

6 ENVIRONMENTAL AND OCCUPATIONAL SAFETY AND HEALTH PERMITS AND COMPLIANCE REQUIREMENTS

6.1 DUF₆ CYLINDER MANAGEMENT AND CONSTRUCTION AND OPERATION OF A DUF₆ CONVERSION FACILITY

DUF₆ cylinder management as well as construction and operation of the proposed DUF₆ conversion facility would be subject to many federal, state, and local requirements. In accordance with such legal requirements, a variety of permits, licenses, and other consents must be obtained. Table 6.1 at the end of this chapter lists those that may be needed. The status of each is indicated on the basis of currently available information. However, because the DUF₆ project is still at an early stage, the information in Table 6.1 should not be considered comprehensive or binding. UDS may determine that additional consents not listed in Table 6.1 apply, or that the DUF₆ cylinder management and/or conversion facility qualify for exemptions or exclusions from some listed consents.

6.2 TRANSPORTATION OF UF₆

Transportation of UF₆ (depleted, natural, or slightly enriched) is governed by the Hazardous Materials Transportation Act (HMTA), as amended by the Hazardous Materials Transportation Uniform Safety Act of 1990 and other acts (49 USC 5101 et seq.). This law is implemented by the DOT through its hazardous materials regulations (HMRs) (i.e., 49 CFR Parts 171 through 180). Since UF₆ presents hazards because of both its radioactivity and corrosivity, the DOT HMRs impose specific packaging requirements on UF₆ shipments in addition to the otherwise applicable radioactive material transportation requirements. The specific packaging requirements for shipments of UF₆ appear in 49 CFR 173.420 and are summarized below.

- Other than Model 30A cylinders and certain cylinders manufactured before June 30, 1987, DUF₆ packaging must be designed, fabricated, inspected, tested, and marked in accordance with the version of ANSI Standard N14.1, *Uranium Hexafluoride — Packaging for Transport*, that was in effect at the time the packaging was manufactured.
- Each UF₆ packaging must be designed so that it will withstand a hydraulic test at an internal pressure of at least 1.4 megapascals (MPa) (200 lb/in.²) without leakage.
- Each UF₆ packaging must be designed so that it will withstand a free drop test without loss or dispersal of UF₆. The specimen must drop onto a flat, horizontal surface of such a character that any increase in its resistance to displacement or deformation upon impact by the specimen would not significantly increase the damage to the specimen. The drop must occur so that the specimen will suffer maximum damage in respect to the safety

features to be tested. Mandatory drop heights, which must be measured from the lowest point of the specimen to the upper surface of the target, vary depending on the packaging mass from 1 ft (0.3 m) if the packaging mass exceeds 33,000 lb (15,000 kg), to 4 ft (1.2 m) if the packaging mass is less than 11,000 lb (5,000 kg).

- Each UF₆ packaging must be designed so that it will withstand, without rupture of the containment system, a thermal test as follows: Exposure for a period of 30 minutes to a thermal environment that provides a heat flux at least equivalent to that of a hydrocarbon fuel/air fire in sufficiently quiescent ambient conditions to give a minimum average flame emissivity coefficient of 0.9 and an average temperature of at least 800°C (1,475°F), fully engulfing the specimen, with a surface absorptivity coefficient that is the greater of 0.8, or the value the package may be expected to possess if exposed to the fire specified and a convective coefficient that must be the value that the package may be demonstrated to have if exposed to the fire specified.
- The UF₆ must be in solid form.
- The volume of solid DUF₆ must not exceed 62% of the certified capacity of the package at 20°C (68°F). For natural and slightly enriched UF₆, this requirement is 61%.
- The pressure in the package at 20°C (68°F) must be less than 101.3 kPa (14.8 lb/in.² absolute [psi]).
- Before initial filling and during periodic inspection and tests, UF₆ packaging must be cleaned in accordance with ANSI N14.1.
- UF₆ packaging must be periodically inspected, tested, marked, and otherwise conform to ANSI N14.1.
- Each repair to UF₆ packaging must be performed in accordance with ANSI N14.1.

If, at the time transportation occurs, the DUF₆ is being stored in a cylinder for which compliance with the then-applicable transportation requirements in 49 CFR 173.420 cannot be verified, UDS may implement one of the following options before shipping the DUF₆:

- Obtain an exception, pursuant to 49 CFR 173.3(b), to allow the cylinder to be transported either “as is” or following repairs, or
- Transfer the DUF₆ from its noncompliant cylinder into a compliant cylinder.
- Ship the noncompliant cylinder in a compliant overpack.

A detailed discussion of regulatory considerations associated with transporting UF₆ is presented in Biwer et al. (2001).

6.3 WORKER SAFETY AND HEALTH

The Occupational Safety and Health Act of 1970 (P.L. 91-596) gives OSHA the authority to prescribe and enforce standards and regulations affecting the occupational safety and health of private-sector employees. However, at facilities where another federal agency has exercised its statutory authority to prescribe or enforce occupational safety and health standards, Section 4(b)(1) of the act waives OSHA's jurisdiction. Relying on this section of the act, in 1974, OSHA explicitly recognized the authority of the AEC to establish and enforce occupational safety and health standards at AEC-sponsored, contractor-operated facilities covered by the AEA. Since then, the AEC and its successor agencies, including DOE, have regulated worker health and safety at most of their own facilities. This approach will be used to regulate worker safety at DUF₆ cylinder management and conversion facilities.

DOE exercises its authority over working conditions at its facilities through an extensive program of internal oversight and a system of DOE regulations and directives that require DOE contractors to comply with relevant worker protection standards and regulations (e.g., 29 CFR Part 1910, *Occupational Safety and Health Standards*, and 29 CFR Part 1926, *Safety and Health Regulations for Construction*) and impose additional radiation and chemical exposure standards developed by DOE (DOE Order 440.1A). DOE enforces its regulations, which have the power of law, by levying fines or by referring the offending contractor to the Department of Justice for other punishment. Most of DOE's worker radiation protection regulations are located in 10 CFR Part 835, *Occupational Radiation Protection*. Pertinent DOE directives are listed in site-specific contract provisions and are enforced by invoking contractual remedies such as contract cancellation. Accordingly, UDS is required by its contract to comply with applicable health, safety, and environmental laws, orders, regulations, and national consensus standards and to develop and execute a radiation protection plan and an integrated safety management plan (DOE 2000d).

TABLE 6.1 Potentially Applicable Consents for the Construction and Operation of a DUF₆ Conversion Facility

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
<i>Air Quality Protection</i>			
<p>Title V Operating Permit: Required for sources that are not exempt and are major sources, affected sources subject to the Acid Rain Program, sources subject to new source performance standards (NSPS), or sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAPs).</p>	<p>Ohio Environmental Protection Agency (OEPA); U.S. Environmental Protection Agency (EPA)</p>	<p>Clean Air Act (CAA), Title V, Sections 501–507 (<i>U.S. Code</i>, Title 42, Sections 7661–7661f [42 USC 7661–7661f]); <i>Ohio Administrative Code</i> (OAC) 3745-77-02</p>	<p>Uranium Disposition Services, LLC (UDS), has determined that the DUF₆ conversion facility is not an affected source subject to the Acid Rain Program and is not a source subject to NSPS. Nevertheless, UDS has not yet confirmed whether the DUF₆ conversion facility would be a major source of hazardous air pollutants (HAPs). Also, the facility is subject to <i>Code of Federal Regulations</i>, Title 40, Part 61, Subpart H (40 CFR Part 61, Subpart H), “National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities” (NESHAPs), although emissions are expected to result in an effective dose equivalent to the maximally exposed individual (MEI) of well below the standard (i.e., 10 mrem/yr). Accordingly, UDS is seeking official verification from the OEPA as to whether this permit is needed. OEPA representatives have verbally stated that no Title V Operating Permit will be required.</p>
<p>Ohio Permit to Install: Required for (1) any source to which one or more of the following CAA programs would apply: prevention of significant deterioration (PSD), nonattainment area, NSPS, and/or NESHAPs; and (2) any source to which one or more of the following state air quality programs would apply: Gasoline Dispensing Facility Permit, Direct Final Permit, and/or Small Maximum Uncontrolled Emission Unit Registration.</p>	<p>OEPA</p>	<p>CAA, Title I, Sections 160–169 (42 USC 7470–7479); OAC 3745-31-02</p>	<p>UDS has determined that the PSD, nonattainment area, and NSPS programs do not apply to the DUF₆ conversion facility. In addition, UDS has determined that none of the state air quality programs that would trigger the need for an Ohio Permit to Install would apply. Nevertheless, the facility is subject to the NESHAPs program (40 CFR Part 61, Subpart H). Accordingly, an Ohio Permit to Install will be required for the DUF₆ conversion facility. UDS will submit a timely permit application to the OEPA.</p>

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
<i>Air Quality Protection (Cont.)</i>			
<p>Ohio Permit to Operate: Required for (1) any source to which one or more of the following CAA programs would apply: PSD, nonattainment area, NSPS, NESHAPs; and (2) any source to which one or more of the following state air quality programs would apply: State Permit to Operate and/or registration of operating unit with potential air emissions of an amount and type considered minimal; this permit is not required, however, for any facility that must obtain a Title V Operating Permit.</p>	OEPA	<p>CAA, Title I, Sections 160–169 (42 USC 7470–7479); OAC 3745-35-02</p>	<p>UDS has determined that the PSD, nonattainment area, and NSPS programs do not apply to the DUF₆ conversion facility. Nevertheless, the facility is subject to 40 CFR Part 61, Subpart H, “National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities” (NESHAPs). Therefore, UDS believes the State Permit to Operate program would apply. UDS will submit a timely application for an Ohio Permit to Operate.</p>
<p>Risk Management Plan (RMP): Required for any stationary source that has a regulated substance (e.g., hydrogen fluoride, anhydrous ammonia, ammonia, nitric acid) in any process (including storage) in a quantity that is over the threshold level.</p>	EPA; OEPA	<p>CAA, Title 1, Section 112(r)(7) (42 USC 7412); 40 CFR Part 68; OAC 3745-104</p>	<p>UDS has determined that certain regulated substances would be stored at the DUF₆ conversion facility in quantities that potentially exceed the threshold levels. Accordingly, an RMP may be required. UDS will verify this with the OEPA and, if necessary, prepare an RMP.</p>
<p>CAA Conformity Determination: Required for each criteria pollutant (i.e., sulfur dioxide, particulate matter, carbon monoxide, ozone, nitrogen dioxide, and lead) where the total of direct and indirect emissions in a nonattainment or maintenance area caused by a federal action would equal or exceed threshold rates.</p>	<p>DOE; OEPA; Tennessee Department of Environment and Conservation (TDEC)</p>	<p>CAA, Title 1, Section 176(c) (42 USC 7506); 40 CFR 93; OAC 3745-102; TDEC Regulations 1200-3-34-.02</p>	<p>Pike County, Ohio, and Roane County, Tennessee, have both been designated as “Cannot be Classified or Better Than Standard” for all criteria pollutants. Because these counties are in attainment with National Ambient Air Quality Standards for all criteria pollutants and contain no maintenance areas, no CAA conformity determination is required for any criteria pollutant that would be emitted as a result of the proposed federal action.</p>

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
Water Resources Protection			
<p>National Pollutant Discharge Elimination System (NPDES) Permit – Construction Site Storm Water: Required before making point source discharges into waters of the state of storm water from a construction project that disturbs more than 5 acres (2 ha) of land.</p>	OEPA	Clean Water Act (CWA) (33 USC 1251 et seq.); 40 CFR Part 122; OAC-3745-33-02, 3745-38-02, and 3745-38-06	UDS has determined that construction of the DUF ₆ conversion facility and new cylinder storage yard would require an NPDES Permit for construction site storm water discharges. A general NPDES Permit for Storm Water Discharges in Ohio (OEPA Permit No. OHR100000 and proposed renewal OHC000002), which covers storm water discharges during construction, including storm water discharges from an on-site concrete batch plant if one is installed, is expected to satisfy this requirement. Accordingly, UDS will submit a Notice of Intent (NOI) to discharge under the General NPDES Permit and, if requested, a Storm Water Pollution Prevention Plan (SWPP) to the OEPA at the appropriate time.
<p>National Pollutant Discharge Elimination System (NPDES) Permit – Industrial Facility Storm Water: Required before making point source discharges into waters of the state of storm water from an industrial site.</p>	OEPA	CWA (33 USC 1251 et seq.); 40 CFR Part 122; OAC-3745-33-02, 3745-38-02, and 3745-38-06	UDS has determined that storm water would be discharged from the DUF ₆ conversion facility site during operations. Therefore, an NPDES Permit for industrial facility storm water discharge may be required, unless arrangements can be made to discharge such storm water through existing outfalls covered by an NPDES Permit already held by United States Enrichment Corporation (USEC) for the Portsmouth site. UDS plans to consult with USEC concerning discharges of storm water during operations through existing outfalls. If this cannot be arranged, a General NPDES Permit for Storm Water Discharges Associated with Industrial Activity (NPDES Permit No. OHR000003) may apply. Thus, if storm water cannot be discharged through existing USEC outfalls, UDS plans to consult with the OEPA about the applicability of the General NPDES Permit, and if it applies, submit a NOI to the OEPA at the appropriate time. Otherwise, UDS will submit an application for an individual NPDES permit at the appropriate time.

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
<i>Water Resources Protection (Cont.)</i>			
National Pollutant Discharge Elimination System (NPDES) Permit – Process Water Discharge: Required before making point source discharges into waters of the state of industrial process wastewater.	OEPA	CWA (33 USC 1251 et seq.); 40 CFR Part 122; OAC-3745-33-02, 3745-38-02, and 3745-38-06	UDS is studying options for management of process water/blowdown discharges. The need for an NPDES permit for such discharges will be determined based on the outcome of the study. If it is determined that an NPDES permit is required, UDS will apply for the permit at the appropriate time.
Ohio Surface Water Permit to Install: Required before constructing sewers or pump stations.	OEPA	OAC-3745-31-02	UDS has determined that a Surface Water Permit to Install would be required before construction of sewer lines and pump stations at the DUF ₆ conversion facility site. Accordingly, UDS plans to submit an application to the OEPA at the appropriate time.
Ohio Surface Water Permit to Install: Required before constructing any wastewater treatment or collection system or disposal facility.	OEPA	OAC-3745-31-02	If it is determined that the DUF ₆ conversion facility would have an on-site wastewater treatment facility, UDS plans to submit an application for a Surface Water Permit to Install at the appropriate time.
CWA Section 404 (Dredge and Fill) Permit: Required to place dredged or fill material into waters of the United States, including areas designated as wetlands, unless such placement is exempt or authorized by a nationwide permit or a regional permit; a notice must be filed if a nationwide or regional permit applies.	U.S. Army Corps of Engineers (USACE)	CWA (33 USC 1251 et seq.); 33 CFR Parts 323 and 330	UDS believes that construction of the DUF ₆ conversion facility would not result in dredging or placement of fill material into wetlands within the jurisdiction of the USACE. However, construction of a storm water discharge outfall requiring dredging in waters of the United States may be necessary. If construction activities are subject to the CWA Section 404 Permit program, they may be covered under a USACE Nationwide CWA Section 404 Permit (i.e., No. 14 [Linear Transportation Projects], 18 [Minor Discharges], or 19 [Minor Dredging]). Accordingly, UDS plans to consult with the USACE concerning the project and, if appropriate, submit either a preconstruction notification about activities covered by a nationwide permit or an application for an individual Section 404 Permit.

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
<i>Water Resources Protection (Cont.)</i>			
Ohio General Permit for Filling Category 1 and Category 2 Isolated Wetlands: Required where the proposed project involves the filling or discharge of dredged material into Category 1 and Category 2 isolated wetlands, causing impacts that total 0.5 acre (0.20 ha) or less.	OEPA	<i>Ohio Revised Code</i> (ORC) Sections 6111.021–6111.029	UDS believes that construction of the DUF ₆ conversion facility would not result in dredging or placement of fill material into wetlands within the jurisdiction of the OEPA isolated wetlands program. Accordingly, UDS plans to consult with the OEPA concerning the project and, only if appropriate, submit to the OEPA a Pre-Activity Notice of activities covered under the General Permit for Filling Isolated Wetlands.
Ohio Individual Isolated Wetland Permit: Required where the proposed project involves the filling or discharge of dredged material into Category 1 and Category 2 isolated wetlands, causing impacts that total greater than 0.5 acre (0.20 ha) for Category 1 isolated wetlands and/or greater than 0.5 acre (0.20 ha) but not exceeding 3 acres (1.21 ha) for Category 2 isolated wetlands.	OEPA	ORC Sections 6111.021–6111.029	UDS believes that construction of the DUF ₆ conversion facility would not result in dredging or placement of fill material into wetlands within the jurisdiction of the OEPA isolated wetlands program. Accordingly, UDS plans to consult with the OEPA concerning the project and, only if appropriate, submit to the OEPA an application for an Individual Isolated Wetland Permit.
Spill Prevention Control and Countermeasures (SPCC) Plan: Required for any facility that could discharge oil in harmful quantities into navigable waters or onto adjoining shorelines.	EPA	CWA (33 USC 1251 et seq.); 40 CFR Part 112	If it is determined that a SPCC plan would be required, UDS will submit the plan to the EPA and the OEPA at the appropriate time.
CWA Section 401 Water Quality Certification: Required to be submitted to the agency responsible for issuing any federal license or permit to conduct an activity that may result in a discharge of pollutants into waters of a state.	OEPA	CWA, Section 401 (33 USC 1341); ORC Chapters 119 and 6111; OAC Chapters 3745-1, 3745-32, and 3745-47	UDS would be required to obtain a CWA Section 401 Water Quality Certification if construction or operation of the DUF ₆ conversion facility or new cylinder storage yard requires a federal license or permit. If UDS determines that a federal license or permit is required (e.g., a CWA Section 404 Permit), a CWA Section 401 Water Quality Certification will be requested from the OEPA at the appropriate time.

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
Waste Management and Pollution Prevention			
Submit Determination Results: Required when a person who generates waste in the State of Ohio or a person who generates waste outside the state that is managed inside the state determines that the waste he/she generates is hazardous waste.	OEPA	OAC 3745-52-11	At the appropriate time, UDS will submit to the OEPA the results of its determination that any waste generated at the DUF ₆ conversion facility is a hazardous waste.
Registration and Hazardous Waste Generator Identification Number: Required before a person who generates over 220 lb (100 kg) per calendar month of hazardous waste ships the hazardous waste off site.	EPA; OEPA	Resource Conservation and Recovery Act (RCRA), as amended (42 USC 6901 et seq.), Subtitle C; OAC 3745-52-12	At the appropriate time, UDS plans to apply to the OEPA for an EPA Hazardous Waste Generator Identification Number.
Hazardous Waste Treatment, Storage, or Disposal Facility Permit: Required if hazardous or mixed waste will undergo nonexempt treatment by the generator, be stored on site for longer than 90 days by the generator of 2,205 lb (1,000 kg) or more of hazardous waste per month, be stored on site for longer than 180 days by the generator of between 220 and 2,205 lb (100 and 1,000 kg) of hazardous waste per month, disposed of on site, or be received from off site for treatment or disposal.	EPA; OEPA	RCRA, as amended (42 USC 6901 et seq.), Subtitle C; OAC 3745-50-40	Hazardous waste would not be disposed of on site at the DUF ₆ conversion facility. Also, UDS does not plan to store any hazardous wastes that are generated on site for more than 90 days. Accordingly, UDS believes that no Hazardous Waste Treatment, Storage, or Disposal Facility Permit would be required.
Industrial Solid Waste Landfill Permit to Install: Required before constructing or expanding a solid waste landfill facility in Ohio.	OEPA	OAC 3745-29-06	Industrial solid waste would not be disposed of on site at the DUF ₆ conversion facility. Therefore, no Industrial Solid Waste Landfill Permit to Install would be required.

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
Waste Management and Pollution Prevention (Cont.)			
Construction and Demolition Debris Facility License: Required before establishing, modifying, operating, or maintaining a facility to dispose of debris from the alteration, construction, destruction, or repair of a man-made physical structure; however, the debris to be disposed of must not qualify as solid or hazardous waste; also, no license is required if debris from site clearing is used as fill material on the same site.	OEPA or the authorized local board of health	OAC 3745-37-01	Construction debris would not be disposed of on site at the DUF ₆ conversion facility. Therefore, no Construction and Demolition Debris Facility License would be required.
Low-Level Radioactive Waste Generator Report: Required within 60 days of commencing the generation of low-level waste in Ohio.	Ohio Department of Health	OAC 3701:1-54-02	UDS will file a Low-Level Radioactive Waste Generator Report with the Ohio Department of Health at the appropriate time.
Underground Storage Tank (UST) Installation Permit: Required before beginning installation of a UST system (i.e., a tank and/or piping of which 10% or more of the volume is underground and that contains petroleum products or substances defined as hazardous by the Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA], except those hazardous substances that are also defined as hazardous waste by the RCRA).	Ohio Department of Commerce, Ohio Bureau of Underground Storage Tank Regulations (BUSTR)	OAC 1301:7-9-06(D)	No UST systems would be installed at the DUF ₆ conversion facility. Therefore, no UST Installation Permit would be required.
New UST System Registration: Required within 30 days of bringing a new UST system into service.	EPA; Ohio BUSTR	RCRA, as amended, Subtitle I (42 USC 6991a-6991i); 40 CFR 280.22; OAC 1301:7-9-04	No UST systems would be installed at the DUF ₆ conversion facility. Therefore, no New UST System Registration would be required.
Notification of PCB Waste Activity	EPA	Toxic Substances Control Act (TSCA), as amended (15 USC 2601 et seq.); 40 CFR Part 761	UDS would be required to notify EPA of PCB waste activities at the time that DUF ₆ cylinders to which paints containing PCBs have been applied are designated for disposal, either alone or as containers for depleted uranium oxide. At the appropriate time, UDS will notify the EPA by filing the required form.

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
<i>Emergency Planning and Response</i>			
List of Material Safety Data Sheets: Submission of a list of Material Safety Data Sheets is required for hazardous chemicals (as defined in 29 CFR Part 1910) that are stored on site in excess of their threshold quantities.	Local Emergency Planning Commission (LEPC); Ohio State Emergency Response Commission (SERC)	Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), Section 311 (42 USC 11021); 40 CFR 370.20; OAC 3750-30-15	UDS will prepare and submit a List of Material Safety Data Sheets at the appropriate time.
Annual Hazardous Chemical Inventory Report: Submission of the report is required when hazardous chemicals have been stored at a facility during the preceding year in amounts that exceed threshold quantities.	LEPC; Ohio SERC; local fire department	EPCRA, Section 312 (42 USC 11022); 40 CFR 370.25; OAC 3750-30-01	UDS will cooperate with other DOE tenants at the Portsmouth GDP site regarding submission of a site-wide Annual Hazardous Chemical Inventory Report each year. For the purpose of preparing the site-wide report, the total quantities of hazardous chemicals stored by all tenants at the Portsmouth GDP site, including those stored at the depleted UF ₆ conversion facility, will be considered.
Notification of On-Site Storage of an Extremely Hazardous Substance: Submission of the notification is required within 60 days after on-site storage begins of an extremely hazardous substance in a quantity greater than the threshold planning quantity.	Ohio SERC	EPCRA, Section 304 (42 USC 11004); 40 CFR 355.30; OAC 3750-20-05	UDS will prepare and submit the Notification of On-Site Storage of an Extremely Hazardous Substance at the appropriate time, if such substances are determined to be stored in a quantity greater than the threshold planning quantity at the DUF ₆ conversion facility.

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
Transportation of Radioactive Wastes and Conversion Products			
Certificate of Registration: Required to authorize the registrant to transport hazardous material or cause a hazardous material to be transported or shipped.	U.S. Department of Transportation (DOT)	Hazardous Materials Transportation Act (HMTA), as amended by the Hazardous Materials Transportation Uniform Safety Act of 1990 and other acts (49 USC 1501 et seq.); 49 CFR 107.608(b)	UDS will obtain a Certificate of Registration at the appropriate time.
Packaging, Labeling, and Routing Requirements for Radioactive Materials: Required for packages containing radioactive materials that will be shipped by truck or rail.	DOT	HMTA (49 USC 1501 et seq.); Atomic Energy Act (AEA), as amended (42 USC 2011 et seq.); 49 CFR Parts 172, 173, 174, 177, and 397	When shipments of radioactive materials are made, UDS will comply with DOT packaging, labeling, and routing requirements.
Biotic Resources			
Threatened and Endangered Species Consultation: Required between the responsible federal agencies and affected states to ensure that the project is not likely to (1) jeopardize the continued existence of any species listed at the federal or state level as endangered or threatened or (2) result in destruction of critical habitat of such species.	U.S. Department of Energy (DOE); U.S. Fish and Wildlife Service; Ohio Department of Natural Resources	Endangered Species Act of 1973, as amended (16 USC 1531 et seq.); ORC 1531.25–26 and 1531.99	Neither a species listed at the federal or state level as endangered or threatened, nor the critical habitat of such a species, has been identified that would be affected by construction or operation of the DUF ₆ conversion facility or new cylinder storage yard.

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
<i>Nuclear Facility Operations</i>			
Approval to Start Up a Nuclear Facility: Required before start-up of new nuclear facilities, which are activities or operations that involve radioactive and/or fissionable materials in such form or quantity that a nuclear hazard potentially exists to the employees or the general public.	DOE	AEA, as amended (42 USC 2011 et seq.); DOE Order 425.1B	UDS will obtain approval from DOE to start up the DUF ₆ conversion facility at the appropriate time.
Approval to Release Materials Containing Residual Radioactive Contamination: Required before releasing (1) nonuranium products from the DUF ₆ conversion process (such as hydrogen fluoride [HF] or calcium fluoride [CaF ₂]) for unregulated use and (2) decontaminated DUF ₆ cylinders for unregulated use as scrap metal.	DOE	AEA, as amended (42 USC 2011 et seq.); DOE Order 5400.5	UDS will obtain approval from DOE before releasing HF, CaF ₂ , or decontaminated cylinders for unregulated use.
<i>Cultural Resources</i>			
Archaeological and Historical Resources Consultation: Required before a federal agency approves a project in an area where archaeological or historic resources might be located.	DOE; Advisory Council on Historic Preservation; Ohio State Historic Preservation Officer (SHPO)	National Historic Preservation Act of 1966, as amended (16 USC 470 et seq.); Archaeological and Historical Preservation Act of 1974 (16 USC 469-469c-2); Antiquities Act of 1906 (16 USC 431 et seq.); Archaeological Resources Protection Act of 1979, as amended (16 USC 470aa-mm)	DOE has coordinated with the Advisory Council on Historic Preservation and the Ohio SHPO regarding previous archeological and architectural surveys at the Portsmouth Gaseous Diffusion Plant site. Discussion of the results of such surveys is ongoing.

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
<i>Cultural Resources (Cont.)</i>			
Government-to-Government Tribal Consultation: Required to ensure that project activities have been designed to protect access to, physical integrity of, and confidentiality of traditional cultural and religious sites.	DOE	American Indian Religious Freedom Act of 1978 (42 USC 1996 and 1996a); Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001 et seq.); National Historic Preservation Act of 1966, as amended (16 USC 470F); 36 CFR Part 800, Subpart B; 43 CFR Part 10	DOE has initiated government-to-government consultations with Native American tribes in the area of the DUF ₆ conversion facility. No religious or sacred sites, burial sites, or resources significant to Native Americans have been identified to date.
<i>Other</i>			
Environmental Impact Statement (EIS): Required to evaluate the potential environmental impacts of a proposed major federal action that may significantly affect the quality of the human environment and to consider alternatives to the proposed action.	DOE	National Environmental Policy Act of 1969, as amended (NEPA) (42 USC 4321 et seq.); 40 CFR Parts 1500–1508; 10 CFR Part 1021	The requirements of NEPA are satisfied by publication of this EIS for the DUF ₆ conversion facility and cylinder management area.
Annual Toxic Release Inventory (TRI) Report: Required for facilities that have 10 or more full-time employees and are assigned certain Standard Industrial Classification (SIC) codes.	EPA; OEPA	EPCRA, Section 313 (42 USC 11023); 40 CFR Part 372; OAC 3745-100-07	UDS will prepare and submit a TRI Report to the EPA each year.

TABLE 6.1 (Cont.)

License, Permit, or Other Consent	Responsible Agency	Authority	Relevance and Status
<i>Other (Cont.)</i>			
<p>OEPA Director’s Final Findings and Orders (issued February 24, 1998): Establishes requirements for management, surveillance, testing, and maintenance associated with the DUF₆ storage yards and cylinders owned by DOE at the Portsmouth site.</p>	DOE; OEPA	ORC 3734 and 3745	<p>UDS will implement the requirements of the OEPA Director’s Final Findings and Orders, including preparation and submission to the OEPA of an annual report outlining DOE’s good faith efforts to evaluate potential use or reuse of DUF₆.</p>
<p>Tennessee Department of Environment and Conservation Consent Order (issued February 2, 1999): Establishes requirements for management, surveillance, testing, maintenance, and disposition of the UF₆ cylinders at the East Tennessee Technology Park.</p>	DOE; Tennessee Department of Environment and Conservation (TDEC)		<p>UDS will implement the requirements of the TDEC Consent Order.</p>

