

Ash reprocessing at Buck Combined Cycle Station

The Buck site will be active with new construction soon. We're closing coal ash basins at the site by safely recycling the ash, turning this material into a valuable product.

Coal ash can be used in concrete and cement products to improve performance and enhance the durability of structures like roads and bridges.

But extra carbon left in the ash must be removed first. We're building an ash reprocessing unit to make the material suitable for the concrete industry. We expect construction of the unit to take about 18 months, which would mean excavation of ash at the site and operation of the unit would begin in Spring 2020.

Recycling coal ash is the only way to avoid permanent disposal.

This project helps achieve what the local community had long advocated for, while using this valuable material to power our economy.

- Short-term benefits include 100 to 200 construction workers contributing to the local economy. Long term, the investment will boost the local tax base, and any net proceeds from ash sales benefit customers in lowering overall project cost.
- The reprocessing unit will be equipped with advanced air quality controls. These will limit emissions to low levels that meet federal and state air quality regulations designed to protect human health and the environment.
- The unit will be equipped with a dry scrubber to control sulfur dioxide (SO₂) emissions, filters to control particulates including trace metals, and controls to limit nitrogen oxides (NO_x).
- Air emissions from the unit are expected to be a fraction of the emissions compared to when the Buck coal plant operated for 80 years. For example, the natural gas plant and ash reprocessing operations combined will result in about 60 percent lower NO_x and 95 percent lower SO₂ emissions compared to a coal facility.
- For every ton of coal ash recycled into concrete, about 1 ton of greenhouse gas emissions is avoided. While the new reprocessing unit will create some greenhouse gas emissions during operation, the net environmental benefits of recycling ash greatly outweigh any minor emissions produced.
- The ash unit will process about 400,000 tons of material a year to produce about 300,000 tons annually for the concrete industry.
- When the new unit begins operating, truck traffic would have increased substantially on Dukeville Road. Anticipating this, Duke Energy held a community meeting in November 2017 to gather feedback on building an alternative road. We expect plant traffic to be diverted to this road, virtually eliminating impacts to the residential street.