

EXHIBIT 14

NDEP Closure Technical Comments



27 October 2021

Mr. Ted Grandy
VP Legal and Regulatory Affairs
Lithium Nevada
5310 Kietzke Lane, Suite 200
Reno NV 89511

VIA EMAIL ONLY

**Re: *CLOSURE Technical Comments 3 for New Water Pollution Control Permit Application
Thacker Pass Project
Water Pollution Control Permit (WPCP) NEV2020104***

Dear Mr. Grandy:

The State of Nevada Division of Environmental Protection – Bureau of Mining Regulation and Reclamation (the Division) has completed its technical review of the Water Pollution Control Permit Application for the Thacker Pass Project. The application is dated 2 April 2020 and was received by the Division on 3 April 2020. The Division provided technical comments on 9 September 2021 and on 25 October 2021 and received technical responses on 24 September 2021 and 26 October 2021, as Addendum 1, respectively.

This letter is to advise Lithium Nevada Company (LNC) on the acceptance if additional information is needed based on the technical response received.

Comments relating to closure are addressed below. The original comments are below in **Blue** and the Division's response to LNC's comments is in **blue italics**.

Division Acceptance or Concerns on Closure Technical Responses Received 24 September 2021

Tentative Plan for Permanent Closure

22. NDEP-BMRR Question: Pages 2 & 3, Section 2.1 – For each extraction and recovery process in which it is stated that remaining solids will be conveyed to the CTFS, specify where in the tailings impoundment each will be placed, i.e. structural or non-structural zone.

LNC Response: Pages 2 and 3 of the TPPC have been updated to specify whether materials are sent to the structural or non-structural zone of the CTFS. A summary table is provided below.

Table 1: Material Composition of CTFS Structural Zone

	Structural Zone	Non-structural zone
Un-Leached Clay Solids	✓	✓
Neutralization Solids	✓	✓
Magnesium Sulfate Salt	⊗	✓
Sodium/Potassium Salt	⊗	✓

The un-leached clay solids (clay solids) and neutralization solids will be combined in the process plant and conveyed to the CTFS. The combined material are ‘clay tailings’. The magnesium sulfate salt and the sodium/potassium salt will be combined in the process plant and conveyed to the CTFS. The combined material are ‘salts’. Clay tailings will be placed in both the structural zone and non-structural zone. Salts will be placed in the non-structural zone. Material placed in the structural zone has a higher compaction requirement and tighter moisture requirement than the non-structural zone as defined in the Earthworks Technical Specifications provided in Attachment 6. **Response accepted.**

23. *NDEP-BMRR Question: Page 5 – paragraph 3, sentence 3 – Relative to the CTFS USM, which sample in Table 1 is represents the blended co-mingled material? Which zone will the co-mingled material be placed?*

LNC Response: The “Blended Tailings” sample represents the blended co-mingled material. This includes a blend of clay tailings, neutralization solids, and sulfate salts. The co-mingled material will be placed in the non-structural zone. **Response accepted.**

24. *NDEP-BMRR Question: Page 6, bullet 2 – Please move this item below the list of approved/certified analyses and clarify that the multi-element analysis is not performed by a Nevada-certified or approved laboratory. This data is considered supplementary.*

LNC Response: This item has been removed as a bulleted item and the wording has been adjusted to state the multi-element analysis is considered supplementary and was not performed by a Nevada-certified or approved laboratory. The updated TPPC is included in Attachment 7. **Response accepted.**

25. *NDEP-BMRR Question: Page 8, Section 3.2, reference to Table 3.4 – the Division suggests that “Radioactive Summary” be renamed to “Radiological Summary” for all occurrences throughout the document.*

LNC Response: “Radioactive Summary” has been changed to “Radiological Summary” for all occurrences in the TPPC document. The updated TPPC is included in Attachment 7. **Response accepted.**

26. *NDEP-BMRR Question: Page 10, Table 3.3 – Although only recently required per the 2021 NAG procedure revision/update, the Division requests that the NAG results,*

reported as kg H₂SO₄ eq/t, be converted to a CaCO₃ equivalent as provided in the method – this will allow for a more direct correlation to ABA data.

LNC Response: Table 3-3 has been updated to include a CaCO₃ equivalent per the 2021 NAG procedure. The updated TPPC is included in Attachment 7. **Response accepted.**

27. NDEP-BMRR Question: Page 16 – General comment – As stated, radioactive (radiological) constituents have been detected as occurring naturally in the background groundwater, the Division suggests that LNC provide this data to represent the naturally Occurring Radioactive Materials (NORM) present at the site to allow for a comparison and development of background water quality for the Thacker Pass site.

LNC Response: The tables showing the average values for radiological constituents occurring naturally in the background groundwater is included in Attachment 8. **Response accepted.**

28. NDEP-BMRR Question: Page 17, Section 3.2.2 – Why only a single-lined pond for the CGS sediment pond?

LNC Response: Under NAC 445A.435, “Ponds which are primarily designed to contain excess quantities of process fluids that result from storm events for limited periods may be constructed with a single liner if approved by the Department.” The primary purpose of the Coarse Gangue Stockpile (CGS) Sediment Pond is to contain sediment generated from stormwater runoff from the CGS. Coarse gangue is not treated with process chemicals, so a double lined pond is not required. Following storm events, the CGS Sediment Pond water will be evacuated within 20 days. **Response accepted.**

29. NDEP-BMRR Question: Page 18, Paragraph 3 – BMRR does not utilize perimeter compliance points per se. (assumed to be specific project boundary compliance points). Please eliminate this terminology or formally propose this as part of the Permit. Explain what is meant by ‘perimeter compliance points’.

LNC Response: “Perimeter compliance points” has been changed to “downgradient monitoring locations” within the TPPC document. This is a generic term used to refer to the monitoring locations downgradient from facilities as outlined in the Piteau Report, “Piteau Thacker Pass Project Water Quantity and Quality Impacts Report” from the References section of the TPPC. The updated TPPC is included in Attachment 7. **Response accepted.**

30. NDEP-BMRR Question: Page 21, Section 4.2, Page 22 Section 4.4 and Page 23, Section 4.6 – Please provide a compaction specification for the LHSCL base layer. If the sediment collection pond is anticipated to be required for closure, the Division recommends the pond be initially constructed as a double-lined leak-detected pond.

LNC Response: The compaction specification for the LHCSL is provided in the Earthworks Technical Specification, 01-0385-000-SP-EW-3, in Attachment 6. From page 23 of the technical specification: LHCSL is to be placed in two six (6) inch thick compacted lifts to form a minimum twelve (12) inch thick compacted layer. Each lift shall be compacted to a minimum of ninety-five (95) percent of maximum dry density (as determined by ASTM D1557) and moisture content between two percent below optimum moisture content and three percent above optimum moisture content as determined by ASTM D1557 unless otherwise approved by the Engineer. The permeability shall be no greater than 1×10^{-6} cm/sec as determined by ASTM D5084. Please refer to the technical specification for more information.

Sections 4.2, 4.4, and 4.6 state that at closure, “The pond area will be backfilled to promote positive drainage into the natural drainages and covered with growth media and seeded.” The only pond that will be required at closure is Reclaim Pond #1 for the CTFS, which is a double-lined leak-detected pond that will be converted into an ET Cell at closure as stated in Section 3.2.3, paragraph 4. A summary of the ponds at the Thacker Pass project is provided in Table 2:

Table 2 – Thacker Pass Pond Summary

Pond	Upgradient Facility	Purpose	Liner	Closure
West WRSF Sediment Pond	West WRSF	Sediment and temporary stormwater storage	Single, HDPE	Cut liner and backfill
East WRSF Sediment Pond	East WRSF	Sediment and temporary stormwater storage	Single, HDPE	Cut liner and backfill
CGS Pond	CGS	Sediment and temporary stormwater storage	Single, HDPE	Cut liner and backfill
Facility Sediment Pond #1	Mine Shop/Office Facility	Sediment and stormwater storage	Unlined	Backfill
Facility Sediment Pond #2	ROM Stockpile	Sediment and temporary stormwater storage	Single, HDPE	Cut liner and backfill
Mine Sediment Pond #1	Natural drainage	Sediment and stormwater storage	Unlined	Backfill
Process Plant Sediment Pond	Natural and man-made drainages	Sediment and stormwater storage	Unlined	Backfill
Reclaim Pond #1	CTFS	Sediment and temporary stormwater storage and long-term meteoric infiltration for CTFS	Double, HDPE	Converted to an ET Cell

Response accepted.

31. NDEP-BMRR Question: Page 22, Sections 4.2, 4.3, 4.4, 4.6 – In what portion of the CTFS will the sediments be placed?

LNC Response: The sediments can be placed in the structural or non-structural areas of the CTFS. The material shall be placed in accordance with the Earthworks Technical Specifications for the project which are included in Attachment 6. The structural zone and non-structural zone have different placement requirements. ***Response accepted.***

32. NDEP-BMRR Question: Section 4.7 – General – For each of the process tanks, what amount of product/slurry is anticipated to remain at closure prior to final closure and removal of each unit?

LNC Response: It is estimated that there will be 2 feet of product/slurry (sediments) at the bottom of each tank that will be removed prior to rinsing and dismantling of the process tanks. The total volume is calculated to be approximately 3,900 cubic yards and is presented in Attachment 9. ***Response accepted.***

33. NDEP-BMRR Question: Section 4.8 – How will compaction of the CTFS material be accomplished?

LNC Response: The CTFS material will be compacted to specified percent relative compaction based on the modified Proctor. The materials will not be compacted to a specific permeability value. The permeability of the filtered clay tailings is low because the material is a fine-grained clay and the reported permeability values are based on material characterization tests performed on representative tailings samples. ***Response accepted.***

And what QA/QC is planned to verify that the compaction specification is being achieved?

LNC Response: The CTFS material will be hauled from the temporary stockpile location in the SW corner of the CTFS and placed in one-foot-thick layers on the CTFS in the structural or non-structural zone depending on the type of material. The moisture content of the material will be reduced if needed by scarifying and processing with mechanical equipment allowing the material to air dry. Once the material is dried to an acceptable moisture range to achieve the necessary compaction requirement then the material will be compacted using a mechanical compactor or routing haul traffic over the area or equivalent equipment. The entity responsible for hauling and placing the filtered materials will select compaction equipment that is suitable for the materials involved. Adequate compaction will be verified by QA/QC testing and the requirements are provided in the Earthworks Technical Specifications included in Attachment 6 and are as follows.

Structural Tailings shall be placed in the areas shown on the Drawings and free of organic and other deleterious material, in twelve (12) -inch loose lifts or as determined to be acceptable by the Engineer after testing trials are completed at the start of operations. This material shall be moisture conditioned as needed to within acceptable moisture content to achieve ninety-five (95) percent of the maximum dry density as determined by ASTM D1557. The target moisture content range is within six percent of optimum moisture content however variations from the specified moisture range may be acceptable if relative compaction values are achieved and subject to acceptance by the Engineer. If oversize materials are encountered during fill placement, the Engineer should be consulted on oversize placement methodology.

The fill material shall be compacted with equipment capable of achieving compaction through the full thickness of the lift layer. Placement shall be performed in such a manner as to minimize rutting, pumping or exhibiting excessive deflection during compaction under haul traffic loading in the opinion of the Engineer. If the surface exhibits excessive deflection, the material in the area of question may require stabilization using a combination of moisture reduction through active drying and re-compaction, selective placement of rocky material and re-compaction, or other means of stabilization. The testing frequencies for the structural tailings are below.

More CQA information is included in the Earthworks Technical Specifications.

Table 3. Test Frequency – Structural Tailings

Test	Type of Test	Frequency (one per)
R1	Atterberg Limits	1 per week/ 60,000 cy
R2	Moisture Content	per nuclear density requirements
R3	Particle Size Distribution	1 per week/ 60,000 cy
R4	Laboratory Compaction	1 per week/ 60,000 cy
R5a	Nuclear Density	1 per lift/ 1 per day of placement/ 5,000 cy
Note: Required number of tests shall be determined by whichever method of determining the frequency requires the most tests.		

Non-Structural Tailings shall be placed in the areas shown on the Drawings and free of organic and other deleterious material, in twelve (12)-inch loose lifts or as determined to be acceptable by the Engineer after testing trials are completed at the start of operations. This material shall be air dried if needed and compacted to approximately 85 percent of the maximum dry density as determined by ASTM D1557 unless otherwise approved by the Engineer. The target moisture content range is within twelve percent of optimum moisture content however slight variations from the specified moisture range may be acceptable subject to acceptance by the Engineer and provided the required compacted densities are achieved.

The fill material shall be compacted with equipment capable of achieving compaction through the full thickness of the lift layer. The testing frequency of the non-structural tailings is below.

More CQA information is included in the Earthworks Technical Specifications.

Table 4. Test Frequency – Non-Structural Tailings

Test	Type of Test	Frequency (one per)
R1	Atterberg Limits	1 per week/ 60,000 cy
R2	Moisture Content	per nuclear density requirements
R3	Particle Size Distribution	1 per week/ 60,000 cy
R4	Laboratory Compaction	1 per week/ 60,000 cy
R5a	Nuclear Density	1 per lift/ 1 per day of placement/ 5,000 cy
Note: Required number of tests shall be determined by whichever method of determining the frequency requires the most tests.		

Response accepted.

What, if any, is the allowable variation from the proposed 1.2×10^{-6} cm/sec compaction that will maintain close to zero infiltration?

LNC Response: Piteau completed a sensitivity analysis titled: Piteau Associates USA Ltd., 2021. Technical Memorandum (TM 21-01) Clay Tailing Filter Stack (CTFS) Unsaturated Flow Modeling Revision 1. Prepared by Tyler Cluff, Piteau Associates USA Ltd., dated January 26, 2021. Revised September 21, 2021.

According to Piteau (Piteau, 2021) using a permeability (K) value that is two orders of magnitude higher than base case (Base case = 1.2×10^{-6} cm/s, versus alternative = 1.2×10^{-4} cm/s). The resulting seepage rate increased from 0.01 percent Mean Annual Precipitation (MAP) to 0.46 percent MAP as shown as follows.

Table 5. Average Seepage Rate

Simulation / Sensitivity	Cumulative 1D Seepage (m)	Average Seepage rate (in/yr)	Average Seepage rate (% MAP)	Facility Seepage rate (gpm)
Base Case	0.02	0.001	0.01%	0.02
Alternate Clay Tailings	1.0	0.056	0.46%	1.12
No Transpiration	2.2	0.121	0.99%	2.42
Reduced Evaporation	0.14	0.008	0.06%	0.15
12-inch Cover	0.68	0.038	0.31%	0.76
Cover Only	13.6	0.76	6.26%	15.2
Precipitation x 2 ¹	11.3	0.64	5.22%	12.7

¹Sensitivity meant to represent, among other properties, north facing slopes with greater precipitation and/or snow drifts.

Piteau completed another sensitivity analysis assuming there was only two feet of cover material over the CTFS without any material underneath it (Piteau, 2021). The lower boundary was simulated using a deep drainage boundary condition, meaning that the lower boundary simulated the same water content and unsaturated hydraulic conductivity to permit pore water to drain from the lower boundary. Under this configuration, a maximum seepage rate of 6.26 percent MAP occurred, which resulted in a facility wide seepage rate of 15 gpm over a 16.6 million square foot (Msf) area (edge of CTFS liner). The CTFS Reclaim Pond at final closure was designed to handle a conservative 15 gpm draindown. The CTFS Reclaim Pond ET-Cell is sized to handle all reasonable sensitivity scenarios that could occur during closure.

This last sensitivity of only the cover itself is a conservative overestimate of seepage. In reality, the presence of any underlying materials will constrain the infiltration rate below the cover. Fine-grained materials, such as the clay tailings, have a very low saturated hydraulic conductivity which will cause increased water content at the boundary between materials seasonally, until transpiration removes water from the cover. Coarse-grained materials will form a Richard's barrier (low unsaturated hydraulic conductivity) at the transition of the cover until sufficient water content is reached to permit percolation. This allows transpiration to consume much of the seasonal wetting front before infiltration migrates into underlying material.

As explained above and in the Piteau technical memo (Attachment 10) the greater the thickness of tailings, and the lower the permeability of the tailings, the less seepage will occur through the facility. **Response accepted.**

34. *NDEP-BMRR Question: Page 26 – Drawing A100 of the Engineering Design Report (Appendix J of the WPCP) describes the CTFS as being designed with two zones: the structural, which consists of clay tailings and neutralized clay tailings, and the non-structural zone which consists of clay tailings and sulfate salts. Infiltration and closure of the non-structural zone is not discussed in the TPPC. Aside from the differing material composition between the two zones, material in the structural zone must meet a moisture requirement and is compacted to 95% maximum dry density in accordance with ASTM D1557 during operations, whereas the non-structural zone has less requirements and will be compacted to 85%. Provide a more detailed description of the operational design of the CTFS, i.e. how the non-structural zone relates to the structural zone. Please provide closure details for the non-structural zone to include short-term and long-term draindown solution management, draindown chemistry, specific to the presence of radiological constituents, if applicable.*

LNC Response: The structural zone of dense tailings is required to provide a zone with higher shear strength to provide a stable platform for the non-structural tailings placed upgradient of the structural zone. The design provides for operational flexibility for the placement of the salts and higher moisture content clay tailings in the non-structural zone. Typically, the structural tailings would be placed during the warmer and drier times of the year when air drying will be effective, and the non-structural tailings and salts are placed as needed and during the colder and wetter times of the year when

moisture reduction may be difficult. The non-structural zone allows for materials with higher moisture contents and lower compaction since it is supported by the stronger structural zone. A chimney drain separates the two zones. The chimney drain provides a vertical drain for potential seepage to drain to the overliner layer at the base of the stack. See responses to Questions 22 and 33 for further information.

A vegetated cover will be placed over the materials in the structural and non-structural zones in the CTFS and near zero infiltration will occur due to the low permeability of the underlying tailings material and the evapotranspiration of the vegetated cover as described in Attachment 10. The entire facility is within geomembrane-lined containment and any infiltration that does occur will be collected and evaporated through the ET-Cell. The Foxfire Radiological Evaluation for Proposed Lithium Nevada Thacker Pass Project Report stated that six inches of cover is all that would be needed to provide adequate buffer should any radiological constituents be disturbed at the site. The CTFS will have two feet of cover, which is more than adequate for the cover of radiological constituents.

At the time of closure, both the structural and non-structural zones of the CTFS will be covered with one foot of coarse-grained soils overlain by one foot of growth media. The growth media will then be seeded with a mixture of native grasses, forbs and shrubs. Most of the water will be taken up by the vegetated cover, and any water that seeps through the cover and CTFS will flow to Reclaim Pond #1, which will have been converted into an ET-cell. The closure detail as well as the ET-cell detail has been added is provided in Attachment 12. Meteoric water that infiltrates through the CTFS will be fully contained in the lined ET-cell. *Response accepted.*

35. NDEP-BMRR Question: Drawing 08, Revision C- Please update as necessary to indicate the structural versus non-structural area of the CTFS.

LNC Response: Figure 08 has been updated and is included in Attachment 12. *Response accepted.*

CTFS Unsaturated Model (USM)

36. NDEP-BMRR Question: Revision 01 of the TPPC did not include the 26 January 2021 Piteau Associates Technical Memorandum entitled “Clay Tailing Filter Stack (CTFS) Unsaturated Flow Modeling (USM).” Following any comments or request provided below, please resubmit a revised CTFS USM, as appropriate.

LNC Response: The revised technical memorandum is included in Attachment 10 and in Appendix D of the TPPC. *Response accepted.*

37. NDEP-BMRR Question: CTFS USM comments – Although the USM included a sensitivity analysis using a hydraulic conductivity of 1.2×10^{-4} cm/sec for “Alternate

clay tailings”, no details regarding the non-structural zone of the CTFS is provided. Specifically, what will be the seepage/draindown rate for this material?.

Although the Division agrees that the structural zone (dry-stacked tailings) of the CTFS, having a hydraulic conductivity of 8.3×10^{-7} cm/sec, based on sample ID 4-LFILTCAKE_E05B-315, will have very little, if any seepage, the non-structural zone represents off-spec tailings materials and salts (?) with varying moisture content.

LNC Response: Overall, the permeability of the structural and non-structural CTFS materials will be dominated by ‘clay tailings’ and the respective permeability of these materials will be very low and in the 10^{-6} to 10^{-7} cm/sec or less range. The structural zone will consist of clay tailings and the non-structural tailings will consist of a both clay tailings and salts. A permeability test was completed on a composite/blend of clay tailings and salts and resulted in a permeability of 1.2×10^{-7} cm/sec when compacted to approximately 90 percent relative compaction and a moisture content 7.5 percent above optimum as determined by the modified Proctor test (ASTM D1557).

The lab test report is provided in Attachment 11. The permeability of the clay tailings material without salt (structural zone) had a permeability of 4.1×10^{-7} cm/sec when compacted to approximately 90 percent relative compaction and a moisture content at optimum as determined by the modified Proctor test (ASTM D1557). For meteoric seepage water modeling purposes Piteau assumed a faster permeability rate of 1.2×10^{-6} cm/sec for the entire stack which yielded a higher infiltration rate through the stack. The draindown rate for this material will be less than 0.02gpm. This is presented in the technical memo provided in Attachment 10. In the short term, underdrainage will be managed by pumping fluids collected in the CTFS Reclaim Pond #1 back to the process plant as needed. In the long term, the Reclaim Pond will be converted into an ET-cell to allow evapotranspiration of underdrain flow and the CTFS will be reclaimed with cover material and growth media and seeded for vegetation to be reestablished.
Response accepted.

38. NDEP-BMRR Question: Page 2 – Table 1 – Please provide specifics of the sample ID.s. What part of the process does each sample represent?

LNC Response: A description of the sample IDs and the process each represent is presented as follows.

- The 4-LFILTCAKE is the filter cake after acid leaching of the clay ore slurry and filtration.
- 4381-Blend is a blended sample of the clay solids and the neutralization solids which is the material from the acid leaching process and the pH neutralization and filtration process before being placed onto the clay tailings conveyor.
- 19-036-01 is a sample of the filter cake after acid leaching of the clay ore slurry and filtration

- 19-057-02C is a sample of the filter cake and salts blended at a ratio of 81.4% clay tailings and 18.6% salt as measured by dry weight which is the same ratio that is being produced in the process plant.

Response accepted.

39. NDEP-BMRR Question: Page 4 – Results – What, if any, are the impacts to vegetation uptake if the roots enter the compacted tailings material? Based on the data from MWMP characterization and the compaction specifications, is root contact or uptake of constituents possible?

LNC Response: The vegetative roots are not expected to penetrate deep into compacted tailings material. The penetration of moisture through the upper clay tailings is limited by the material's low hydraulic conductivity. Vegetative roots are likely to stay within the looser, more productive, better quality, 24-inch cover/growth medium material, where water would be absorbed by the plant, as described and referenced in Attachment 10.

The proposed reclamation seed mix (Table 6-2, Plan of Operations) was developed for the Project location through coordination with the University of Nevada, Reno. The seed mix is especially adapted for the Project site's clay soils. The mix is based on known soil and climatic conditions and was selected to establish a plant community that will support the post-mining land use. The mix is designed to provide species that can exist in the environment of northwestern Nevada, are proven to be robust species for revegetation, or are native species found in the plant communities prior to disturbance.

The uptake of constituents in the tailings through the roots is unlikely. As noted above, the roots are not expected to significantly penetrate into the clay tailings. The roots are expected to be concentrated in the more productive, better quality, 24-inch growth media and coarse-grained cover material zone.

Site reclamation will be performed per the Reclamation Plan (Chapter 6, Plan of Operations), in accordance with 43 CFR 3809 regulations, and per the BLM's Solid Minerals Reclamation Handbook, BLM Manual Handbook H-3042-1. ***Response accepted.***

40. NDEP-BMRR Question: Page 5 – Conclusions – Does the cover design and modeled precipitation account for snow drifting on north-facing areas?

LNC Response: Piteau completed a very conservative sensitivity analysis assuming double the precipitation over the entire CTFS to simulate snow drifting on north facing slopes which resulted in 5.2% MAP or 12.7gpm seepage rate. Even with double the precipitation for an entire year, the seepage flow rate is less than the 15 gpm that the ET Cell can handle. The model conservatively did not take into account increased vegetation from increased precipitation which would result in greater

evapotranspiration so the value would be reduced even further. This analysis is further described in Attachment 10. **Response accepted.**

41. NDEP-BMRR Question: Additional comment - Page 55 of the PoO/rec plan states, “Concurrent with construction of each lift (one foot), a layer of waste rock material may be placed over the top of the clay tailings to provide a trafficable surface for relocating and operating conveyors. The material will likely be sourced from the pit, delivered using haul trucks, and spread using a bulldozer”. Please clarify if these waste rock layers will have any effect on the hydraulic conductivity or has a potential to increase the seepage potential of the dry stack tailings material.

LNC Response: The text on the PoO page 55 (now page 56 and 57) has been updated to state, “LNC expects to place the clay tailings in lifts approximately one-foot thick so that no major re-grading is required; lift height may be adjusted as determined to be suitable based on engineering test-work completed at the start of operations. Concurrent with construction of each lift, a layer of waste rock material may be placed in select areas (roadways/travel lanes) on the clay tailings to provide a trafficable surface for relocating and operating vehicles and conveyors. The thickness of the waste rock layer, if applied, will depend on the quality of the materials, the maximum particle size, and the construction equipment used, but typically it will be approximately one foot thick. The waste should be considered a contingency and will be placed on an as needed basis to provide a working surface for vehicles and conveyors. The material will likely be sourced from the pit, delivered using haul trucks, and spread using a bulldozer.”

NewFields has not included waste rock road layers in the stability model since it is unknown if it will be needed. A conservative approach was used for stability modeling which assumes no waste rock was placed within the stack. Any waste rock placed within the tailings stack will add some nominal strength to the material. Any waste rock placed within the tailings stack will not impact the meteoric water infiltration since the waste rock will be sandwiched between layers of low permeability compacted tailings. The overall vertical permeability of the stack will not be impacted by isolated roadways of rock. **Response accepted.**

Addendum 1 to 24 September 2021 Response to Technical Comment

NDEP-BMRR comment - Provide further explanation of how American Standards of Testing and Materials (ASTM) Testing Standard D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³)) is related to ASTM Standard D5084 - Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter.

LNC Response: The ASTM D1557 testing standard provides detailed steps to determine the maximum dry density and optimum moisture content of a soil and results in the relationship of density change with the removal or addition of water for a specific

compaction energy. This relationship is known as the modified Proctor curve. The technical specifications for compaction and acceptance criteria for earthen materials are based on a percentage of the maximum dry density and a moisture content range as determined from ASTM D1557. For example, a typical compaction specification will read: Compaction of common fill shall be to a minimum of ninety-five (95) percent of ASTM D1557 maximum dry density. The moisture content during compaction shall be maintained within the limits of two (2) percent below to three (3) percent above optimum moisture content as determined in accordance with ASTM D1557.

The Proctor curve in conjunction with CQA testing allows for the pass/fail criteria in the field for control of mass earthworks.

ASTM D5084 uses a flexible wall permeameter (triaxial cell) to measure the hydraulic conductivity (permeability) of remolded or intact specimens. For the case of the clay tailings, the specified compaction requirements were used in conjunction with the modified Proctor results to remold samples of material for subsequent permeability testing (ASTM D5084). This result gives an indication of what the permeability of the compacted fill material (filtered clay tailings in this case) will be in-place when compacted to meet the specifications.

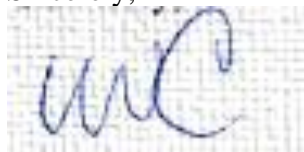
The ASTM D5084 test takes several days to a week to complete and is performed in a laboratory. ASTM D1557 is routinely performed in field laboratories and in conjunction with ASTM D6938 - Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) CQA can readily determine whether compaction criteria (technical specifications) are being achieved in the field. The correlation between in-place moisture content and density from the permeability testing (ASTM D5084), allows for assurance the permeability will be in the expected range. *Response accepted.*

Division determination

Following review and acceptance of LNC comments by the Closure Branch, the Division approves Revision 02 of the TPPC.

The Division is appreciative of cooperation extended by the LNC technical and environmental staff. If you have any questions regarding this matter or if I can be of any other assistance, please call me at (775) 687-9407 or via e-mail at kmccrea@ndep.nv.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'KMC', is written over a grid background.

Karl W. McCrea, CEM
Supervisor, Closure Branch
Bureau of Mining Regulation
and Reclamation

Ec: Aimee Keys, Bureau Chief, NDEP-BMRR
Rob Kuczynski, P.E., Supervisor, Regulation Branch, NDEP-BMRR
Michelle Griffin, Permit Writer, Regulation Branch, NDEP-BMRR
Rachel Burnham, Compliance Inspector, Regulation Branch, NDEP-BMRR
Todd Suessmith, Reclamation Branch, NDEP-BMRR
Amanda Tate, Closure Branch, NDEP-BMRR
Ken Loda, BLM, Winnemucca Office
John Follette, Supervisor, NV Radiation Control, Nevada Division of Public and Behavioral Health