

**Appendix D: National Pollutant Discharge
Elimination System Noncompliance
Summaries for 2015**

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D.1 Y-12 National Security Complex

The Y-12 complex was in full compliance with the National Pollutant Discharge Elimination System (NPDES) permit in 2015. About 3,400 data points were obtained from sampling required by the NPDES permit. Compliance with permit discharge limits for 2015 was almost 100%.

D.2 East Tennessee Technology Park

The East Tennessee Technology Park was in full compliance with the NPDES permit in 2015 based on 32 laboratory analyses and 27 field measurements and flow estimates. There were no instances of NPDES permit non-conformances. The current ETTP NPDES permit became effective on April 1, 2015. It will be in effect until March 31, 2020.

D.3 Oak Ridge National Laboratory

The summer daily-maximum limit for ammonia at the Sewage Treatment Plant (STP), NPDES Outfall X01, was exceeded four times in May 2015, resulting also in a calculated exceedance of the monthly-average limit. The exceedances were attributed to malfunctioning sludge drying equipment, which caused a gradual increase in the mixed liquor suspended solids (MLSS) concentration in the treatment process. This resulted in an unfavorable environment for nitrification and ammonia removal at the facility.

The ORNL STP has also experienced several instances in past years where the rate of influent after heavy rain storms overwhelms the existing pump system and results in only partial treatment (disinfection) before discharge to White Oak Creek. A project is in progress to upgrade the ORNL STP, and this project is estimated to begin in 2016.

In 2015, compliance with the ORNL NPDES permit was determined by about 2,300 laboratory analyses and field measurements. The NPDES permit limit compliance rate for all discharge points for 2015 was greater than 99%, with four measurements exceeding numeric NPDES permit limits. The four effluent limit exceedances occurred at the ORNL STP in May 2015, when issues with STP sludge-management equipment occurred. Efforts to maintain sludge management included flow and aeration decreases, which led to unfavorable conditions for nitrification and ammonia control within the system. As a result, the STP ammonia discharge limits were exceeded four times during that month. Corrective actions including sludge-management system improvements were completed before the end of May 2015, after which there were no further NPDES compliance issues at the STP.

