



Additional Information and Drawing Checklist

Mine

A *mine* is an excavation to obtain minerals or other materials buried at or under the earth's surface. Materials most commonly mined in Florida are phosphate, peat, limestone and heavy metals (titanium)

This checklist contains the basic information that will be needed for most mining projects. It is not comprehensive due to the many different types of mines. More specific information will be requested after the application is submitted. Please contact your local district office for a pre-application meeting.

Use this checklist to check your application for completeness. Make sure all applicable information is included. This checklist is intended to supplement, not replace, the general information requirements outlined in Sections D and E of the Joint Application.

Written Description (use additional sheets)

- ☐ A timetable for ditching, clearing, and mining of the jurisdictional area and other information on the mining plans, including the ditches of mine cuts and the annual sequence of mining
- ☐ Information about the existing drainage patterns and surficial ground water levels, including:
 - Seasonal variation, percolation rates, and the conditions prevailing when these data were determined
 - If the pre-mining drainage basin has been affected by mining, ditching, or similar activities, incorporate a description of the differences between existing and historic patterns.
- ☐ Baseline data on existing surface water quality, land use, and vegetation communities. The wetland vegetation communities proposed for mining should be detailed as follows:
 - Data should be determined by use of sampling transects which are placed at periodic intervals throughout the wetlands, depending on the degree of topographic relief and wetland area.
 - Sampling transects for vegetation should use the point-center-quarter method for the canopy stratum, and one-meter square plots for the ground cover stratum at intervals along the transects. Canopy and subcanopy are those defined in [Section 62-301.400, F.A.C.](#)

- Sampling for the ground cover stratum shall be divided into two segments and analyzed as follows:
 - All vegetation less than one inch DBH and more than 18 inches in height; and
 - All vegetation less than 18 inches in height
- Provide a tabular synopsis of the data, providing for each species:
 - The number of sampling plots in which a species was observed
 - Trees per acre, basal area, average percent cover, percent relative frequency, percent relative density, percent relative dominance, and importance value

Note: The location of transects must be agreed upon by the applicant and the Department before sampling. Alternative sampling methods may be proposed by the applicant.

- ☐ Existing surface water quality in areas to be mined, based on the collection and analysis of water quality parameters determined in advance by the regulatory agencies. At a minimum, these data will include dissolved oxygen, pH, turbidity, nutrients, and macroinvertebrate species present together with their diversity and abundance at the sampling points. Stream flow should be measured in the main channel at each sampling point. Sampling locations shall be agreed upon by the applicant and the Department.
- ☐ Provide documentation of the establishment of the surficial water table for each mine cell and demonstrate that mining activities will not cause an adverse impact to adjacent property
- ☐ A detailed reclamation/restoration plan for the project. The plan should be written in accordance with [Chapter 62C-39, F.A.C.](#) and include:
 - Plan and cross-sectional drawings of restored jurisdictional wetlands, including invert elevations of water control structures, all connections to waters of the United States and of the State, and showing appropriate water levels, such as normal high water (NHW), seasonal high water, seasonal low water, and normal water levels. Provide acreage of all post-reclamation jurisdictional areas.
 - A narrative describing plans for physical and functional restoration of mined wetlands, including the re-establishment of the water table and hydroperiod
 - If available, reference other wetland projects that have used the same reclamation technology as that proposed for creating jurisdictional wetlands for this project.
 - Indicate how organic material will be used in the reclamation, including the amount and source of this organic material, how much of the reclaimed area will be mulched with organic material and how thick a layer, and whether the organic material will be spread as a surface layer or incorporated into the soil.
 - Indicate the types, quantities and spacing of each species of plants to be used in restoring the site. Provide detailed planting plans for the reclamation/restoration.

- Provide a timetable for each stage of reclamation, including backfilling, grading, planting, restoration of flow, etc.
- Provide a map of proposed post-reclamation topography (on one foot contour intervals) of the restored jurisdictional wetlands and their transition to uplands. Include the topography of the supporting watersheds at five foot contour intervals and the anticipated normal water level (NWL), seasonal high water level (SHWL), and seasonal low water level (SLWL) for these wetlands.
- Specify what water source will be available for the wetlands to be restored during establishment and after connection to waters of the State. Include the normal water level (NWL) and ordinary low water level (OLWL) for lakes within the supporting watershed.
- Provide details of anticipated annual monitoring plans for vegetation, water quality, hydroperiod, and aquatic invertebrates for success determination.
- Provide a plan view drawing showing the anticipated reclaimed drainage patterns, delineate drainage basins, and provide the acreage of each basin.

Drawing Items (to be included in addition to general drawing requirements listed in the General Checklist)

- ☐ All drawings must be signed and sealed by an appropriate Florida registered professional
- ☐ A detailed, pre-mining topographic map of the jurisdictional areas to be mined, showing one foot topographic intervals, and including the transition to the uplands. Clearly delineate the jurisdictional areas on the map
- ☐ Plan view showing existing land use cover types utilizing FLUCCS Level 3 or a more specific level
- ☐ Cross-sectional drawings showing the proposed depth of mining cuts, and ground water elevations
- ☐ NRCS soil survey map
- ☐ Include construction plans for each mine phase, showing stormwater management and water quality protection plans
- ☐ Show (if applicable) depth to shallow water table, depth to spodic horizon (hardpan), depth to confining unit, depth to limerock, depth to aquifer and associated piezometric head contours
- ☐ Provide the 100 year floodplain elevation for the site, if applicable
- ☐ Stormwater information will be required. Include all information listed in Joint Application Section E, Part V