



August 2, 2021

Joel Bolduc
Albert Frei & Sons, Inc.
35715 Hwy 40, Building B, Suite 120
Evergreen, CO 80439

**Re: Albert Frei & Sons, Inc.; Walstrum Quarry; File No. M-1983-033;
 112c Permit Amendment Application (AM-09) Adequacy Review**

Mr. Bolduc,

The Division of Reclamation, Mining and Safety (Division/DRMS/Office) reviewed the content of the Albert Frei & Sons, Inc. (Frei) 112c permit amendment application (AM-09) for the Walstrum Quarry, File No. M-1983-033 and submits the following comments. The Division is required to issue a recommendation to the Board no later than October 8, 2021 since a timely objection was received by the Office. Therefore a response to the following adequacy review concerns should be submitted to the Division as soon as possible.

The review consisted of comparing the amendment application content with the specific requirements of Rules 1, 3, 6.1, 6.2, 6.4 and 6.5 of the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials effective date July 15, 2019. Any inadequacies are identified under the respective exhibit heading along with suggested actions to correct them.

Comments and Objections

1. The Division received state agency comments from History Colorado. The letter is attached for review. Please address the comments submitted for the amendment application and revise the application accordingly.
2. The Division sent the Applicant a copy of the timely objection received for the amendment application from Robert L. Young, Jr. Please inform the Division how the Applicant intends to address the jurisdictional issues raised by Objector.

1.6 Public Notice

3. As required by Rules 1.6.2(1)(d) and 1.6.5(2), please submit proof of publication in a newspaper of general circulation in the locality of the proposed mining operation.

The Applicant submitted proof of publication for the amendment application on July 1, 2021. No additional response is required by the Applicant.

4. As required by Rule 1.6.2(e), please submit proof of the notice to all owners of record of surface and mineral rights of the affected land and the owners of record of all land surface within 200 feet of the



boundary of the affected land including all easement holders located on the affected land and within 200 feet of the boundary of the affected land. Proof of notice may be return receipts of a Certified Mailing or by proof of personal service.

The Division received proof of notice to all owners of record for the amendment application in the form of certified mail receipts from the Applicant on July 1, 2021. No additional response is required by the Applicant.

The Applicant submitted proof of notice for the following owners of record of all land surface within 200 feet of the boundary of the affected land, however the owners of record listed below are not indicated on the Exhibit C maps. Please explain these discrepancies and revise the Exhibit C maps accordingly.

- a. Colorado RSA No. 3 Limited Partnership
- b. Sprint Spectrum LLC fka Sprint Spectrum Limited

6.4 Specific Exhibit Requirements - Regular 112 Operations

The following items must be addressed by the Applicant in order to satisfy the requirements of C.R.S. 34-32.5-101 et seq. and the Mineral Rules and Regulations of the Mined Land Reclamation Board:

6.4.1 Exhibit A - Legal Description

- 5. On Page 2, Item #9 of the application form, the Applicant states the amendment area is located in Clear Creek County. On Page 2 of Exhibit A, the Applicant lists Parcel F (1833-352-00-003) which is located in Gilpin County with exceptions. Please confirm the existing quarry and the proposed amendment area are located entirely in Clear Creek County.
- 6. On Page 9 of Exhibit A, the Applicant lists the tax parcel number for Parcel D as 1833-343-00-600. Based on the Division review of the parcel information on the Clear Creek County Assessors website, the Division believes the correct tax parcel number for Parcel D is 1833-342-00-600. Please review the tax parcel number for Parcel D and update Exhibit A accordingly.

6.4.4 Exhibit D - Mining Plan

- 7. On Page 7 of Exhibit D, Section 3, the Applicant states explosives are currently used in the Existing Quarry and will continue to be used in the same manner in the Spur Amendment area. Please provide a copy of the current blasting plan for the existing quarry for Division review.
- 8. On Page 7 of Exhibit D, Section 3, the Applicant blasting is done with modern detonation methods to achieve millisecond delays between holes so as to minimize noise and vibration from the blast. Please state if blasts are or will be monitored using seismic instruments and microphones. If so, please describe where the instruments will be placed during blasting operations.
- 9. The current quarry operation generates mine waste which is stockpiled on-site within the permit boundary and off-site adjacent to the permit boundary in Gilpin County. Please explain how and where the waste generated from the proposed amendment area will be stockpiled. Please update the Mining Plan and Mine Plan Maps accordingly.

Additionally, please provide documentation demonstrating the Special Use Permit from Gilpin County from 2007 for the exempted waste area is still active and current and includes the disposal of future waste generated from the Spur Amendment area.

6.4.5 Exhibit E - Reclamation Plan

10. On Page 2 of Exhibit E, Section 2.0, the Applicant states three areas will be reclaimed as Industrial/Commercial/Public Gathering. The Division will require the Applicant to provide an alternative Reclamation Plan to reclaim the three areas if the areas are not currently zoned as commercial/industrial. The alternate plan must include the removal of all facilities used during the mining operation and reclamation of the areas. Please include an alternate Reclamation Plan for demolition, grading, topsoiling and revegetation of the three areas.

If the three areas are currently zoned as commercial/industrial, please provide documentation and clarify how these areas will be stabilize from erosion regardless of zoning.

The Division will calculate the required reclamation bond based on the alternate Reclamation Plan until documentation is provided from Clear Creek County of commercial/industrial zoning for the three areas.

11. On Page 2 of Exhibit E, Section 2.0, the Applicant states the reservoirs will be reclaimed with slopes that are no steeper than 2H:1V. Rule 3.2.5(7) states, "In all cases where a lake or pond is produced as a portion of the Reclamation Plan, all slopes, unless otherwise approved by the Board or Office, shall be no steeper than a ratio of 2:1 (horizontal to vertical ratio), except from 5 feet above to 10 feet below the expected water line where slopes shall be not steeper than 3:1." Please commit to reclaiming the reservoir slopes at a 3H:1V grade from 5 feet above to 10 feet below the expected water line and revise Exhibit E accordingly.
12. On Page 2 of Exhibit E, Section 3.0, the Applicant states "refer to Clear Creek County Rezoning Case No. 265, Major Plan Amendment 01-PDA-2 that was previously approved." Please provide a copy of the approved case for Division review.
13. On Page 2 of Exhibit E, Section 5.0, the Applicant states the growth medium will be seeded if stored for more than one year. Please commit to seeding the growth medium stockpiles if stored for more than 180 days. Please provide a seed mixture, application rate in pure live seed (PLS) and application method for the growth medium stabilization.
14. On Page 5 of Exhibit E, Section 5, the Applicant states a weed management plan may be developed in conjunction with Clear Creek County Weed Management Office. Please provide a copy of the weed management plan to the Division for review.

6.4.6 Exhibit G - Water Information

15. Exhibit G for the Walstrum Spur Amendment application was reviewed by Patrick Lennberg with the Division. A copy of Mr. Lennberg's review memo dated June 29, 2021 is attached. Please respond to the adequacy questions contained in the memo.

6.4.8 Exhibit H - Wildlife Information

16. Exhibit H for the Walstrum Spur Amendment application was reviewed by Jared Ebert with the Division. A copy of Mr. Ebert's review memo dated August 2, 2021 is attached. Please respond to the adequacy questions contained in the memo.

6.4.12 Exhibit L - Reclamation Costs

17. The Division will estimate the reclamation cost to reclaim the proposed quarry following the Applicant's response to this letter and provide the estimate under separate cover.
18. The Applicant states in the proposed Mining Plan the north side will be mined and backfilled to an overall average slope that will not exceed 2H:1V. Figure L-1 - North Face Benches Cross Section indicates the upper 200 feet of the north face benches at a 0.7H:1V slope. Please explain this discrepancy and revise the amendment application accordingly.

6.4.15 Exhibit O - Owner(s) of Record of Affected Land (Surface Area) and Owners of Substance to be Mined

19. The Applicant states the deeds to the parcels within the permit boundary can be provided upon request. Please provide a copy of the deeds for Division review.

6.4.18 Exhibit R - Proof of Filing with County Clerk and Recorder

20. Please provide an affidavit or receipt indicating the date on which the revised amendment application information required to address this adequacy letter was placed with the Clear Creek County Clerk and Recorder for public review, pursuant to Subparagraph 1.6.2(1)(c).

6.5 - Geotechnical Stability Exhibit

21. On Page 1, Section 1.0 of Geotechnical Stability Exhibit the Applicant states due to the nature of metamorphic rock, any changes in the rock quality should be evaluated and addressed as the final pit geometry and benching are developed during mining. If new structural trends are encountered, adaptive management can address design changes through the annual mine review process. The annual review will be a time to assess the stability of the working benches to determine the operational and final pit slopes. Please commit to notifying the Division if the rock quality differs from the information presented in the Geotechnical Stability Exhibit resulting in revisions to the final pit geometry. Additionally, please commit to updating the Geotechnical Stability Exhibit based on the updated rock quality and final pit geometry.
22. On Page 8, Section 3.2 of Geotechnical Stability Exhibit the Applicant states geologic hazards identified (Widmann 2002 and Pelizza 1978) in the Spur Amendment area include potentially unstable slopes, rockfall areas, and debris chutes. These naturally occurring hazards are common in the mountainous terrain within which the Spur Amendment is located. To mitigate these hazards, Tetra Tech recommends construction of staggered earthen berms on the downhill side of the haul roads below locations where these hazards may exist. Please provide a map of the known location of the hazards and provide construction details for the staggered earthen berms.
23. On Page 28, Section 6.5.3 of Geotechnical Stability Exhibit the Applicant states GeoSlope Slope/W software was used to assess the stability of the proposed final pit configuration. Please provide the

SLOPE/W slope stability analysis data from Tetra Tech to allow the Division to duplicate the analysis with Clover Technology's Galena software for verification purposes.

24. On Page 32, Section 6.5.5 of Geotechnical Stability Exhibit the Applicant states the structure of the rock should be evaluated to verify its conformance with this stability analysis. Please commit to providing an updated stability analysis if the structure of the rock differs from the structure presented in the geotechnical stability analysis.
25. Please provide a geotechnical stability analysis for any waste material stockpiles as required by Rule 6.5 of the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials.
26. Please provide a slope stability monitoring plan to include at minimum the type and frequency of monitoring to be conducted to prevent possible slope stability issues due to the proposed mining activity.
27. The Geotechnical Stability Report is currently under separate review by the Division's geotechnical engineer. Additional, adequacy review comments could result from the review and will be sent to the Operator when available.

Please be advised the Walstrum amendment application may be deemed inadequate, and the amendment application may be denied on October 8, 2021, unless the above mentioned adequacy review items are addressed to the satisfaction of the Division. If more time is needed to complete the reply, the Division can grant an extension to the decision date. This will be done upon receipt of a written waiver of the Applicant's right to a decision by October 8, 2021 and request for additional time. This must be received no later than the deadline date.

If you have any questions, please contact me at peter.hays@state.co.us or (303) 866-3567 Ext. 8124.

Sincerely,



Peter S. Hays
Environmental Protection Specialist

Enclosures - History Colorado Comment Letter, Exhibit G Review Memo, Exhibit H Review Memo

Ec: Jared Ebert; Division of Reclamation, Mining & Safety



Peter S. Hays
Division of Reclamation, Mining and Safety
Department of Natural Resources
1313 Sherman St, Room 215
Denver, CO 80203

Re: Walstrum Quarry - File No. M-1983-033, Albert Frei & Sons Inc. Amendment Application (AM-9)
(HC #38607)

Dear Mr. Hays:

We received your letter dated May 11, 2021 initiating consultation with our office on the subject action pursuant to the Colorado State Register Act – Colorado Revised Statute (CRS) 24-80.1 et. seq.

A search of our database indicates that a number of mining sites including 5CC1127, 5CC1128, 5CC1130, and 5CC1168 are located within or adjacent the permit area. Each of these properties has been determined not eligible for listing to the National Register of Historic Places. As there are no properties of historical significance included or nominated for inclusion in the state register currently documented within the proposed permit area, a finding of no adverse effect to significant properties is appropriate. As most of Colorado has not been inventoried for cultural resources, our files contain incomplete information. Consequently there is the possibility that as yet unidentified cultural resources exist within the proposed permit area. The requirements under CRS 24-80 part 13 apply and must be followed if human remains are discovered during ground disturbing activities.

Please note that if the fill or disposal site location is associated with a Federal undertaking, it is the responsibility of the federal agency to meet the requirements of Section 106 as set forth in 36 CFR Part 800 titled “Protection of Historic Properties”. This includes not only reasonable and good faith identification efforts of any historic properties located within the area of potential effects, but determining whether the undertaking will have an effect upon such properties. The State Historic Preservation Office, Native American tribes, representatives of local governments, and applicants for federal permits are entitled to consultative roles in this process.

We thank you for the opportunity to comment. If we may be of further assistance, please contact Mark Tobias, Intergovernmental Services Manager, at (303) 866-4674 or mark.tobias@state.co.us.

Sincerely,

Steve Turner, AIA
State Historic Preservation Officer
ST/mt



Date: June 29, 2021

To: Peter Hays, DRMS

From: Patrick Lennberg, DRMS

RE: Walstrum Quarry AM-9 Exhibit G Review Memo, Walstrum Quarry, File No. M1983-033

On June 8, 2021, I was requested to review Exhibit G of the Walstrum Quarry amendment application AM-9. Below are follow-up questions that should be addressed.

Section 2.0 - INTRODUCTION

1. Well 83085 which was replaced by 83085-A and is now owned by AFS appears to be close or within 200' of the affected area boundary, please state the distance of this well to the affected area boundary.
2. Has well 83085 been abandoned? The Division was unable to positively verify that it was abandoned.
3. Cross-Section A-A' does not appear to be accurate, there are no pit boundary delineations near CH-001?

Section 5.0 – WATER SUPPLY

4. Please provide a copy of the water court decree 98CW473.

Section 7.0 - STORMWATER

5. Please provide the details and location of the to-be-installed engineered stormwater detention basin located in Parcel C2 also known as the Texaco Placer Area.

Section 8.0 - GROUNDWATER

6. What is the estimated range of flow rates from the seeps expressing in the quarry area?

Appendix G-2

7. The Division could not find the SVL lab data that was supposed to have been included in Appendix A, please provide the data.
8. Please describe the QA/QC protocol that was used for the geochemical sampling and analysis.
9. Please compare the Summary of Total Metals Analysis to EPA Regional Screening Levels that CDPHE uses to determine whether media requires additional investigation, [Regional Screening Levels](#).
10. ANP/AGP ratios between 3:1 and 1:1 is considered a zone of uncertainty, please indicate which samples are in this range and whether or not the material is in an area that will be consumed by mining.
11. ANP/AGP ratios 1:1 or less are considered to be acid generating materials, please indicate which samples are in this range and whether or not the material is in an area that will be consumed by mining.



Appendix G-3

12. Well 84565 was replaced in 2002 by well 84565-A which is located in Gilpin County please update Figure G-1. (While Figure G-1 is based off DWR data and may be subject to errors showing wells inside the permit boundary which clearly are not located in the permit boundary is misleading and inconsistent with other maps within the application package.)
13. Well 59379 is shown to be within the permit boundary when the true location of the well is 180 Elk Valley Drive, Evergreen CO, please update the map.
14. Well 97767 is shown to be within the permit boundary, the location of the well indicated on the change of ownership document is 653 Ponderosa Dr, Evergreen, CO, please update the map.
15. The location of well 03803-F (3803-F) is inconsistent with Map C-4, please update the well location to be consistent with Map C-4.
16. The stated location of wells 43995 and 87423 are in the Douglas Mountain Ranch subdivision in Jefferson County, please update map G-3.

If you need additional information or have any questions, please let me know.

Sincerely,



Patrick Lennberg
Environmental Protection Specialist

cc: Jared Ebert, DRMS



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

Memorandum

Date: August 2, 2021

To: Peter Hays, DRMS

From: Jared Ebert, DRMS

RE: Walstrum Quarry, M-1983-033, Spur Amendment, AM09 Exhibit H – Wildlife Information Review

I have completed my review of Walstrum Quarry, AM09 Spur Amendment application for compliance with Rule 6.4.8 and 3.1.8 regarding wildlife information. Possible adequacy review items are identified below in *italic text*. I have reached out several times to Joseph Walter with Colorado Parks and Wildlife (CPW) to obtain any comments or concerns that CPW may have, as of the date of this memorandum I have not received anything.

Rule 6.4.8

- (a) The applicant provided a summary of the significant wildlife resources within the affected area in Exhibit H of the application as well as a more detailed description in the “Biological Resource Report,” as part of Appendix H-1 of the application. Table 4 of Appendix H-1 provides a list of the general wildlife in the ecoregion where the Walstrum Quarry is located. This information satisfies this rule requirement.
- (b) The applicant indicates the site is within a winter concentration area for mule deer and occasional use for mountain lion and elk. Detailed results of a raptor survey/study is included in Appendix H-2, and a detailed description of the bighorn sheep use of the area is included in Appendix H-3. This information satisfies this rule requirement. Using the Colorado Parks and Wildlife (CPW) online Hunting Atlas, I reviewed game species migration routes and concentration areas and their relation to the affected land. My finding are below:
 - a. CPW shows a bighorn sheep migration corridor on the east end of the site near the intersection of HWY 6 and HWY 119. This corridor appears to be outside of the proposed affected land and partially within a designated undisturbed area of the Spur Amendment. The migration patterns for the bighorn sheep are shown to occur from both east to west and west to east within the affected land. Bighorn sheep winter and summer range exists within the affected land. Appendix H-3 discusses the bighorn sheep population and use of the existing and proposed quarry expansion area.
 - b. No elk migration patterns or corridors are shown for this area. The affected land is within elk’s summer and overall range. No seasonal concentration area for elk are identified within the affected land.
 - c. No moose migration patterns or corridors are shown for this area. No seasonal concentration areas for moose are shown to exist for this area. The east side of the site where the existing quarry is located is shown to be within the moose’s summer and overall range.



- d. No migration corridors, patterns, concentration areas, or ranges for mountain goats are shown to occur in this area.
 - e. No migration patterns or corridors for mule deer are shown to exist within this area. The winter concentration area for mule deer encompasses a broad area and includes the existing and proposed expansion area. The existing and proposed expansion area is within the broad area identified as winter, summer, and overall range for mule deer.
 - f. No migration corridors, patterns, concentration areas, or ranges for pronghorn are shown to occur in the area.
 - g. The existing and proposed expansion area is within the overall range for turkey.
 - h. No migration corridors, patterns, concentration areas, or ranges for white-tailed deer are shown to occur in the area.
 - i. The existing and proposed expansion area is north of the black bear summer/fall concentration area, but is within the overall range of black bear.
- (c) Appendix H-1 (Sections 2.1.2.3 and 2.1.2.4), the Biological Resource Report, provides a description of potential threatened and endangered species presence within and around the affected area from both federal and State of Colorado lists. Regarding federally listed threatened and endangered species, the applicant reports the species that may potentially be found at the site are either unlikely to occur or are not present at the site. Regarding State of Colorado listed species, only one species of concern was detected during a field survey of the site, the American peregrine falcon. Golden eagle is another species of concern that has a potential to occur at the site and one was reported to have been spotted during the raptor survey but did not land within the study area. According to Appendix H-2, the nearest known golden eagle nest is about 4.5 miles east-southeast of the area. The northern pocket gopher is a state species of concern that is likely to occur at the site. However, no state listed threatened or endangered species were found likely to occur in the study area. The information provided by the applicant appears to be adequate and satisfies this rule requirement.
- a. Using the U.S. Fish and Wildlife's IPaC online consultation tool, I used the proposed AM09 permit boundary as the "Area of Interest" to generate a resource list to identify which federally threatened and endangered species may occur within the permit area. The results of the IPaC report are enclosed with this memorandum. Overall these results are consistent with the results provided by the applicant with Appendix H-1. Based on my review, the least tern, Preble's meadow jumping mouse, and Ute Ladies'-tresses were not identified as potential species to occur within the permit area.
 - b. I compared the State of Colorado listed species on the CPW website to what was presented in Appendix H-1 of the application. The information the applicant submitted appears accurate and reflective of the state list.
- (d) Section 4.0 of Appendix H provides a summary of the effects of mining within the Spur Amendment on existing wildlife, including temporary habitat loss. Page 3 of Exhibit H, states long-term permanent alterations to wildlife habitat are not expected to affect seasonal use or movement patterns. This statement seems unlikely given that 200 acres of the affected land are proposed to be reclaimed as industrial/commercial/public gatherings areas where no revegetation is planned. If this post mine land use is not assured, the applicant should revise their reclamation plan to revegetate this area. Given this, the following adequacy questions should be addressed:
- a. *The long-term impact to wildlife seasonal use and movement patterns within the Spur Amendment area will likely be affected permanently by 200 acres of affected land being reclaimed for*

industrial/commercial use where revegetation is not proposed to occur. Please revise Exhibit H to acknowledge this. If the post mine land use for the Spur Amendment for this area is not reasonably assured, the reclamation plan should be revised to provide a plan to revegetate this area.

Rule 3.1.8

- (1) The wildlife protective measures identified by the applicant include appropriate refuse containers, a reduced speed limit within the quarry, following truck counts allowed by the Colorado Department of Transportation on HWY 6, and slower customer vehicle speeds. However, it is unlikely the applicant will have control over the customer's vehicle speed on the public highway. Other possible efforts by the applicant could include new fencing, wildlife crossings, or alternative water sources. The applicant has installed a water tank within the quarry area that is documented to be used frequently by wildlife, especially bighorn sheep (Appendix H-3). A key feature of the operation is 255 acres designated as undisturbed area that will continue to be used as wildlife habitat within the permit area and will allow for animal movement and concealment during operations at the site. The seed mixture to be used to revegetate the "Privately Owned Natural Resource Area" includes species palatable for browsing for wildlife according to the applicant (Page 4, of Exhibit E, Reclamation Plan). The seed mixture does include a diverse mixture of native grasses, forbs, and important woody species. The woody species included with the seed mixture are species that were observed at the site during the pre-operation inspection.
 - a. The applicant conducted an analysis of raptor use and nesting in and around the existing and proposed expansion area (Appendix H-2). Two nests were identified outside of the proposed and existing permit boundary. Several recommendations were offered in Appendix H-2, of the application. However, these recommendations were not expressly discussed in Exhibit H, or Exhibit E in accordance with Rule 6.4.5(2)(c) of the application.
 - b. Similarly, the applicant provided a detailed analysis of the presence and use of the existing and proposed expansion area by bighorn sheep (Appendix H-3). The impact, both positive and negative, regarding the bighorn sheep are discussed at length in Appendix H-3. Recommendations specific to the mining and reclamation operation were provided in Appendix H-3. However, these recommendations were not expressly discussed in Exhibit H, or Exhibit E in accordance with Rule 6.4.5(2)(c) of the application.
 - (1) Therefore the following adequacy item should be addressed:
 1. *Several recommendations were offered in Appendices H-2 and H-3 regarding raptors and bighorn sheep. Please explain if these recommendations that are applicable to the mining and reclamation operation will be adopted, and if so, please update Exhibit H or Exhibit E to describe how they will be implemented.*
- (2) As discussed above wildlife resources are discussed at length in Appendix H-1, H-2, and H-3 of Exhibit H of the application. Habitat management and creation is not expressly stated as a goal of the reclamation plan. However, as described in Appendix H-3 there are potential opportunities of habitat management and creation especially for bighorn sheep. A summary of these habitat management and creation opportunities for bighorn sheep should be discussed in either Exhibit H or Exhibit E in accordance with Rule 6.4.5(2)(c).
 - a. *Habitat management and creation is not expressly stated as a goal of the reclamation plan. However, as described in Appendix H-3 there are potential opportunities of habitat management and creation for bighorn sheep. A summary of these habitat management and creation opportunities for*

bighorn sheep should be discussed in either Exhibit H or Exhibit E in accordance with Rule 6.4.5(2)(c).