

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:
West Farm Pit	M-2008-078	Gravel and sand	Prowers
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Surety-Related Inspection	Amy Eschberger	March 17, 2015	15:20
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
GP Aggregates, LLC	Ron Peterson	112c - Construction Regular Operation	

REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:		
Surety Related	Complete Bond	\$678,977.00		
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:		
NA	None	None		
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:		
Clear	Amy Eschberger	April 8, 2015		

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS <u>Y</u>	(FN) FINANCIAL WARRANTY Y	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>NA</u>
(PW) PROCESSING WASTE/TAILING Y	(SF) PROCESSING FACILITIES \underline{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 <u>Y</u>	(SP) STORM WATER MGT PLAN Y	(SB) COMPLETE INSP Y
(ES) OVERBURDEN/DEV. WASTE <u>Y</u>	(SC) EROSION/SEDIMENTATION Y	(RS) RECL PLAN/COMP Y
(AT) ACID OR TOXIC MATERIALS <u>N</u>	(OD) OFF-SITE DAMAGE <u>Y</u>	

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

OBSERVATIONS

This was a surety-related inspection of the West Farm Pit (Permit No. M-2008-078) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) in response to a Surety Reduction request (SR-01) that was received by the Division on February 26, 2015. Mr. Ron Peterson represented the Operator, GP Aggregates, LLC during the inspection. This site is located approximately one mile east of Lamar, Colorado in Prowers County, on land owned by the Operator. The site is situated approximately 0.2 miles south from the Arkansas River. The site is accessed from its southern boundary by Co Road HH.5. The approved post-mining land use is developed water resources.

This is a 112c operation permitted for 233.40 acres to dry mine sand and gravel to a maximum depth of approximately 70 feet. The site will be mined in two main cells, the North Mining Area and the South Mining Area, which are separated by an existing irrigation lateral and Co Rd HH 8/10. The two main cells are comprised of 19 mining phases. Mining will begin in the North Mining Area, and will then proceed to the South Mining Area. The approved Reclamation Plan calls for leaving two separate water storage reservoirs with a total surface area of approximately 166.4 acres. However, the South Mining Area may be partially or completely backfilled, depending on the amount of excess material that remains after mining is completed. During reclamation activities, inlet and outlet facilities for the reservoir(s) will be designed and installed once the operational criteria of the proposed reservoir(s) have been identified. The Operator has committed to installing a perimeter drain around portions of the pit(s) if it becomes necessary to convey groundwater around the lined reservoirs.

A stipulation was added with the approval of this permit on April 07, 2009, requiring the Operator to submit to the Division a written request to increase the Financial Warranty prior to opening an additional phase(s). Thus far, the Operator has complied with this stipulation by submitting a Technical Revision to revise the Financial Warranty as additional phases within the permit area are to be disturbed by the operation. In the Technical Revision (TR-02) approved on November 27, 2013, the Reclamation Plan was revised so that the finished reservoir(s) will be enclosed by an impermeable slurry wall rather than lined by a compacted clay liner. This revision also changed the mining slope from vertical to 3H:1V, with a mining setback of 25 feet from the inside edge of the slurry wall. Additionally, it made some minor revisions to the mining phases, and reduced the total mining area to 185.26 acres. With approval of TR-02, the Operator committed to monitoring groundwater elevations upgradient and downgradient of the mined pit on a quarterly basis and reporting the results to the Division annually. There are four groundwater monitoring wells installed around the perimeter of the pit), and GP MW-3 (located east of the pit). The Town of Lamar installed the monitoring well located north of the pit. According to TR-02, the Town of Lamar agreed to provide the Operator with groundwater depth readings for this well.

Two additional Technical Revisions were approved (TR-03 and TR-04) to revise the mine phasing and increase the maximum allowed disturbed acreage, with associated increases of the required Financial Warranty. Currently, the maximum allowed disturbed acreage is 117 acres, including, 37.77 acres for active mining of Phases 1-4 (enclosed by slurry wall) located in the northwestern portion of the permit area, 11.61 acres for processing and stockpiling material in Phase 13 located in the western portion of the permit area, and 67.59 acres for stockpiling in Phases 14-18 located in the southern portion of the permit area. The Division allowed for the 20% bonding option for slurry wall installation around Phases 1-4 because the Operator provided (in TR-03) adequate design documents, plans, specifications, and a quality assurance program. After approval of TR-04, the required Financial Warranty was increased to \$943,946.00 to account for disturbance of 117 acres (from 60 acres), and still included costs for 20% of slurry wall installation around Phases 1-4. Approval of TR-03 and TR-04 included Stipulation No. 1 which states that prior to mining outside of the current slurry wall

enclosed area (Phases 1-4; 37.77 acres), the Operator will be required to post additional bond for the approved final configuration of the slurry wall [until it is approved by the Office of the State Engineer (SEO)].

According to the approved Reclamation Plan, the final configuration of the slurry wall has it enclosing the entire permit area. The Division estimates the total length of slurry wall needed to enclose this area to be approximately 14,024 linear feet (based on measurements of maps provided by the Operator). The northern and western walls of the currently installed slurry wall (totaling approximately 2,724 linear feet) which have already passed the 90-day performance test and were approved by the SEO would remain as part of the final configuration. The Division would not require Financial Warranty for these portions. During the inspection, Mr. Peterson indicated that the final configuration of the slurry wall may be revised in the near future. As long as the final slurry wall enclosure is installed prior to exposure of groundwater, gains approval from the SEO, and the final design and specifications are submitted to the Division, then no Financial Warranty would be required for the slurry wall. Construction of the slurry wall around Phases 1-4 was completed at the end of last year (2014). The Operator has provided the Division with a copy of the Slurry Wall 90-Day Performance Test Final Report and a letter from the SEO stating that the slurry wall meets their design standards. The SEO requires the Operator to submit monthly water accounting for the site.

At the time of the inspection, the weather was cool and overcast, and the ground was dry. A permit sign was posted at the main entrance to the site off of County Rd HH.5 (Photo 1). The permit boundary was delineated with PVC pipes and metal stakes. The site was operational during the inspection, including mining and material processing in the Phase 1-4 area (Photos 2 and 3), material processing and stockpiling in the Phase 13 area (Photos 4 and 5), and hauling material off site from these areas. The Division estimates that the operation has currently disturbed approximately 75 acres. The operation is currently mining in Phases 1 and 3 within the slurry wall enclosed area. The mining walls are approximately 50-55 feet in height, and are being maintained at 3H:1V slopes (Photos 6 and 7) with mining activities kept a minimum of 25 feet from the inside edge of the slurry wall (as approved in TR-02). The mining walls appeared to be stable, showing no signs of major sloughing.

The Operator has stripped topsoil from approximately 11 acres just east of the current pit (within the slurry wall enclosure) in preparation for mining (Photo 8). A small settling pond is located in the northeastern corner of this area (Photo 9). The Operator appears to hold a current Substitute Water Supply Plan that accounts for evaporative losses from this pond. The far eastern portion of the slurry wall enclosed area (approximately 8.2 acres; Photo 10) had not yet been disturbed by the operation at the time of the inspection. The Phase 13 area located in the western portion of the permit area includes a material wash plant (see Photo 4), several large material stockpiles (see Photo 5), and two settling ponds (located just north of the wash plant; Photos 11 and 12). Water used to wash material is directed into the settling ponds, then pumped out and re-used in the process. It appears that evaporative losses from the two ponds are covered by the Substitute Water Supply Plan.

Topsoil and overburden are stored in the southwestern portion of the permit area, near Co Rd HH.5 (Photo 13). The Division estimates that the footprint of this stockpile currently covers approximately 9.0 acres. It appears that, initially, the overburden and topsoil were being stockpiled together. However, topsoil is now being properly separated and placed in its own stockpile just north of the current one. The Operator has hydro-mulched the western (Photo 14) and southern sides of the large overburden/topsoil stockpile that face the adjacent residences. This stockpile appears to be stable at this time.

It should be noted here that an area that is approximately 1 acre in size, located just outside of the northwest corner of the permit boundary is being used for parking. According to historical Google Earth images of the site, this portion of land was disturbed at some time between September 2012 and June 2014. During the inspection, Mr. Peterson indicated that this area is not used by the operation, but by contract workers for the

farm. The Operator should be advised that if this area is to be used by the mining operation, it will need to be included in the permit area.

The Surety Reduction request (SR-01) was submitted to eliminate the costs associated with slurry wall installation now that the Operator has submitted evidence to the Division that the final design of the slurry wall was approved by the SEO. The Division did not receive any written objections to the Surety Reduction within the public comment period that ended on March 20, 2015. <u>Therefore, on March 23, 2015, the Division approved the Surety Reduction, giving a current required Financial Warranty of \$561,037.06.</u>

The Operator intends to submit a Succession of Operators application to transfer the permit to Crossfire Aggregate Services, LLC. The Division informed the Operator that this application could be submitted once the Surety Reduction was approved. As long as the application is submitted within 90 days of the inspection date, and the operation does not disturb more than the maximum allowed disturbed acreage of 117 acres, the Successor Operator will be required to post the current required Financial Warranty in the amount given above.

PERMIT #: M-2008-078 INSPECTOR'S INITIALS: AME INSPECTION DATE: March 17, 2015

PHOTOGRAPHS



Photo 1. View of permit sign posted at main entrance to site off of Co Rd HH.5.



Photo 2. View looking southeast into active pit located in northwestern portion of permit area.



Photo 3. View looking east at material processing area located just south of active pit in northernwestern portion of permit area.



Photo 4. View looking west at material wash plant located in Phase 13 in western portion of permit area.



Photo 5. View looking east at Phase 13 located in western portion of permit area where material is washed and stockpiled. Note existing irrigation ditch and Co Rd HH 8/10 running E-W just south of Phase 13.



Photo 6. View looking east across northern mining wall, showing slopes maintained at 3H:1V, in accordance with approved Mining Plan.



Photo 7. View looking south across western mining wall, showing slopes maintained at 3H:1V, in accordance with approved Mining Plan.



Photo 8. View of area just east of active pit (within slurry wall enclosure) where topsoil has been stripped in preparation for mining.



Photo 9. View of small settling pond located east of active pit, within slurry wall enclosed area.



Photo 10. View of far eastern portion of slurry wall enclosed area that has not yet been stripped of topsoil.



Photo 11. View looking west, showing northern portion of settling ponds used for recycling water from material wash plant (located in Phase 13).



Photo 12. View looking south, showing southern portion of settling ponds used for recycling water from material wash plant (located in Phase 13).



Photo 13. View of large topsoil/overburden stockpile present along southwestern permit boundary. Topsoil is now being separated from overburden and placed just north of current stockpile (note darker material in front).



Photo 14. View of eastern side of large overburden/topsoil stockpile that was recently hydromulched (yellow in color).

Inspection Contact Address Karl Nyquist GP Aggregates, LLC 7991 Shaffer Parkway, Suite 200 Littleton, CO 80127

CC: Tom Kaldenbach, DRMS