

Appendix E. Air Permits

Table E.1. Air permits at the Y-12 Complex, 2004

Emission Source Reference Number	Permit Number	Source Description
01-0020-15	554701	Metal Fabrication Shop
01-0020-17	554701	Graphite Carbon Machine Shop
01-0020-59	554701	Tool Fabrication Shop
01-0020-99	554701	General Machine Shop
01-1020-31	554701	Y-12 Steam Plant
01-1020-19	554701	Rubber Shop
01-1020-99	554701	Classified Paper Waste Incinerator
01-0020-35	554701	Brine/Methanol System
01-0020-38	554701	Brine/Methanol System
01-1020-82	554701	Dry Ash Handling System
01-0020-44	554701	Arc Melt Operation
01-0020-21	554701	Beryllium Machine Shop
01-1020-18	554701	North Machine Shop
01-0020-30	554701	Plating Shop
01-0020-21	554701	West Machine Shop
01-0020-06	554701	Beryllium Laboratory
01-1020-56	554701	Metal Forming and Heat Treating Operation
01-0020-13	554701	Foundry Operation
01-0020-37	554701	Machine Shop
01-1020-51	554701	O-Wing Metal Working Operation
01-1020-52	554701	P-Wing Operations
01-1020-53	554701	Third Mill Operation
01-1020-84	554701	R & D Facility
01-0020-12	554701	Metal Forming & Heat Treating Operation
01-0020-03	554701	Chemical Process Operation
01-0020-21	554701	Air Bearing Operation
01-0020-05	554701	Special Processing Operation
01-0020-02	554701	Metal Casting and Recovery Operation
01-1020-72	554701	Chemical Process Operation
01-1020-55	554701	Dry Chemistry Operation
01-1020-55	554701	Special Material Operation
01-1020-79	554701	Ceramic Machine Shop
01-0020-71	554701	Electrolytic Cell Process
01-1020-57	554701	Wet Chemistry Operation
01-0020-68	554701	Disassembly and Storage Operation

Table E.2. Oak Ridge National Laboratory air permits, 2004

Emission Source Reference Number	Permit Number	Source Description
73-0112-01	556850	Radioactive Materials Analytical Laboratory
73-0112-02	556850	Radiochemical Development Facility
73-0112-03	556850	Steam Plant
73-0112-05	556850	Manipulator Boot Shop
73-0112-07	556850	Boilers
73-0112-09	556850	Surface Coating and Cleaning Operation
73-0112-11	956542P	Spallation Neutron Source and Central Exhaust Facility (construction permit)
73-0112-24	556850	Boilers
73-0112-25	556850	Boilers
73-0112-37	547563 ^a	Air Stripper
73-0112-82	556850	High Flux Isotope Reactor & Radiochemical Engineering Development Center
73-0112-93	547563 ^a	Off Gas & Hot Cell Ventilation
Not applicable	0904-12 ^b	National Transportation Research Center (NTRC)

^aTitle V Major Source Operating Permit issued October 2004 superceding previously issued operating permit 739974P for 3039 and permit 730489P for 3608.

^bThis permit was issued by Knox County Department of Air Quality Management.

Table E.3. East Tennessee Technology Park air permits, 2004

ETTP source number	Emission source reference number	Permit number	Source description	Permit type
K1202ST1 ^a	73-1106-20	033203P	Tank storing waste oils and solvents for incinerator	Operating
K1202ST2 ^a	73-1106-41	034392P	Tank storing waste oils and solvents for incinerator	Operating
K1420AI ^a	73-0106-82	034619P	Flammable materials storage tank	Operating
K1425WOSA	73-0106-11	029895P	Waste oil and solvent storage tanks	Operating
K1425WOSB	73-0106-11	029895P	Waste oil and solvent storage tanks	Operating
K1425WOSC	73-0106-11	029895P	Waste oil and solvent storage tanks	Operating
K1425WOSD	73-0106-11	029895P	Waste oil and solvent storage tanks	Operating
K1435TSCAINCIN ^b	73-0106-78	032449I	Toxic Substances Control Act Incinerator	Operating
K1435CTANKFARM	73-0106-75	037460P	Tank farm for hazardous liquid wastes	Operating
K1407CNFAIRSTRIPPER	73-0106-90	045253P	Air stripper for removing volatile organic compounds at Central Neutralization Facility	Operating
ETTPFUGITIVEEMISSIONS	73-1106-38	043016P	Number of sources logged into permit	Operating

^aSources permanently removed from service, request to rescind permits submitted with Title V permit re-application submitted August 2004.

^bApplication for Permit to Construct or Modify the Toxic Substances Control Act Incinerator submitted to TDEC November 2004.

Table E.4. Periods of excess emissions and out-of-service conditions for Y-12 Steam Plant east and west opacity monitors in 2004

Date	Stack	Condition	Comments
January 21	East	One 6-minute period of excess emissions	Start-up of fans on Boiler 4 after overhaul
January 21	West	Four 6-minute periods of excess emissions	Baghouse 1 inlet-temperature transmitter sensor malfunction which caused the baghouse bypass dampers to open
January 27	West	Three 6-minute periods of excess emissions	Baghouse 1 bypass dampers opened during installation of a new sensor
February 11	West	Two 6-minute periods of excess emissions	Baghouse 2 malfunction. The baghouse bypass dampers opened during maintenance on the baghouse instrumentation
February 27	East	Seven 6-minute periods of excess emissions	Baghouse 4 malfunction caused by a couple of bag filters rupturing. The filters were replaced with new ones
March 31	East	One 6-minute period of excess emissions	Boiler 4 malfunction. The boiler was off-line during the malfunction
April 7	West	One 6-minute period of excess emissions	Unknown. The operators conducted an evaluation of the situation and were unable to identify the cause
April 11	West	One 6-minute period of excess emissions	Chart recorder cam switch malfunction that sent a signal to the computer to open the Baghouse 2 bypass dampers
April 10	West	Opacity monitoring system was out of service	Due to maintenance performed on the opacity monitoring system
May 14	West	Opacity monitoring system was out of service	Due to maintenance performed on the opacity monitoring system
June 4	West	Opacity monitoring system was inoperative	Due to a failure in communication between the data logger and polling computer
July 1,2,3,7,10,12,30	West	Fifteen 6-minute periods of excess emissions	New bags blew off after installation in Baghouse 1
July 13	West	Opacity monitoring system was inoperative	Monitor malfunction
August 7	West	One 6-minute period of excess emissions	New bags blew off after installation in Baghouse 1
September 15	West	Two 6-minute periods of excess emissions	New bags blew off after installation in Baghouse 1