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1.0 PURPOSE AND SCOPE

The U.S. Department of Energy (DOE) has a written policy requiring integration of sustainable environmental stewardship into operations at DOE owned facilities as a good business practice to reduce environmental hazards, protect environmental resources, avoid pollution control costs, and improve operational efficiency and mission sustainability.

This plan presents a sustainability program pursuant to DOE O 436.1, “Departmental Sustainability.”

Sustainability requirements have been integrated into working procedures to ensure an effective Environmental Management System (EMS) as part of an Integrated Safety Management System (ISMS). Sustainability requirements, goals, and training are implemented through procedures and environmental oversight for facilities, processes, materials, and equipment. This plan focuses on programmatic functions that include sustainable acquisition, sustainable design, pollution prevention (P2) and sustainability awareness, waste generation and reduction, source reduction and recycling and energy management and considers the lifecycle of these functions. The sustainable programs and methods described within this plan are meant to provide the necessary guidance to achieve the goal of protecting the air, water, land, and other natural and cultural resources impacted by Washington River Protection Solutions, LLC (WRPS) activities.

1.1 Purpose

The objective of this document is to describe the WRPS Sustainable Programs in conjunction with the annual Hanford Site Sustainability Plan (SSP), HNF-54800, the Hanford Site Pollution Prevention and Waste Minimization Program Plan, HNF-46952, the WRPS Sustainability Requirement Implementation Matrix (RIM) TOC-ENV-RIM-0016, and the Environmental Management System Description, TFC-PLN-123. This document satisfies the DOE requirements and other regulatory drivers for the sustainability performance program plan.

This plan implements WRPS policy (TFC-POL-30) to integrate environmental sustainable practices into the WRPS operating philosophy and work practices. This plan is a WRPS reference and guidance document for persons doing work under its control. In the Environmental Protection Organization, the Environmental Program, Reporting and Technical Support Manager is responsible for the maintenance and management of this plan in accordance with TFC-BSM-AD-C-01. This plan will be reviewed annually and updated as necessary.

The WRPS Sustainability performance program objectives can be divided into two categories: cultural and technical.

Cultural objectives include:

- Foster a philosophy for protection of the environment among workers while carrying out the company mission.
- Promote communication of sustainability objectives, goals, methods, and ideas laterally and vertically among WRPS organizations.
• Recognize employee and project accomplishments in the area of sustainability performance.

Technical objectives include:

• Comply with federal, state, and local regulations and DOE requirements for sustainability.

• Support DOE efforts to meet sustainability goals and objectives.

• Reduce or eliminate the generation of waste streams through source reduction and substitution, product reformulations, improved housekeeping, inventory control, process modification, and onsite reuse and recycling of materials to protect the air, water, land and other natural and cultural resources, which may be impacted by WRPS activities.

• Identify new or modify current methods to improve sustainable practices.

• Promote the use of nonhazardous materials in construction, maintenance, and operations to minimize risks to human and environmental health.

• Collect and exchange sustainability information from other DOE sites and fellow contractors as appropriate through benchmarking, technology transfer, outreach, and educational networking.

1.2 Scope
(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

The Sustainability Program scope includes elements of pollution prevention, waste prevention and waste minimization, reduce-reuse-recycle strategies, sustainable acquisition, energy and fuel conservation, environmental regulatory requirements and certifications, climate adaptation and employee communications and recognition.

2.0 REQUIREMENTS
(5.1.1, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

NOTE: WRPS is required to follow all applicable federal, state, and local laws, regulations and permit conditions unless a waiver, variance, or exemption has been granted by the appropriate enforcement authority. Omission of applicable environmental requirements from this document does not relieve WRPS of its obligation for compliance with those requirements.

Requirements and implementing guidance for sustainability performance are found in federal regulations, Executive Orders (EOs), DOE orders and directives, state-issued permits, and State of Washington regulations.

2.1 Federal Directives

Acts of 1992 and 2005; and other related statutes, and administrative and secretarial mandates and priorities. DOE has articulated its key strategies and goals in its “Strategic Sustainability Performance Plan, Discovering Sustainable Solutions to Power and Secure America’s Future” (SSPP).

2.1.1 DOE O 436.1, “Departmental Sustainability”

The Contractor Requirements Document (CRD) of DOE Order 436.1 sets forth requirements applicable to contracts for the management and operation of the facilities and fleets or facilities construction and demolition, or facility infrastructure improvements, or other contracts under which the contractor manages supply and service acquisitions for Government facilities, fleets or mission operations. The CRD lists the following requirements:

1. Reporting. The contractor must establish and implement activities that support the Department’s required submittal of reports and data and implementation of sustainability goals specified by DOE in the contract. The contractor must also meet the requirements of the Emergency Planning and Community Right-to-Know Act.

2. The contractor must establish and implement the following activities:

   a. Site Sustainability Plans. Contractors must develop or support development and commitments to identify their respective contributions toward meeting the Department’s sustainability goals. Contractors must integrate their SSP with their operational plans.

   b. Environmental Management Systems. Contractors must develop and implement an EMS that is certified to or conforms with the International Organization for Standardization’s (ISO) 14001 in accordance with References 7.o and 7.p, respectively. Site sustainability goals must be integrated into the EMSs.

2.1.2 Executive Orders


2. EO 13514, “Federal Leadership in Environmental, Energy, and Economic Performance.” This order establishes numerous goals and targets for federal agencies. They build on the earlier goals of EO 13423.

2.2 WRPS Environmental Policy

(5.1.1, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

TFC-POL-30 establishes WRPS commitment to complete the Tank Operations Contractor (TOC) mission in a manner that is protective of the environment, public health, and natural and cultural resource, as required by DOE O 436.1. It documents senior management’s endorsement and expectations, providing the framework for the WRPS EMS that ensures Tank Operations and related activities are conducted in a safe, compliant, and resource-effective manner, integrating
pollution prevention, resource conservation, and other sustainable practices into planning, procurement, and execution of work as shown below in the WRPS Description, Mission and Vision:

- WRPS is a limited liability corporation (LLC) owned by AECOM and Atkins, with AREVA as its primary subcontractor. This partnership brings decades of experience to the job, which is considered one of the most complex cleanup projects in the nation.

- WRPS is reducing the risk to the environment posed by 56 million gallons of radioactive and chemical waste stored in 177 underground tanks near the center of the 586 square-mile Hanford Site. The company’s focus is transferring waste from aging single-shell tanks into newer double-shell tanks where it will be stored until it is prepared for disposal. WRPS’ commitment includes doing the job safely with a strong focus on innovation, employee involvement, and environmental protection.

**Mission:** WRPS is committed to the safe and efficient management, retrieval and treatment of Hanford’s radioactive and hazardous tank waste, to protect the nearby Columbia River.

**Vision:** Be ready to feed waste to the Waste Treatment Plant on schedule.

### 3.0 RESPONSIBILITIES

(5.1.1, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

The responsibilities for implementing and administering this plan are based on the organizational structure and interfaces established between DOE Richland (RL), DOE Office of River Protection (ORP), WRPS, the Hanford Site Contractors and personnel. DOE Headquarters established the goals delineated in this plan. WRPS management implements the requirements and provisions of this plan. The primary responsibility for sustainability performance implementation lies with the project teams responsible for planning and executing work. Oversight and coordination of the Sustainable programs are handled through the Sustainable Program Lead. However, all WRPS personnel are responsible for implementing environmental sustainability within their work activities.

#### 3.1 Management

(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

Management will:

- Provide necessary resources to comply with the requirements of the WRPS Sustainability Performance Program Plan

- Identify representatives to support the goals of the Sustainable Program Plan

- Support the maintenance of the Site Wide Sustainability Plan

- Integrate company-level environmental goals into facility and operational plans
• Support and communicate sustainability techniques, procedures, and accomplishments to personnel

• Commit to reducing sanitary wastes to comply with the ISMS, EMS, EPA, DOE Orders, and State, and local regulations.

3.2 Environmental Protection Organization

(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

Environmental Protection will:

• Provide Regulatory Analysis for the Sustainable Programs

• Provide Programmatic support and oversight of the Waste Minimization and Sustainable Programs

• Provide Programmatic support and oversight of the Energy Management and Water Conservation Programs

• Provide programmatic support of the land stewardship program as applicable to Tank Farms

• Assign a Sustainable Program Lead.

3.3 Sustainable Program Lead

(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

The Sustainable Program Lead will:

• Promote creativity and innovation in meeting the WRPS sustainability requirements

• Promote a team approach among the sustainable program organizations

• Provide technical support as needed to help organizations understand and integrate sustainability requirements into their procedures and work processes

• Advocate, facilitate, publicize, and document sustainability awareness, progress, and achievements to increase awareness

• Share resources in order to promote and implement sustainability activities

• Serve as an information exchange mechanism to promote general awareness of sustainability

• Review and select projects for the DOE Headquarters awards program
• Coordinate the domestic product recycling program (e.g., plastic bottles, hard hats, aluminum, paper, etc.)

• Represent WRPS as the sustainability POC for complex-wide and site-wide working groups, i.e., Hanford Site Sustainability Working Group (HSSWG)

• Lead and coordinate organizational efforts to compile information necessary for the completion and maintenance of the annual SSP

• Raise awareness of the BPA incentive program and support the application process

• Facilitate participation in voluntary environmental partnership programs where there is a programmatic benefit from doing so (community outreach, technology transfer, regulatory incentives, etc.)

• Facilitate continuous improvement of the sustainable program processes

• Perform periodic assessments and make programmatic changes as needed

• Monitor changes to sustainability related laws and orders and update programs, procedures, and RIM as needed, inform relevant organizations within WRPS of changes

• Coordinate energy reduction activities in cooperation with the Hanford Site Energy Manager.

3.4 WRPS Employees
(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

Each employee is responsible for applying sustainability practices and procedures, as applicable to his or her position. In addition, employees should prevent and minimize waste, including but not limited to, the following:

• Manage inventory to minimize storage and exceedance of expiration dates on materials

• Substitute materials for environmentally friendly materials, where appropriate

• Conserve resources (e.g., print only what is needed, print double-sided, review documents electronically, use e-mail for document/literature distribution)

• Reuse and recycle (e.g., paper, cardboard, toner cartridges, computers, aluminum, plastic)

• Share ideas/thoughts on ways to perform tasks in an environmentally sustainable manner
• Work to procedures.

Employees should regularly review work processes to ensure continual improvement in sustainability practices.

4.0 SUSTAINABLE ENVIRONMENTAL STEWARDSHIP GOALS, OBJECTIVES, STRATEGIES, AND PERFORMANCE MEASURES

(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

It is the policy of DOE to establish sustainable environmental stewardship goals that advance sustainable practices; these are integrated into WRPS operations as cost-effective business practices and will:

• Prevent pollution
• Reduce environmental hazards
• Protect public health and the environment
• Avoid pollution control and waste disposal costs
• Improve operational capability and overall mission sustainability.

In furtherance of this policy, DOE established its key strategies and goals in its SSPP. The SSPP established DOE Strategies and goals for:

• Scope 1 and Scope 2 greenhouse gas reduction
• Scope 3 greenhouse gas reduction
• Comprehensive greenhouse gas inventory
• High-performance sustainable design
• Regional and local planning
• Water use efficiency and management
• P2 and waste elimination
• Sustainable acquisition
• Electronic stewardship and data centers
• Departmental innovation
• Climate adaptation.

The SSP addresses the strategies and goals, applicable to the Hanford site, which are identified and flowed down from the DOE SSPP and the current applicable Executive Orders.

In accordance with DOE O 436.1, DOE sites are to consider legal requirements and the requirements in Executive Order 13423 and its implementing instructions, mission performance, and life-cycle costs when selecting specific sustainable practices for achieving the Sustainable
Environmental Stewardship goals. Additionally, the site may identify other sustainable practices appropriate to site-specific operations and activities, as necessary to achieve the goals.”

The SSP assesses annual performance, accomplishments, and progress toward meeting the sustainable environmental stewardship goals identified in the SSPP.

4.1 Program Elements
(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

This section discusses organizational and programmatic elements that either directly or indirectly comprise the current WRPS Sustainability Performance Program. Depending on the program element, WRPS may manage the program element individually or, as directed by DOE Headquarters, as needed and agreed upon, a collaborative approach may be used to accomplish the objectives of the program.

WRPS has created the sustainable program logo, which is reflected in Figure 1. The sustainable programs are divided into three categories and nine sustainable programs with all-inclusive consideration given to climate adaptation as Figure 1 depicts:

- Environmental Stewardship:
  - Sustainable Acquisition
  - Electronics Stewardship

- Energy Management:
  - Renewable Energy
  - Vehicle and Fuel Use
  - Sustainable Buildings
  - Energy Efficiency and Greenhouse Gas

- Resource Conservation:
  - Land Stewardship
  - Waste Minimization and Pollution Prevention
  - Water Conservation

- Climate Adaptation
4.2 Environmental Stewardship
(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

4.2.1 Sustainable Acquisition
(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

Sustainable acquisition promotes the purchase of environmentally preferable products that are or can be made with recovered materials. Section 6002 of RCRA requires governmental agencies and contractors to develop and implement a cost-effective procurement preference program.
favoring the purchase of these products and services. EO 13423 requires federal agencies to preferentially purchase goods and services that use sustainable environmental practices, including the acquisition of bio-based, environmentally preferable, energy-efficient, water-efficient, non-ozone depleting, non-toxic or less toxic alternatives, and recycled-content products. Planned activities for improvement of the Hanford site sustainable acquisition program are described in the SSP and the Hanford Site Pollution Prevention and Waste Minimization Plan.

EO 13514 requires that 95% of all new contracts including contract modifications (with the exception of weapons systems) require products and services that are:

- Energy-efficient
- Water-efficient
- Biobased
- Environmentally preferable
- Non-ozone depleting
- Contain recycled-content
- Non-toxic or less-toxic alternatives.

The Farm Security and Rural Investment Act (7USC 8102) requires federal agencies to purchase bio-based products. One of the goals of the Farm Security and Rural Investment Act is to promote the use of innovative bio-based products, and specifies that the Department of Agriculture develop and issue procurement guidelines that designate specific bio-based products. Section 9002 of the Farm Security and Rural Investment Act defines a bio-based product as “a commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, or marine materials) or forestry materials.”

Sustainable acquisition incorporates waste prevention and recycling initiatives and ultimately expands markets for recovered materials. WRPS has instituted a sustainable acquisition program, which is compliant with the regulations. As new items are designated by EPA and the Department of Agriculture, they are incorporated into the sustainable acquisition program. Implementing documents for the purchase of recycled, environmentally preferable and bio-based products and services are:

- TFC-BSM-CP_CPR-C-01
- TFC-BSM-CP_CPR-C-05
- TFC-BSM-CP_CPR-C-06
- TFC-BSM-CP_CPR-D-01.1.

4.2.2 **Electronic Stewardship**

The electronic stewardship program implements the electronic stewardship requirements and goals specified in EO 13423, EO13514, DOE O 436.1, and associated documents, such as the
Instructions for Implementing Executive Order 13423 (CEQ 2007), to the extent technically and economically feasible and as approved by management. Although each contractor is responsible for compliance with the regulations, the electronic stewardship sustainable program is treated as a site wide program at Hanford.

Electronic stewardship is applicable during the three phases of electronic equipment’s life cycle: purchase, use, and disposition. The following practices are used during these phases to benefit the environment:

- Purchase electronic equipment that is energy efficient and constructed of less hazardous materials
- Operate, maintain, and reuse electronic equipment in a manner that maximizes energy efficiency and product life
- Donate, sell, or recycle electronic equipment at the end of its useful life.

Planned activities for improvement of the Hanford site electronic stewardship program are described in the following documents:

- Annual Hanford Site Sustainability Plan
- HNF-43959, “Electronic Asset Environmental Stewardship Management Plan”
- HNF-46952, “Hanford Site Pollution Prevention and Waste Minimization Program Plan.”

Electronic stewardship is documented and implemented through the following WRPS procedures:

- TFC-BSM-CP_CPR-C-01 (purchasing card [P-Card])
- TFC-BSM-CP_CPR-C-06 (procurement of items [materials])
- TFC-BSM-CP_CPR-C-18 (material receipt, storage, issuance, return, and excess control)
- TFC-BSM-FPM_PR-C-01 (property management)
- TFC-BSM-FPM_PR-C-12 (management and control of automated data processing and communications equipment).

4.3 **Energy Management**

(5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

EO 13423 establishes goals and objectives for energy efficiency, use of renewable energy, transportation energy, and water conservation for federal facilities. EO 13514 establishes an integrated strategy towards:
- Sustainability in the federal government
- Reduction of greenhouse gas emissions as a priority for federal agencies.

DOE O 436.1 applies to all DOE elements responsible for the management and operation of facilities, fleets, or facilities construction and demolition or facility infrastructure improvements.

Transformational Energy Action Management (TEAM) Initiative is a plan put forth by the Department of Energy (DOE) to dramatically transform the Departments energy, environmental, and transportation management. The TEAM Initiative is designed to end the practice of incremental energy improvements, and institute transformative management practices at DOE. The TEAM Initiative is the DOE’s plan of action to meet the goals of Executive Order 13423. The TEAM initiative sets specific goals in the areas of energy efficiency, energy use, water consumption, use of alternative transportation fuels, and Leadership in Energy and Environmental Design certification of new building designs. Sustainability goals are reinforced in EO 13514.

DOE has articulated its key strategies and goals in its “Strategic Sustainability Performance Plan, Discovering Sustainable Solutions to Power and Secure America’s Future” (SSPP). The SSP outlines the Hanford Site strategy to meet the goals of DOE’s SSPP, the TEAM initiative DOE O 436.1, and EOs 13423 and 13514.

Per direction from DOE Headquarters, following the release of EO 13514, there has been one Energy Manager designated for the entire Hanford site and that position is included in the scope of the MSA contract.

4.3.1 Renewable Energy (5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

The Renewable Energy program at the Hanford Site is just one of the programs that are managed as a site-wide program. The Hanford Site has met the renewable energy goal from Section 203 of EPACT; Hanford has more than exceeded the 7.5 percent goal of its electricity consumption coming from renewable energy sources.

Annually the SSP addresses the renewable energy requirements, performance and goals. Implementing documents that pertain to the WRPS interface management and Hanford Site Renewable Energy Program are:

- HNF-46952, “Hanford Site Pollution Prevention and Waste Minimization Program Plan”
- Annual Hanford Site Sustainability Plan
- TFC-PLN-102 (TOC interface management plan).

4.3.2 Vehicle and Fuel Use (5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

The Hanford Site Vehicle and Fuel Use Program is established to conserve finite natural resources by reducing the use of petroleum fuel, increasing the use of alternative renewable fuel, and using alternative fuel and hybrid vehicles when available.
Both EO 13423 and 13514 set forth goals to reduce the amount of fuel usage and optimize fleet vehicle usage and corresponding greenhouse gas emissions. The Hanford site works toward meeting these goals by:

- Acquiring more AFVs and using alternative fuels
- Using biodiesel in diesel vehicles to the maximum extent possible
- Acquiring high efficiency and advanced technology vehicles
- Improving fleet efficiency practices.

The Vehicle and Fuel Usage program is managed as a Site-wide program and performance and goals are addressed in the annual SSP. The WRPS Fleet is managed by the Facilities and Property Management organization and implemented through the following procedure:

- TFC-BSM-FPM_PR-C-06 (government motor vehicle and equipment management).

### 4.3.3 Sustainable Buildings

(5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

The Sustainable Buildings Program promotes the conservation of natural resources, energy efficiency, waste minimization, and the creation of healthy, productive work environments as part of the cost-effective construction and improvement of new and existing owned and leased buildings.

In accordance with the sustainable buildings requirements found in EO 13423, EO 13514, DOE O 413.3B, and DOE O 436.1, WRPS has procedures and processes in place that ensure building designs:

- Reduce negative environmental impacts
- Reduce energy and water use
- Use recycled content materials
- Improve the health and comfort of building occupants.

The sustainable acquisition requirements of the sustainable building program are implemented as shown in section 4.2.1. WRPS Engineering implements the high performance sustainable building principles to the siting, design, construction, and commissioning of new facilities and major renovations of existing facilities through the following documents:

- TFC-ENG-DESIGN-C-52 (technical reviews)

The Hanford Site goals and progress for high performance construction, lease, operation, and maintenance of buildings are addressed in the SSP and the Site-wide Pollution Prevention Waste Minimization Plan.
4.3.4 Energy Efficiency and Greenhouse Gas (E2G2)
(5.1.1, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

WRPS strives to improve energy efficiency and decrease greenhouse gas (GHG) generation in support of DOE’s goals and in compliance with Executive Order 13423, Executive Order 13514, DOE Order 436.1 and other applicable regulations (e.g., the Energy Independence and Security Act [EISA], Energy Policy Act [EPAct], and National Energy Conservation Policy Act [NECPA]).

EO 13514 requires DOE to set goals for reducing greenhouse gas emissions. DOE chose to reduce Scope 1 and 2 emissions by 28 percent by 2020, based on 2008 emissions. Scope 3 emissions are to be reduced by 13 percent by 2020.

Greenhouse gas emission reduction performance is calculated by DOE headquarters annually upon receiving the Hanford Site Sustainability Plan data.

Greenhouse gas categories are described below:

- **Scope 1**: Greenhouse gas emissions from sources that are owned or controlled by a Federal agency.
- **Scope 2**: Greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a Federal agency.
- **Scope 3**: Greenhouse gas emissions from sources not owned or directly controlled by a Federal agency but related to agency activities.

Scope 1 and 2 are managed at the site-wide level under the MSA, scope 3 reductions are calculated and reported at the contractor level to MSA who coordinates and combines this data with the scope 1 and 2 emissions for annual reporting to Headquarters through the Dashboard in the SSP.

Per direction from Headquarters, the greenhouse gas and energy use programs are managed at the site-wide level for the Hanford site versus a contractor specific program. EM has not yet established site-specific GHG goals for the Hanford Site. Both energy use and greenhouse gas compliance, current status and long-term goals at the Hanford Site level are addressed in the SSP. WRPS participates in and supports the site-wide reporting of energy use and greenhouse gasses to the DOE as required.

WRPS Implementing documents for the E2G2 program are addressed in Section 4.2.1 under Sustainable Acquisition.

4.4 Resource Conservation 
(5.1.1, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

4.4.1 Land Stewardship 
(5.1.1, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

DOE has publicly stated that it is a steward of the land and that it will work to preserve the environment for future generations. Land Stewardship advocates improving ecosystem health on DOE properties at the Hanford Site in accordance with DOE O 430.1B, “Real Property Asset
Management and federal regulations.” At the Hanford Site, the Land Stewardship program is managed on a site-wide level with support and participation from all prime contractors.

Land management on the Hanford site is handled in two different phases: Current management (how we manage the environment today while performing our work) and the long-term stewardship plan (a look out into the future 50 years).

DOE O 430.1B, Change 1, “Real Property Asset Management,” states that Departmental land and facilities are valuable national resources. It requires that land use planning and stewardship responsibilities will be implemented consistent with the principles of ecosystem management and sustainable development.

The National Environmental Policy Act of 1969 promotes efforts to prevent or eliminate damage to the environment and biosphere, and to “enrich the understanding of the ecological systems and natural resources important to the nation.” It also directs the federal government, under Title I, Section 101 (b), “to improve and coordinate Federal plans functions, programs, and resources to the end that the Nation may…fulfill the responsibilities of each generation as trustee of the environment of succeeding generations.”

The Final Hanford Comprehensive Land-Use Plan (CLUP) Environmental Impact Statement (HC-EIS), DOE/EIS- 0222, governs the Land Stewardship path forward. The Site Evaluation Team, (SET) made up of environmental POC’s from DOE and the prime contractors, is the organization that is in charge of the day-to-day implementation. MSA per their contract is responsible for the overall integration and implementation of the CLUP, which includes the SET process. MSC-PRO-FPROP-46449, “Site Evaluation,” The WRPS National Environmental Policy Act (NEPA) procedure, TFC-ESHQ-ENV_PP-C-07, instructs the WRPS workers on how the MSA procedure and process are integrated with NEPA and other WRPS procedures that govern the SET process.

The Endangered Species Act of 1973 law requires the management of federally listed species and their habitat. If habitat is lost in areas that formerly contained federally listed species, the federal land administrator must restore the lost habitat.

4.5 Pollution Prevention and Waste Minimization Program

The purpose of this program is to implement the Waste Minimization requirements from DOE O 436.1, the SSP, the SSPP, and the sustainability performance and recycling elements in EOs 13423 and 13514.

Typically, pollution prevention and waste minimization (P2WM) is universal in scope. However, because the WRPS EMS is integrated into everyday operations, many aspects of P2WM are also integrated within other programs and implemented by various organizations and programs at the Hanford site.

In addition to those requirements listed in the above referenced documents, the following laws are pertinent to WRPS program:

- RCRA regulates the ongoing generation, treatment, storage, transportation and disposal of solid waste, which includes hazardous waste. One purpose of RCRA is to prevent the
creation of new abandoned hazardous waste site (e.g., Superfund sites). RCRA also promotes waste minimization and resource recovery by encouraging reduction of hazardous waste at the source and the recycling of hazardous waste in an environmentally sound manner.

- The Pollution Prevention Act of 1990 expanded the nation’s waste prevention policy beyond the RCRA framework to address minimizing or eliminating toxic releases to all environmental media and natural resources.

The WRPS Waste Services organization provides for the safe, effective, and compliant management of waste materials. The prime objective of the Waste Services organization is to ensure waste characterization and management-related activities are performed in compliance with all applicable laws and regulations governing these activities. Other objectives include providing a streamline approach to waste determination, proactively working with projects to minimize the generation of waste, incorporating accountability, and improving cost-effectiveness.

By routinely interfacing with the operations and projects, the Waste Services organization is uniquely positioned to identify sustainability performance and waste minimization opportunities early in the planning process. As applicable, waste minimization and sustainability measures performed for a particular waste stream are documented on waste determination and disposition forms such as the waste planning checklist (site form A-6002-848).

Waste Services is responsible for the chemical management and universal waste programs, and managing recyclable materials, such as fluorescent tubes, all battery types, RCRA scrap metal, mercury, and lead. Waste Services is also responsible for managing the associated subcontracts for these materials. The recycling scope of this program plan is limited to recycling/reusing materials classified as nonhazardous solid waste (e.g., plastic, cardboard, aluminum, paper, etc.).

A summary of the EO 13514 sustainability performance and waste minimization requirements are provided below. WRPS incorporates measures and metrics to work toward achieving most of these goals. However, using a business perspective, if the goals are not efficient, cost-effective or reasonably achievable, they will not continue to be pursued. The Hanford Site EMS, supported by all prime contractors including WRPS, also incorporates measures and metrics towards the achievement of sustainability goals, which are reported through the SSP as directed.

The EO 13514 requirements include the following:

- Increase source reduction of pollutants and waste

- Reduce printing paper use

- Increase use of uncoated printing and writing paper containing at least 30 percent post-consumer fiber

- Reduce and minimize the quantity of toxic and hazardous chemicals and materials acquired, use, and disposed of
- Increase diversion of compostable and organic materials from municipal waste streams

- Implement integrated pest management and landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials

- Increase agency use of acceptable alternative chemicals and processes

- Decrease agency use of chemicals to assist agency in achieving FY2020 greenhouse gas reduction targets

- Report in accordance with the requirements of sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act.

The Hanford site with participation and support from all prime contractors including WRPS accomplish this scope by:

- Tracking the volume of waste generated and recycled

- Tracking the purchase of hazardous chemicals and green alternative chemicals

- Maintaining a system for tracking hazardous chemical inventories (see TFC-PLN-58)

- Eliminating the use of ozone-depleting compounds where alternative environmentally preferable products are available

- Preparing annual Emergency Planning and Community Right-to-Know Act reports, as applicable.

At WRPS, line managers, designated environmental field representatives, and other pertinent project staff discuss and identify potential sustainability opportunities during project or activity planning phases, including the annual environmental objective and target campaign.

Sustainability opportunities that are technically and economically feasible are identified and approved by WRPS senior management. Opportunities will be implemented on a graded approach. Implementation may include changes to works scope or routine practices, new procedures or modification of existing procedures.

Implementing documents for the WRPS waste minimization and sustainability performance program are:

- TFC-PLN-41
- TFC-PLN-33
Implementing documents for the Hanford site waste minimization programs are:

- HNF-54800, “Hanford Site Sustainability Plan”
- HNF-46952, “Hanford Site Pollution Prevention and Waste Minimization Program Plan”

4.6 Water Conservation
(5.1.1, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7)

The Hanford Site water conservation program is managed on a site-wide level with participation and support from all prime contracts including WRPS.

Executive Orders 13423 and 13514 water conservation goals:

- Reducing water consumption intensity
- Reducing potable water consumption intensity by implementing water management strategies including water-efficient and low-flow fixtures and efficient cooling towers
- Reducing industrial, landscaping, and agricultural water consumption
- Identifying, promoting, and implementing water use strategies that reduce potable water consumption
- Implementing and achieving the objectives identified in the storm water management guidance.

Both the SSP and the Hanford Site Pollution Prevention and Waste Minimization Program Plan address the performance status and projected performance of the water conservation program. The sustainable acquisition requirements of the water conservation program at WRPS are implemented as shown in section 4.2.1.
5.0 SOURCES

5.1 Requirements


2. DOE O 413.3B, “Program and Project Management for the Acquisition of Capital Assets.”

3. DOE O 430.1B, Change 1, “Real Property Asset Management.”

4. DOE O 436.1, “Departmental Sustainability.”


7. FAR 52.245-1, “Government Property.”

5.2 References


2. HNF-54800, “Hanford Site Sustainability Plan.”

3. HNF-46952, “Hanford Site Pollution Prevention and Waste Minimization Program Plan.”


7. “Strategic Sustainability Performance Plan.”


10. TFC-BSM-CP_CPR-C-01, “Purchasing Card (P-Card).”

11. TFC-BSM-CP_CPR-C-05, “Procurement of Services.”

12. TFC-BSM-CP_CPR-C-06, “Procurement of Items (Materials).”


15. TFC-BSM-FPM_PR-C-01, “Property Management.”


17. TFC-BSM-FPM_PR-C-12, “Management and Control of Automated Data Processing and Communications Equipment.”


22. TFC-PLN-58, “Chemical Management Plan.”


25. TFC-PLN-123, “Environmental Management System Description.”