



October 26, 2022

Peter Wayland
Weiland, Inc.
PO Box 18087
Boulder, CO 80308

**RE: Goose Haven Reservoirs (Permit No. M-2010-071)
Amendment No. 2 (AM-2)
Adequacy Review #3**

Dear Mr. Wayland:

On October 5, 2022, the Division of Reclamation, Mining and Safety received your adequacy response to the Division's adequacy letter of August 2, 2022 for the Goose Haven Reservoirs AM2 application, File No. M-2010-071. The following questions address adequacy issues and missing information that is needed to complete the application. This information needs to be addressed and/or received before the Division can approve the application.

Rule 1.6.2(1)(d) and 1.6.5(2) – Proof of Publication

1. Item Resolved.

Rule 1.6.2.(e) Notice of Land Owners –

2. Item Resolved.

Rule 6.2.1(2) Maps and Exhibits –

3. Item Resolved.

Rule 6.4 - Specific Exhibit Requirements - 112 Reclamation Operation

6.4.1 EXHIBIT A - Legal Description - Adequate as submitted.

6.4.2 EXHIBIT B - Index Map - Adequate as submitted.

6.4.3 EXHIBIT C - Pre-mining & Mining Plan Map(s) of Affected Lands

4. Item Resolved.

6.4.4 EXHIBIT D - Mining Plan



5. Please see the attached memo from Robert Zuber (DRMS surface water specialist) and address the issues he raise concerning the drainage swale.
6. The City of Lafayette has committed to submitting the final dam construction report, as-built plans and final certification for inclusion into the permit when the documents are obtained.

6.4.5 EXHIBIT E - Reclamation Plan - Adequate as submitted.

6.4.6 EXHIBIT F - Reclamation Plan Map - Adequate as submitted.

6.4.7 EXHIBIT G - Water Information -

7. Item Resolved.
8. Please see the attached memo from Patrick Lennberg (DRMS groundwater specialist) and address the issues he raised concerning groundwater.
9. The Division will reconsider the need for ground water monitoring based on the information provided in #8 above.

6.4.8 EXHIBIT H - Wildlife Information - Adequate as submitted.

6.4.9 EXHIBIT I - Soils Information - Adequate as submitted.

6.4.10 EXHIBIT J - Vegetation Information - Adequate as submitted.

6.4.11 EXHIBIT K - Climate- Adequate as submitted.

6.4.12 EXHIBIT L - Reclamation Costs – Adequate as submitted.

6.4.13 EXHIBIT M - Other Permits and Licenses (Statement Req'd) - Adequate as submitted.

6.4.14 EXHIBIT N - Source of Legal Right to Enter – Adequate as submitted.

6.4.15 EXHIBIT O - Owner(s) of Record of Affected Land and Substance to be Mined - Adequate as submitted.

6.4.16 EXHIBIT P - Municipalities Within Two Miles - Adequate as submitted.

6.4.17 EXHIBIT Q - Proof of Mailing of Notices to Board of County - Adequate as submitted.

6.4.18 EXHIBIT R - Proof of Filing with County Clerk and Recorder - Adequate as submitted.

6.4.19 EXHIBIT S - Permanent Man-made Structures -

10. Item resolved.

The decision date for AM2 was October 10, 2022. After a preliminary review of the materials submitted on October 5, 2022, the Division has determined there are still outstanding adequacy issues that need to be resolved.

AM2 is under a Board order and all materials needed to be in approvable form within the statutory deadline of 365 days from when the application was filed (Rule 1.4.1(9)). The AM2 application was filed on October 11, 2021 and needed to be approved by October 10, 2022. Additional review time is needed beyond the October 10, 2022 deadline; therefore, the matter will be scheduled for the December Board hearing (Rule 1.4.1(9)).

The Division will continue its review of the submitted materials with the intention of getting all materials in approvable form before the December Board meeting.

All corrected pages must also be provided to Boulder County Clerk & Recorder.

If you have any questions, please contact me at (720) 774-0040 or brock.bowles@state.co.us.

Sincerely,



Brock Bowles
Environmental Protection Specialist

CC: Jared Ebert, DRMS



MEMORANDUM

Date: October 13, 2022
To: Brock Bowles, DRMS
From: Rob Zuber, DRMS
RE: Goose Haven Pit (permit M-2010-071), AM-02
Review of surface water management, Item #4 of adequacy response of 10/5/2022

I reviewed the adequacy response (dated October 5, 2022, from Weiland, Inc.) to Item #4 in the Division adequacy letter of August 2, 2022. I have the following follow-up comments:

- a) **In the adequacy response to Item #4, the applicant states that post-mining stormwater flows from the site will not exceed pre-mining flows. (The Division understands this statement to be relevant to the swale at the northwest corner of the site.) The applicant should provide proof that flow is less than or equal to pre-disturbance flow in the form of a hydrology model or other type of hydrologic analysis.**
- b) **I find the drop structure, wing wall, and cutoff wall concept and design to be sound. However, it is a somewhat unusual approach. Therefore, the applicant needs to provide a written commitment to repairing any erosion on or addressing sediment loading to adjacent properties. This includes the property north of the site, which is owned by Boulder County. If erosion or sediment problems persist, the applicant will need to redesign the stormwater system, perhaps constructing a detention pond with an embankment and adequate spillways that do not cause damage to the downstream property.**



Date: October 24, 2022

To: Brock Bowles, DRMS

From: Patrick Lennberg, DRMS

RE: Goose Haven Site, Amendment No.2 (AM-2) Application, Responses to Adequacy Review Questions, File No. M2010-071

On October 10, 2022, I was requested to review the responses to adequacy review no. 2, dated August 2, 2022, questions 8 and 9 for the Goose Haven Site, AM-2 application, M2010-071. Below are follow-up questions that should be addressed.

1. There is an approved groundwater monitoring program for the site that was initially approved during the original permitting process and further committed to during AM-1. The groundwater monitoring program needs to be updated to account for the new lined reservoir. The updated program needs to propose new groundwater monitoring locations (up- and down-gradient locations), provide a map of current and proposed monitoring locations, and update the groundwater flow model to demonstrate affects to the hydrologic balance will be minimized pursuant to Rule 3.1.7. An updated model is needed to establish mitigation triggers for the new wells and demonstrate the effectiveness of the installed underdrain along the southern boundary of the lined reservoir. The potentiometric surface map provided in the Applicant's responses, Map C-1, to the Division's second adequacy review is comprised of onsite data and interpolated regional data. The provided map seems to indicate a north-northeast gradient near the new lined reservoir where there is no onsite data but where there is onsite data the gradient shifts to a more northeast gradient. Updating the groundwater model and installing additional wells at the site would determine the actual groundwater flow across the new portion of the permitted area and the site as a whole.

Finally, in the Board Order, signed July 21, 2021, for violation MV-2021-008, part of the Board ordered corrective action was to submit a hydrologic evaluation for the site to address the new reservoir. To date a sufficient hydrologic evaluation has not been submitted for review for the site.

2. During the pre-operation inspection the Operators representative stated there is another underdrain along the northern boundary of the lined reservoir and ties into the same outfall location as the southern underdrain ties into. Does this drain exist? If so, the underdrain needs to be shown on an updated map and please provide the construction details of the underdrain



(length, diameter, and timing of installation). Please explain why the underdrain, if installed, was constructed and how it may impact the jurisdictional dam at the site.

3. During the pre-operation inspection the Operators representative stated the outfall is pumped to discharge to the ditch. Please explain if the representative meant the lined ditch immediately north of the site or the Boulder and Weld County ditch located along Boulder Creek approximately 0.5 miles north of the site. Please provide a map that shows the alignment of the discharge piping.
4. Please see the Division of Water Resources comment letter regarding the current amendment application, attached to this memo. Please provide a copy of the currently approved SWSP Plan or approved augmentation plan and valid well permit for the site.
5. Please provide an update on the status of the Applicant's permit with Dam Safety and the jurisdictional dam at the site. Please commit to providing a copy of the approval documentation from Dam Safety.

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

Sincerely,



Patrick Lennberg
Environmental Protection Specialist

Attachment: DWR Comment Letter October, 28, 2021

cc: Jared Ebert, DRMS
Brock Bowles, DRMS

Attachments



Response to Reclamation Permit Amendment Application Consideration

DATE: October 28, 2021
TO: Brock F. Bowles, Environmental Protection Specialist
CC: Division 1 Office, District 6 Water Commissioner
FROM: Ioana Comaniciu, P.E.
RE: Goose Haven Reservoir #2 Complex Expansion, File No. M-2010-071-[AM2](#)
Operator: City of Lafayette, (303) 661-1226
Contact: Peter Wayland, (303) 443-9521
Sections 15, 21, and 22, Twp 1 North, Rng 69 West, 6th P.M., Boulder County

COMMENTS: City of Lafayette requested an amendment to the application for the Goose Haven Reservoir #2 Complex Expansion, Permit no. M2010-071. The purpose of this amendment is to add a new cell to the mining area designated as Cell 2A. Cell 2A will be reclaimed as a clay liner reservoir and an embankment dam. This change in end use will involve creating up to 3 reservoirs covering 94.3 acres. The proposed operation will continue to consume ground water through evaporation, dust control, reclamation, water removed with the mined product, and dewatering. The Goose Haven Reservoir #2 Complex Expansion is included in a pending Substitute Water Supply Plan, which is proposed to covered depletions caused by gravel mining operations at the site through April 30, 2022, which include Cell 2A. The renewal request of the SWSP was submitted to this office on May 25, 2021 and this plan is pending additional information from the Applicant's water consultant. A gravel pit well permit must be obtained for the current use and exposed surface area at the site in accordance with §37-90-137(2) and (11), C.R.S., since the current well permit no. 79766-F obtained for the site in 2016 covers only 2 acres of groundwater exposed at the site and 20 acre-feet of depletions. So long as the proposed amendment is operated in accordance with an approved SWSP or approved plan for augmentation and a valid well permit, this office has no objection to the request.

If stormwater runoff is intercepted by this mining operation and is not diverted or captured in priority, it must be released to the stream system within 72 hours, which may require a discharge permit from CDPHE-WQCD. Otherwise, the operator will need to make replacements for evaporation.

The applicant may contact the State Engineer's Office with any questions.

