City of Reidsville Public Works

Water and Wastewater Plant Upgrade Progress

Steady progress continues to be made with the upgrades to Reidsville's water and wastewater plants by contractor Ulliman Schutte. Currently work is focused on the installation of the underground electrical conduits and underground piping required to serve the new **Solids Handling Building** at the wastewater treatment plant. In addition to the installation of piping and conduits portions of the building's concrete foundation have been constructed.

Figure 1 - Solids Handling Building

The **Solids Handling Facility** is a major component of the wastewater portion of the upgrade. The building will house several important new processes including ***drum thickeners*** and a ***screw press***. Drum thickeners are used to reduce the amount of water in the solids portion of the waste stream prior to sending it to the ***digesters.*** Digesters work by mixing these solids with lots of air to encourage micro bacteria activity which converts the solids to harmless gasses released to the atmosphere and more water. Typically in Reidsville, at the completion of this process the remaining material is loaded on tractor trailers and hauled away for land application. Approximately 13 million gallons a year are disposed of. Unfortunately the disposal is restricted during wet weather or when the ground is frozen. With the addition of the screw press, the City will be able to operate the process during inclement weather without the need for contractors to bring in temporary equipment to dewater sludge. By thickening the sludge prior to land application the City will realize significant savings to its disposal costs of approximately $200,000 / year, based on current disposal costs.

Other major work at the wastewater plant includes the preparation of the foundation for the new ***digesters*** included in the project. The City's existing digesters are undersized and in need of repair. The two existing 250,000 gal units will be replaced with two new 500,000 gal tanks. The larger tanks will enable the City to digest the wastewater sludge for a much longer period of time which helps by better reducing the sludge volume and, due to the increase in treatment time, will eliminate the expense of adding lime to the material prior to disposal.

Minor work is also underway at the water plant as well, primarily the installation of the erosion control measures required prior to disturbing the ground.

Contact Kevin Eason, PWD to arrange for site visit at any time.

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