



**COUNTY OR MUNICIPALITY
APPROVAL FOR
SURFACE MINING
(Form SM-6)**

NAME OF COMPANY OR INDIVIDUAL APPLICANT(S) Same as name of the exploration permit holder. <i>(Type or print in ink.)</i> L Rock Industries	TOTAL ACREAGE AND DEPTH OF PERMIT AREA (Include all acreage to be disturbed by mining, setbacks, and buffers, and associated activities during the life of the mine.) <i>(See SM-8A.)</i> Total area permitted will be <u>59.95</u> acres Maximum vertical depth below pre-mining topographic grade is <u>50</u> feet Maximum depth of excavated mine floor is <u>30</u> feet relative to mean sea level
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MAILING ADDRESS 1902 E State Route 4 Cathlamet, WA 98612 Telephone	COUNTY <u>Lewis County</u> No attachments will be accepted. Legal description of permit area: <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>1/4</th> <th>1/4</th> <th>Section</th> <th>Township</th> <th>Range</th> </tr> </thead> <tbody> <tr> <td>SE</td> <td>SE</td> <td>27</td> <td>11N</td> <td>02W</td> </tr> <tr> <td>SW</td> <td>SW</td> <td>26</td> <td>11N</td> <td>02W</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	1/4	1/4	Section	Township	Range	SE	SE	27	11N	02W	SW	SW	26	11N	02W															
1/4	1/4	Section	Township	Range																											
SE	SE	27	11N	02W																											
SW	SW	26	11N	02W																											

Proposed subsequent use of site upon completion of reclamation

Reclaimed site will be pasture land with pond as shown on sheet FR1.

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March 21, 2023
Washington Geological Survey

Signature of company representative or individual applicant(s) 	Name and title of company representative <i>(please print)</i> Ryan Moore, PE Principal, Vector Engineering Inc	Date signed 11.15.22
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TO BE COMPLETED BY THE APPROPRIATE COUNTY OR MUNICIPALITY:

Please answer the following questions 'yes' or 'no'.

1. Has the proposed surface mine been approved under local zoning and land-use regulations? <small>Pre-existing land use established prior to zoning</small>	Yes	No
2. Is the proposed subsequent use of the land after reclamation consistent with the local land-use plan/designation?	X	

When complete, return this form to the Department of Natural Resources.

Name of planning director or administrative official <i>(please print)</i> Lee Napier	Address
Signature 	
Title <i>(please print)</i> Director	

Telephone 360.740.2606	Date 3-10-2023	FOR DEPARTMENT USE ONLY:	DNR Reclamation Permit No. 70-012730
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WASHINGTON STATE DEPT OF
**NATURAL
RESOURCES**

**APPLICATION FOR
RECLAMATION PERMIT AND PLAN
(Form SM-8A)**

Check appropriate box(es): new permit revision of existing permit transfer of permit expansion

NOTE: Do not attempt to complete this form until you have carefully read "Instructions for Form SM-8A".

1. NAME OF APPLICANT/PERMIT HOLDER(S) John Bredfield DBA L Rock Industries, Inc.			
2. MAILING ADDRESS PO Box 850, Castle Rock, WA 98611			
3. Telephone		Email johnbredfield@gmail.com	
4. NAME OF MINE L Rock Pit			
5. Street address and milepost of surface mine 451 Mandy Road			
6. Distance (miles) 2.3	7. Direction from East	8. Nearest community Vader, WA	
9. COUNTY Lewis No attachments will be accepted. Legal Description of permit area:			
1/4	Section	Township	Range
SE	27	11N	2W
SW	26	11N	2W
10. Do you or any person, partnership, or corporation associated with you now hold, or have you held, a surface mining operating or reclamation permit? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no If you answered yes to the above, please list: 70-012730			
11. Are all of these mines now in compliance with RCW 78.44, WAC 332-18, and conditions of the permits? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Have you ever had a surface mine operating or reclamation permit revoked? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Have you ever had a reclamation security forfeited? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no If you answered yes to either of the above, give permit number(s): 70-012730			

12. TOTAL ACREAGE OF PERMIT AREA APPLIED FOR: (Include all acreage to be permitted. See Form SM-6.) 57.4 acres	
13. Total disturbed acreage (Include all acreage to be disturbed by mining and reclamation during the life of the mine.) Total area to be disturbed: 48 acres. Area to be disturbed in next 36 months: 24 acres.	
14. Maximum vertical depth (thickness) mined below pre-mining topographic grade will be 50 feet.	
15. Lowest elevation of excavated mine will be 30 feet relative to mean sea level. Highest elevation of excavated mine will be 80 feet relative to mean sea level.	
16. Type of proposed or existing mine: <input checked="" type="checkbox"/> pit <input type="checkbox"/> quarry	
17. Material(s) to be mined: <input checked="" type="checkbox"/> sand and gravel <input type="checkbox"/> rock or stone <input type="checkbox"/> clay <input type="checkbox"/> metal <input type="checkbox"/> limestone <input type="checkbox"/> silica <input type="checkbox"/> other _____	
18. Deposit type: <input type="checkbox"/> glacial <input checked="" type="checkbox"/> river floodplain (alluvial) <input type="checkbox"/> river channel deposits <input type="checkbox"/> talus <input type="checkbox"/> bedrock <input type="checkbox"/> lode <input type="checkbox"/> other _____	
19. Expected start date of mining: Ongoing	20. Estimated number of years: 10 additional
21. Total quantity to be mined over life of mine (estimated): 2.45 MM <input checked="" type="checkbox"/> tons or <input type="checkbox"/> cu yds	22. Estimated annual production: 250,000 <input checked="" type="checkbox"/> tons or <input type="checkbox"/> cu yds
23. Subsequent land use: <input type="checkbox"/> industrial <input type="checkbox"/> commercial <input type="checkbox"/> residential <input checked="" type="checkbox"/> agricultural <input type="checkbox"/> forestry <input checked="" type="checkbox"/> wetlands and lakes <input type="checkbox"/> other	
County or Municipality Approval for Surface Mining (Form SM-6) attached? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	
24. Reclaimed elevation of floor of mine: 30 feet relative to mean sea level Reclaimed elevation is shown on cross sections? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	
25. SEPA Checklist required? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	
26. Application fee for a new reclamation permit is herewith attached? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	

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APPLICATION FOR RECLAMATION PERMIT AND PLAN

22. SEGMENTAL RECLAMATION		
Permit area has been divided into segments for mining and a mining schedule has been developed?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
If no, explain:		
Permit area has been divided into segments for reclamation and a reclamation schedule has been developed?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
If no, explain:		
23. SITE PREPARATION		
23A. Saving Topsoil, Subsoil, and Overburden for Reclamation		
Thickness of topsoil is <u>1</u> feet	Thickness of subsoil is <u>6-12</u> feet	Depth to bedrock is <u>Unknown</u> feet
Total volume of topsoil is <u>30,657</u> cubic yards	Total volume of subsoil is <u>183,942</u> cubic yards	
Volume of stored topsoil/subsoil is <u>20,00</u> cubic yards and will require <u>5</u> acres for storage.		
Storage areas are shown on maps and will be marked on the ground with permanent boundary markers?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
Topsoil will be salvaged?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
If no, explain:		
Topsoil and overburden will be moved to reclaim an adjacent depleted segment?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
If no, explain:		
Before materials are moved, vegetation will be cleared and drainage planned for soil storage areas?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
If no, explain:		
Soil storage areas will be stabilized with vegetation to prevent erosion if materials will be stored for more than one season?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
If no, explain:		
23B. Permit and Disturbed Area Boundaries		
Boundary of the permit area will be marked on the ground with permanent boundary markers?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
Explain boundary markers: Orange painted "T-bars"		
23C. Setbacks Screens and Buffers		
Are Screens required and are shown on maps?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
The reclamation setback for this site will be <u>100</u> feet wide.		
Is a permanent, undisturbed buffer planned for this site?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
If no, explain:		
Setbacks and buffers are shown on maps and have been marked on the ground with permanent boundary markers?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
If no, explain:		
23D. Buffers to Protect Streams and Flood Plains		
Will the site include a stream or flood plain?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
If yes, see "Additional Requirements for Mines in Flood Plains" in "Instructions for SM-8A".		
If no, skip to 23E.		
A stream buffer of at least 200 feet has been marked on the ground with permanent boundary markers?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
A buffer of at least 200 feet from the 100-year flood plain has been marked on the ground with permanent boundary markers?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
If no, explain: Project is allowed to mine within the floodplain per the Shoreline Permit.		
Copy of Shoreline Permit from local government or the Department of Ecology is attached?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
Hydraulic Project Approval from the Department of Fish and Wildlife is attached?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no

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23E. Conservation Buffers	
Are there any conservation buffers?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If no, skip to 23F	
Conservation buffers will be established for the following purpose(s): <i>(Check all that apply)</i> <input type="checkbox"/> unstable slopes <input type="checkbox"/> wildlife habitat <input type="checkbox"/> water quality <input type="checkbox"/> other Describe the nature and configuration of the conservation buffer(s):	
Conservation buffers are shown on maps and have been marked on the ground with permanent boundary markers?	<input type="checkbox"/> yes <input type="checkbox"/> no
23F. Ground Water	
High water table depth is <u>70</u> feet <input checked="" type="checkbox"/> relative to mean sea level, <input type="checkbox"/> below original surface, or <input type="checkbox"/> unknown. Low water table depth is <u>50</u> feet <input checked="" type="checkbox"/> relative to mean sea level, <input type="checkbox"/> below original surface, or <input type="checkbox"/> unknown. Annual fluctuation of water table is from <u>70</u> feet on <u>winter</u> to <u>50</u> feet on <u>summer</u> .	
Are well logs attached?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
The shallowest aquifer is <input type="checkbox"/> confined <input checked="" type="checkbox"/> unconfined	
The site will be mined: <input checked="" type="checkbox"/> wet <input type="checkbox"/> dry <input type="checkbox"/> both	
Describe mining method: Drag Line	
The site is in a: <input checked="" type="checkbox"/> critical aquifer recharge area <input type="checkbox"/> sole source aquifer <input type="checkbox"/> public water supply watershed <input type="checkbox"/> wellhead protection area <input type="checkbox"/> special protection area <input type="checkbox"/> designated aquifer protection area <i>If checked above, see "Additional Requirements for Mines in Hydrologically Sensitive Areas" in "Instructions for SM-8A".</i>	
Ground water study attached?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If no, explain:	
23G. Archeology	
Are archeological/cultural resource sites present?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If yes, describe how you will protect these resources:	
24. MINING PRACTICES TO FACILITATE RECLAMATION	
24A. Soil Replacement	
Topsoil and (or) subsoil will be restored?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If "no", explain:	
Subsoil will be replaced to an approximate depth of <u>0</u> feet on the pit floor and a depth of <u>3-6</u> feet on slopes. Topsoil will be replaced to an approximate depth of <u>0</u> feet on the pit floor and a depth of <u>1-2</u> feet on slopes.	
If topsoil is in short supply, it will be strategically placed in depressions and low areas in adequate thickness to conserve moisture and promote revegetation?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If no, explain:	
Topsoil will be moved when conditions are not overly wet or dry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If no, explain:	
Topsoil will be restored to promote effective revegetation and to stabilize slopes and mine floor?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If "no", explain:	
Topsoil will be replaced with equipment that will minimize compaction, or it will be plowed, disked, or ripped following placement?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If no, explain:	
Topsoil will be immediately stabilized with grasses and legumes to prevent loss by erosion, slumping, or crusting?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If no, explain:	

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Segmental topsoil removal and replacement is shown on maps? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Topsoil will be imported? If yes, describe source. Estimated volume is _____ cubic yards.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Synthetic topsoil made from compost, biosolids, or other amendments will be used and (or) made on site to supplement existing topsoil?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Materials such as till, loess, and (or) silt are available on site that could be used to supplement topsoil for reclamation. If yes, explain:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Silt from settling ponds or a filter press will be used for reclamation?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Settling pond clay slurries will be pumped or hauled to other segments for reclamation? If yes, explain: Stockpiled clay lens materials will be pumped into the pond area floors to assist in maintaining a permanent water feature retention.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
24B. Removal of Vegetation	
Vegetation will be removed sequentially from areas to be mined to prevent unnecessary erosion? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Small trees and other transplantable vegetation will be salvaged for use in revegetating other segments? If yes, give details. If no, explain: Mining area has no trees	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Wood and other organic debris will be: <input checked="" type="checkbox"/> recycled <input type="checkbox"/> removed from site <input type="checkbox"/> chipped <input type="checkbox"/> burned <input type="checkbox"/> buried <input type="checkbox"/> used to synthesize topsoil or mulch <input type="checkbox"/> other (<i>explain</i>)	
Solid waste disposal, burning, and land use permits are attached?	<input type="checkbox"/> yes <input type="checkbox"/> no
Some coarse wood (logs, stumps) and other large debris will be salvaged for fish and wildlife habitats? If yes, give details. If no, explain: Coarse wood to be placed in wildlife habitat wood piles.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
24C. Stormwater and Erosion control for Reclamation	
Pit floor will slope at gentle angles toward highwall, sediment retention pond, or proper drainage? If yes, give details. If no, explain: Pit floor will slope towards retention area throughout the life of the project.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Revegetation, sheeting, and (or) matting will be used to protect areas susceptible to erosion? If yes, give details. If no, explain: Areas susceptible to erosion will be revegetated with native plantings.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Water control systems used during segmental reclamation will: Divert clean water around pit? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Trap sediment-laden runoff before it enters a stream? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Be established to prevent erosion of setbacks and neighboring properties? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Be removed or reclaimed? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no If any answers are no, explain:	
Stormwater system design will be capable of carrying the peak flow of the 25-year, 24-hour precipitation event? (Data are available at the National Oceanic And Atmospheric Administration (NOAA))	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If yes, are calculations attached? Hydraulic Study & WWHM report attached If yes, give details. If no, explain: WWHM calculation report	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Natural and other drainage channels will be kept free of equipment, wastes, stockpiles, and overburden? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

APPLICATION FOR RECLAMATION PERMIT AND PLAN

25. RECLAMATION TOPOGRAPHY	
25A. Final Slopes	
Final slopes will be created using the cut-and-fill method? Explain procedure to be used: The only slopes that will be backfilled with be along the south perimeter.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Slopes will be created by mining to the final slope using the cut method? Explain procedure to be used: All slopes other than along the south/southeastern perimeter will be mined to final slope.	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Slopes will vary in steepness? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Slopes will have a sinuous appearance in both profile and plan view? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Large rectilinear (that is, right angle, or straight, planar) areas will be eliminated? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Where reasonable, tracks of the final equipment pass will be preserved and oriented to trap moisture, soil, and seeds, and to inhibit erosion? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
25B. Slope Requirements for Pits and Overburden/Waste Rock Dumps (non-saleable products)	
<i>If the mine is a quarry or in hard rock, skip to Quarry section (25C).</i>	
Slopes will vary between 2 and 3 feet horizontal to 1 foot vertical or flatter, except in limited areas where steeper slopes are necessary to create sinuous topography and control drainage? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
For pits, slopes will not exceed 2 feet horizontal to 1 foot vertical except as necessary to blend with adjacent natural slopes? Give details:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<i>Review "Additional Requirements for Mines with Steep or Potentially Unstable Slopes" in "Instructions for SM-8A".</i>	
Slope stability analysis required? If yes, attach analysis.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
25C. Slope Requirements for Quarries and Hardrock Metal Mines	
<i>If mine is a pit in unconsolidated materials covered by Section 25B, go to Section 25D</i>	
Check the appropriate box(es) <input type="checkbox"/> Slopes will not exceed 2 feet horizontal to 1 foot vertical. <input type="checkbox"/> Slopes steeper than 1 foot horizontal to 1 foot vertical are an acceptable subsequent land use as confirmed on Form SM-6. <input type="checkbox"/> Hazardous slopes or cliffs are indigenous to the immediate area and already present a potential threat to human life. Photo and maps attached to document presence of cliffs. <input type="checkbox"/> Geologic or topographic characteristics of the site preclude slopes being reclaimed at a flatter angle and are an acceptable subsequent land use as confirmed on Form SM-6.	
<i>Review "Additional Requirements for Mines with Steep or Potentially Unstable Slopes" in "Instructions for SM-8A".</i>	
Slope stability analysis required? If yes, attach analysis.	<input type="checkbox"/> yes <input type="checkbox"/> no
Measures will be taken to limit access to the top and bottom of hazardous slopes? Describe measures, or if no, explain:	<input type="checkbox"/> yes <input type="checkbox"/> no
Selective blasting will be used to remove benches and walls and to create chutes, buttresses, spurs, scree slopes, and rough cliff faces that appear natural? Blasting plan attached? If no, explain:	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> yes <input type="checkbox"/> no

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Reclamation blasting will be used to reduce the entire highwall to a scree or rubble slope less than 2 feet horizontal to 1 foot vertical?	<input type="checkbox"/> yes <input type="checkbox"/> no
Blasting plan is attached?	<input type="checkbox"/> yes <input type="checkbox"/> no
If no, explain:	
Access to benches will be maintained for reclamation blasting?	<input type="checkbox"/> yes <input type="checkbox"/> no
If no, explain:	
Small portions of benches will be left to provide habitat for raptors and other cliff-dwelling birds?	<input type="checkbox"/> yes <input type="checkbox"/> no
25D. Backfilling	
The site will require backfilling?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If no, skip to 25E. Maximum depth of backfilling is 16 feet.	
Backfill will be <input checked="" type="checkbox"/> onsite materials <input type="checkbox"/> imported materials <input type="checkbox"/> both	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Provide a written screening method that ensures importation of acceptable soil for reclamation.	
Backfilling plan is attached?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If no, explain: Back fill plan is outlined in the narrative.	
Backfill stockpiles are shown on maps and will be marked on the ground with markers?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
All grading/backfilling will be done with non-noxious, non-combustible, and relatively incompatible solids?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If no, explain:	
Backfill will require compaction?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If no, explain:	
Will you be backfilling to create slopes?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Is slope stability analysis attached?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If no, explain: Analysis is not required.	
25E. Mine Floors	
Flat areas will be formed into gently rolling mounds?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If yes, give details. If no, explain: Mine floor is under water.	
Mine floor will be gently graded into sinuous drainage channels to preclude sheetwash erosion during intense precipitation?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If yes, give details. If no, explain: Mine floor is underwater	
Mine floor and other compacted areas will be bulldozed, plowed, ripped, or blasted to foster revegetation?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If yes, give details. If no, explain: Mine floor is underwater	
25F. Lakes, Ponds, and Wetlands	
Is water currently present in the area or will the mining penetrate the water table?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If no, go to Section 25G.	
Reclaimed areas below the permanent low water table in soil, sand, gravel, and other unconsolidated material will have a slope no steeper than 1.5 feet horizontal to 1 foot vertical?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If yes, give details. If no, explain: Final slopes will be mined/reclaimed at no steeper than 1.5 horizontal to 1 vertical.	
If not already present, soils, silts, and clay-bearing material will be placed below water level to enhance revegetation?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If yes, give details. If no, explain: Wash plant discharge will be piped into pond.	
Some parts of pond and lake banks will be shaped so that a person can escape from the water?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Armored spillways or other measures to prevent undesirable overflow or seepage will be provided to stabilize bodies of water and adjacent slopes?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If yes, give details. If no, explain: Pond elevation changes based on infiltration/exfiltration.	

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Wildlife habitat will be developed, incorporating such measures as:	
Sinuous and irregular shorelines?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Varied water depths?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Shallow areas less than 18 inches deep?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Islands and peninsulas?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Give details: Final pond shape will incorporate the above features.	
Ponds or basins will:	
Be located in stable areas?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Have sufficient volume for expected runoff?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Have an emergency overflow spillway?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Spillways and outfalls will be protected (for example, rock armor) to prevent failure and erosion?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If any answers are no, explain: Pond does not have an overflow, due to infiltration/exfiltration	
Proper measures will be taken to prevent seepage from water impoundments that could cause flooding outside the permitted area or adversely affect the stability of impoundment dams or adjacent slopes?	
	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If yes, give details. If no, explain: Water impound is not being created at this site.	
Written approval from other agencies with jurisdiction to regulate impoundment of water is attached?	
	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If no, explain: Pond is not designed as an impoundment, but reacts to groundwater level.	
25G. Final Drainage Configuration	
Drainages will be constructed on each reclaimed segment to control surface water, erosion, and siltation?	
	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Result in essentially natural conditions of volume, velocity, and turbidity?	
	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Clean runoff is directed to a safe outlet?	
	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If yes, give details. If no, explain: All runoff will be captured in pond.	
Are these shown on maps?	
	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
26. SITE CLEANUP AND PREPARATION FOR REVEGETATION	
26A. Dealing with Hazardous Materials	
Hazardous materials are present at the mine site?	
	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
<i>If no, go to Section 26B</i>	
The final ground surface drains away from any hazardous natural materials?	
	<input type="checkbox"/> yes <input type="checkbox"/> no
If yes, give details. If no, explain:	
Plan for handling hazardous mineral wastes indigenous to the site is attached?	
	<input type="checkbox"/> yes <input type="checkbox"/> no
If no, written approval from all appropriate solid waste regulatory agencies attached?	
	<input type="checkbox"/> yes <input type="checkbox"/> no
26B. Removal of Debris	
All debris (garbage, 'bone piles', treated wood, old mining equipment, etc.) will be removed from the mine site?	
	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
All sheds, scale houses, and other structures will be removed from the site?	
	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If either answer is yes, give details. If no, explain: Office, scale, and other structures to be removed.	
27. REVEGETATION	
The mine site is in: <input type="checkbox"/> eastern Washington Revegetation area is: <input type="checkbox"/> wet <input type="checkbox"/> dry <input checked="" type="checkbox"/> both	
	<input checked="" type="checkbox"/> western Washington
The average precipitation is <u>50-60"</u> per year.	
Revegetation will start during the first proper growing season (fall for grasses and legumes, fall or late winter for trees and shrubs) following restoration of mine segments?	
	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
If yes, give details. If no, explain: All revegetation will take place in the proper growing season.	

APPLICATION FOR RECLAMATION PERMIT AND PLAN

The site will not be revegetated because:

- It is a rural area with a rainfall exceeding 30 inches annually and erosion will not be a problem (requires approval of DNR).
 Revegetation is inappropriate for the approved subsequent use of this surface mine.

Explain:

27A. Recommended Pioneer Species

In the Sections below, check the species that will be planted at your mine site:

** indicates nitrogen-fixing species*

Western Washington Dry Areas

- | | | | |
|---|--|---|---|
| <input type="checkbox"/> alfalfa* | <input type="checkbox"/> lupine* | <input type="checkbox"/> clover* | <input type="checkbox"/> orchard grass |
| <input type="checkbox"/> cereal rye | <input type="checkbox"/> perennial rye | <input checked="" type="checkbox"/> colonial bent grass | <input type="checkbox"/> ponderosa pine |
| <input checked="" type="checkbox"/> creeping red fescue | <input checked="" type="checkbox"/> red alder* | <input checked="" type="checkbox"/> Douglas fir | <input type="checkbox"/> shore pine |
| <input checked="" type="checkbox"/> ground cover | <input type="checkbox"/> shrubs | <input type="checkbox"/> other | |

Western Washington Wet Areas

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> birdsfoot trefoil | <input checked="" type="checkbox"/> sedges | <input type="checkbox"/> cedar | <input type="checkbox"/> tubers |
| <input checked="" type="checkbox"/> cottonwood | <input checked="" type="checkbox"/> wetland grasses | <input type="checkbox"/> creeping red fescue | <input checked="" type="checkbox"/> willow |
| <input checked="" type="checkbox"/> red alder* | <input type="checkbox"/> other | | |

Eastern Washington Dry Areas

- | | | | |
|---|---|-----------------------------------|---|
| <input type="checkbox"/> alder* | <input type="checkbox"/> grasses | <input type="checkbox"/> alfalfa* | <input type="checkbox"/> juniper |
| <input type="checkbox"/> black locust | <input type="checkbox"/> lodgepole pine | <input type="checkbox"/> clover | <input type="checkbox"/> lupine* |
| <input type="checkbox"/> deciduous trees | <input type="checkbox"/> ponderosa pine | <input type="checkbox"/> shrubs | <input type="checkbox"/> deep-rooted ground cover |
| <input type="checkbox"/> diverse evergreens | <input type="checkbox"/> other | | |

Eastern Washington Wet Areas

- | | | | |
|---------------------------------------|-------------------------------------|---------------------------------|---------------------------------|
| <input type="checkbox"/> alder* | <input type="checkbox"/> cottonwood | <input type="checkbox"/> poplar | <input type="checkbox"/> sedges |
| <input type="checkbox"/> serviceberry | <input type="checkbox"/> tubers | <input type="checkbox"/> willow | |
| <input type="checkbox"/> other | | | |

Give planting details (stems/acres of trees and shrubs, see [Forest Practices manual](#); lbs/acre of grass, legume, or forb mixture):

Conifers stems at 150/acre, stake trees at 100 acre proposed pond edges (see map). Legume/grass seed at the rates recommended by the manufacturer for full coverage 10 lb per acre average

Describe weed control plan:

Plant grasses, allow native plants from buffer areas to spread over reclaimed areas. Active weed control measured to be determined if necessary.

27B. Planting Techniques

Revegetation at this site will require:

- | | | |
|--|---|-----------------------------|
| Ripping and tilling? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| Blasting to create permeability? | <input type="checkbox"/> yes | <input type="checkbox"/> no |
| Mulching? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| Irrigation? | <input type="checkbox"/> yes | <input type="checkbox"/> no |
| Fertilization? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| Importation of clay- or humus-bearing soils? | <input type="checkbox"/> yes | <input type="checkbox"/> no |
| Other soil conditioners or amendments? | <input type="checkbox"/> yes | <input type="checkbox"/> no |

Give details: **Natural Revegetation, staking (willow/alder) and seedlings (hemlock)**

- Trees and shrubs will be planted in topsoil or in subsoil amended with generous amounts of organic matter? yes no
 If yes, give details. If no, explain: **Trees and shrubs to be planted in native soils.**

APPLICATION FOR RECLAMATION PERMIT AND PLAN

Mulch will be piled around the base of trees and shrubs?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
High quality stock will be used?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Trees and shrubs will be planted while they are dormant?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Stock will be properly handled, kept cool and moist, and planted as soon as possible?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Seeds will be covered with topsoil or mulch no deeper than one-half inch?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
If any answers are no, explain:				
28. FINAL CHECKLIST				
All required maps are attached? (See "Instructions for SM-8A" for detailed requirements.)	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
All required cross sections are attached? (See "Instructions for SM-8A" for detailed requirements.)	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Geologic map attached (if required)? (See "Instructions for SM-8A" for detailed requirements.)	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
All documents submitted have the date, the name and address of the permit holder, and the application number?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Have you completed the SM-6 and has it been signed by the local jurisdiction?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Have you provided the SEPA checklist?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Have you provided a copy of the SEPA determination (DNS, MDNS, or DS)?	<input type="checkbox"/>	yes	<input checked="" type="checkbox"/>	no
Have you attached photographs (as needed)?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
Are additional supplemental studies included?	<input type="checkbox"/>	yes	<input type="checkbox"/>	no
If yes, check the appropriate box(es) below:				
<input type="checkbox"/> Archeological	<input checked="" type="checkbox"/> Geohydrologic	<input type="checkbox"/> Backfill	<input type="checkbox"/> Slope stability	
<input type="checkbox"/> Topsoil	<input checked="" type="checkbox"/> Flood plain	<input type="checkbox"/> Conservational	<input type="checkbox"/> Vegetation	
<input type="checkbox"/> Other				
Other permits required?	<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
If yes, check the appropriate box(es) below:				
<input checked="" type="checkbox"/> Shoreline Permit	<input type="checkbox"/> Water Discharge Permit	<input type="checkbox"/> Solid Waste Permit		
<input type="checkbox"/> Air Quality Permit	<input type="checkbox"/> NPDS or General Discharge Permit	<input type="checkbox"/> Hydraulic Project Approval		
<input checked="" type="checkbox"/> Special or Conditional Use Permit	<input type="checkbox"/> Other			

APPLICATION FOR RECLAMATION PERMIT AND PLAN

IDENTIFICATION OF LANDOWNER(S)

Identify names and addresses of all landowners. Provide written evidence of landowner approval of the extraction of minerals by surface mining methods and of the reclamation plan and/or provide the signature of all landowners below. If landownership has been severed between surface and mineral rights ownership, identify all affected mineral rights owner(s) and provide their approval. *(Attach signed copies of this page if more than one.)*

Print Name(s): John Bredfield

RECEIVED

SEP 21 2023

Address(es): PO Box 850, Castle Rock, WA 98611

WASHINGTON GEOLOGICAL SURVEY

APPLICANT ACKNOWLEDGMENT

By signing this application, the applicant acknowledges the following:

- **Application's Information True.** The applicant verifies that all information on this application and reclamation plan is true.
- **Reclamation Plan Contents.** The applicant's reclamation plan consists of this document (SM-8A), SM-6, associated maps, cross sections, reclamation narrative, and other attachments. The department's approval of this application would reflect approval of the applicant's reclamation plan.
- **Applicant/Permit Holder Must Comply.** If the department approves this application, the applicant shall be the permit holder and shall be responsible for compliance with Chapter 78.44 RCW, Chapter 332-18 WAC, the terms and conditions of the permit, and the approved reclamation plan and attachments. *The permit holder shall comply with the permit and may not significantly deviate from the reclamation plan without prior written approval by the department for the proposed change.* Revised permits or modified plans might be necessary following significant deviations.
- **Applicant/Permit Holder Consents to Inspection.** All permitted surface mines are subject to regular inspection. See RCW 78.44.161 and WAC 332-18-050. The applicant verifies that it has authority to consent to department inspections on behalf of itself and the landowner(s). *Applicant authorizes the department to enter and inspect any property covered by this application during any day or time determined necessary by the department to ensure compliance with the Surface Mining Act, Surface Mining Rules, the Reclamation Permit, and the Reclamation Plan.*

APPLICANT Signature of surface mine permit applicant or applicant's company representative 	Name and Title of Company Representative (Please print) John Bredfield President	Date signed 9/21/23
--	---	------------------------

LANDOWNER(S)	As landowner, I <u>John Bredfield</u> (name) authorize the applicant to extract minerals from my land using surface mining methods and I approve this reclamation plan.
Signature: 	Date signed: 9/21/23

FOR DEPARTMENTAL USE ONLY			
Date accepted	Accepted by:	Title:	Reclamation Permit No.



2724 Black Lake Blvd. SW Suite 202
Tumwater WA 98512

Phone: 360-352-2477 Fax: 360-352-0179

RECEIVED
October 27, 2022
Washington Geological Survey

3.7.22

RE: Surface Mine Permit #70-012730
Eagle Cliff Northwest, LLC – Mandy Road Pit
Permit Expansion

Introduction:

The above surface mine was originally permitted under DNR Permit #70-012730 for Donna Wallace of Cowlitz Valley Sand and Gravel in 1992. The original approved mining area is included on the revision plan set (MR2). The original drawing was poorly defined and likely did not encompass 20 acres by scale. In 2016 it was noted by DNR staff that the actual mining activity had moved beyond the permitted setback areas and Lewis County noted that there had been fill materials installed within the floodway, which was not allowed by the approve shoreline substantial development permit. Subsequent to that, the client rectified the fill in floodway and the flood development permit was revised to suit the existing situation. A Hydraulic Analysis was performed to verify that the site as constructed and future construction would meet the criteria from FEMA and DOE for Zero Rise at the property boundaries.

It is anticipated that the mine has 10 additional years of production with a maximum production of 350,000 cubic yards of merchantable material per year.

Mine Areas:

The original area approved for mining is 20 acres, the result of the permit revision is to adjust the actual mineable area inside the 59.95-acre surface mine reclamation permit boundary. Materials being mined are sand gravel as stated in SM-8 permit. The original MDNS was for a 59.95 acre site.

Mine Depth:

The original permit allows for a 50' depth below ground surface (BGS). Mining depths have been consistent with this depth.

Water Depth:

Pond and groundwater depth are determined via visual evidence on reclamation pond, verified by survey and Owner interview.

Reclamation Plan:

The reclamation plan and sections are attached to the permit revision. The reclamation practices will follow the original reclamation strategy – continuous reclamation. Mining sections 1 and 2 on MR3 should be immediately reclaimed along the south line of the current mine and the southeast side of the current mine.

Section 1 and 2 will be replaced with native materials found on site to meet the 100' buffer requirement and planted per requirement. Material replacement to be sinuous in nature mimicking natural pond edges. Section 3, 4, and 5 will be mined to final grade using the cut method.

This differs from the original reclamation plan in geometry but not practice. The original plan was more rectilinear the actual practice matches the permit revision in that rectilinear areas have been eliminated in lieu of a sinuous nature of the mine boundary. Surface flow on the mine has been consistent of settling basin and interflow. The site is designed to flow to the mine/pond area both during mine operations and upon reclamation.

Mine reclamation includes discharge of wash water and associated suspended fine material from the rock crusher and wash plant back into the pond via a 12-inch pipe, as shown in Figure 3 of the Hydrogeologic Evaluation report. Fine materials will help assist in maintaining a permanent water feature retention. The processing area is built on site materials which will be graded out with the rest of the reclamation. Discharge pipe will be moved and removed as reclamation progresses, no pipe will be left on site at the termination of the project.

In sloped areas subsoil and topsoil will be replaced to a depth of 3 to 6 feet. There is an overabundance of reclaim soils on site, none will be imported. The placed reclamation soils will be 'ripped' to accept plantings. Sloped areas will receive: Evergreen species (Douglas fir), willow and alder stub, DOE approved seed mix, and be left for pioneer species as well.

Flat areas or those used as filtration for surface treatments will be left lower than surrounding grades and sloped to move drainage across them. They will be planted with Willow, Cattail and wetland seed mix. Cattails can be noted in existing low areas currently. Flat areas above the pond will be planted with Perennial grasses, Douglas Fir, and Alders.

All reclamation actions are for a final use of wildlife habitat after mining activity is complete.

Surface Excavation Plan

The surface excavation plan follows the plan revision sequence on MR3. Section 3, 4, and 5 will be mined to a maximum depth of 30' mean sea level. Reclamation will occur in each section as the mining is completed. After approval of the excavation limits proposed in this revision by DNR the Owner will hire a licensed surveyor to install orange painted "T-bars" along the permitted boundary, to ensure that no further 'out of bounds' mining occurs. Surface mining activity and machinery will be excavators and a drag line.



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September 28, 2022

ADDENDA: NARRATIVE – NOISE COMPLIANCE

Section 7 b from the Environmental Checklist addresses noise from the site. This Addenda is intended to supplement that section as well as the project narrative.

Noise Compliance

This facility has been monitored by the Office of Mine Safety and Health Administration (MSHA), with records as far back as August of 2012. MSHA has performed biannual or quarterly inspections during this time frame.

Inspections

Event No.	Mine ID	Inspection Activity Code	Inspection Begin Date	Inspection End Date	Citations	Orders	Safeguards
6871072	4503710	Compliance Follow-up Inspection	08/01/22	08/01/22	0	0	0
6871215	4503710	Regular Safety and Health Inspection	07/20/22	07/26/22	4	0	0
6871102	4503710	Regular Safety and Health Inspection	01/10/22	01/19/22	11	0	0
6825362	4503710	Regular Safety and Health Inspection	06/29/21	06/30/21	2	0	0
6830840	4503710	Compliance Follow-up Inspection	03/25/21	04/21/21	0	0	0
6830828	4503710	Regular Safety and Health Inspection	02/22/21	02/24/21	5	1	0
6828265	4503710	Regular Safety and Health Inspection	07/07/20	07/17/20	11	0	0
6824792	4503710	Regular Safety and Health Inspection	02/04/20	02/12/20	2	0	0
6662586	4503710	Regular Safety and Health Inspection	07/24/19	07/26/19	3	0	0
6824726	4503710	Regular Safety and Health Inspection	03/04/19	03/06/19	1	0	0
6723575	4503710	Regular Safety and Health Inspection	05/09/18	05/15/18	3	0	0
6723574	4503710	Compliance Follow-up Inspection	05/08/18	05/15/18	0	0	0
6723559	4503710	Compliance Follow-up Inspection	02/13/18	02/14/18	0	2	0
6723555	4503710	Regular Safety and Health Inspection	12/12/17	01/09/18	7	1	0
6723234	4503710	Compliance Follow-up Inspection	06/05/17	06/07/17	0	0	0
6723233	4503710	Regular Safety and Health Inspection	05/02/17	05/04/17	8	0	0
6723206	4503710	Regular Safety and Health Inspection	12/12/16	12/13/16	4	0	0
6667171	4503710	Accident Reduction Program	09/21/16	09/21/16	0	0	0
6598494	4503710	Regular Safety and Health Inspection	06/01/16	06/08/16	21	0	0
6667141	4503710	Verbal Hazard Complaint Inspections	05/13/16	05/13/16	0	0	0
6667142	4503710	Spot Inspection	05/13/16	05/13/16	1	0	0
6666825	4503710	Accident Reduction Program	10/29/15	10/29/15	0	0	0
6667105	4503710	Regular Safety and Health Inspection	09/28/15	10/01/15	0	0	0
6675888	4503710	Regular Safety and Health Inspection	05/11/15	05/11/15	2	0	0
6662083	4503710	Compliance Follow-up Inspection	12/11/14	12/12/14	0	0	0
6593850	4503710	Regular Safety and Health Inspection	11/10/14	11/18/14	15	0	0
6593456	4503710	Regular Safety and Health Inspection	01/02/14	01/02/14	1	0	0
6592946	4503710	Regular Safety and Health Inspection	05/09/13	05/13/13	3	0	0
6591178	4503710	Spot Inspection	12/18/12	12/18/12	1	0	0

(Inspection records 2012- 2022 Q1)

The MSHA Handbook PH20-I-3 (Citation and Order Writing Handbook) refers to the individual citations in Title 30 Code of Federal Regulations (CFR) Part 62 Occupational Noise Exposure. We have reviewed each citation listed against the Eagle Cliff Mine in the above inspection cycles. There are no citations for noise limits or protection. The individual citation would list the Part/Section of 30 CFR being violated.

Mine Noise Limits

30 CFR Does provide mine duration and dose limits for decibel (dBA) listings and readings. Table 62-1 provides a dba and Duration limit for mines.

113	0.33
114	0.29
115	0.25

At no time shall any excursion exceed 115 dBA. For any value, the reference duration (T) in hours is computed by: $T = 8/2^{(L-90)/5}$ where L is the measured A-weighted, slow-response sound pressure level.

(Portion of Table 62-1 from 30 CFR)

As shown above the maximum decibel limit for a any 15 minute period is 115 dBA. This limit is the upper bound for mining noise.

Zoning Noise Limits

Lewis County Code Chapter 1.23 “PUBLIC DISTURBANCE NOISE” subsection (1) states:

(1) It is unlawful for any person to cause or, for any person in possession of property, to allow to originate from the property sound that is a public disturbance which unreasonably disturbs or interferes with the peace, comfort and repose of other property owners or possessors. The following sources of sound when they unreasonably disturb or interfere with the peace, comfort and repose of property owners or possessors shall be prohibited public disturbance noises: . . .

Following this section are sounds that violate the noise code.

Subsection 2 states:

(2) The provisions of subsection (1) of this section shall not apply to:

(d) Sounds originating from agricultural operations, mining operations and forestry operations.

Thus, the Lewis County code does not regulate noise emissions from the subject mine site.

Washington Department of Ecology does set noise pollution limits via Chapter 70.107 of the Revised Code of Washington as well as Chapter 173-60 of the Washington Administrative Code. This limits the decibels received by an area as follows:

EDNA OF NOISE SOURCE	EDNA OF RECEIVING PROPERTY		
	Class A	Class B	Class C
CLASS A	55 dBA	57 dBA	60 dBA
CLASS B	57	60	65
CLASS C	60	65	70

(WAC 173-60-040)

The RR5 zone is the nearest Class A receiving property. Thus the maximum allowed dBA allowed to the neighboring residential zone would be **60dBA**.

Zoning and Distance Review

The project is in an Agricultural Resource Land (ARL) bounded by mining (Mineral Resource Land) with 10 Acre residential property to the south.



A residential zone does not directly abut the subject property. The distance between the closest residential area and the noise generating mining equipment is 1,375 feet. The largest noise generator on site is the rock crushing equipment. There is no blasting or percussive rock breaking outside of the crusher on this site. This will be the limiting factor for noise limitations.

Noise Disturbance Levels

Utilizing the maximum point source noise load from 30 CFR 62 for the baseline of 115 dBA and the distance from the Mining Machinery to the nearest edge of residential (Class A EDNA) zoned properties 1375 feet. It is possible to calculate decibel delivery at the maximum level permitted for mine safety utilizing the Inverse Square Law.

The output is **52.2 dba in open air**. This does not consider any attenuation via vegetation, geography or background noises existing in the Class A area. 52 DBA at the maximum allowable level is a conservative estimate of mining noise at Class A EDNA interface.

Noise Testing

This mine has been permitted since 2012 and while it has had violations of its shoreline permit, and mining boundaries, there has not been a noise violation on site (county or Federal regulations). Additional noise testing will determine what has already been proven during the 10 years of permitted use. The machinery and mining systems used have not changed during the usage of this mine. Any noise complaints are valid, but will not trigger the WAC thresholds based on the data provided above.