

ENVIRONMENTAL MANAGEMENT SYSTEM

**Environmental Health and Safety Center
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ENVIRONMENTAL MANAGEMENT FRAMEWORK

NC State will construct its facilities and conduct its operations and in compliance with all pertinent environmental laws, regulations, and ordinances.

Environmental Goals

The University environmental management goals are to operate all university programs in full compliance with applicable federal, state, and local environmental regulatory requirements.

Overview of Responsibilities

Although the Environmental Affairs component of the Environmental Health and Safety Center is the lead organization for developing and managing the NC State environmental compliance program, all individuals and organizations, from the Chancellor through each employee or student, have responsibilities for implementation.

Individuals

The primary element in ensuring the success of the environmental program is the individual.

The individual employee will perform their job functions in accordance with work practices or procedures specific for their activities and in compliance with the NC State Environmental Management Plan.

Students and other non-employees will conduct themselves in an environmental responsible manner under the general guidelines provided in the NC State Environmental Management Plan.

Work Area Supervisor/Lab Manager/Owner-Operator

Managers and supervisors are responsible for environmental compliance of their work unit.

Deans, Division Directors and Department Heads

Deans, Division Directors, and Department Heads have primary responsibility for operations in their organizations and for taking the necessary measures to make certain that all division or department buildings, facilities and facility-related activities are in compliance with all pertinent environmental requirements.

Environmental Affairs

Environmental Affairs is available to provide the following, as requested by the affected organization:

1. interface to regulatory agencies for preparation of environmental permits, notices or other documents,

2. necessary support and assistance for the development of organization-specific plans and procedures which implement specific provisions of permit or plan-associated requirements held by the organization,
3. training necessary for employees to ensure that they can effectively perform their job functions as it relates to environmental compliance or management,
4. informational materials that describe the University environmental program, and
5. compliance-related reviews of various activities to ensure proper implementation of the organization environmental management plan.

Vice-Chancellors and Provost

The Vice-Chancellors and Provost are directly responsible to the Chancellor for all aspects of environmental compliance in their respective organizations.

Within these organizations, management is responsible for conforming facility operations and all other activities under their direction to the requirements specified by the NC State environmental management policy and its implementing plans and procedures.

Chancellor

Within the University, the Chancellor has the ultimate responsibility for environmental regulatory compliance.

STANDARDS / PROTOCOLS / PROCEDURES

This document is consistent with University-wide policies, standards, protocols, and procedures. Those documents relevant to this plan are listed below:

Safety and Health Management Plan at North Carolina State University

Manual for Chemical Waste Management at North Carolina State University

NC State Biosafety Manual, University Directive 19934

NC State University Emergency Contingency Plan

Responsibilities

Environmental Affairs

Environmental Affairs shall be responsible for the development, distribution, and maintenance of the NC State Environmental Management Plan. This Plan, and its component manuals, provide specific policy and procedures and recommend practices for implementing the basic policy provided herein.

Environmental Affairs maintains current information on federal, state, and local environmental regulations.

Environmental Affairs identifies specific university procedures that require revision or new procedure development as a result of a regulatory change or new regulation.

Environmental Affairs works with appropriate staff (primarily owner/operators and supervisors) on procedure development as dictated by permits or other environmental documents.

Field Supervisors and Owner/Operators

The owner/operator of the facility is responsible for working with Environmental Affairs on the development of necessary operating procedures to ensure that activities are conducted in compliance with permit conditions.

Supervisors and operators shall be responsible for performing activities as defined by the appropriate procedure and identifying work practices that require procedure revision and/or a separate procedure to achieve the overall objective of environmental compliance.

DESIGN REVIEW

The University is continually embarking on new construction projects and modifying its existing structures and facilities. These projects require environmental review to determine potential for new permits, impact on existing permits, and other environmentally-related issues.

Ancillary (non-University) programs, which are located off campus, for which the University provides facilities planning services and for which the University has responsibility for environmental compliance, are included.

Projects for non-University programs, for which the University has no responsibility for environmental compliance, are not discussed here.

The managing organization can choose to use Environmental Affairs to meet the requirements described below, can do it themselves, or contract for necessary support. Whatever route is taken, Environmental Affairs has final review and acceptance responsibility for work performed and documents prepared to satisfy environmental regulatory requirements. These documents include permit applications, notices, environmental assessments, and environmental impact statements, stormwater plans.

The following situations: new facility, facility modification, property acquisition, and programmatic initiatives are discussed below.

Design Review - New Facilities

This covers new facility construction for any project or operation for which the University has responsibility for environmental compliance or which may have an impact upon any aspect of the University's environmental compliance status.

Responsibilities

Any University organization managing a new facility or facility modification project is responsible for the following:

- Informing Environmental Affairs of the project during the conceptual and design phase and including Environmental Affairs in design and/or planning meetings, as requested by Environmental Affairs.

- Determining the level of the North Carolina Environmental Policy Act (NCEPA) documentation required by the project for the design bid document.

- Preparing the required environmental documentation as required by the NCEPA.

- Ensuring that a comprehensive environmental regulatory applicability analysis for identification of new environmental permits, impacts on existing permits, and notices is performed.

- Providing Environmental Affairs with environmental applicability analysis, draft and final NCEPA documents, environmental permit application, and notices for and submittal review

on a schedule that allows for adequate quality review and provides the opportunity for incorporation of comments.

Making sure that adequate organizational resources are available to meet environmental management requirements.

Environmental Affairs will:

Attend project initiation meetings, and other project meetings as necessary, to identify potential areas of environmental concern.

Respond to formal university design reviews at schematic design, design development, and construction document phases with comments relating to environmental compliance or regulations.

Provide guidance and necessary support information on the performance of comprehensive environmental regulatory applicability analyses.

Provide review and oversight for the engagement of any special environmental consulting services, to the extent requested by the project manager.

Will review and provide input to all environmental documents, i.e., environmental assessments, regulatory applicability analyses, permit application and notices.

Colleges and Departments

It is possible for colleges and departments to embark on new construction projects without using the services of Facilities Planning and Design. In this situation, the College Facilities Coordinator in the individual college and/or department is responsible for implementing the requirements specified in the NC State Environmental Management Plan.

Design Review - Facility Modification and Capital Improvement

There is always the need for facility modifications to accommodate growth and change at the University. These modifications have the potential to impact permitted operations and/or trigger the need for a specific notification or permit. Therefore, it is important that Environmental Affairs have the opportunity to review all facility modifications.

Responsibilities

Any University organization managing a facility modification or renovation project is responsible for the following:

Informing Environmental Affairs of the project at the project conceptualization or design stage and including Environmental Affairs in design and/or planning meetings, as requested by Environmental Affairs.

Determining the level of NCEPA documentation required by the project for the design bid document.

Consulting with EHS on other jobs that, based upon the job supervisor or project managers judgment, may require EHS input or present some regulatory concern.

Preparing the required environmental documentation as required by the NCEPA.

Ensuring that a comprehensive environmental regulatory applicability analyses for new environmental permits, impacts on existing permits, and notices is performed.

Providing Environmental Affairs with draft NCEPA documents, environmental permit applications, and notices for review on a schedule that allows for adequate quality review and submittal and provides the opportunity for incorporation of comments.

Colleges and Departments

The College Facilities Coordinator will consult with EHS on any job that, based upon his/her judgment, may require EHS input or present some regulatory concern.

Design Review – Property Acquisition

The University periodically acquires real property through several mechanisms. One of the review subjects associated with this acquisition process is evaluation for environmental liability. Prior to acquiring property, the receiving organization has the responsibility to conduct an environmental assessment.

This review shall meet the specifications of the current version of ASTM Standards on Environmental Site Assessments for Commercial Real Estate, as follows:

Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527) and

Standard Practice for Environmental Site Assessments: Transaction Screen Process (E1528)

Responsibilities

Real Estate

Real Estate is responsible for conducting environmental assessments for all property acquired by the University and shall conduct environmental assessments meeting the requirements specified in ASTM E 1527 or E 1528.

Real Estate will manage all records associated with this activity.

Environmental Affairs

Environmental Affairs will provide guidance on the selection of the appropriate assessment method and interpretation of collected information, as requested by Real Estate.

Design Review - Programmatic Initiatives

There are situations in which the environmental regulatory action is not focused on a specific project, but involves the entire University. Examples of such initiatives are the University's permit under the Clean Air Act Title V provisions and the Municipal Separate Stormwater System Permit.

Responsibilities

Environmental Affairs is responsible for identifying these permitting requirements and/or opportunities, for coordinating affected University organizations to assure the development of permit application materials, and managing permit compliance.

PERMITS, LICENSES, AND NOTIFICATIONS

There are some operations at NC State that must be licensed or permitted with local, state, or federal agencies. Similarly, notifications must be filed for a variety of project activities.

Responsibilities

Project Manager

For the environmental documents identified in the Design Review stage of a project, the Project Manager will provide final documents to Environmental Affairs for submittal for internal signature (e.g., Vice Chancellor of Finance and Business) and to the appropriate regulatory agency.

Environmental Affairs will:

Serve as the technical and administrative point of contact between the University and the regulatory community for all environmental regulatory compliance-related issues.

Make the determination about the acceptability of environmental-related documents.

Identify conditions related to implementation of a project, as described in the Environmental Assessment and/or permit, and for providing assistance to the affected organization for the development of procedures and work practices to meet those conditions.

Vice Chancellor for Finance and Business

The Vice Chancellor for Finance and Business is the corporate officer responsible for all environmental permits and/or licenses held by the University.

Facility Owner/Operator

The owner/operator of the permitted facility or operation is responsible for working with Environmental Affairs on the development of operating procedures to ensure that activities are conducted in compliance permit conditions.

The owner/operator is responsible for the operation of the permitted facility in a manner that meets all permit conditions.

FEES AND RELATED COSTS

There are a number of fees and costs associated with obtaining permits and operating facilities in compliance. These costs include fees associated with permit application preparation, State charge for permit application review, annual permit maintenance fees charged by the State, costs of annual sample collection and/or monitoring fees, and source-specific evaluations.

Responsibilities

Owner/Operator

It is the responsibility of the permitted source owner to fully fund all costs associated with acquisition of necessary permits for their facility or operation. These permit acquisition costs may include:

- Outside support services for preparation,
- Initial State agency permit application review charges,
- Data collection supporting permit application or environmental document preparation,
- Preparation of notices (e.g., notice for UST removal).

With regard to operation of the facility, it is the owners responsibility to meet the cost of complying with the conditions of the permit.

These operational costs may include:

- Annual permit maintenance fees;
- Outside support services necessary to resolve any permit compliance issue;
- Routine sample collection and analysis required for compliance;
- Charges for all equipment maintenance; and
- Maintenance of compliance-related devices or equipment (e.g., BMP's).

The owner/operator of the permitted facility or operation is responsible for maintaining all equipment and for having adequate staff support to ensure compliance with the conditions of the permit. Permit-related equipment includes the permitted unit e.g., boiler treatment device, or monitoring device integral to maintaining compliance.

Environmental Affairs

Environmental Affairs will fund all expenses associated with discretionary sampling activity.

Expenses associated with facility-wide or programmatic environmental activities, e.g., development of the Title V air permit, will be negotiated with the affected parties by the EHS Director.

RECORD KEEPING AND REPORTING

Keeping accurate records of the information required by environmental permits or other documents is the cornerstone of compliance management. Much of this record keeping responsibility resides with the owner/operator as part of the Standard Operating Procedures (SOP's), which describe work practices.

Responsibilities

Owner/Operator

It is the task of the owner/operator to maintain the appropriate records and related information (as defined by permits, etc.) necessary to document compliance with their facility or operation.

Environmental Affairs will:

Work with owner/operators to establish record keeping and reporting procedures as necessary under the permit/license.

Be responsible for preparation of University environmental-related reports. These include:

- Annual air pollutant emission inventory
- SARA Title II report
- Annual Hazardous Waste Generator report
- Annual Nutrient Reduction Program Report

Information may be requested from individual organizations to support report preparation.

Maintain records documenting compliance with the North Carolina Environmental Policy Act.

Maintain records of all University permits and compliance status.

TESTING AND SAMPLING

Testing and sampling may be required either under the conditions of a specific permit or to satisfy a general regulatory issue.

Responsibilities

Owner/Operator

The Owner/Operator is responsible for all permit-required routine and special sampling and testing as it relates to their permit and/or operation.

The Owner/Operator will submit routine test results as required by the permit. Environmental Affairs will receive a copy of all such submittals.

Environmental Affairs will

Immediately notify the Owner/Operator of any requests for sampling or testing beyond that routinely required by the permit.

Manage any environmental sampling or testing conducted at a non-permitted facility or operation supporting a University-wide permit (e.g., stormwater).

Manage any environmental testing and sampling performed at the discretion of EHS or in response to a request by an employee or regulatory agency.

Provide consultation and guidance to the Owner/Operator on establishing a sampling and testing program, as requested by the Owner/Operator.

TRAINING

Responsibilities

Managers are required to provide for adequate training for personnel who may have an impact on environmental compliance.

Environmental Affairs will provide training to effectuate the implementation of this plan.

EMERGENCY RESPONSE

Responsibilities and functions during emergency situations are defined in The Emergency Contingency Plan, NC State University, or by another operation-specific plan.

INTERNAL AUDITS

It is necessary to perform internal audits to measure the effectiveness of program implementation.

Responsibilities

Environmental Affairs will:

Design and perform internal reviews of various aspects of environmentally-related procedures and programs.

Conduct audits using written protocols.

Provide results (an audit report) to and discuss with the Owner/Operator and their management.

Report results to University management.

File audit reports with Environmental Affairs.

Owner/Operator

The Owner/Operator will provide information as requested and cooperate with the review process.

CORRECTIVE ACTIONS

Any issue identified during the internal audit will be assigned a corrective action.

Responsibilities

Environmental Affairs will work with the Owner/Operator to develop corrective action plans.

The Owner/Operator will implement the corrective action.

The Dean, Director or Department Head will provide funds and other support necessary to implement the corrective action.

INTERNAL MANAGEMENT REPORTS

University management must be kept informed concerning the status of the NC State environmental program.

Responsibilities

Environmental Affairs will:

Provide University management with internal audit reports.

Prepare an annual environmental status report for NC State management. The status report will provide University's management with a comprehensive view of environmental regulatory compliance.