

MINERALS PROGRAM INSPECTION REPORT PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME:	MINE/PROSPECTING ID#:	MINERAL:	COUNTY:		
Bivens Pit	M-1985-184	Sand and gravel	Larimer		
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:		
Monitoring	Amy Eschberger	September 2, 2020	13:30		
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERAT	'ION:		
Bivens Trucking & Excavating, Inc.	Aaron Bivens	112c - Construction Regular Operation			
REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:			
Normal I&E Program	Complete Bond	\$40,000.00			
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGEN	NCY:		
NA	None	None			
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATI	E:		
Clear	Clerry Erchluger	September 24, 2020			

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Reclamation Success

PROBLEM: Failure to follow the approved reclamation plan, or the current reclamation plan needs to be updated and clarified pursuant to C.R.S. 34-32.5-116(1). The operator must follow the approved reclamation plan or provide sufficient information to describe or identify how the operator intends to conduct reclamation. Specifically, the approved reclamation plan and map do not address the residential area and associated structures at the southern end of the site or the recreational area and associated structures at the eastern edge of the pond.

CORRECTIVE ACTIONS: By the corrective action date, the operator shall submit a Technical Revision, with the required \$216 revision fee, to update and clarify the current approved reclamation plan to reflect existing and proposed activities. This revision should include an updated reclamation plan and reclamation plan map that, at a minimum, addresses existing conditions at the site, including the residential and recreational areas (and associated structures) located within the permit area.

CORRECTIVE ACTION DUE DATE: November 23, 2020

OBSERVATIONS

This was a normal monitoring inspection of the Bivens Pit (Permit No. M-1985-184) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Mr. Aaron Bivens represented the operator during the inspection. The site is located at the northern edge of Fort Collins, CO in Larimer County. Access to the site is from the south off Willox Lane. The permit area is bound at its eastern edge by the Union Pacific Railroad and at its southern edge by the Larimer and Weld Canal (Eaton Ditch). The affected lands are owned by the operator. **Photos 1-32** taken during the inspection are included with this report.

This is a 112c operation permitted for 11 acres (see enclosed Google Earth image of site) to mine sand and gravel from an existing pit. The approved mining plan includes dewatering the mining area and discharging this water into the adjacent Eaton Ditch. An NPDES permit will be obtained from the Colorado Department of Public Health and Environment for the discharge activity. The site will be mined as a dry pit in three primary phases, beginning at the existing 0.6 acre pit located at the far eastern edge of the permit area, and commencing in a general counter-clockwise fashion (see enclosed mining plan map). Mined material will be screened and crushed on site. The mobile processing plant will initially be located in Phase 1, then be relocated as the operation moves to the next mining phase. No material washing will occur on site. A scale and scale house will be located at the southern edge of the site off the existing access road. A large topsoil stockpile (approximately 9,250 cy) mixed with fertilizer existed at the western edge of the site at the time of permitting. Additional salvaged topsoil will continue to be placed in this area.

The approved post-mining land use for the site is a pond with vegetated shoreline. Disturbed land around the pond will be revegetated to grassland. The final pond size was initially expected to be 6.5 acres in size (see enclosed reclamation plan map). However, through Technical Revision No. 1 (TR-1; approved on 5/12/2003), the final pond size was reduced to no more than 4.5 acres (see enclosed reclamation plan map submitted with TR-1). Pond shorelines will be graded to slopes of 3H:1V or flatter. Portions of the pond shorelines may be stabilized with clean concrete and/or rock. Disturbed land around the pond will be retopsoiled at a depth of approximately 12 inches and revegetated with a grass seed mixture consisting of switchgrass, slender wheatgrass, tall wheatgrass, and alkali sacaton. The truck scale and scale house (trailer) will be removed for reclamation, and the area beneath them scarified, retopsoiled, and revegetated. The main access road and a road around the perimeter of the pond will remain after reclamation.

TR-1 authorizes the operation to utilize the land around the pond for temporarily storing and processing concrete and asphalt rubble, fill dirt, and topsoil imported to the site by contractors from different excavation sites in or around Fort Collins. The crushed and/or recycled products are sold and hauled off site. In TR-1, the operator estimated no more than approximately 28,000 cy of imported material would be stored on site at any given time. The permit file also includes an affidavit (submitted in 2009) for the additional importation of up to approximately 3,000 cy of inert fill material, including concrete, asphalt, sand, fill dirt, topsoil, and rock to be used for reclamation of the site.

The current operator, Bivens Trucking & Excavating, Inc. took over the permit in 2009, and since that time, has completed a significant amount of reclamation work at the site. This work includes using some of the stockpiled material to backfill portions of the pond, grading pond shorelines to the approved final slope configuration, stabilizing portions of the pond shorelines with boulder and cobble-sized rocks, and conducting extensive weed control including removing several old Tamarisk and Russian Olive trees from the permit area.

During the inspection, the Division walked around the perimeter of the pond and observed its shorelines to be graded to 3H:1V or flatter and stable with good vegetative cover consisting of grasses and wetland vegetation (consisting primarily of cattails). Cobblestones have been placed along the pond slopes beneath the water line.

Portions of the northwestern and eastern shorelines have been stabilized with boulders. Portions of the southern shoreline have been stabilized with cobblestones. No erosion problems were observed. Several material stockpiles (e.g., fill dirt, recycled asphalt, rock) were scattered around the perimeter of the pond. A mobile processing plant was set up east of the pond. Large topsoil stockpiles were stored west of the pond. The Division understands the operator has been removing topsoil for reclamation. However, if the topsoil stockpiles remain for more than one growing season, they should be sloped to 3H:1V or flatter and seeded with a fast-growing vegetative cover (i.e., smooth brome or slender wheatgrass) to prevent deterioration and contamination, per the approved permit. The operator has created a recreational area for his family along the eastern edge of the pond, comprised of a sandy beach lined with trees. The pond shoreline in this area is graded to 5H:1V or flatter for swimming. Portions of this area are paved. Recreational features/structures in this area include a small dock and gravel boat ramp, a few small cabins, a fire pit area, a picnic area, a playground, a flagpole, wooden fencing, and some artistic structures. The Division estimates the recreational area to cover approximately 0.32 acre.

A residential area is located at the southern end of the site, where a house, carport, and chainlink fencing are located within the permit area, a large garage is located partially within the permit area, and a row of rock bins are located outside of the permit area. The rock bins and material stockpiles located in the residential area are associated with the operator's construction material recycling business, and not with the mine permit. None of the construction material stored outside of the permit area was extracted from the mine. Because the approved permit boundary no longer aligns with the property boundary, the mine operation will need to be very careful not to disturb land outside the permit boundary, particularly along the western edge of the site.

The Division estimates a total of 9.85 acres have been disturbed by the operation, including the 3.5 acre pond, the stockpiling and processing areas around the pond, the 0.32 acre recreational area along the eastern edge of the pond, and the scale/scale house area. This means that 6.35 acres of land will require retopsoiling and revegetating for final reclamation, per the approved plan. Additionally, per TR-1, any construction material stockpiled within the permit area would be considered reclamation backfill material in the event the financial warranty was forfeited and the State had to complete reclamation of the site. The scale and scale house would also be removed and the area beneath them scarified, retopsoiled, and revegetated.

During the inspection, the Division had discussions with the operator regarding future plans for the site. The operator does not currently have plans to continue mining the site, but wishes to retain the permit in case he decides to enlarge the pond and sell the material. If the operator does intend to expand the pond, he should first contact the Division of Water Resources to ensure the current water-court approved augmentation plan (Case No. 90-CW-129 and Case No. W-7813-74) would cover the additional exposed groundwater. If additional mining is not planned at this time, the Division strongly recommends the operator either complete reclamation of the site in accordance with the approved reclamation plan or revise the reclamation plan and post-mining land use to allow for continued use of the site as a construction material recycling facility, then request a full release of the permit and financial warranty.

The approved reclamation plan does not address the recreational area and associated structures/features created at the eastern edge of the pond or the residential area and associated structures located in the southern portion of the permit area. Therefore, unless the reclamation plan is updated to show these areas will remain as-is for final reclamation, the Division will need to update the required financial warranty to include costs for reclaiming these areas and their associated structures/features. <u>A problem is cited in this report (see page 1) requiring the operator to submit a Technical Revision to update the reclamation plan and reclamation plan map to reflect, at a minimum, existing conditions at the site.</u> The revised reclamation plan map should specify all features and structures to remain on site for final reclamation, show final slope gradients of the pond shorelines (including the swimming area which was graded flatter than 3H:1V for swimming), indicate the post-mining

land use for all portions of the permit area (e.g., residential, recreational, industrial/commercial, rangeland, wildlife habitat), specify which portions of the permit area, if any, will be retopsoiled and revegetated for reclamation, and show the approximate location of any roads to remain. Given the site is primarily used for the operator's construction material recycling business, any proposals to continue using the site for this purpose after final reclamation could be included in this Technical Revision. Such a proposal should also include demonstration this industrial/commercial use is compliant with local county land use and zoning requirements. The Division will reassess the required financial warranty for the site after reviewing the proposed changes in the Technical Revision.

This concludes the report.

Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at amy.eschberger@state.co.us.

PHOTOGRAPHS



Photo 1. View looking east across southern pond shoreline, showing slopes graded to 3H:1V or flatter and stable with good vegetative cover.



Photo 2. View looking northeast across western pond shoreline, showing slopes graded to 3H:1V or flatter and stable with good vegetative cover.



Photo 3. View looking southeast across western pond shoreline, showing slopes graded to 3H:1V or flatter and stable with good vegetative cover.



Photo 4. View looking north across northwestern pond shoreline, showing slopes graded to 3H:1V or flatter and stable with good vegetative cover.



Photo 5. View looking south, showing topsoil stockpiles stored west of pond. These stockpiles should be graded to a stable configuration and seeded with a fast-growing vegetative cover.



Photo 6. View looking south across northwestern pond shoreline, showing slopes graded to 3H:1V or flatter and stabilized with boulders.



Photo 7. View looking east across northern pond shoreline, showing slopes graded to 3H:1V or flatter and stable with good vegetative cover.



Photo 8. View looking west, showing material stockpiles and screen stored north of pond.



Photo 9. View looking southwest across northern pond shoreline, showing slopes graded to 3H:1V or flatter and stable with good vegetative cover.



Photo 10. View looking east across northeastern pond shoreline, showing slopes graded to 3H:1V or flatter and stable with good vegetative cover.



Photo 11. View looking southwest, showing boulder stockpile stored northeast of pond.



Photo 12. View looking south, showing cobble stockpile (behind boulders) stored northeast of pond.



Photo 13. View looking south, showing mobile processing plant located east of pond.



Photo 14. View looking southeast across processing area located east of pond.



Photo 15. View looking northeast across processing area located east of pond.



Photo 16. View looking northeast across eastern pond shoreline in recreational area, with slopes graded to 5H:1V or flatter for swimming.



Photo 17. View looking east across recreational area along eastern edge of pond.



Photo 18. View looking southwest across eastern pond shoreline in recreational area, with slopes graded to 5H:1V or flatter for swimming.



Photo 19. View looking west, showing small dock (at right) and gravel boat ramp (at left) constructed along eastern pond shoreline in recreational area.



Photo 20. View looking northeast across eastern pond shoreline in recreational area.



Photo 21. View looking northeast across recreational area along eastern pond shoreline, showing small building, fencing, and art structures present in this area.



Photo 22. View looking southwest across eastern pond shoreline (south of recreational area), showing slopes graded to 3H:1V or flatter and stable with good vegetative cover.



Photo 23. View looking south across disturbed area east/southeast of pond, showing material stockpiles stored in this area.



Photo 24. View looking south across disturbed area east/southeast of pond, showing material stockpile stored in this area.



Photo 25. View looking south across southeastern pond shoreline, showing slopes graded to 3H:1V or flatter and stable with good vegetative cover.



Photo 26. View looking north across pond from its southern shoreline.



Photo 27. View looking west across disturbed area south of pond.



Photo 28. View looking south across disturbed area south of pond (residential area in background).



Photo 29. View looking northwest across disturbed area south of pond, showing recycled asphalt stockpiled in this area.



Photo 30. View looking north, showing residential buildings (in background) present in southern portion of permit area. Garage (at left) is located partially outside permit area.



Photo 31. View looking northeast, showing truck scale and scale house installed off main access road in southern portion of permit area.



Photo 32. View looking southwest, showing row of rock bins present along western edge of property (outside permit area), utilized for operator's construction material recycling business.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS <u>Y</u>	(FN) FINANCIAL WARRANTY <u>N</u>	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>N</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING Y	(SF) PROCESSING FACILITIES Y	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS Y	(SP) STORM WATER MGT PLAN Y	(RS) RECL PLAN/COMP PB
(ES) OVERBURDEN/DEV. WASTE Y	(SC) EROSION/SEDIMENTATION Y	(ST) STIPULATIONS <u>N</u>
(AT) ACID OR TOXIC MATERIALS <u>N</u>	(OD) OFF-SITE DAMAGE <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

Inspection Contact Address

Aaron Bivens Bivens Trucking & Excavating, Inc. 862 W. Willox Ln Ft. Collins, CO 80524

Encls: Google Earth image of site Mining plan map approved with original permit application Reclamation plan map approved with original permit application Revised reclamation plan map approved with TR-1 Technical Revision form

CC: Michael Cunningham, DRMS

M-1985-184 / Bivens Trucking & Excavating, Inc. / (112c) / Image data from: 7/17/2019

Red Outline = 11 acres = Approved Permit Area (location approximated based on approved maps)

Blue Outline = 3.5 acres = P ond Surface Area

Purple Outline = 0.32 acre = Recreational Area

Yellow Outline = 9.85 acres = Total Disturbed Area (including 3.5 acre pond + 0.32 acre recreational area)









COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M	Site Name:	
County	TR#	(DRMS Use only)
Permittee:		
Operator (If Other than Permittee)		
Permittee Representative:		
Please provide a brief description	of the proposed revision:	

As defined by the Minerals Rules, a Technical Revision (TR) is: "a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan." The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered "filed for review" until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	Required TR Fee	Submitted (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	
112 hard rock (not DMO)	\$175	
110d, 112d(1, 2 or 3)	\$1006	