

EXHIBIT D – THE MINING PLAN

Excavation is occurring on a deposit of Valley-fill materials of the Pleistocene and recent ages which makes up the flood plain of the Cache La Poudre River. The deposit can occur naturally at the surface, or where it has been exposed by flooding or other erosion. The majority of the deposit is overlain by soil. The deposit extends to a variable depth of 10 to 20 feet, with the majority of the deposit occurring to a depth of 15 feet.

Referring to the soil series descriptions under Exhibit I, deposit material will be considered to commence at the top of the C soil profile horizon for affected soils. The C horizon occurs at depths of one to five feet from the surface, depending upon the soil/ A and B soil profile horizons will be salvaged as soil and managed as discussed under Exhibit I. The exception will be on areas lacking soil profile development [(92) – Riverwash soils], or where soil was removed prior to 1973 [(42) – Mined-out areas]. On such areas, the deposit will be considered to occur at the surface.

Underlying the deposit throughout the affected lands is a deposit of Pierre Shale. The shale is encountered as a result of deposit variations. Since the shale occurs under reduced conditions, it appears grey to dark grey when exposed. Shale will be treated as waste material and will be left in piles on the pit floor to aid in the creation of an irregular pond bottom for improved aquatic habitat. The shale is not expected to have an adverse effect on the water quality of the resulting pond since it is a natural part of the local hydrology. It should be noted as well that the shale will be minimally encountered, and will not comprise the majority of the pit floor, since residual deposit material and reject fines will remain there as well. A typical cross section of area geology, and related drill log information, is located at the back of Exhibit G – Water Resources.

Site preparation prior to mining will occur in the following manner. First, trees and other woody vegetation, where encountered and requiring removal, will have the slash windrowed and burned, or will be hauled off site to a designated land fill. Tree trucks and limbs will be stored for disposal into final ponds for fish habitat enhancement; or will be bucked and sold or given away as firewood; or will be hauled off site to a designated land fill. Every effort will be made to avoid nonessential removal or impact to mature woody vegetation. Existing woody vegetation can be viewed under Exhibit C1 and C2, Existing Conditions Aerial Photograph.

Next, soil to be salvaged will be removed with scrapers in advance of one years anticipated excavation. Maintaining optimum vegetation cover as excavation progresses over the site, will aid in maintaining overall site stability. Salvaged soil will be stockpiled on the excavation perimeters. The stockpile will not exceed 25 feet in width or 3 feet in height, and all final slopes will be at 3h:lv. slopes, and stockpile height will be limited by the area extent to which they are confined, and by the percent slope as indicated. All remaining excess soil will be stockpiled at plant site locations and made available for sale. Soil volume records will be maintained to assure adequate soil replacement depth. Stabilization of soil stockpiles, soil replacement depths, and other soil management information is detailed under Exhibit I – Soils Information.

Following soil salvage, excavation will proceed to remove the aggregate deposit and transport it to one of the plant site/deposit stockpile areas for processing. All earth moving operations utilize modern earth-moving equipment, including (but not limited to): scrapers, front-end loaders, shovels, draglines, bulldozers, backhoes, haulers, and other equipment of various makes, sizes, and capacities.

As excavation advances, grading of the perimeter will occur concurrently with mining. Only the advancing pit wall will be steeper than 3h:lv (with the exception of areas of excavation greater than 10 feet below the final anticipated pond water level, where slopes may approach 2h:lv). All other slopes will be maintained at 3h:lv, or flatter. Some slope anomalies may occur where slopes exceed 3h:lv, but not steeper than 2h:lv. Such anomalies will generally not exceed 25 linear feet, but may occur within five feet above to ten feet below the anticipated final elevation of the water in the resulting ponds. This is contrary to Rule 6.1 (f), and is mentioned, not in an effort to circumvent the rule, but to allow some room for error. Such anomalies will not exceed 10% of the total linear feet of the final shoreline for each individual pond, resulting in an allowance of 10% slope error.

Before excavation can occur to any significant extent, and in order to mine the resulting pits in a dry condition, dewatering must occur. Eventually, dewatering trenches are created at the bottom of the pit floor. Water is discharged at points identified on Exhibit C3 and C4. The dewatering of pits is discussed in detail under Exhibit G – Water Resources.

The excavation limits are represented under Exhibit C3 and C4, and establish specific minimum distances between the excavation and man-made structures or natural features. Anomalies of 10% of the total length involved may occur where excavation breaches the minimum setbacks, however, such anomalies will not exceed 10% of the required setback distance. These setbacks, or buffers, are specified below:

- * Adjacent property (i.e., permit boundaries) = 25 feet.
- * Irrigation ditches = 50 feet.
- * Residential buildings (unless a written agreement specifying closer distances exists) = 200 feet.
- * Colorado Southern Railroad and adjacent power line = 50 feet.
- * Taft Hill Road = 75 to 125 feet.
- * Fort Collins Recreation Trail = 25 feet.

As indicated under Exhibit C1, KOA Campground contains several buildings that are located within 200 feet of the excavation as proposed under Area G, phases I & II, as presented under Exhibit C3, Mining Plan Map. This area was previously part of the permit as Area Z and was mined and released prior to this amendment. KOA has been mailed a structure agreement along with all other structures within 200 feet.

Where excavation has already occurred on some pre-1973 areas, excavation came closer to the river than 100 feet. There were no existing buffer commitments under the original permits when this occurred however. River erosion has also contributed to narrower buffers between the excavation and the river. Excavated materials will be stockpiled or processed at area 5. Where material is washed at the wash plant, a settling pond is used to minimize siltation of resulting ponds. Settling pond locations identified on the previous Exhibit C were in Areas 1, 2, and pre-1973 mine areas and F. Area 1, 2, and pre-1973 area settling ponds are no longer used and have been backfilled with the exception of a small stormwater pond on the south end of Area 1. Area 5 plant site/deposit stockpile will be mined as part of phase II of area E excavation. Areas 3 and 4 plant site/deposit stockpiles were also mined, extending east and west a pre-1973 pond during excavation of area E, phase I. Areas 1 and 2 will function as plant sites long after mining at the HOME OFFICE MINE is completed. Presently, the principal processing occurs in area 5. Area 1 has other service buildings north and south of the office Area 1 is the present location of the asphalt processing facilities.

Areas W, X, and Y, were affected by mining operations prior to 1973, and have not been re-affected since. They have a commercial/industrial use at present. These areas will only be marginally affected by excavation of Areas 3, 4, G-1 and G – II. Area V, will remain undisturbed for the life of the mining operation with the exception of the conveyor bridge overhead.

Table II no longer applies and has been removed. A general description of the sequencing of the excavation and mining timetable follows, and is summarized in Table III. The mining timetable will be adjusted in the annual report as necessary. Reclamation is detailed in the following Exhibit E.

TABLE III
EXCAVATION SEQUENCE AND MINING TIMETABLE

AREAS W, X, Y – PRE-1973 DISTURBANCE.

AREA Z – PRE-1973 DISTURBANCE AND RELEASED FROM THE PERMIT

AREAS T, U – UNAFFECTED AND RELEASED FROM THE PERMIT

AREA, V – UNAFFECTED LANDS.

AREAS B, D, H – MINING COMPLETED AND RELEASED FROM THE PERMIT.

AREAS C, I – MINING COMPLETED AND RELEASED FROM THE PERMIT

AREA F – MINING COMPLETED AND USED FOR SILT STORAGE

AREA J MINING COMPLETED AND RELEASED FROM THE PERMIT

AREA E 1988 THROUGH 2024

AREA A – MINING COMPLETED AND RELEASED FROM THE PERMIT

AREA 5 – MINING 2022-2024 AS PART OF AREA E

AREA G - MINING COMPLETED

ADDENDUM – EXHIBIT D – THE MINING PLAN

Response to the CMLRD letter of adequacy of 15 October 1987

1. Backfilling of the Area 1 pond is dependent upon reject materials from the wash plant and other inert, non-toxic fill for which a rate cannot be determined. However, due to the length of the project and relatively small size of the pond, backfilling is assured within the periods provided for the life of the mining and reclamation timetables. Note: For this 2022 Amendment, Area 1 has all been backfilled except for a small stormwater pond which will remain.

This Area is scheduled for alternate reclamation as detailed under the 10/15/87 addendum to Exhibit E.

ADDENDUM – EXHIBIT D – MINING PLAN

Amendment 03 submitted 30 June 2006

The overall mining plan for the site does not deviate greatly from the plan previously presented in the July 1987 Amendment 02. In 2005, Lafarge mined through a portion of the 25-foot offset berm separating what is known as the Seaworth Parcel (Exhibit C-4, Area F) and the Taft Hill Expansion Pit (Permit No. M-2001-051). This resulted in a disturbance of an additional 0.38 acres. The berm was backfilled and re-established in order to remain in compliance with the Taft Hill Expansion permit and the Home Office Pit Mining Plan was amended.