

EXHIBIT D – MINING PLAN

1.0 GENERAL

The Wattenberg Lakes Mine property is located within unincorporated Weld County on land owned by the City of Westminster and Holcim. The geographic coordinates of the main entrance area are 40° 00' 40.82" North, 104° 50' 21.43" West. Sand and gravel will be the primary product produced from a small portion of the Wattenberg Lakes site. The principal intended use for the sand and gravel is for construction aggregates.

Agricultural and mining uses surround the property, with residential uses extending farther from the site including the community of Wattenberg north of the property. Some of the Baurer Pit permit (M-2020-058) area overlaps existing Pond 1 within the Wattenberg Lakes permit area; an acreage reduction will be requested for the Baurer Permit after the Wattenberg Lakes amendment is approved. The majority of the site is immediately west of the South Platte River between Weld County Road (WCR) 2 and WCR 6. Although a small northeastern section of the property straddles the South Platte River, the mining operation will not disturb the river. Mining was completed previously for most of the property, with only a small amount of additional mining planned (6.2 acres) to create the area required to complete Pond 1 (also known as the Struck Pond).

The primary changes in the current DRMS permit amendment mining plan compared with the 2004 DRMS permit mining plan include the following (changes to the reclamation plan are noted in Exhibit E):

- Mining has been completed in most of the permit area, with only a minimal amount of mining planned in two small areas in the Pond 1 (Struck Pond) area; Area 1 (see Exhibit C) was not previously included in the 2004 mining plan.
- The Huett Seep/Ditch was re-routed immediately east of Pond 3 as part of the activities permitted in 2004.
- A decreased area of mining occurred in the west boundary area of Pond 3, resulting in a straightened western pond boundary and a decrease in the disturbance during mining compared with the 2004 permit.

The total DRMS permit amendment area covers 420.8 acres. The permit boundary and affected area are the same for this amendment. Within the site, 6.2 acres of the land will be mined as shown for Area 1 (3.2 acres) and Area 2 (3.0 acres) in Exhibit C, Map C-1; the remaining areas will be used for temporary earthwork and other material movement (minor grading) as part of reclamation activities. Area 1 and Area 2 are planned for mining concurrently.

In June and August 2022, a survey was conducted within the permit area for wetlands and other waters of the U.S.; the delineation report is included in the vegetation exhibit (Attachment J-1) and wetlands are shown in Exhibit C, Map C-1. Holcim is working with the U.S. Army Corps of Engineers (USACE) to amend an existing permit to cover the wetland mitigation required to satisfy USACE 404 requirements. Please see Exhibit J for vegetation information. The proposed plan does not include mining in areas with existing wetlands.

The saleable aggregate material to be removed from Area 1 and Area 2 will amount to approximately 158,000 cubic yards (221,000 tons at 1.4 ton/cy), based on exploratory logs from the previous investigation for adjacent Pond 3. The overburden and growth medium materials excavated as part of the mining operation, along with overburden previously placed in the west half of Pond 1 (Struck Pond), will total approximately 900,000 cubic yards. Overburden and growth medium will be stockpiled for use as backfill and reclamation within the permit area; excess overburden will be hauled off site for other uses.

Based on routine groundwater elevation monitoring in the Wattenberg Lakes site, Area 1 and Area 2 groundwater is typically expected at approximately 2 ft below ground surface but can be less than 1 ft during seasonal highs. Additional information on groundwater at the site is presented in Exhibit G (Water Information).

2.0 PHASING AND METHODS OF MINING

2.1 Phasing

Holcim anticipates conducting operations under this DRMS permit amendment in three phases for a total duration of 18 months, with mining of Area 1 and Area 2 planned for only 2 months of that duration and the other activities as part of reclamation (discussed in Exhibit E). The three phases are:

1. Phase 1 – Concurrent activities (10 months)
 - a. Grade/fill to achieve side slopes of 3H:1V (horizontal:vertical)
 - b. Build up south edge of existing Pond 1 on south side to create 50-ft buffer from top of pond slope to edge of county road
 - c. Mine areas 1 and 2 with post-mining pond depth of 42 ft
 - d. Place fill in other parts of the site to achieve reclamation grades
2. Phase 2 – Construct slurry wall and perimeter drain (2 months)
3. Phase 3 – General earthwork on western side of footprint (excess fill to be used for backfill as needed in other parts of the site) (6 months)

In Phase 1, prior to or while initiating mining in Area 1 and Area 2, the Pond 1 side slopes will be graded to the base of the pond at a 3H:1V slope. Also, excess fill from the western portion of the Pond 1 footprint area will be used to build up the southern perimeter of Pond 1 to create a 50-ft offset from the edge of county road to the top of the pond embankment. Area 1 and Area 2 will be mined and excess fill (placed previously in the western part of the footprint) removed and placed in the cottonwood replacement area or other areas where fill is required to achieve the reclamation grades. Also, in areas outside Area 1 and Area 2, minor earthmoving and grading will take place to establish reclamation grades for wetland establishment, cottonwood replacement, and other reclaimed uses as presented in Exhibits E and F.

In Phase 2, the slurry wall and perimeter drain will be constructed around the perimeter of the final footprint of Pond 1. Design specifications for the slurry walls and quality control procedures used during construction will ensure that the reservoirs meet State Engineer's Office (SEO) performance standards. Specific specifications and quality control procedures will be provided to the Division for review prior to construction of the slurry walls.

After construction of these reclamation features, Phase 3 general earthwork will take place on the western side of the Pond 1 area and excess fill not used in this area will be used to achieve reclamation grades in other parts of the site.

2.2 Equipment

The aggregate material will be recovered using equipment and facilities typical for sand and gravel mining operations. The equipment and facilities may include, but not be limited to, a conveyor system from the mining area to the Holcim's Platte Valley Plant; additional, portable, temporary processing equipment on an as needed basis for screening, crushing, and washing; earth-moving equipment including dozers, loaders, scrapers, excavators, dragline, dredge, compactors, and field conveyors; and an employee/storage trailer and fueling/lubricating station. Dewatering pumps and generators and watering trucks will be also used as needed.

2.3 Mining Process

The typical mining process for Area 1 and Area 2 will involve stripping growth medium and overburden with scrapers, to expose the aggregate product below, and stockpiling these materials in the temporary stockpile areas identified in Exhibit C. Mining of the aggregate will progress down to the underlying claystone bedrock. The bedrock material is rippable and, when necessary, will be excavated and used for reclamation.

Overburden found on the site will be used to fill in the reclamation slopes and for minor grading and fill needed in other areas as part of reclamation. Overburden and growth medium reserved for reclamation will be vegetated

and stabilized in accordance with Rule 3.1.9(1). All soil and overburden material will be used for reclamation, so long-term stockpiling of these materials is not anticipated. The mining areas will be reclaimed using soil, overburden, process fines, and other inert materials from on-site. If materials from off-site are used, Holcim will provide the Division with the appropriate notices and affidavit in accordance with Rule 3.1.5(9).

During mining and prior to reclamation, the mine walls will be nearly vertical at a 0.5H:1V slope. The aggregate material will be temporarily stockpiled or placed directly onto a conveyor system for transport. The conveyor system will transport the material to be processed at an existing DRMS permitted mining site (Permit Number M-89-120) immediately east of the property (Holcim's Platte Valley Plant). The conveyor will cross the South Platte River within the permit boundary before entering the adjacent mining site as illustrated on the Pre-Mining/Mining Plan Map (Exhibit C). Alternatively, if needed, a limited amount of material may be processed on-site with portable and temporary screening, crushing, and/or washing equipment.

Once backfilling and grading has been completed in an area, the top of the slope and the side slopes above the anticipated reservoir water level will be seeded as soon as practicable (in first available seeding season).

Prior to and during removal of the materials in Area 1 and Area 2, a dewatering system will be operated using the current pump system that is on site. If additional capacity is needed, the pump system will be upgraded. Dewatering trenches will be excavated around the perimeter of each pond and pumps will be used to remove the water that drains from the deposit and surrounding alluvium into the trench. The water removed during dewatering will be used for dust control at the site or piped to the nearby unlined Stillwater Ski Lake (owned by Holcim) or to permitted outfall 8 at the South Platte River. Stormwater that falls within the mine areas will drain internally and will also be removed through dewatering operations. There will not be uncontrolled releases of surface water and sediment from mining areas.

Water associated with the site will be used for dust control operations during use of the roads and for stockpiles and berms. The water used to limit dust emissions will be applied using a water truck with capacity of 2,500 or 4,000 gallons. As noted above, water for dust control will come from the dewatering process.

No explosives will be used to mine the site.

3.0 STOCKPILES

Growth medium and overburden in the Area 1 and Area 2 mining area will be stripped with scrapers or a dozer and placed separately in temporary stockpiles to the north and west of the mining area. The growth medium will be segregated and stored separately (see Exhibit C-1 map) to the north of Pond 1 and the overburden material will be temporarily stored to the north and west of the mining area, as required by Rule 3.1.9(1). The stockpiles will have an average height of 8 feet tall; they will have maximum 3H:1V side slopes. The overburden stockpiles will be used for backfilling and reclamation where needed on the site. No excess overburden is anticipated for this site.

The growth medium stockpile will be protected from wind and water erosion by vegetative cover (see the Seed Mix for Upland Areas found in Exhibit E). Also, overburden stockpiles reserved for reclamation will be vegetated and stabilized in accordance with Rule 3.1.9(1). The stockpiles will be broadcast seeded and incorporated into the weed control program. Weed control consists of chemical treatments as needed in the applicable fall and spring seasons.

4.0 COMMODITIES TO BE MINED

The primary commodity to be mined will be aggregate. Holcim will supply local, county, and state governments, as well as private industry with aggregate from this facility.

5.0 OFFSETS

The mining area will be subject to setbacks to prevent disturbance of road and utility rights-of-way and undisturbed wetland areas. Holcim will maintain a 200-foot minimum setback from the South Platte River. In the

Pond 1 area, the limit of mining will be at least 40 feet from the proposed permit boundary or edge of county roads (see the Pre-Mining/Mining Plan Map, Exhibit C). In all other areas, a minimum 25-foot setback will be maintained from the permit boundary. Setbacks from man-made structures not owned by Holcim or the City of Westminster will be established at twice the pit depth unless an agreement is obtained from the property owner or engineering slope stability analyses performed.

Items owned by Holcim or the City of Westminster located within the proposed permit boundary, such as roads, fences, water wells and associated pumps, and structures including a house and outbuildings, may be removed or relocated during the mining process. There are additional structures on the site not owned by Holcim or the City of Westminster (see the Pre-Mining/Mining Plan Map, Exhibit C). The structures in the overall site include oil and gas wells and associated facilities and power transmission lines. Mining and reclamation activities will avoid these structures (see Exhibit S, Permanent Man-Made Structures within 200 Feet of the Affected Land).

Prior to mining under the 2004 permit, there were oil and gas wells and flowlines in parts of the site, but none of these remain in the small areas to be mined and where grading for reclamation is planned. Previously, a well located within the Pond 1 footprint (within mining Area 1) was plugged and abandoned, thus allowing the full area of Pond 1 to be constructed for water storage.

6.0 ROADS AND CONVEYORS

Preparation for mining will include constructing 15-ft-wide gravel access roads as needed. Most of these gravel roads are included in the permitted acreage and will be removed and reclaimed after mining. However, a new gravel access road will be constructed in the north end of the site by the current landowner, independent of mining, to allow permanent access from WCR 4 ½ to the western side of Pond 3 (see Map C-1).

All the aggregate material will be transported via conveyor from the mining area to Holcim's Platte Valley Plant to the east for processing. The conveyor is set on concrete blocks or frames. The main conveyor line comes from the south and currently crosses the Pond 1 area (will be relocated to go around the west side of Pond 1 area), then continues along the north side of Pond 1 following its current alignment to the east side of the permit area. The conveyor will continue to be operated for future permitted mining in areas to the south of the Wattenberg permit area.

A 10.5-ft wide existing road that currently connects to WCR 2 ¾ will be utilized to provide street access to this site. The location of this existing road is shown on Exhibit C, Pre-Mining Plan.