

Introduction

The Dayton Power and Light Company (DP&L) operates two electric generating stations along the Ohio River in southern Adams County.

The J.M. Stuart Station, located on U.S. Route 52 in Sprigg Township, has operated since 1970 and generates 2.4 million kilowatts of electricity. The Killen Station, located on U.S. Route 52 in Monroe Township, has operated since 1982 and generates 650,000 kilowatts of electricity.

In 2007 and 2008 respectively, the Killen and Stuart power plants began operating scrubbers on their coal boiler units.



J.M. Stuart Station, Sprigg Township, Ohio

Scrubbers: Air Pollution Control Equipment

The scrubbers, also known as flue-gas desulfurization (FGD) equipment, are air pollution control devices that remove sulfur dioxide and other air pollutants from the boiler exhaust gases.

Inside the scrubbers, the boiler emissions pass through a slurry of ground limestone (or calcium carbonate) and water. The sulfur dioxide reacts with the calcium carbonate to form calcium sulfate, otherwise known as gypsum.

What is Gypsum?

Gypsum is a non-hazardous material that is a byproduct of the scrubbing process. Gypsum also occurs in nature.

Whether naturally occurring or created “synthetically” by power plants, gypsum is commonly used to make dry wall (or wall board). It is also used as a soil conditioner in farming and as an ingredient in cement manufacturing.

Gypsum: Generation, Reuse and Disposal

About one million tons of gypsum are generated annually by both stations - about 725,000 tons from Stuart and 275,000 tons from Killen.

DP&L markets as much gypsum as possible for commercial reuse in dry wall and other products. The gypsum is temporarily stored on site at each plant prior to being reused or transferred to an off-site landfill for disposal.

Due to the recent economic downturn, the commercial market for gypsum has declined and more gypsum has required disposal.

Carter Hollow Landfill

DP&L is proposing to construct and operate its own gypsum landfill to serve both Stuart and Killen stations.

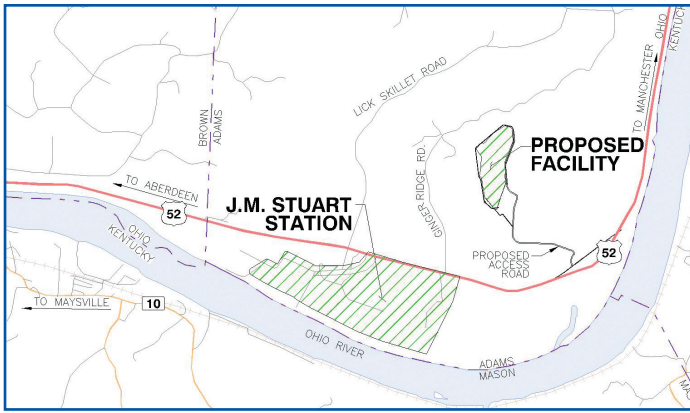
The proposed location of the landfill is a site known as Carter Hollow, which is north of U.S. Route 52 near Stuart Station (see location map on back).

The landfill would be about 70 acres in size and have the capacity to hold about 20 million tons of gypsum. The facility would be constructed in four phases over its lifespan of about 25-30 years.

Once constructed, the facility would primarily accept gypsum, with the possibility of accepting dry coal ash in the future.



Gypsum at Stuart Station prior to off-site landfilling or commercial reuse in dry wall and other products



Location of proposed gypsum landfill

Benefits of the Proposed Landfill

- ▶ Allows DP&L to manage the gypsum generated at Stuart and Killen stations.
- ▶ Creates temporary construction jobs.
- ▶ Creates 6-12 permanent jobs.

Potential Inconveniences

DP&L will work to minimize any inconveniences to local residents. However, the following may be experienced at times:

- ▶ Some dust carried by wind.
- ▶ Some noise from construction, hauling and operations.
- ▶ Potential increase in truck traffic along U.S. Route 52 (between Stuart Station and entrance road). During high-volume periods, trucks from Stuart Station may use an alternative route through the plant site.

Facts about the Proposed Landfill

- ▶ Facility operated year-round during daylight hours on an as-needed basis. DP&L would continue to market as much gypsum as possible for commercial reuse.

- ▶ Entrance to facility located off U.S. Route 52, about 1.5 miles east of Stuart Station.
- ▶ Facility would not be visible from U.S. Route 52. It may be visible from Kentucky and some areas along Ginger Ridge Road during winter and toward the end of the landfill's lifespan.
- ▶ A minimum 1,000-foot buffer would separate the landfill from adjacent homes along Ginger Ridge Road. A minimum 300-foot buffer would separate the landfill from Ginger Ridge Road/adjacent property lines.
- ▶ Landfill would be lined with three feet of compacted clay at the bottom and capped at the top with two feet of clay to prevent infiltration of rain and two feet of soil covered by grass.
- ▶ During construction and operation, any storm water that comes into contact with the gypsum would be collected for treatment. Storm water that does not come into contact with the gypsum would be directed to existing creeks/streams.
- ▶ Once landfill sections are capped, storm water runoff would be collected in drainage ditches and ponds and directed to existing creeks/streams.

Anticipated Schedule

DP&L must seek approval from the Ohio EPA for the proposed facility and is scheduled to submit an application for a Class III residual solid waste landfill in April 2010.

DP&L will host a public meeting in Adams County in May 2010 to discuss the proposed facility. The Ohio EPA will hold a public hearing in summer or fall 2010 and may sponsor public information sessions.

Following approval by the Ohio EPA, gypsum would be transported to the landfill beginning in 2012 or 2013.

Our Commitment to the Environment

It is our goal to minimize the environmental impacts associated with our operations. We are committed to compliance with all federal, state and local environmental regulations. We also look for opportunities to reduce emissions and prevent pollution.

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