



February 25, 2022

Chad Haley  
Department of Environmental Quality  
Land Quality Division  
200 West 17th Street, Suite 10  
Cheyenne, WY 82002  
Via Email: chad.haley@wyo.gov

**RE: Weaver Limestone Quarry, Permit #658, 2021-2022 Annual Report**

Dear Mr. Haley:

Enclosed is Cemex Construction Materials South LLC's (CEMEX) Annual Report for the Weaver Limestone Quarry, Permit No. 658 as well as the Annual Report Map. This report covers the period from February 28, 2021 to February 27, 2022.

If you have questions regarding this annual report, please contact me (303-823-2105, patrick.chalupsky@cemex.com) or our Plant Manager, Erik Estrada (303-823-2101, erik.estrada@cemex.com). Please contact me for the site inspection.

Sincerely,

Patrick Chalupsky  
Quarry Manager

Cc: Erik Estrada, CEMEX Lyons Plant Manager  
Robin Bay, Habitat Management, Inc.

Enclosures: Annual Report 2021-2022  
Itemized Performance Bond Calculations  
Groundwater Sampling Report 2021-2022  
Annual Report Map 2021-2022



PERMIT #658  
WEAVER LIMESTONE QUARRY

ANNUAL REPORT  
AND MINE AND RECLAMATION PLANS

FEBRUARY 28, 2021 to FEBRUARY 27, 2022

*REPORT PREPARED:*  
FEBRUARY 25, 2022

*SUBMITTED TO:*  
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
LAND QUALITY DIVISION  
HERSCHLER BUILDING  
CHEYENNE, WYOMING

*PREPARED BY:*  
CEMEX CONSTRUCTION MATERIALS SOUTH LLC  
5134 UTE HIGHWAY LONGMONT, CO 80503  
(303) 823-2101

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**REQUIRED ANNUAL REPORT INFORMATION  
FOR NON-COAL LARGE MINING OPERATIONS  
Land Quality Division Districts I, II & III**

**RE: Wyoming Environmental Quality as Amended §35-11-411, Annual Report**

1. (a) Name of Permittee: **Cemex Construction Materials South LLC**  
(b) Address: **5134 Ute Highway Longmont, CO 80503**  
(c) Mining Permit Number: **Permit No. 658**  
(d) Date of Permit Issuance (and Amendments): **February 29, 1996**  
(e) Commodity Mined: **Limestone**  
(f) State and Federal Mineral Lease: **None**
  
2. Time period covered by the report: **February 28, 2021 to February 27, 2022**
  
3. Mining:
  - (a) Tabulate acreage disturbed (by pits, roads, facilities, etc.) during the report period and illustrate on map.  
**5.4 acres were newly disturbed during the reporting period as shown on the map**
  
  - (b) Tabulate acreage affected to date by years and illustrate on map.  
200.1 acres were disturbed from 1996 to September 13, 2018 by MCC  
0 acres were disturbed from September 14, 2018 – February 27, 2019  
1.2 acres were disturbed from February 28, 2019 – February 27, 2020  
30.4 acres were disturbed from February 28, 2020 – February 27, 2021  
**5.4 acres were disturbed from February 28, 2021 – February 27, 2022**  
**237.1 acres Affected Total Since Mine Start Up**  
**0 acres Projected Disturbance 2022-2023**  
**237.1 acres Total Affected and Projected for 2021-2022 as shown on the map**
  
  - (c) Tabulate all topsoil stockpile volumes, date of stockpiling and illustrate on map.  
159,613 CY of topsoil were stockpiled before September 13, 2018 by MCC  
0 CY were stockpiled from September 14, 2018 – February 27, 2019  
309 CY were stockpiled from February 28, 2019 – February 27, 2020  
28,922 CY were stockpiled from February 28, 2020 – February 27, 2021  
**4,388 CY were stockpiled from February 28, 2021 – February 27, 2022**  
**-2,000 CY were placed from February 28, 2021 – February 27, 2022**  
**191,232 CY of topsoil are currently stockpiled for reclamation as shown on the map and detailed in Table 4**

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- (d) Tabulate all out-of-pit spoil volumes, dates of placement and illustrate on map.  
106,102 CY of overburden were stockpiled before September 13, 2018 by MCC  
0 CY were stockpiled from September 14, 2018 – February 27, 2019  
0 CY were stockpiled from February 28, 2019 – February 27, 2020.  
0 CY were stockpiled from February 28, 2020 – February 27, 2021.  
**13,493 CY were stockpiled from February 28, 2021 – February 27, 2022.**  
**119,595 CY of overburden are currently stockpiled for mine reclamation as shown on the map and detailed in Table 4**
- (e) Tabulate quantity of commodity mined by years.  
6,899,746 tons of limestone were mined from 1996 to September 13, 2018 by MCC  
50,501 tons were mined from September 14, 2018 – February 27, 2019  
245,778 tons were mined from February 28, 2019 – February 27, 2020  
443,714 tons were mined from February 28, 2020 – February 27, 2021  
**441,615 tons were mined from February 28, 2021 – February 27, 2022**  
**8,081,354 tons of limestone have been mined since mine start-up**
- (f) Describe any new construction during the report period and illustrate on map; include:
1. Shop facilities, erection sites.  
**Some of the portable crushing equipment, as shown on the map, was moved from where it was shown on the previous report map.**
  2. Roads **None**
  3. Culverts **None**
  4. Diversion ditches, collector ditches, interceptor ditches, etc. **None**
  5. Sediment ponds, containment ponds. **None**
  6. Monitoring sites. **None**
- (g) Describe any environmental problem areas and a proposed plan for mitigating them. Illustrate on map; include:
1. Pit stability problems.  
**The limestone layers being mined are 9 ft to 20 ft thick and mostly flat which maximizes the pit stability. While there can be minimal back-breaks after blasting, they are easily mitigated with a wheel loader.**
  2. Subsidence.  
**N/A**
  3. Accidental water discharge, dam failure, etc.  
**All water impacted by mining activities is trapped within the stormwater ponding area located at the western edge of the current disturbance.**
  4. Slumping or sliding.  
**N/A**
  5. Revegetation problem areas.  
**N/A**

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4. Reclamation:

- (a) Tabulate the acreage completed during the report period and illustrate on map. Distinguish between:
- |   |                  |
|---|------------------|
| 1. Backfilled, graded, and contoured.   | <b>2.9 acres</b> |
| 2. Topsoiled.   | <b>2.9 acres</b> |
| 3. Seeded.  | <b>None</b>      |
| 4. Reseeded.  | <b>None</b>      |
| 5. Indicate where special construction or reclamation practices were used such as for sand bodies or alluvial material. | <b>None</b>      |

- (b) Submit a map showing the reconstructed contours. The map must be the same scale and contour interval as the PMT map in the approved permit.  
**As indicated in the approved Reclamation Plan Map but with gentler slopes and more natural-looking shapes and distances.**

- (c) Tabulate acreage reclaimed (seeded with permanent seed mix) to date by years and illustrate on map.  
**To date, no areas have been seeded with the permanent seed mix. MCC covered 2.9 acres (as shown on the map) with direct-hauled topsoil in 2015. While not seeded, these areas have established some volunteer vegetation cover and LQD agreed with MCC, on a one-time basis, to let nature take its course with these two experimental reclamation patches rather than disturbing the volunteer revegetation. MCC also planted a 0.2-acre area with mountain mahogany plants between 2010 and 2015 (labeled as Experimental Garden on the map).**

- (d) Describe reclamation procedures used during the report period:
- |   |                                  |
|---|----------------------------------|
| 1. Depth of topsoil applied. Indicate whether from stockpile or directly applied.   | <b>5-6" thick<br/>From TS-23</b> |
| 2. Type of seed used for seeding during the report period.  | <b>N/A</b>                       |
| 3. Dates of seeding during the report period.   | <b>N/A</b>                       |
| 4. Seeding procedures used.   | <b>N/A</b>                       |
| 5. Rate of seed application.  | <b>N/A</b>                       |
| 6. Type and rate of any fertilizer applied.   | <b>N/A</b>                       |
| 7. Type and rate of mulch applied.  | <b>N/A</b>                       |
| 8. Rate of irrigation water applied.  | <b>N/A</b>                       |
| 9. Any deviations to the approved reclamation plan including, in addition to the items above, changes to the contour or location of post mining features. | <b>N/A</b>                       |

- (e) Describe results of previous revegetation efforts; include:
1. Types of seed that have germinated and are growing.  
**The two approved reclamation test areas with unseeded direct-hauled topsoil are continuing to develop. A qualitative evaluation conducted on October 1, 2020, found over 20 native perennial species that have established. The Experimental Garden area with the planted mountain mahogany was also evaluated. Similar native perennial species have established in this area even in the absence of topsoil. One live mountain mahogany transplant was found. CEMEX will continue to monitor these areas.**

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2. Types of seed that are not growing successfully.

**None**

3. Areas experiencing problems with weeds and weed types.

**A significant population of musk thistle (*Carduus nutans*) is present on some of the topsoil stockpiles.**

4. Significant erosional problems.

**None**

5. Areas if unsuitable overburden on the surface.

**None**

6. Procedures used or proposed to correct these problems.

**CEMEX will conduct weed control activities in 2022 to address the musk thistle and any other noxious weeds observed at that time.**

- (f) Summarize the actual reclamation costs incurred during the report period. Costs should be itemized for each operation (i.e., grading, topsoil replacement, seeding, etc.) and for each type of disturbance (i.e., spoil, haul roads, facilities removal, etc.) on a per-acre basis.

**Topsoil was placed on a 2.9-acre area during the reporting period. This work was completed by CEMEX personnel for a total cost of approximately \$24,000.**

5. Describe in detail mining plans for the coming year including revised time schedules and all proposed deviations from previously approved plans. Acreages should be tabulated and illustrated on a map.

**See Mine and Reclamation Plan Summary and Map.**

6. Describe in detail reclamation plans for the coming year including revised time schedules and deviations from previously approved plans. Acreages should be tabulated and illustrated on a map.

**See Mine and Reclamation Plan Summary and Map.**

*NOTE: On items 5 and 6 above, any proposed deviation from the approved mine and reclamation plan must be described in detail. The proposed mining and reclamation plans will be reviewed and the operator will be notified if further information is required. "Significant" deviations will require permit revision application (Form 11) and public notice pursuant to Chapter VII Section 2 of Land Quality Division Noncoal Regulations.*

7. Describe in detail all monitoring activities during the report period, summarize the data, describe procedures to correct any noted problems and deviations from previously approved methods, including:

- (a) Groundwater analyses.

**Both wells were visited for sampling during the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> quarters of 2021. The results of the 2021 monitoring are summarized in Tables 4, 5, & 6 and detailed in the WWC Annual 2021 Groundwater Sampling Report (Attachment 2).**

- (b) Surface water analyses and discharge data.

**N/A**

- (c) Precipitation data.

**N/A**

- (d) Subsidence monitoring.

**N/A**

- (e) Overburden analyses.

**N/A**

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(f) Topsoil quantities – compare calculated and actual.

**A drone survey was conducted in August 2021 to quantify the available topsoil and overburden material in the various stockpiles on the site. Quantities reported in previous annual reports were based on numbers provided by MCC at the time of the permit transfer in 2018 and field estimates for more recent stockpiles.**

**Materials stockpiled after August 2021 were again recorded as field estimates.**

(g) Vegetation data.

N/A

(h) Wildlife data.

N/A

(i) A map showing and identifying monitoring locations.

See Map

Operator’s Reclamation Performance Bond Estimate as required by Wyoming Statute §35-11-417.

Reclamation cost estimates should be itemized in detail to reflect the actual estimated costs of reclaiming all lands which have been affected to date and those lands to be affected during the next report period.

Costs must reflect procedures as specified in the approved mine and reclamation plan. The estimated cost

8. of dismantling and disposal of all facilities and structures must be included. Salvage value will not be used to offset bonding requirements. Reclamation projected for the coming year will not be used to offset bonding requirements. Pit backfill costs must reflect actual yardages to be moved. Actual yardages to be moved will reflect the removal or placement of additional material to correct any deviations between the PMT map and the map submitted for part 4.(b).

**See attached Mine and Reclamation Plan Summary.**

9. Supply any additional information as requested by the Division to:

(a) Notices of violation

N/A

(b) Orders

N/A

(c) Permit stipulations; and

N/A

(d) Other special conditions.

N/A

10 All drill holes used for immediate developmental expansion of the advancing pit(s) shall be tabulated by location and depth and shown on the mining plan map. Pursuant to W.S. §35-11-404(e), all drill holes used for exploration shall be reported to the LQD and the State Engineer.

**Exploration drill holes were added in the 2021-2022 reporting period on the north wall of the mine and northeastern area previously stripped of topsoil. Drill hole locations and depths are shown on the attached map.**