are used to assess the impact of the proposed emissions with respect to the air quality standards. EPA has developed models, rules, guidance and policy documents that help states and the regulate industry to account for and accurately predict the impact of proposed changes of stationary emission sources on air quality.</p> <p>Monitoring vs Modeling Indeed, there are clear and significant differences between air pollution dispersion modeling and air quality monitoring. The accuracy and applicability of the two approaches can vary significantly. For the monitoring, the instrumentation's accuracy relies on the quality and technology used to sample the pollutant, but also on the quality of the routine maintenance of the sensors itself (e.g., calibrations, accuracy checks, and overall maintenance of the equipment); EPA's approved regulatory monitors can be very accurate if maintenance is performed accordingly to manufacturer and EPA's specifications. Other types of sensors may display much lower accuracy and precision, often without a mechanism to verify the level of performance. However, regardless of the accuracy, a major limitation of air quality monitoring is that the spatial representativeness of the sample can be very limited, even under the best siting conditions. Air pollution dispersion, which mainly depends on atmospheric conditions and the type of pollutant, is extremely variable both a spatial and temporal scales. This variability makes the detection of, for instance, pollutant plumes from a stationary source, almost impossible to be accurately performed by using one, or even a multiple monitoring systems. Rather, air quality monitoring is better suited for those situations where the location itself carries the importance for monitoring. Another important shortcoming of the monitoring approach is the inability to discriminate among emitting sources. Pollution disperses and mixes in the atmosphere and what a monitoring sensor measures is most likely a combination of different sources. The addition of meteorological measurements can help locating the general direction of the pollutant plume, but in most of the cases, the attribution of a pollutant concentration measurement to a specific source can be only very speculative.</p> <p>The accuracy of air pollution dispersion modeling relies on the ability of the algorithms to reproduce the actual temporal and spatial dispersion of the pollutant, and in some cases, the ability to reproduce the chemical reactions once released in the atmosphere. All the models are affected by uncertainty, and modeling results should not be used without a proper assessment of the uncertainty and bias associated with the resulting concentrations. EPA approved regulatory choice of model is the air pollution dispersion model AERMOD, which is used to estimate the impact of new and existing sources of emissions within a range of approximately 30 miles. EPA maintains, routinely updates, and approves new versions of AERMOD for regulatory purposes, and all accessorial computational modules, only after rigorous verification of the algorithms and results, including potential biases. Likewise, EPA provides clear directions on how to use AERMOD for regulatory purposes, including the use of input parameters and alternative algorithms within the same model.</p> <p>AERMOD is the model that NDEP's Air Program uses during the permitting process. As per all air dispersion models, the results from AERMOD (i.e., pollutant concentrations) require careful analysis and interpretation. In particular, AERMOD has been shown to accurately predict the statistical distribution of possible air quality outcome (e.g., highest, lowest concentrations, etc.); in other words, AERMOD better performance is with assessing how air quality is impacted across the spatial and temporal domain of the model run, rather than exactly predicting where and when a given concentration will occur. This characteristic is very important because NAAQs are based on very similar principles; for instance, the primary 24-hour PM_{2.5} NAAQS can be exceeded if the 7th highest daily average over a year is higher than 35 ug/m³, regardless of when that happened.</p> <p><i>(continued on next page)</i></p>		<p>Permitting Process and Modeling 40 CFR Part 51, Appendix W</p>



DATE	FROM	TOPIC	QUESTION	DIVISION RESPONSE	PERMIT SECTION/ REGULATORY CITATION
	Monitoring Considerations			<p>There are other aspects of modeling that make this approach better suited to assess the impact of a modified or new source of air quality: as mentioned already, the modeling spatial representativeness is much larger than any individual monitoring station; AERMOD can model several pollutants in one simulation; several months or years of weather conditions can be simulated in few hours, providing a wide range of atmospheric conditions for the assessment of pollution dispersion and ground concentrations. The most critical aspect of modeling, however, is the fact that the model (AERMOD) can be set to simulate conservative conditions for the source emissions. NDEP's Air Program uses the max allowed emission rates for every single emission unit when running AERMOD. These are operational conditions that not always occur in reality, and when they actually do, atmospheric conditions may not be conducive to a significant air quality impact (i.e., good pollution dispersion may counter act the effect of higher emissions). But by choosing to run always the highest emission possible over all weather conditions, the model results are bound to include the 'worst case scenario', that is, when high emission rates occur during very poor pollution dispersion conditions.</p> <p>Lithium Nevada (LNC) has communicated to NDEP that the company plans to review options for ambient air quality monitoring with the Thacker Pass Concerned Citizens and Fort McDermitt Paiute Shoshone Tribe. LNC has indicated it will work with the local communities to identify the most appropriate monitoring location(s) and system. Although NDEP will not be requiring any ambient air quality monitoring as part of the permit for the reasons reviewed above, NDEP would plan to participate in these discussions between the company, the community, and Tribal representatives. NDEP has experience selecting air monitoring locations across the state and has experience operating different types of air monitoring equipment and can offer a technical perspective to these discussions. LNC has indicated they plan to organize a series of discussions in 2022 and prior to facility startup operations. NDEP looks forward to further interactions with community and Tribal representatives on this topic.</p>	