

COMPLIANCE MANAGEMENT SYSTEM MANUAL

THE UNIVERSITY OF TENNESSEE,
KNOXVILLE



Prepared for

The University of Tennessee, Knoxville
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January 2016



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Reviewed and revised by the:
Environmental Compliance Team (ECT)
The University of Tennessee, Knoxville

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ACRONYMS

CAA	Clean Air Act
CFR	Code of Federal Regulations
CMS	Compliance Management System
CWA	Clean Water Act
DOT	Department of Transportation
ECT	Environmental Compliance Team
EHS	Environmental Health and Safety
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FS	Facilities Services
IATA	International Air Transportation Association
OSHA	Occupational Safety and Health Administration
RCRA	Resource Conservation and Recovery Act
SPCC	Spill Prevention, Control, and Countermeasure
SWDA	Solid Waste Disposal Act
SWPPP	Storm Water Pollution Prevention Plan
TDEC	Tennessee Department of Environment and Conservation
TSCA	Toxic Substances Control Act
UT	University of Tennessee

SENIOR MANAGEMENT COMMITMENT

It is the policy of The University of Tennessee, Knoxville (UT Knoxville) to practice good environmental stewardship. An important part of this policy is compliance with applicable **environmental** regulations

This document describes the UT Knoxville Compliance Management System (CMS) for environmental issues. The CMS is used to systematically identify and correct deficiencies in environmental compliance at the UT Knoxville campus.

The University administration supports this endeavor by committing human and financial resources to the successful implementation of the CMS. Although the Environmental Compliance Team serves as the lead group for implementation of this system, each department head or manager, and all members of the university community, are responsible for supporting and enforcing the CMS.

Dr. Jimmy G. Cheek, Chancellor

Date

Provost and Vice Chancellor for Academic Affairs

Date

1.0 INTRODUCTION

The Compliance Management System (CMS) was implemented in response to U.S. Environmental Protection Agency (EPA) Region 4 College and University Compliance Incentive Initiative under EPA's Audit Policy (Federal Register, Vol. 65, No. 70, pp. 19618–19627, April 11, 2000). This CMS Manual documents The University of Tennessee, Knoxville's (UT Knoxville's) systematic approach to detect, correct, and prevent environmental violations. The CMS covers all facilities and activities located on the main campus of the University, except for those belonging to the College of Veterinary Medicine and construction and capital projects. The requirements included in the CMS and the referenced plans, procedures, and policies are applicable to all employees, students, visitors, and vendors working on or visiting the facilities and activities covered by the CMS.

The core of the CMS consists of UT Knoxville's policies, plans, and procedures that identify how employees and agents are to meet the requirements of the laws, regulations, permits, enforceable agreements, and other sources of authority for environmental requirements. The primary environmental program areas at UT Knoxville are defined by the appropriate governing federal regulations. These regulations include:

- Clean Air Act (CAA);
- Clean Water Act (CWA), primarily including storm water discharges and Spill Prevention, Control, and Countermeasure (SPCC) Plan implementation and maintenance;
- Emergency Planning and Community Right-to-Know Act (EPCRA);
- Federal Insecticide, Fungicide and Rodenticide Act (FIFRA);
- Resource Conservation and Recovery Act (RCRA);
- Solid Waste Disposal Act (SWDA); and
- Toxic Substances Control Act (TSCA).

Other key elements of the CMS include assignment of roles and responsibilities for all the elements of the CMS, an inspection and auditing element to detect and correct violations and examine the health of the environmental program as a whole, a training element to ensure persons are aware of their environmental responsibilities, and a compliance element for consistent enforcement through appropriate disciplinary mechanisms. The CMS goal is one of continuous improvement through input from employees and results of audits.

2.0 OBJECTIVE

The objective of the CMS is to maintain compliance with all federal, state, and local environmental regulations through a structured, sustainable program that is based on a continuous improvement philosophy, where improvement input is received from audits and employees. The CMS is based on the foundation of any effective management system: Plan, Do, Check, Act. Figure 2-1 depicts these basic elements of the CMS and their interrelationship.

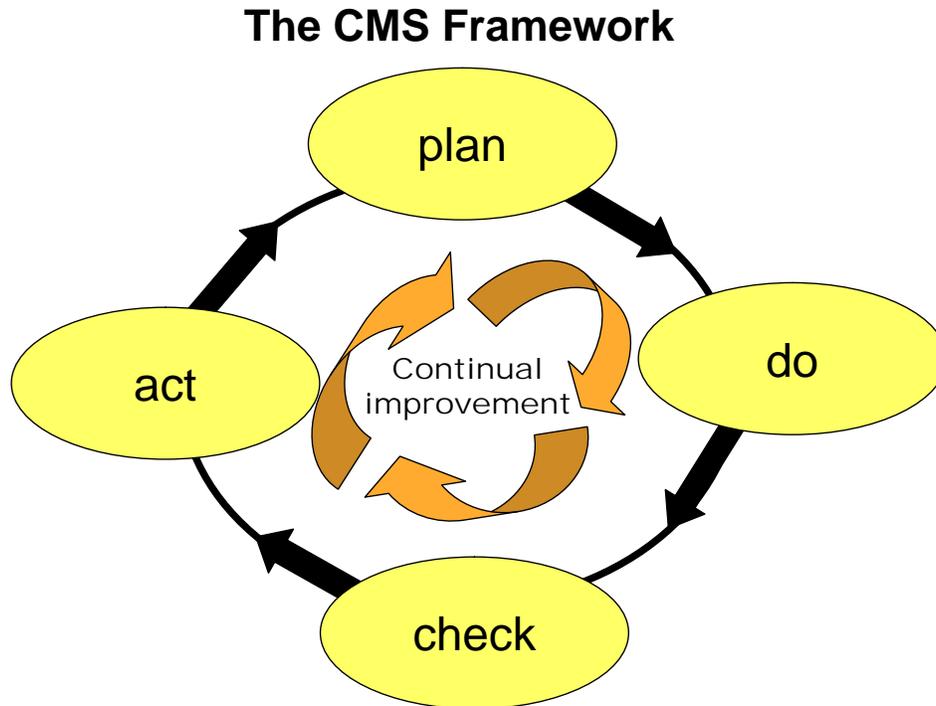


Figure 2-1. Diagram of the basic CMS framework.

Figure 2-2 presents details of the CMS framework and identifies the questions and actions that must be continually addressed by personnel responsible for CMS implementation.

The CMS philosophy is integrated into each of the written policies, procedures, and plans listed in Section 4.0. In addition to compliance objectives, employee input and audit results are used to establish program goals and/or focus areas during an annual Environmental Compliance Team (ECT) CMS review. Results from audits/inspections and observations from the daily implementation of the CMS are used by the team during annual goal setting. Quantifiable performance measures are developed and tracked where feasible for each environmental program area in an effort to objectively demonstrate continuous improvements. If failures occur, they are investigated and the root cause determined. These events provide an opportunity to correct deficiencies, improve compliance, and enhance environmental stewardship and sustainability.

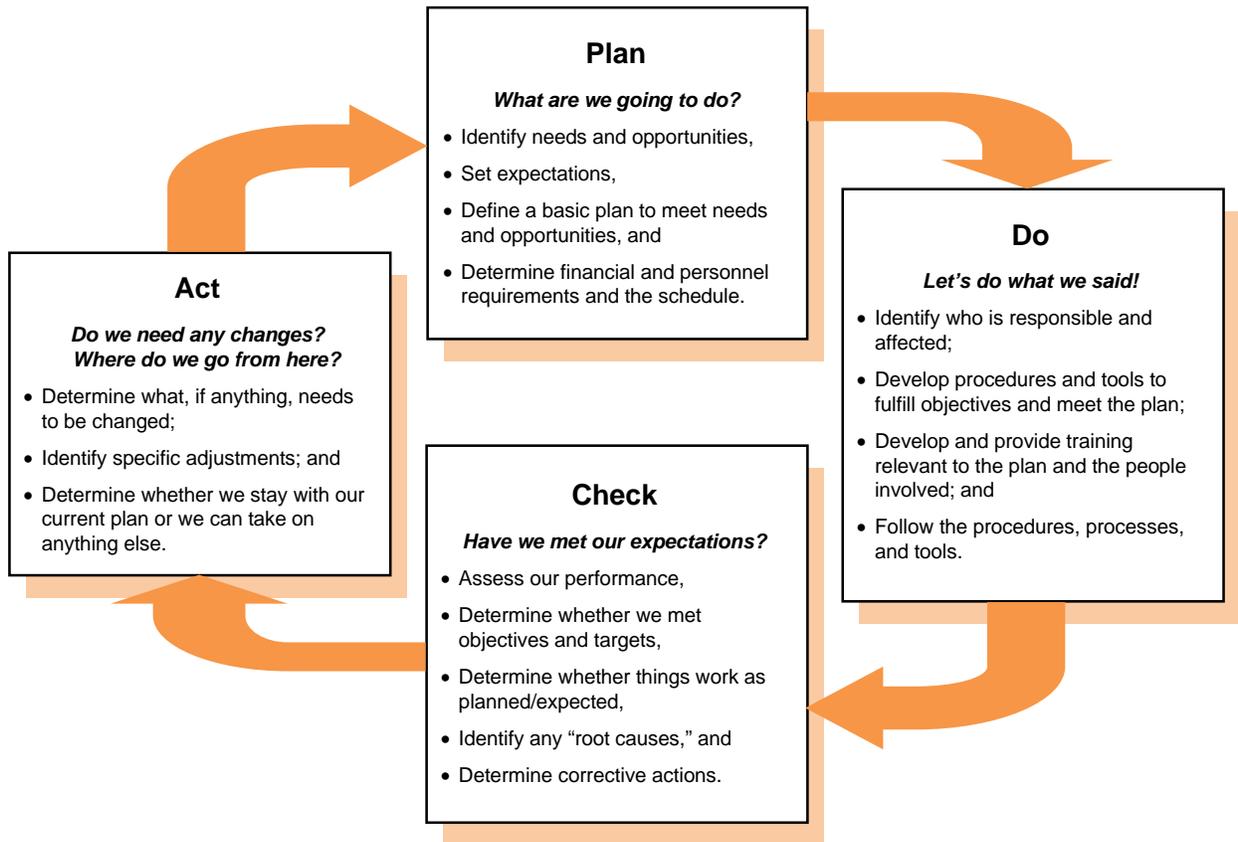


Figure 2-2. Detailed diagram of the CMS process.

3.0 ROLES AND RESPONSIBILITIES

Many departments and individuals within UT Knoxville have a role in environmental compliance. However, the two lead departments in this program are Environmental Health and Safety (EHS) and Facilities Services (FS). Representatives from these two departments compose the ECT. These representatives and their associated departments are listed in Table 3-1.

Table 3-1. Members of the Environmental Compliance Team

EHS	FS
April Case	Bob Caudill ^a
Susan Fiscor	Randy Hamilton
Chuck Payne	Jay Price
Mark Smith ^a	Garrett Ferry
Steve Crouch	Preston Jacobsen

^aECT Co-Chairmen

In addition, there is representation from the General Counsel's Office and the Office of Research and Engagement. The members of the ECT are tasked with staying current with environmental subjects under their purview, attending ECT meetings, conducting compliance reviews, and communicating and documenting findings. Additional duties may include revising policies and procedures, developing and delivering training, consulting on methods to achieve compliance, serving as a liaison with environmental regulatory officials, preparing and submitting reports, and conducting other similar duties as determined by the team. The ECT Chairmen ensure the team meets quarterly and that meeting minutes are recorded and included in the CMS records. Meetings may be held more frequently as needed. The chairmen also ensure an annual CMS review (documented as the annual report) is conducted during the first quarter of each year to review the systems, procedures, and policies in place and to evaluate the need for changes. The review is also used to establish any necessary goals or focus areas for the coming year.

A department-level roles and responsibilities matrix for each environmental program is provided in Appendix A. Detailed roles and responsibilities matrices listing individuals can be found in program plans and procedures.

An environmental compliance calendar is also used to ensure compliance. EHS maintains this calendar in an Excel format on their SharePoint site. Items addressed in the calendar include, but are not limited to:

- Reporting due dates (such as annual EPCRA Tier II reporting),
- Meetings,
- Plan reviews,
- Inspections/audits,
- Monitoring requirements (visual and analytical), and
- Training requirements.
- Other related standards (e.g. OSHA, DOT, IATA)

ENVIRONMENTAL PROGRAMS

The environmental program areas and their corresponding plans and procedures are listed in Table 4-1. All the plans and procedures in the table are considered appendices to this CMS Manual. The most current version of each document is included in the University’s Safety Manual, available at <http://web.utk.edu/~ehss/safety%20manual/smanualaph2kj.html> These documents are reviewed periodically or when any one of the following occurs:

- A new regulation is promulgated;
- A regulation is revised;
- It becomes apparent that the current policy, plan, and/or procedure is not effective or lacks needed information/detail;
- A major failure has occurred that falls within the scope of a plan or procedure; or
- A request for review has been submitted by a regulatory agency or an individual that has a stake in the subject.

Table 4-1. Summary of Environmental Program Areas and Associated Documents

Program Area	Plans^a	Procedures^a
Hazardous Waste and Materials (RCRA, CERCLA, EPCRA)	None	EC 5, Chemical Inventory
	None	EC 10, Hazardous Waste Reduction
Solid Waste (RCRA)	None	EC 20, Recycling and Waste Reduction
Wastewater	EC 25, SPCC Plan	Procedures specified in SPCC Plan
Storm Water	EC 30, Steam Plant Storm	Procedures specified in Steam

Program Area	Plans^a	Procedures^a
	Water Pollution Prevention Plan (SWPPP)	Plant SWPPP
Air	Title V Permit	Procedures specified in Title V Permit
Toxic Substances Control	None	EC 50, Asbestos Management
		EC 45, Lead Management
Pesticide Management	None	EC 55, Pesticides Management
Environmental Management	CMS Manual	GS 30, Actions of Regulatory Agencies
		EC 60, Environmental Inspections and Audits

^aPlans and procedures are maintained in the campus safety manual. EC refers to the environmental compliance section and GS refers to the general safety section of the manual.

These documents address the following subjects where applicable:

- Responsibility for implementation and follow-up;
- Regulatory requirements;
- Recordkeeping and reporting;
- Training needs and availability of training;
- Emergency management;
- Monitoring and sample collection; and
- Goals, performance measures, and metrics.

5.0 RECORDKEEPING

Recordkeeping is an integral part of the CMS. Examples of environmental compliance records that must be maintained include:

- Sampling logs and analysis files/reports for various media (air, water, solid waste, soil, etc.);
- Employee training materials, records, and certification;
- Correspondence with regulatory agencies, including periodic reports and site visit summaries;
- Written plans, policies, and procedures;
- ECT meeting minutes;
- Notes or reports of audits, reviews, inspections, and similar evaluations, including transmittal records; and
- Communiqués relevant to environmental compliance.

Records are maintained in electronic and/or paper form for the prescribed minimum number of years. Paper copies of records are maintained by the FS and EHS Departments, depending on responsibility. Electronic records can be accessed via the Internet at www.facilities.utk.edu/cms. Copies of all electronic records maintained by FS are backed up weekly at an off-site storage location. Electronic records maintained by EHS are backed up at the department's active directory (I-drive). In general, records for environmental compliance are kept at least three years. Obsolete policies, procedures, and written plans are archived for a minimum of 10 years. UT Knoxville personnel determine which, if any, records are to be maintained indefinitely to demonstrate compliance history.

The Records Retention for Safety, Health and Environmental Protection plan, found in the UTK safety manual, identifies the length of time each environmental record must be kept.

6.0 TRAINING AND INFORMATION

In order to meet UT Knoxville compliance requirements and environmental performance and sustainability goals, personnel must be aware of, knowledgeable about and competent in their area of operations that affect those requirements and goals. Training sets expectations by communicating regulatory and CMS requirements as well as opportunities for employees to contribute to maintaining compliance and achieving program goals.

Two levels of training are included in the CMS: training for environmental personnel and general training for employees who must comply with environmental regulations within the conduct of their jobs. Laboratory personnel, for example, must ensure the proper handling of hazardous

waste while conducting classes or research. These training levels are described in more detail below.

- **Environmental Personnel** — Staff performing environmental oversight and audits receive training or are competent by virtue of education, experience, or self-study
- **General Employee Knowledge** — Various environmental regulations require training for general employees. Each department that has employees who require training is responsible for ensuring the training is appropriate, completed, and documented. EHS staff provides training upon request. EHS notifies departments of the need and available resources for training.

7.0 REVIEW OF ENVIRONMENTAL REGULATIONS

Staying current with new or revised environmental regulations is an important component of the CMS. The ECT stays abreast of changes to environmental regulations that fall under their purview by one or more of the following:

- Actively participating on list server related to environmental compliance;
- Reading journal articles;
- Attending conferences, workshops, and other similar events;
- Maintaining membership in professional societies; and
- Periodically reviewing EPA websites.

Any individual who learns of a new or revised regulation is expected to share this information with the ECT. Changes that impact the University are evaluated and implemented. Senior management is apprised of changes that are likely to have a significant impact on the University.

Appendix B contains a table summarizing the local, state, and federal environmental regulations and associated Internet addresses where they can be found.

8.0 VENDORS

All contracts for university services include language requiring vendors to follow applicable local, state, and federal laws.

Under RCRA, UT Knoxville has “cradle-to-grave” responsibility for the wastes generated and must ensure proper disposal to avoid future environmental liabilities. Where deemed necessary, vendors that receive municipal solid waste and hazardous waste from UT Knoxville are inspected by UT Knoxville personnel to ensure the waste handling methods used after the waste leaves the property are compliant with federal, state, and local regulations.

9.0 QUALITY ASSURANCE FOR MONITORING

UT Knoxville uses established, recognized methods for environmental sample collection, holding, and delivery. Standardized forms are used to document the sample collection, and only accredited laboratories are used to perform sample analysis.

Contractors performing environmental monitoring on behalf of UT Knoxville are required to use and follow established protocols for sample collection.

10.0 IDENTIFICATION OF DEFICIENCIES

In order to assess performance (as part of the “check” step in the Plan, Do, Check, Act framework), deficiencies in the environmental compliance program must be systematically identified. The two main methods for identifying deficiencies are through prescribed inspections and compliance audits.

10.1 Inspections

Inspections conducted by EHS and FS personnel are the primary method used for identifying and correcting deficiencies. The frequency of inspections is addressed in environmental permits, procedures, and plans and inspections are conducted in accordance with federal, state, and local requirements. Unless otherwise specified in detailed procedures and plans, internal compliance inspections are conducted annually at a minimum. Identified environmental deficiencies are communicated to the appropriate individual within the University for correction. A record of the finding, including the transmittal, is maintained.

10.2 Audits

Audits are used as the secondary method for identifying deficiencies. An audit (internal, second party, or third party) is a snapshot-in-time evaluation of UT Knoxville’s environmental compliance program implementation. It is a tool used to:

- Find and fix problems and
- Discover and take advantage of opportunities for improvements.

Audits are used to identify any noncompliance situation and search for evidence of the administration’s commitment to an environmental and/or sustainability policy as well as awareness and competency among employees. Audits identify corrective and preventive actions to be taken to improve UT Knoxville’s ability to meet goals and maintain compliance.

UT Knoxville program auditors look for objective evidence that the CMS is working as designed and expected, identify areas that need improvement, and determine whether UT Knoxville personnel are following University plans and procedures. Auditors also review and evaluate the adequacy of documents, procedures, programs, and records along with the implementation, integration, and consistency of procedures and programs at a particular moment. Finally, auditors examine and evaluate how UT Knoxville is fulfilling its commitment to continual improvement.

UT Knoxville’s first comprehensive environmental audit was conducted in November 2007 by URS Corporation. A second comprehensive audit was conducted in June 2014 by EnSafe.

Audits conducted by a third party are tentatively planned every four to five years.

11.0 COMPLIANCE INCENTIVES PROGRAM

The EPA Audit Policy recommends implementing a “compliance incentive element for managers and employees that includes consistent enforcement through appropriate disciplinary mechanisms.”

Failure to follow environmental procedures at UT Knoxville may result in disciplinary action. Supervisors shall immediately notify an employee who is violating an environmental regulation and take steps to terminate the violating action. Initially, the supervisor must counsel the employee to ensure he or she is aware of the correct procedures, understand how they apply, and determine whether the employee has adequate resources (e.g., equipment). If an employee willfully disobeys the correct procedure, the supervisor will begin disciplinary action in accordance with Human Resources Policy 525.

An attempt shall be made to recognize individuals and department who exhibit exemplary performance with respect environmental compliance. The ECT shall review such cases and make recommendations as necessary.

12.0 REGULATORY ACTIONS

Regulatory actions include site visits, notices of violation, citations, fines, and similar events. UT Knoxville administration (including EHS and FS) shall be notified when a regulatory agency is on-site, provided with the results of the site visit, and notified if a violation and/or enforcement action is likely to be or has been received. UT Knoxville personnel will cooperate with regulatory officials and provide requested information in a timely manner. Inspectors and auditors from outside agencies shall be accompanied by a member of the ECT or a designee at all times while on UT Knoxville property.

Escorts and UT Knoxville personnel being interviewed are to be courteous and respond truthfully and specifically to all questions asked; however, personnel should not attempt to answer a question if unfamiliar with the specific issue. When personnel do not know the answer to a question, an appropriate response is, "I don't know, but I will get an answer for you as soon as possible." When this type of response is given, it is imperative that answers be obtained and provided in a timely manner, usually within 24 hours. Refer to UT Knoxville Safety Policy GS 30, Actions of Regulatory Agencies, for detailed procedures on receiving and assisting auditors and inspectors.

13.0 ENVIRONMENTAL CALENDAR

To facilitate compliance within prescribed deadlines the Director of EHS maintains an environmental calendar that includes, but is not limited to, the following information:

- Due dates for annual reports under EPCRA and RCRA and others
- Training schedules,
- Annual report dates for CMS,
- Inspection frequencies, and
- Other activities

The environmental calendar shall be a standing agenda item for each ECT meeting and seen as a living document. ECT members are encouraged to add action items to the calendar at any time on the SharePoint site or during quarterly meeting. The format of the environmental calendar shall be determined by ECT members. Note that related subjects may be included on the calendar.

Appendix A

ENVIRONMENTAL PROGRAM ROLES AND RESPONSIBILITIES MATRIX

Table A-1. Environmental Program Roles and Responsibilities Matrix

Program Area	EHS	FS
Air Quality		X
Asbestos		X
Biohazard Waste (other than research)	X	X
Emergency Management as relates to hazardous materials (example EPCRA)	X	
Environmental Management	X	
Hazardous Material Management	X	
Hazardous Waste Management	X	
Municipal Solid Waste Management		X
Pesticide Management	Auxiliary units, including Athletics; exterior herbicide applications only for Housing	All academic and administrative buildings; inside residential buildings
SPCC Plan	X	X
Steam Plant Storm Water Pollution Prevention	Quarterly discharge monitoring, training	Inspections, implementation,
Storm Water		X
TSCA	Lead, PCBs; asbestos in auxiliary buildings	Asbestos in academic buildings
Underground Storage Tanks		X

Appendix B

FEDERAL, STATE, AND LOCAL REGULATIONS

Table B-1. Environmental Regulations Potentially Applicable to UT Knoxville

State: Tennessee

City: Knoxville

County: Knox

Regulation	Description	Web Site	Equipment/Process	Applicable?
AIR EMISSIONS				
Federal				
40 CFR 52	Approval and Promulgation of Implementation Plans	http://www.epa.gov/lawsregs/search/40cfr.html	Must have information in file to demonstrate emissions are below thresholds.	Yes
40 CFR 60	Standards of Performance for New Stationary Sources	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 61	National Emission Standards for Hazardous Air Pollutants	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 63	National Emission Standards for Hazardous Air Pollutants for Source Categories	http://www.epa.gov/lawsregs/search/40cfr.html	None at UT Knoxville.	No
40 CFR 68	Chemical Accident Prevention Provisions	http://www.epa.gov/lawsregs/search/40cfr.html	Below thresholds.	No
40 CFR 70	State Operating Permit Programs	http://www.epa.gov/lawsregs/search/40cfr.html	Title V Permit covers Steam Plant and various other sources (both permitted and miscellaneous) across UT Knoxville. See local regulations below.	Yes
40 CFR 71	Federal Operating Permit Programs	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 80	Regulation of Fuels and Fuel Additives	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 82	Protection of Stratospheric Ozone	http://www.epa.gov/lawsregs/search/40cfr.html	Equipment with certain refrigerants.	Yes
40 CFR 85	Control of Air Pollution From Mobile Sources	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 89	Control of Emissions From New and In-use Nonroad Compression-ignition Engines	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No

Regulation	Description	Web Site	Equipment/Process	Applicable?
40 CFR 90	Control of Emissions From Nonroad Spark-ignition Engines at or Below 19 Kilowatts	http://www.epa.gov/lawsregs/search/40cfr.html	Applies to small engine design and performance.	No
State				
Chapter 1200-3	Air Pollution Control Regulations	http://www.state.tn.us/sos/rules/1200/1200.htm	See local regulations below.	Yes
Local				
Knox County Air Pollution Control Regulations	Air Pollution Control Regulations	http://www.knoxcounty.org/airquality/pdfs/regs/pdf	Heat generating equipment and miscellaneous sources across UT Knoxville.	Yes
HAZARDOUS MATERIALS				
Federal				
29 CFR 1910	Occupational safety and health standards	http://www.gpoaccess.gov/cfr/index.html	Safety and hazardous material usage requirements.	Yes
40 CFR 302	Designation, Reportable Quantities, and Notification	http://www.epa.gov/lawsregs/search/40cfr.html	Identifies reportable quantities and sets forth the notification requirements for releases of hazardous substances designated under CWA Section 311(b)(2)(A).	Yes
40 CFR 355	Emergency Planning and Notification	http://www.epa.gov/lawsregs/search/40cfr.html	This regulation establishes the list of extremely hazardous substances, threshold planning quantities, and facility notification responsibilities necessary for the development and implementation of state and local emergency response plans.	Yes
40 CFR 370	Hazardous Chemical Reporting: Community Right-to-Know	http://www.epa.gov/lawsregs/search/40cfr.html	The requirements of this subpart apply to any facility that is required to prepare or have available a material safety data sheet for a hazardous chemical under the Occupational Safety and Health Act of 1970 and regulations promulgated under that Act.	Yes

Regulation	Description	Web Site	Equipment/Process	Applicable?
40 CFR 372	Toxic Chemical Release Reporting; Community Right-to-Know	http://www.epa.gov/lawsregs/search/40cfr.html	This part sets forth requirements for the submission of information relating to the release of toxic chemicals under Section 313 of EPCRA.	Yes
49 CFR 171	General information, regulations, and definitions	http://www.access.gpo.gov/nara/cfr/cfr-table-search.html#page1	UT Knoxville does not transport hazardous materials.	No
49 CFR 172	Hazardous materials table, special provisions, hazardous materials communications, emergency response information, and training requirements	http://www.gpoaccess.gov/cfr/index.html	UT Knoxville does not transport hazardous materials.	No
49 CFR 177	Carriage by public highway	http://www.gpoaccess.gov/cfr/index.html	UT Knoxville does not transport hazardous materials.	No
State				
Rule 1340-6-1-.47	Hazardous Materials Transportation	http://tennessee.gov/sos/rules/1340/1340-06/1340-06-01.pdf	UT Knoxville does not transport hazardous materials.	No
HAZARDOUS WASTE				
Federal				
40 CFR 261	Identification and Listing of Hazardous Waste	http://www.epa.gov/lawsregs/search/40cfr.html	This part identifies those solid wastes that are subject to regulation as hazardous wastes. UT Knoxville has numerous hazardous waste generating processes.	Yes
40 CFR 262	Standards Applicable to Generators of Hazardous Waste	http://www.epa.gov/lawsregs/search/40cfr.html	These regulations establish standards for generators of hazardous waste.	Yes
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No

Regulation	Description	Web Site	Equipment/Process	Applicable?
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 268	Land Disposal Restrictions	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 270	EPA Administered Permit Programs: The Hazardous Waste Permit Program	http://www.epa.gov/lawsregs/search/40cfr.html	RCRA permits	No
40 CFR 273	Standards for Universal Waste Management	http://www.epa.gov/lawsregs/search/40cfr.html	This part establishes requirements for managing batteries, pesticides, mercury-containing equipment as described in 273.4 ; and lamps as described in 273.5 .	Yes
State				
Rule 1200-1-11	Hazardous Waste Management (Solid and Hazardous Waste Management)	http://www.state.tn.us/sos/rules/1200/1200.htm	Regulations for the proper management of aerosol can puncturing, batteries, lamps, and thermostats.	Yes
NATURAL RESOURCES				
Federal				
NA				
State				
Rule 1200-4-7	Natural Resource Development	http://www.state.tn.us/sos/rules/1200/1200.htm	Regulation governs the conduct of activities that would alter waters of the state. Currently UT Knoxville does not have any such activities.	No. But, any future construction activities at the facility would be governed by the regulation.

Regulation	Description	Web Site	Equipment/Process	Applicable?
Local				
TCA 11-14	Rare Species of Knox County	http://tennessee.gov/environment/na/pdf/county.pdf	None	No. However, the list should be consulted prior to conducting activities that disturb plant and animal populations.
PESTICIDE MANAGEMENT				
Federal				
7 CFR 110	Recordkeeping on restricted use pesticides by certified applicators; surveys, and reports	http://www.gpoaccess.gov/cfr/index.html	Regulation governs all application of restricted use pesticides.	Yes
29 CFR 1910	Occupational Safety and Health Administration, Department of Labor	http://www.gpoaccess.gov/cfr/index.html	UT Knoxville protects employees from workplace exposure to pesticides by scheduling pesticide application at times when employees are not in the area.	Yes
40 CFR 152	Pesticide Registration and Classification Procedures	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 155	Registration Standards	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 166	Exemption of Federal and State Agencies for Use of Pesticides Under Emergency Conditions	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 171	Certification of Pesticide Applicators	http://www.epa.gov/lawsregs/search/40cfr.html	Persons applying restricted use pesticides must be certified appropriately.	Yes

Regulation	Description	Web Site	Equipment/Process	Applicable?
40 CFR 172	Experimental Use Permits	http://www.epa.gov/lawsregs/search/40cfr.html	Persons accumulating information necessary to register a pesticide not registered with EPA or register a pesticide for a use not previously approved in the registration of the pesticide must have an experimental use permit.	No. However, if UT Knoxville undertakes this type of endeavor, a permit must be obtained.
State				
Rule 0080-6	Division of Plant Industries	http://www.state.tn.us/sos/rules/0080/0080.htm	Pest control applicators must be properly licensed and certified by the Department of Agriculture.	Yes
TCA 43-8	Pesticides	http://www.michie.com/tennessee/	Applies to all use of restricted use pesticides.	Yes
TCA 62-21	Pest Control Operators	http://www.michie.com/tennessee/	Applies to all use of restricted use pesticides.	Yes
PETROLEUM, OILS & LUBRICANTS				
Federal				
29 CFR 1910	Occupational Safety and Health Administration, Department of Labor	http://www.gpoaccess.gov/cfr/index.html	Safe use of petroleum, oils, and lubricants; employee notification of hazards; storage.	Yes
33 CFR 154	Facilities transferring oil or hazardous material in bulk	http://www.gpoaccess.gov/cfr/index.html	NA	No
33 CFR 155	Oil or hazardous material pollution prevention regulations for vessels	http://www.gpoaccess.gov/cfr/index.html	NA	No
33 CFR 156	Oil and hazardous material transfer operations	http://www.gpoaccess.gov/cfr/index.html	NA	No
40 CFR 112	Oil Pollution Prevention	http://www.epa.gov/lawsregs/search/40cfr.html	SPCC Plan for all oil and fuel storage locations.	Yes
40 CFR 279	Standards for the Management of Used Oil	http://www.epa.gov/lawsregs/search/40cfr.html	Applies to all processes at the university generating used oil.	Yes

Regulation	Description	Web Site	Equipment/Process	Applicable?
State				
Rule 1200-1-11	Hazardous Waste Management (Solid and Hazardous Waste Management)	http://www.state.tn.us/sos/rules/1200/1200.htm	Applies to all processes at the university generating used oil.	Yes
POLLUTION PREVENTION				
Federal				
40 CFR 247	Comprehensive Procurement Guideline for Products Containing Recovered Materials	http://www.epa.gov/lawsregs/search/40cfr.html	This guideline applies to federal agencies, to state and local agencies using appropriated federal funds to procure designated items, and to persons contracting with any such agencies with respect to work performed under such contracts.	Yes
State				
None				
STORAGE TANKS				
Federal				
NFPA 30A	Motor Fuel Dispensing Facilities and Repair Garages Code	http://www.nfpa.org/aboutthecodes/list_of_codes_and_standards.asp	Requirements applicable to the Motor Pool.	Yes
29 CFR 1910	Occupational Safety and Health Administration, Department of Labor	http://www.gpoaccess.gov/cfr/index.html	Compressed gas storage.	Yes
40 CFR 60	Standards of Performance for New Stationary Sources	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 280	Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (USTs)	http://www.epa.gov/lawsregs/search/40cfr.html	USTs must be properly managed and maintained.	Yes
State				
Rule 1200-1-11	Hazardous Waste Management (Solid and Hazardous Waste Management)	http://www.state.tn.us/sos/rules/1200/1200.htm	NA	No
Rule 1200-1-15	Underground Storage Tank Program	http://www.state.tn.us/sos/rules/1200/1200.htm	USTs must be managed and maintained properly.	Yes
Rule 1200-3-18	Volatile Organic Compounds	http://www.state.tn.us/sos/rules/1200/1200.htm	NA	No

Regulation	Description	Web Site	Equipment/Process	Applicable?
SOLID WASTE				
Federal				
40 CFR 60	Standards of Performance for New Stationary Sources	http://www.epa.gov/lawsregs/search/40cfr.html	Solid waste incinerators, municipal solid waste landfills.	No
40 CFR 243	Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste	http://www.epa.gov/lawsregs/search/40cfr.html	The guidelines apply to the collection of residential, commercial, and institutional solid wastes and street wastes. Explicitly excluded are mining, agricultural, and industrial solid wastes; hazardous wastes; sludges; construction and demolition wastes; and infectious wastes.	Yes
40 CFR 246	Source Separation for Materials Recovery Guidelines	http://www.epa.gov/lawsregs/search/40cfr.html	The "Requirement" sections of these guidelines are mandatory for all federal agencies that generate solid waste. In addition, they are recommended to state, interstate, regional, and local governments for use in their activities.	No. However, source separation is recommended for state agencies.
40 CFR 257	Criteria for Classification of Solid Waste Disposal Facilities and Practices	http://www.epa.gov/lawsregs/search/40cfr.html	Solid wastes are managed so that all environmental media (air, water, soil) are protected from contamination.	Yes
40 CFR 258	Criteria for Municipal Solid Waste Landfills	http://www.epa.gov/lawsregs/search/40cfr.html		No

Regulation	Description	Web Site	Equipment/Process	Applicable?
40 CFR 266	Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities	http://www.epa.gov/lawsregs/search/40cfr.html	Applies to the reclamation of economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these. Also applies to persons that generate, collect, transport, store, or regenerate lead-acid batteries for reclamation purposes.	No
49 CFR 172	Hazardous materials table, special provisions, hazardous materials communications, emergency response information, and training requirements	http://www.gpoaccess.gov/cfr/index.html	Use to identify materials listed as hazardous materials for the purposes of transportation.	Yes. However, UT Knoxville does not currently ship any hazardous materials.
49 CFR 173	Shippers—general requirements for shipments and packaging	http://www.gpoaccess.gov/cfr/index.html	Requirements to be observed in preparing hazardous materials for shipment by air, highway, rail, or water, or any combination thereof.	Yes. However, UT Knoxville does not currently ship any hazardous materials.
State				
1200-1-7	Solid Waste Processing and Disposal	http://www.state.tn.us/sos/rules/1200/1200.htm	Sets state MSW reduction goals in Section 1200-1-7-.09. The goal is currently past date of -25% reduction by 12-31-03.	Yes
TOXIC SUBSTANCES (ASBESTOS, RADON, LBP, PCBs)				
Asbestos-Containing Material				
Federal				
29 CFR 1910	Occupational Safety and Health Administration, Department of Labor	http://www.gpoaccess.gov/cfr/index.html	Asbestos disturbing activities.	Yes
29 CFR 1926	Safety and health regulations for construction	http://www.gpoaccess.gov/cfr/index.html	Asbestos disturbing activities.	Yes
40 CFR 61	National Emission Standards for Hazardous Air Pollutants	http://www.epa.gov/lawsregs/search/40cfr.html	Asbestos disturbing activities.	Yes

Regulation	Description	Web Site	Equipment/Process	Applicable?
State				
None				
Lead-Based Paint				
Federal				
29 CFR 1926	Safety and health regulations for construction	http://www.gpoaccess.gov/cfr/index.html	Remodeling activities that disturb lead-based paint.	Yes
40 CFR 745	Lead-based Paint Poisoning Prevention in Certain Residential Structures	http://www.epa.gov/lawsregs/search/40cfr.html	Applicable to Sutherland Village due to occupancy by children.	Yes
State				
Rule 1200-1-18	Lead Based Paint Abatement	http://www.state.tn.us/sos/rules/1200/1200.htm	Applies to remodeling or demolition of structures containing lead-based paint.	Yes
Polychlorinated Biphenyls				
Federal				
40 CFR 302	Designation, Reportable Quantities, and Notification	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
State				
None				
WASTE WATER				
Federal				
40 CFR 122	EPA Administered Permit Programs: The National Pollutant Discharge Elimination System	http://www.epa.gov/lawsregs/search/40cfr.html	UT Knoxville does not have any discharges requiring a NPDES permit.	No
40 CFR 136	Guidelines Establishing Test Procedures for the Analysis of Pollutants	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 144	Underground Injection Control Program	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No

Regulation	Description	Web Site	Equipment/Process	Applicable?
40 CFR 403	General Pretreatment Regulations for Existing and New Sources of Pollution	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 433	Metal Finishing Point Source Category	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 438	Metal Products and Machinery Point Source Category	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 459	Photographic Point Source Category	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 460	Hospital Point Source Category	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
40 CFR 503	Standards for the Use or Disposal of Sewage Sludge	http://www.epa.gov/lawsregs/search/40cfr.html	NA	No
State				
Rule 1200-1-6	Regulations to Govern Subsurface Sewage Disposal Systems	http://www.state.tn.us/sos/rules/1200/1200.htm	NA	No
Rule 1200-4-1	General	http://www.state.tn.us/sos/rules/1200/1200.htm	NA	No
Rule 1200-4-5	Permit Effluent Limitations and Standards	http://www.state.tn.us/sos/rules/1200/1200.htm	NA	No
Rule 1200-5-1	Public Water Systems	http://www.state.tn.us/sos/rules/1200/1200.htm	NA	No
Rule 1200-5-3	Rules Governing Water and Wastewater Operator Certification	http://www.state.tn.us/sos/rules/1200/1200.htm	NA	No
TCA 69-3-108	Water Quality Control Act	http://www.michie.com/tennessee/	Storm water	Yes
Local				
Knoxville Utility Board	Rules and Regulations for the Wastewater Division	NA	Wastewater discharge to sanitary sewer	Yes
WATER QUALITY				
Federal				
USC Title 42, Chapter 6A, Subchapter XII, Part C, Section 300h	State programs to establish wellhead protection areas	http://uscode.house.gov/search/criteria.shtml	UT Knoxville drinking water is obtained from the public drinking water system.	No
40 CFR 141	National Primary Drinking Water Regulations	http://www.epa.gov/lawsregs/search/40cfr.html	UT Knoxville drinking water is obtained from the public drinking water system.	No

Regulation	Description	Web Site	Equipment/Process	Applicable?
40 CFR 143	National Secondary Drinking Water Regulations	http://www.epa.gov/lawsregs/search/40cfr.html	UT Knoxville drinking water is obtained from the public drinking water system.	No
40 CFR 149	Sole Source Aquifers	http://www.epa.gov/lawsregs/search/40cfr.html	UT Knoxville drinking water is obtained from the public drinking water system.	No
State				
Rule 1200-4	Water Pollution Control	http://www.state.tn.us/sos/rules/1200/1200.htm	Storm water	Yes
Rule 1200-5	Public Water Systems	http://www.state.tn.us/sos/rules/1200/1200.htm	UT Knoxville drinking water is obtained from the public drinking water system.	No
TCA 68-221	Water and Sewerage	http://www.michie.com/tennessee/		
Local				
City of Knoxville	Best Management Practices Manual	http://www.ci.knoxville.tn.us/engineering/bmp_manual/	Storm water from UT Knoxville property.	Yes