



Duke Energy CCC BMP3 Plan

Duke Energy

Relevant Services

Planning, Permitting and Compliance
Best Management Practices
Risk Management

Challenges

Minimizing impacts to concurrent active operations
Coordinating and combining compliance procedures already in place

OVERVIEW

NovelE prepared the initial Best Management Practices/Pollution Prevention Plan (BMP3 Plan) for stormwater controls at this newly activated energy plant. The CCC is a natural gas-fired, combined cycle combustion turbine generator (CTG) facility with a total of 1,640 Megawatt (MW) electrical power generating capacity. Four stormwater detention ponds, surrounding the main buildings, are utilized to collect and treat stormwater runoff. An Industrial Wastewater (IWW) Percolation Pond is located northwest of the combined cycle power blocks. Process IWW is treated by an oil/water separator system prior to discharge to the percolation pond. Domestic Wastewater (DWW) is also processed and sent via sumps to the percolation pond. The IWW Percolation Pond contains an emergency overflow structure to isolated wetlands. When an additional

pond was added to the system, NovelE was again contacted to update the BMP3 Plan. The two percolation ponds are designed to contain permitted wastewater flows plus rainfall generated by a 25-year/24-hour storm event. Overall onsite activities encompass approximately 193 acres of the property with the remainder as undeveloped land. The purpose for the development of this BMP3 Plan and associated update are to maintain and monitor stormwater and industrial wastewater discharges at the CCC Station and minimize potential adverse impacts to the onsite and surrounding soil, surface water, groundwater, and ecosystems. This BMP3 Plan consisted of the development and implementation of best management practices, and the establishment of provisions, protocols, and responsibilities for maintaining and monitoring the industrial wastewater and stormwater at the CCC Station. Ms. Grudin was the Engineer-of-record for the BMP3 Plan and prepared training materials to accompany the new Plan, including a Waste Minimization Assessment.

