Operation
Narrative for the
PH Citrus LLC.
Mammoth Grove Mine

Introduction and Project Description

The proposed operation is located on either side of State Road 60 approximately 6 miles east of Lake Wales, Florida. More specifically, the site is located in Section 35, Township 29 South, Range 28 East; and, Sections 1, 2, 11, and 12, Township 30 South, Range 28 East, in Polk County, Florida.

The site is currently zoned A/RR, and the Future Land Use designation is A/RR and IND.

The Property is predominantly made up of active and inactive citrus groves, and undeveloped lands.

The proposed operation will produce sand primarily used for commercial construction aggregates, concrete, asphalt, clean fill material, FDOT and other critical regional infrastructure projects. The sand will be mined using a hydraulic dredge, which will pump the product to an on-site sand processing plant to be washed, sized and stockpiled for delivery to customers by over the road commercial sand trucks. Of the +/-656 acres on site, +/-502 acres are proposed for excavation within the areas containing the minable resources.

The proposed mining areas consist almost entirely of active and inactive citrus groves. Mining will be carried out via an environmentally friendly methodology known as closed-loop hydraulic dredging, which does not require dewatering and therefore will not result in negative effects to the either on-site avoided, adjacent, or nearby wetland areas. The Environmental Report included herein provides information concerning the proposed project as it relates to natural resources and environmental considerations including supporting environmental and ecological information.

Ingress and egress from the site will be via Mammoth Grove Road, a County Road. The internal entrance road will accommodate all trucks entering the facility. There will be no queueing or stacking of trucks at the entrance for the proposed operation.

Mammoth Grove Road intersects with State Road 60, which will allow access to and from various roads and highways for transport of the product to customers.

The Mammoth Grove Mine will also include a new office, processing plant, internal access road and driveway apron. The proposed Mammoth Grove Mine will not include a “Batch Plant”. Batch Plants are generally associated with ready mix concrete plants. No concrete plants, nor asphalt plants are proposed, and there will be no industrial drying or dry treatment and processing of the sand.

Detailed Engineering for the plant and ancillary structures will be provided as part of the subsequent Level 2 review process. Building permits will be obtained from Polk County as necessary for the installation and or construction of the requisite structures. The series of exhibits below show an example of the dredge and processing plant.

Exhibit 1: Example of dredge.

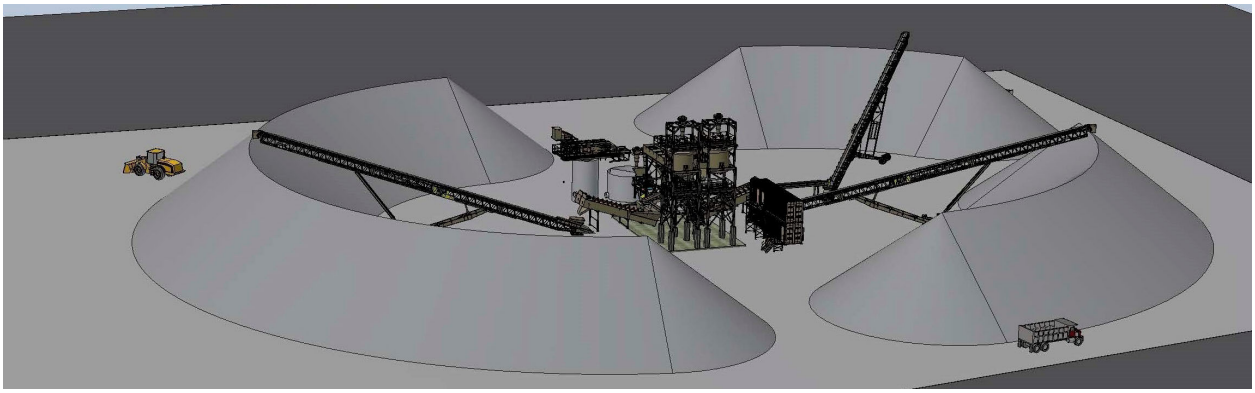

Exhibit 2: Example of processing plant

Exhibit 3: Example of conveyor stacking sand for delivery to customers.

Site Development and Mining Details

The areas to be mined are detailed on the attached Figures. Start-up and development of the initial mining areas will involve removal of any overburden using typical equipment such as bulldozers, front-end loaders, and dump trucks. Both the initial land clearing and site development, including the construction of the entrance road, plant and other ancillary infrastructure will be carried out within the first year following permit issuance.

Initial overburden will be removed using conventional excavation equipment. Once the water table has been reached, other conventional excavation equipment such as draglines and excavators may be brought in to start the sand extraction. Land clearing will commence +/- 6 months in advance of dredging operations to ensure there is access to the sand reserves.

As the depth and size of the lake increases, a hydraulic dredge will be used. The hydraulic dredge will be used for the majority of the sand extraction activities. The total depth of excavation will be no more than +/-25 NGVD 29 or no deeper than the confining layer, whichever is shallower.

The dredge allows for the material to be pumped to the proposed processing plant as sand and water slurry where it can be sorted and graded. The hydraulic dredge can be adjusted to reach differential depths and is the most efficient method of excavating deeper sand deposits. The water and out of specification sand will be returned to the mine lakes.

A portion of the sand tailings may be transported off site as fill material and will be removed as needed to maintain the required volume to support the ongoing operation.

The remaining sand tailings will be incorporated in the reclamation process to reduce the side slopes of the completed excavation areas.

Polk County requires 100 foot and 200 foot setbacks for excavation, as indicated in the attached Figures. As allowed by Polk County, berms will be within the 100 excavation setback, as shown in the attached Figures.

The production schedule anticipates that between 15 and 30 acres will be mined per year, though this number will vary depending on market conditions and demand for sand, which will affect the schedule.

Stormwater

All stormwater from the perimeter berms, mining and eventual reclamation activities will be contained on site and within the proposed mining areas. No offsite discharge is proposed for the operation. Stormwater runoff from the plant site and access road will be directed by way of sheet flow and into the into the mine lake. Additionally, a berm will surround the mine lakes and overall project area to contain the stormwater and prevent runoff from discharging offsite as shown in the mine plan and cross-section. The berm will be constructed around active mining areas and will continue to be built as mining progresses throughout the property. The berm for Mining Area 1 will be constructed prior to mining operations. Berms for mining areas 2 through 5 will be constructed as mining becomes depleted in the proceeding area and prior to mining. All processed water will be recycled as part of the closed loop system.

Stormwater for Non Phosphate mines is regulated by the Florida Department of Environmental Protection (FDEP) via an Environmental Resource Permit (ERP). No NPDES permit is required for operating sand mining operations that do not include off site discharges. A Stormwater Pollution Prevention Plan (SWP3) is not required for this operation.

Measures to control soil erosion in all phases of the mining operation, including site preparation, will be the following:

- All setbacks will be surveyed and marked in the field prior to construction.
- Sloping and grading of the site will be conducted in a manner that minimizes soil erosion and surface water runoff, and that allows the land surface to be suitable for revegetation.
- Sedimentation controls such as silt fencing/turbidity screens, stable sloping, berms, and re-vegetation of disturbed areas will be used to control erosion.
- A temporary sediment barrier consisting of silt fence will be installed around the outside limits of any construction/earthmoving/clearing activity and at the outside toe of the perimeter berm, to intercept and detain small amounts of sediment from disturbed areas in order to prevent sediment from leaving the site and to decrease the velocity of sheet flows.

- Disturbed areas will be stabilized by sodding with Bahia grass to prevent erosion and damage from sediment and runoff by stabilizing the soil surface.
- Any material track-out at the ingress/egress will be regularly monitored by on-site management, inspections documented, and any material deposited removed by use of a street sweeper, wet broom, or by manually sweeping up any track out material.
- PH Citrus LLC will perform and document weekly inspections of all erosion and sediment control features at the site, including berms and silt fencing. In addition to the periodic inspections, a comprehensive site compliance evaluation will be conducted and documented at least once per year by site management.

Pre- and Post Development Environmental and Hydrologic Conditions

- All stormwater and process water will be directed to the mine areas and lakes. No off site discharge of process or stormwater is proposed for the Mammoth Grove Mine. No point discharges are planned for the operation.
- With regards to the detention, retention, or infiltration of water for protection of water quality, all stormwater and process water will be directed to the mining areas and mine lakes. There will be no detention, retention ponds, or infiltration for groundwater. Water used in the mining process and stormwater will be directed to the open water mine lakes.
- There will be no significant changes to pre- and post-development environmental and hydrologic conditions of the site and adjacent areas.
- Mining will not change the semi-confining unit characteristics, the surficial aquifer water table level, nor the potentiometric level of the Intermediate aquifer. Therefore, mining will not reduce the recharge volume to the Intermediate and Upper Floridan aquifers.
- Because the property is predominately irrigated citrus groves, elimination of the groves will eliminate citrus irrigation. The availability of ground water within the upper Floridan aquifer will therefore increase.
- Since the dredge pond water levels will be maintained at levels similar to the surficial aquifer water table levels, the Mammoth Grove Mine basically maintains the ambient water table conditions. Maintaining the dredge pond elevation at approximately the ambient, natural water table level will preclude off site drawdown effects.
- The mining plan coupled with a highly favorable geologic and hydrologic setting ensures that the proposed of the Mammoth Grove Mine will not adversely affect ground water and surface water, nor cause off-site sedimentation.
- All process water will be recirculated to the dredge pond so that the addition of water from the Intermediate nor the Upper Floridan aquifer as make-up water is not necessary. No wells, other than a small diameter well for potable and maintenance are planned.
- No surface streams will be affected by this operation. All surplus precipitation (less evapotranspiration) becomes internal drainage, and no offsite surface water discharge will occur. The process water is recycled to the settling basin, thence to the dredge pond, and ultimately recharged back into the aquifers. No stormwater will be discharged from the site to off-site areas.

Reclamation:

Reclamation will be completed per FDEP and Polk Couty Standards and include the following:

- The reclaimed land will be compatible with the land use designated for the area by the Polk County Comprehensive Plan.
- The reclaimed mine site will provide for a drainage pattern similar to the pre-mining drainage of the area as required by Chapter 6, regulating surface water management.
- Reclamation will commence after completion of mining.
- Reclamation will be consistent with the reclamation standards set forth in Chapter 62C 39 F.A.C.
- Reclamation will be initiated no later than one year after the calendar year in which mining operations cease and will be completed no more than three years after mining is completed at the facility.
- All temporary buildings, pipelines, and other man-made structures will be removed with the exception of those that are of sound construction with potential uses that are compatible with the reclamation goals.
- Upon completion of excavation, the reclamation of the excavation area will be by way of sloping the lake shorelines and contouring the upland areas, in some cases using the overburden and/or unmarketable sand, to achieve the required final grades.
- The maximum slope of reclaimed land will be 4:1 to normal water elevation (normal pool), and then 4:1 from normal pool to a water depth of five feet.
- Upland areas disturbed by mining operations will be revegetated and maintained until a vegetative cover is fully established. Disturbed areas will be stabilized by sodding with Bahia grass to prevent erosion and damage from sediment and runoff by stabilizing the soil surface, to reduce the production of dust and mud associated with bare soil surfaces, and to stabilize drainageways where concentrated overland flow will occur.
- The slopes of the reclaimed lakes will be vegetated with native species which will include planting of native wet land vegetation or natural regeneration of wetland plant species.

  Planted species will include the following:

  Duck potato,
  Arrowhead,
  Pickerel Weed,
  Bulrush
  Maidencane,
  Alligator flag

- There will be no on-site waste disposal, including any junk, debris, cables or Other structural or chemical items.