

Version (2008)



Washington State University
Environmental
Management System

Washington State University
Environmental Management System

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Introduction

WSU established its Environmental Management System (EMS) in 1999. WSU's EMS is structured after the ISO 14001 EMS models. The EMS documents WSU's attempts to continuously improve its operations (facilities design, operation, maintenance, waste management, energy management, etc.), products, services, and related environmental programs. The WSU EMS supports, but does not directly address traditional university environmental research, education, or extension programs at WSU. However, the EMS may coordinate activities with these other traditional programs as it relates to WSU operations, products and services and related environmental programs. Please see **Appendix 1** for a WSU EMS organizational chart.

The EMS for WSU operations is also linked to traditional research, education and extension programs through the institution's Sustainability Initiative, Executive Policy # 24. EMS and Sustainability efforts at WSU are integrated and coordinated by the WSU Sustainability and the Environment Committee. The committee consists of four faculty, four students and four staff that are active in sustainability and environmental programs and departments at WSU. The committee also has a member that represents the three regional campuses and other state wide WSU facilities. This committee has been established to coordinate sustainability and environmental activities between faculty, staff, and students and to ensure WSU maintains its position as an environmental leader as it meets its educational, research, and extension missions, and its operations. The committee, executive policy # 24, and EMS support WSU's strategic goals.

While there are environmental operational programs across the state, this EMS currently applies only to the Pullman Campus.

WSU's EMS has been developed and is implemented by professionals having expertise in vital areas (categories) of the University's operations. These experts are Category Coordinators who oversee and coordinate efforts within the scope of their categories. Category Coordinators are responsible for identification of aspects of their operations activities, products and services' that have environmental and energy impacts. They identify and document objectives and targets to improve their program's environmental and energy performance for their category.

The categories and their respective coordinators are:

- Air – Air Quality Program Coordinator , Environmental Health and Safety (EH&S)
- Energy – Director Energy Systems and Operations, Facilities Operations (FO)
- Facility Design, Construction and Maintenance – EH&S Capital Services Coordinator
- Food – Director, Dining Services
- Hazardous Materials – Environmental Services Manager, EH&S
- Procurement – Associate Director, Purchasing Services
- Waste Management – Manager, Waste Management Services(FO)
- Water – Water Quality Program Coordinator, EH&S

1 Scope

WSU Operation's activities, services, products, and environmental programs on the main Pullman Campus fall within the scope of this WSU Environmental Management System (EMS). All other WSU operations, activities, products and environmental programs at other WSU locations are excluded as are tenant operations and activities.

2 Normative References

Unless otherwise stated, all references cited within this EMS refer to the most recent versions of the separate documents.

3 Terms and Definitions

Terms and definitions shall consist of those terms and definitions in the most recent ISO 14001 unless otherwise noted in this WSU EMS Program Document.

4 Environmental Management System Requirements

4.1 General Requirements

This EMS Program Document, documents WSU Pullman's Operations attempts to continuously improve environmental performance using a plan, do, check, and advance model for its operation's activities, products and services and environmental programs at the WSU Pullman campus.

The EMS documents organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing, maintaining and improving its operations activities, products and services with environmental impacts and environmental programs at WSU.

4.2 WSU EMS Environmental Policy

Environmental Policy for Washington State University – Pullman

Washington State University is committed through its Environmental Management System and Sustainability Initiative to continually improve its environmental performance. Continuous improvement will be achieved through support of teaching, research, extension, and in the development and management of university facilities.

The Washington State University – Pullman, Environmental Management System will be:

- implemented through campus operations and facilities;
- utilized to plan, design, construct, and operate WSU facilities;
- used as a framework to monitor its progress and ensure continual improvement to meet or exceed environmental regulations;
- support Executive Policy 24, Sustainability Initiative and meet pollution prevention goals which follow the hierarchy of: prevention, recycling/reuse, treatment and disposal;
- documented, implemented, maintained and communicated to its employees, students and the public.

This policy shall remain in effect until altered or rescinded



Greg Royer Vice President, Business Affairs



Date

4.3 Planning

The process and procedure to identify WSU operation's environmental aspects (element of WSU's activities, products or services that significantly interact with (impact) the environment) is limited to those that it can control. WSU Pullman has identified categories of its operations that meet these criteria using inputs from administrators, faculty, staff, students, regulators, and the general public

4.3.1 Environmental Aspects - and significant impacts

Environmental Aspects

Environmental aspects are activities/services, products or facilities that impact the environment. WSU is committed to identifying and reasonably minimizing negative environmental impacts and enhancing positive environmental impacts of its environmental aspects. The activities/services, products, and facilities that impact the environment in this EMS are those which WSU can reasonably control and influence.

The identification of environmental aspects and their impacts on the environment is an ongoing process. This process includes the identification of new or remodeled university facilities and changing university activities/services or products and their impacts on the environment. A list of potential Operations EMS facilities, activities/services and products is located in **Appendix 2**. Each EMS category coordinator with assistance from EH&S will develop and maintain an applicable list of environmental aspects.

Category coordinators review and revise their list of environmental aspects as needed. EH&S coordinates this effort with University Administrative Officials, University committees and the general public.

Significant Environmental Impacts

Significant environmental impacts are direct, indirect or potential influences on the environment from activities, products and facilities. These environmental impacts can be either positive or negative.

Potential significant environmental impacts are listed in **Appendix 3**. Each EMS category coordinator with assistance from EH&S will develop and maintain an applicable list of environmental impacts.

The identification of significant environmental impacts is an ongoing process. This process includes the identification of new or remodeled university facilities, and changing university activities. EMS category coordinators review and revise the list of environmental impacts as needed. EH&S coordinates this effort with University Administrative Officials, University committees and the general public.

Environmental Aspect/Impact Evaluation Worksheet

Using the applicable aspects and impacts each EMS category develops an Environmental Aspect Environmental Impact Worksheet. These worksheets are summaries of the positive and negative impacts environmental aspects have or may have on the environment.

It allows WSU to compare and prioritize which facilities or activities have the most negative or potentially most positive environmental impacts. The worksheets are a tool to identify priorities for EMS objectives and targets, the allocation of limited resources to improve environmental performance, promote sustainability, and maintain regulatory compliance.

The Environmental Aspect and Impact Evaluation Template Worksheet is **Appendix 4**.

EMS category coordinators with assistance from EH&S reviews and revises their category environmental aspect/impact evaluation worksheet annually. EH&S coordinates this effort with University Administrative Officials, University committees, and the general public.

4.3.2 Legal and Other Requirements

Compliance with legal environmental requirements is important to WSU.

WSU uses several resources to monitor new and changes to relevant environmental laws and regulations. Please review and update **Appendix 5** the listing of resources used to monitor new and changes to relevant environmental laws and regulations.

WSU identifies and communicates applicable environmental laws, regulations, and other requirements to students, faculty, and staff using WSU Safety Policy and Procedures, WSU web sites, newsletters, WSU Announcements (daily e-mail broadcast), live and webcast training sessions, and other means, as appropriate.

EMS Category Coordinators with assistance from EH&S reviews and updates the environmental laws and regulations at least annually. EH&S coordinates this effort with University Administrative Officials, University committees and the general public.

4.3.3 EMS Objectives, Targets, and Programs

EMS Objectives and Targets

EMS objectives are environmental goals that WSU sets annually.

EMS targets are steps to achieve those objectives within a specified time-frame. EMS targets are specific and measurable.

WSU reviews and revises environmental objectives and targets annually for each EMS category. EH&S coordinates this effort with University Administrative Officials, University committees, and the general public

The environmental objectives and targets are consistent with the environmental policy, including the commitments to continual improvement, pollution prevention, and compliance with environmental laws and regulations. When establishing and reviewing its environmental objectives and targets, Washington State University considers:

- environmental concerns of staff, faculty, students and other interested parties
- significant environmental aspects and their environmental impacts
- technological, financial, operational, options, and other university requirements
- legal and other requirements

Environmental objectives and targets are evaluated using the Environmental Aspects and Impacts Worksheet (EAIW) **Appendix 4**.

Collaborating with University administrative Officials, university committees and the general public, environmental objectives and targets are established and are included in each annual report.

EMS Environmental Programs

Environmental management programs at WSU work together as a team to achieve EMS objectives and targets. The roles and responsibilities of these departments are listed below.

Department Animal Science	Animal waste management
Capital Planning and Development	New construction and major remodel (LEED) Stormwater runoff control (construction sites) Environmental assessments and Impact Statements
Dining Services	Sustainable food procurement and production
Environmental Health and Safety	Air quality Program Water quality Program Hazardous materials management Program Hazardous waste management Program Public Health Bio-safety EMS /Sustainability Coordination
Facilities Operations	Minor building remodel Operate potable water system Maintain sanitary and storm sewer systems Operate steam and chiller plants Energy management Program Maintain facilities and equipment Road maintenance Operate and maintain vehicle fleet Rideshare Program
Waste Management	Recycling Composting Medical/pathological waste management Solid waste management Surplus material sales and disposal
Parking and Transportation Services	Trip reduction program
Radiation Safety	Radioactive materials management
Research Compliance	Research bio-safety

4.4 Implementation and Operation

4.4.1 Structure and Responsibility

Environmental management roles, responsibilities, and authority at WSU are defined, documented and communicated in the WSU Safety Policy and Procedures Manual, Business policies and Procedures Manual, and Executive Policy 24.

WSU management provides resources essential to the implementation and control of the environmental management system. Resources include human resources and specialized skills, technology, and financial resources.

The Director of EH&S serves as the EMS Management Representative and Coordinator. The EMS Management Representative and Coordinator is responsible and has the authority to:

- Ensure WSU's EMS is established implemented, maintained, in accordance with reasonable and applicable standards and regulations;
- Reporting on the performance of the EMS to WSU's top management including recommendations for improvement;
- Working with others to continuously improve the EMS.

4.4.2 Competence, Training, and Awareness

Competence:

Personnel performing tasks which may cause significant environmental impacts shall be competent on the basis of appropriate education, training and/or experience. Department Chairs and Directors shall determine the level of experience, competence, and training necessary to ensure the capability of personnel carrying out the performance of tasks that have or may be reasonably expected to have significant environmental impacts.

Training: Training requirements are based on environmental program responsibilities (see [Section 4.4.1 "Structure and Responsibility"](#)).

WSU has identified training needs for the EMS and personnel associated with environmental aspects whose work may create a significant impact upon the environment and has retained or has access to associated records. Those records are maintained at several locations at WSU Pullman.

Awareness

EMS category coordinators and EH&S establish, implement, and maintain procedures for WSU, so they can train workers and contractors, so they are aware of:

- the importance of following environmental policies, procedures, and requirements of the EMS;
- actual or potential environmental impacts of their work activities and the environmental benefits of improved performance;
- their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirements of the environmental management system, including emergency preparedness and response; and
- potential consequences of departure from specified operating procedures.

EMS Training and Awareness for students, faculty, staff and Local Stakeholders:

- A. EMS awareness training is made available to employees on the EH&S website. The website describes the general EMS structure and processes in the EMS Program Document and through the annual report a summary of past and future goals (objectives and targets), and recent accomplishments that have improved WSU's environmental performance.
- B. EMS awareness training also occurs during new employee orientation, in classes such as ESRP 490/590 Environmental Management Systems and Sustainability, and during the Sustainability and the Environment committee meetings.
- C. Students, faculty, staff and other stakeholders are encouraged to provide environmental concerns and/or suggestions for environmental improvement(s).

4.4.3 Communication

WSU provides internal communication regarding its environmental aspects and EMS and provides a procedure for receiving, documenting, and responding to relevant communication from external interested parties

Internal Communication Procedures

Internal communication procedures regarding environmental aspects and the EMS include

- A WSU EMS website
- The WSU Sustainability and Environment Committee
- Classes (e.g. ES/RP 490/590 – environmental management systems and sustainability)

External Communication Procedures

When Category Coordinators and EH&S receive communication about the EMS from external interested parties they will respond and document the communication. Those files will be kept at each category coordinator's office.

4.4.4 EMS Documentation and 4.4.5 EMS Document Control

Washington State University's EH&S maintains information, in paper and electronic form.

WSU EMS documentation has four types of records:

1. EMS Program Document
2. EMS Annual Reports
3. EMS - University Safety Policy and Procedures Manual Records
4. EMS Audit Records

1. WSU EMS Program Document

The WSU EMS Program Document is available on the WSU EH&S website and working revisions are available at the WSU EH&S building.

The WSU EMS Program Document contains

- a. The WSU EMS Environmental Policy
- b. The scope of the WSU EMS
- c. The main elements of the WSU EMS and their interaction
- d. References related documents

2. WSU EMS Annual Reports

WSU EMS Annual Reports are on the WSU EH&S website.

The WSU EMS Annual Reports contain WSU EMS objectives and targets. EH&S will coordinate with EMS Category Coordinators to develop and submit the annual report to ensure it meets the Washington Department of Ecology Pollution Prevention and EPA Performance Track Program annual reporting requirements.

3. WSU EMS Safety Policies and Procedures Manual Records

WSU EMS Safety Policies and Procedures Manual Records are located at

<http://www.wsu.edu/~forms/manuals.html>

4. EMS Audit Report Records

Internal and external EMS audit report records will be kept at the Environmental Health and Safety Building.

4.4.6 Operational Control

WSU has identified and planned its operations aspects with significant environmental impacts so they are consistent with the EMS environmental policy, objectives and targets so they are carried out under specified conditions by:

- establishing and maintaining documented procedures to cover situations where their absence could lead to deviations from the EMS;
- determining which operations should be covered by documented procedures; and
- determining which operations should be covered by documented procedures and how those operations should be controlled.

The operations and activities that have significant environmental impacts are documented in Section 4.5.1 – “[Monitoring and Measurement.](#)”

4.4.7 Emergency Preparedness and Response

WSU has identified potential accidents and emergency situations to establish and maintain procedures to prevent, respond to, and mitigate the environmental impacts that may be associated with them.

Emergency plans and procedures have been developed at WSU to respond to abnormal operating conditions, accidents and emergencies. These plans and procedures comply with applicable regulatory requirements by minimizing and mitigating environmental impacts that may be associated with the incidents. WSU emergency management plans include:

- WSU’s Emergency Response Plan (contact public safety 5-5524 for a template)
- WSU’s Safety Policies and Procedures Manual
- WSU’s Office of Emergency Management Website - <http://oem.wsu.edu/>
- Preparedness and Prevention and Contingency Plan
- Departmental Emergency Response Plan and Continuity of Operations Program Template
- Dangerous Waste Generator Personnel Training Program
- Emergency Response Procedures for EH&S Personnel
- Oil Handler training
- Laboratory Safety Manual

WSU Emergency Response Plan

The mission of the plan is to minimize the local effects of disaster or other emergency situations upon the University community through the appropriate deployment and use of available personnel, facilities and equipment. The plan also allows for the University to extend its resources, within its capability, to the region and the state, contingent upon the availability of its personnel and facilities. The plan sets forth the functional roles, responsibilities, and necessary actions of key University

officers and departments. The emergency response plan addresses emergency preparedness, response and recovery. The situations envisioned include radiation exposure, volcanic activity, earthquakes, windstorms, severe winter storms, flood, fire, war, technological disasters. This plan defines functional responsibilities and procedures to be followed in the event of an emergency. This document is maintained, reviewed and revised by WSU's Emergency Management Coordinator.

Safety Policies and Procedures Manual

The WSU Safety Policies and Procedures Manual (SPPM) is the official publication used by WSU administration to communicate environmental, health and safety policies and procedures to the University community. The manual includes subject areas that roughly correspond to the University Safety and health functions. These functions include: accident prevention, accident reporting, accident follow-up, protective equipment, motor vehicle safety, fire safety, environmental health, occupational health, radiation safety. Unit administrators are responsible for ensuring that unit employees and students have ready access to the SPPM. Departmental personnel are to allow any University employee or student access to the departmental copy. WSU's administration is responsible for maintaining, reviewing and revising the SPPM. The Office of Procedures, Records and Forms is responsible for editing the material that is published in the manual.

Preparedness and Prevention and Contingency Plan

The EH&S "Preparedness and Prevention and Contingency Plan" for management of hazardous waste is maintained in accordance with the requirements of 40 CFR 122.25(a)(12) and 264.16 and WAC 173-303-330. This plan contains a general facilities description, a training program, contingency plan and information requirements for containers and containment. The plan is maintained by the EH&S Environmental Services Program Manager. The "Preparedness and Prevention and Contingency Plan" is reviewed and revised when personnel changes, when procedures change, if a portion of the plan fails during implementation (or testing exercises), or at the discretion of the Director of EH&S or the Environmental Services Program Manager. The procedures contained in this plan are tested at least once a year through either tabletop or mock emergency situations. These testing exercises incorporate:

- WSU Emergency Response Plan
- Safety Policies and Procedures Manual
- Dangerous Waste Generator Personnel Training Program
- Emergency Response Procedures for EH&S Personnel

Elements in the "Preparedness and Prevention and Contingency Plan" manual include:

- Training Program
- Contingency Plan
- Preparedness and Prevention
- Containers and Containment
- Dangerous Waste Generator Personnel Training Program
- Emergency Response Equipment
- Release Reporting Procedures

Departmental Emergency Response plans and Continuity of Operations Program templates:

Each WSU department is responsible for completing and maintaining a Departmental Emergency Response Plan and Continuity of Operations Program Template. The plan and template ensure departments are prepared to continue operations, to the maximum extent practicable during and immediately following an emergency and resume normal operations as soon as possible.

Emergency Response Procedures for EH&S Personnel:

These procedures are to be followed when a dispatcher calls with an emergency. A copy of the procedures, as well as a current list of “EH&S Emergency Response Phone Numbers” is maintained in an easily accessible file folder in the phone reception area of EH&S. These procedures are maintained and updated by EH&S when there is a change in personnel, when the procedures change, when a portion of the procedures fail during implementation (or testing exercises) or at the discretion of EH&S.

Oil Handler Training – Oil Handler Training is required by the US EPA Spill Prevention Control and Countermeasure Plan regulations. The training provides standard operating procedures to prevent potential oil spills and accidental release protocols.

Laboratory Safety Manual

The Purpose of the [Laboratory Safety Manual](#) (LSM)—which incorporates WSU’s Chemical Hygiene Plan, establishes policies and procedures and provides general and specific guidelines and information to protect employees from health hazards associated with hazardous chemicals in the laboratory, including small chemical spills. Implementation of the LSM in the laboratory assists in minimizing chemical exposures and in complying with mandated exposure limits. All teaching, research and clinical laboratories at WSU are considered to be subject to the LSM.

Included in the LSM are the established policies of WSU and various regulatory agencies. Each laboratory must provide additional information to make the manual relevant to their area. LSMs are to be reviewed and updated at least annually by each laboratory supervisor. EH&S assists in the implementation and maintenance of the LSM within individual laboratories.

4.5 Check and Advance

4.5.1 Monitoring and Measurement

Procedures to continuously monitor and measure operations which have significant impacts on the environment have been developed and are reviewed annually. These documented procedures:

- monitor the key characteristics of the various operations and activities;
- track performance of objectives and targets (ref. Section 4.3.3);
- calibrate and maintain monitoring equipment

Category Coordinators are responsible for coordinating and evaluating monitoring and measuring efforts for their respective categories. For information on the operations aspects that have significant environmental impacts, please refer to Section 4.3.4 – “Aspects and Impacts”. Each operational area is responsible for the calibration and maintenance of their monitoring and measuring equipment. Category Coordinators verify the calibration status of equipment used by programs within their category is current.

Attributes of an effective monitoring and measuring program:

- simple
- flexible
- consistent
- ongoing
- produce reliable data
- communicate results

4.5.2 Evaluation of Compliance

4.5.2.1 Compliance with legal requirements

Compliance with environmental laws and regulations (Section 4.3.2) will be verified through annual internal audits ([Section 4.5.5](#)) and various reporting requirements. EH&S uses a compliance calendar to evaluate and maintain compliance with environmental permits and other regulatory reporting requirements. The calendar is kept at the EH&S building and is available upon request.

4.5.2.2 Compliance with other requirements

Compliance with voluntary standards and certifications will be verified through annual internal audits ([Section 4.5.5](#)) and various reporting requirements.

4.5.3 Nonconformity, Corrective Action and Preventive Action

- Category Coordinators are responsible for identifying and managing nonconformities, corrective and preventive actions in their categories. Each Coordinator makes a written record of nonconformance(s) and corrective/preventive actions which they track until completion. Coordinators use unique tracking forms to aid them in following the progress of preventive/corrective actions and reporting their status. Once a nonconformance is recorded, the Category Coordinator will investigate each significant corrective/preventive action. It is not required to act immediately to each nonconformity. WSU will take action appropriate to the magnitude of the problem(s) or improvement opportunities and commensurate with the environmental impacts encountered.
- The staff member assigned investigation responsibility will work to determine the cause of the problem or improvement opportunity. Once identified, recommendations will be made.
- Using the results of the investigation the EH&S Program Managers and/or Director of EH&S will determine if the problem or improvement opportunity requires corrective and/or

preventive action. If it is determined that action is needed, then the Program Managers for programs identified in Section 4.3.3 will have the responsibility for ensuring effective development and implementation for that corrective or preventive action.

- Once the action is implemented, the Program Managers have the responsibility to verify that the proposed action was taken and to assess the effectiveness of that action. If the action is determined ineffective, then the action will be reviewed, and any changes should be made in order to increase chances of successfully resolving the original problem. A record of the action will be maintained at EH&S.

4.5.4 Control of Records

Procedures for the identification, maintenance and management of environmental records, including training records, and the results from audits and management reviews are the responsibility of EH&S.

Environmental records will be legible, identifiable, and traceable to the activity and/or service involved. The environmental records will be stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration or loss. Records are retained in accordance with policies set forth at the WSU Business Policies and Procedures Manual, Section [90.01](#).

4.5.5 Audits

Internal Audit

WSU conducts an internal audit of the EMS annually. Audits are conducted by a team consisting of environmental management professionals and auditors from the University's Internal Audit Office. This ensures that the team has sufficient technical expertise, familiarity with the EMS and that the process is impartial.

Audits are conducted to determine if the EMS:

- conforms to the EMS Program Document which includes applicable EPA and ISO 14001 EMS sections
- has been properly implemented and maintained

Audit findings are reported to management

Audits are planned, established, implemented and maintained, taking into consideration the environmental importance of the operations within the scope of the EMS and the results of previous audits. Audit procedures address:

- the responsibilities and requirements for planning and conducting audits, reporting results

- and retaining associated records
- the determination of audit criteria, scope, frequency and methods

External Audit - EPA Performance Track Independent Assessment

If required to meet EPA Performance Track independent assessment requirements, WSU will conduct an external independent assessment every three years.

The audit will comply with EPA Performance Track audit requirements.

<http://www.epa.gov/performance-track/independent-assessment.htm>

4.6 Management Review

Top management reviews the environmental management system annually, to ensure its continuing suitability, adequacy and effectiveness. The management review process ensures that the necessary information is collected to allow management to carry out this evaluation. Reviews include assessment of opportunities for improvement and need for changes to the EMS, including the environmental policy and environmental objectives and targets. This review will be documented in accordance with Section 4.5.4 – “[Control of Records](#)”.

The management review addresses:

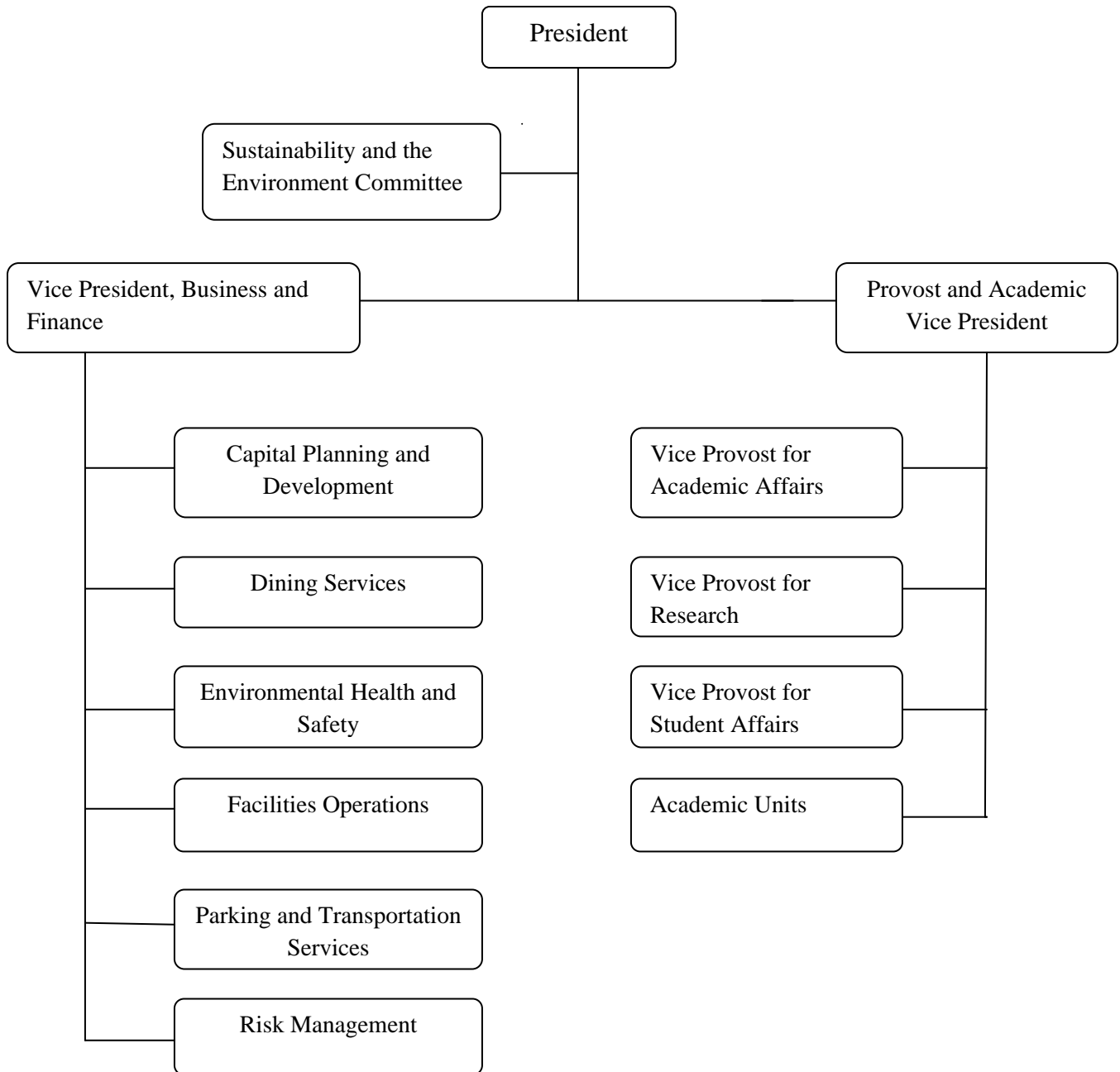
- results of internal audits and evaluation of compliance with legal and other requirements to which the University subscribes
- external communications
- the University’s environmental performance
- progress toward and/or accomplishment of environmental objectives and targets
- the status of corrective and preventive actions
- follow-up from previous management review(s)
- emerging issues and changes in legal and other requirements related WSU’s environmental aspects, and
- recommendations for improvement

As part of WSU’s commitment to continual improvement, the review process is utilized to reach decisions related to required and beneficial changes in the environmental policy, objectives, targets and other elements of the EMS.

Appendix 1

EMS Organizational Chart

2008



Appendix 2

WSU EMS Aspects with Activities, Products and Services which create Environmental Impacts

- Air
- Energy
- Facility Design, Construction and Maintenance
- Food
- Hazardous Materials
- Procurement
- Waste Management
- Water

Appendix 3

Potential EMS Environmental Impacts

- **Air Quality** – the measured or estimated air pollutants in the ambient air which may cause a negative impact to human health (e.g., NO_x, SO_x, CO, CFCs, etc.).
- **Water Quality** – the measured or estimated pollutants in surface water, stormwater and ground water that may cause negative impacts to human health (e.g., sediment, bacteria, chemicals, etc.).
- **Water Conservation** – the efficient management of drinking water and aquifer resources.
- **Hazardous Waste** – the proper management of hazardous chemical, radioactive, and biohazard wastes.
- **Hazardous Materials** – the proper transportation, storage, and use of hazardous materials (chemical, radioactive and biological).
- **Solid Waste** – the proper management of solid wastes and recycling of materials (e.g., household waste, construction waste, food waste, etc.).
- **Energy Use** – the efficient use and consumption of energy (electrical, fuel, etc.).
- **Spill Risks** – the potential for hazardous material release that may cause a negative impact to human health or the environment.
- **Spill Impacts** – the severity of impacts on human health and the environment from hazardous materials spills.
- **Human Health & Safety** – the severity of impacts on human health and safety for people who operate or are in close proximity to a facility or activity.
- **Regulatory Compliance** – the compliance status with environmental laws and regulations.
- **Aesthetics/Public Relations** – the image and beauty created by facilities and activities.
- **Costs** – the planning, construction, operation, maintenance, regulatory compliance, demolition, and decontamination costs.

Appendix 4

Aspects and Impacts Evaluation Worksheet

- 1 Rank each Impact (1 – 5) relative to each Aspect* with a ranking of “1” meaning the impact is the least important consideration for that aspect and a ranking of “5” meaning it is the most important, using each value only once per impact.
- 2 Total the columns.
- 3 Scores shall be utilized as a factor in determining project priority.

Category: _____

Aspect

	Acquisition	Transportation	Storage	Use	Disposal
Human Health					
Air					
Water					
Soil					
Regulations					
Score					

*This matrix is provided as a guideline and customizable template for Category Coordinators. Aspects and impacts listed on this matrix should be considered when designing category specific documents. Non-applicable items may be deleted and appropriate items added as needed.

Appendix 5

EMS Regulatory Resources

Legal and other Requirements Resources	WSU's access to resource
Government publications (e.g. Federal Registrar, Code of Federal Regulations, Registered Code of Washington Administrative Code, and local ordinances)	<ul style="list-style-type: none"> • Monitor and evaluate the Federal Register, Code of Federal Regulations, Revised Code of Washington, Washington Administrative Code and local ordinances on line. • Current hardcopies are monitored and maintained by EH&S if not available on line.
Newsletters / Magazines	<ul style="list-style-type: none"> • Subscriptions to environmental newsletters such as Environmental Managers Compliance Advisor, Safety and Health NSC, and DOE WAC Track. • WSU EH&S Notes newsletter is circulated throughout the university.
Trade Groups / Associations / Committees	<ul style="list-style-type: none"> • EH&S Director: • Campus Safety Health Env. Management Association • Secretary of University-wide Health and Safety Committee • Risk-management Committee • EH&S Program Area Managers are affiliated with various environmental associations and committees.
Commercial Services	<ul style="list-style-type: none"> • Consultants and vendors provide regulatory updates in their marketing materials
The Internet	<ul style="list-style-type: none"> • EH&S Director and Program Area Managers monitor a variety of list serves, such as Dept. of Health and Dept. of Ecology. • EH&S staff accesses to retrieve relevant environmental laws and regulations
Public Libraries	<ul style="list-style-type: none"> • EH&S staff access various sources and records
Seminars and Courses	<ul style="list-style-type: none"> • Continual training provided by regulatory agencies and commercial sources (see section 4.4.2 – Training and Competence)