

Table F.3. Summary of K-25 Site NPDES excursions, 1995

Date	Location	Excursion	Explanation	Corrective action
2/16/95	Outfall 005	Sample concentration (0.53 mg/L TRC) exceeded permit limit.	The NPDES permitted limit for total residual chlorine (TRC) was exceeded at the K-1203 Sewage Treatment Plant. The sample result was 0.53 mg/L and the daily maximum NPDES limit is 0.24 mg/L.	The K-1203 Sewage Treatment Plant is equipped with a continuous TRC monitor that measures and records TRC levels in the effluent. The maximum TRC measurement recorded from the continuous monitor for 2/16/95 was 0.12 mg/L which did not exceed the permit limit. TRC concentrations prior to and on subsequent days following the elevated TRC measurement were well below the permit limit. An investigation to determine the cause for the discrepancies between analytical results and values measured by the continuous monitor was inconclusive.
2/22/95	Outfall 005	Sample concentration (31.9 mg/L BOD) exceeded permit limit.	A biological oxygen demand (BOD) concentration for a sample collected from the K-1203 Sewage Treatment Plant exceeded the permit limit. This sample was 31.9 mg/L and the daily effluent BOD limit is 20 mg/L.	An investigation was conducted which included discussions with other sewage treatment plant operators, chemists, and the State Operator Training Center in Murfreesboro, Tennessee. The investigation did not reveal a cause.
2/12/95	Outfall SD-120	Unpermitted discharge	As part of the Oak Ridge K-25 Site Sewer Upgrade Project, sections of the site sanitary sewer system are isolated during relining activities performed by Insitu Form. On 2/23/95, a bypass pump failed at the low point of the system causing sewage to back up and to eventually overflow a manhole near Building K-1007 and flow into a nearby storm drain catch basin leading to storm drain 120.	Immediate actions were taken to remove any residual sewage remaining on the parking area. The outlet of SD-120 was inspected and no adverse impacts to the environment were observed. In case of bypass pump failure in the future, emergency pumping operations will be initiated using a preestablished backup pump.
5/1/95	Outfall SD-480/490	Visible oil sheen	On 5/1/95 a sheen was observed flowing from SD-480/490 into the K-1007-P1 Pond.	Oil absorbent booms and pads were utilized to contain and remove the sheen. A walkdown of the complete storm drain system was initiated to find the source of the discharge. No source was found.
12/4/95	Outfall SD-100	Sample concentration (0.43 mg/L TRC) exceeded permit limit.	A temporary dechlorination system being used while a waterline break was being repaired failed to function adequately. The permit limit of 0.14 mg/L TRC was exceeded.	An investigation revealed that there was a temporary unexpected increase in flow which dissolved dechlorination tablets at a much higher rate than had previously been experienced, rendering the dechlorination system ineffective. Immediately upon identifying the unexpected increase in flow, additional dechlorination tables were added to the system and the TRC concentration in the effluent was brought back into compliance with the NPDES Permit limit for TRC.