

LOCATION RESTRICTIONS DEMONSTRATION
SEISMIC IMPACT ZONES (391-3-4-.10(3) and 40 C.F.R. §257.63)
PLANT BOWEN CCR LANDFILL PERMIT 008-018D(CCR)
GEORGIA POWER COMPANY

The Federal CCR Rule and the Georgia CCR Rule require that new CCR landfills or lateral expansions of CCR units must not be located in seismic impact zones unless the owner/operator demonstrates that all structural components of the CCR landfill including liners, leachate collection and removal systems, and surface water control systems are designed to resist the maximum horizontal acceleration in lithified earth material at the site. See Ga. Comp. R. & Regs. R. 391-3-4-.10(3)(a); 40 C.F.R. § 257.63(a). A seismic impact zone is defined in the Federal CCR Rule as an area having a 2 percent or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth's gravitational pull (g) will exceed 0.10g (or 10%g) in 50 years.

The CCR Landfill is located nine (9) miles southwest of Cartersville in Bartow County, Georgia. The plant is bordered by the Etowah River to the north and east, and Euharlee Creek to the northwest and west. Plant Bowen's Landfill currently consists of six (6) constructed and operational CCR disposal cells (Cells 1, 2, 3, 4, 9 and 10). The CCR solid waste permit 008-018D(CCR) includes plans for future cells (Cells 5, 6, 7 and 8), the subject of this location restriction demonstration. A review of the site geology, hydrogeology, and other siting criteria was performed at the time that the landfill was initially permitted and is described in the Composite Site Acceptability Report for CCR Landfill Permit. This Report indicates the site is in a seismic impact zone, and that the maximum horizontal acceleration at the site, expressed as a percentage of the earth's gravity (g), in rock is approximately 0.17g with a 2% probability of being exceeded in 50 years (approximately equal to 10% probability in 250 years). A separate report titled Report of Subgrade Settlement and Slope Stability Evaluation, Georgia Power Co. – Plant Bowen CCR Landfill, Bartow County, Georgia, included in the Engineering Report located in Part B, supporting documents, of the CCR Permit 008-18D(CCR) has confirmed that the future cells have an adequate factor of safety for slope stability under seismic conditions.

I hereby certify that for the existing and future Cells 5, 6, 7, and 8 at Georgia Power's Plant Bowen CCR Landfill, the seismic impact zone location restriction demonstration meets the requirements of Georgia EPD Rule 391-3-4-.10(3); USEPA 40 C.F.R. §257.63(a).



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