

What we're doing to protect our workplace, our community and our environment.



Environmental Management System Plan

By Jackie Couture
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USDA-ARS Northern Plains Agricultural Research Laboratory, Sidney, MT

NPARL: A Tradition of Environmental Stewardship

While this plan outlines a number of new steps to be undertaken by personnel at the USDA-ARS Northern Plains Agricultural Research Laboratory (NPARL) in Sidney, MT to address environmental concerns – in particular, the requirements of Executive Orders (E.O.) 13423, entitled “Strengthening Federal Environmental, Energy, and Transportation Management,” and E.O. 13514, entitled “Federal Leadership in Environmental, Energy, and Economic Performance,” along with ISO 14001 – NPARL staff have already instituted many lab, field and administrative practices addressing that same issue.

For example, over the past decade and more NPARL has been:

- a. Recycling paper products, cardboard, used oil, solvent waste, batteries, electronic waste, etc.
- b. Practicing energy & water conservation.
- c. Practicing hazardous chemicals and hazardous waste disposal reduction.
- d. Using or purchasing environmentally (green) friendly products where possible.

In the past several years, NPARL has added electronics recycling to this list, participating annually in a community-wide electronics recycling event that was originally initiated by Sidney ARS personnel.

These existing practices have proven successful because of the ongoing support from NPARL management and staff to do what we can to protect the environment and maintain a safe and healthy workplace. That commitment to sound environmental stewardship and to workplace and public health and safety is also reflected under these new guidelines.

POLICY STATEMENT

Policy

The USDA-ARS Northern Plains Agricultural Research Laboratory, Sidney, MT (NPARL) will continue to integrate environmental stewardship into its operations. NPARL will manage its operations and programs in a manner that protects the environment and the safety and health of its employees, and the health of the public.

Implementation

In support of this policy, NPARL will:

- Comply with all Federal, State, and local environmental laws and regulations.
- Create and maintain an Environmental Management System (EMS) Committee, which will be lead by the EMS Manager and EMS coordinator, and will include Research Leaders from both units, Administrative Officer, Information Technology Specialist, Utility Systems Repair Operator, Purchasing Agent, and Technical Information Specialist.
- Use cost-effective practices to eliminate, minimize, or mitigate environmental impacts.
- Use environmentally preferred materials if those materials meet technical specifications.
- Establish appropriate objectives and performance indicators to guide and measure the effectiveness of our environmental management programs.
- Provide environmental management training for all staff.
- Reduce the amount of waste at our facility, reuse and recycle whenever possible, and support pollution prevention.
- Monitor and report our environmental performance through an annual audit conforming to ISO 14001 standards.
- Maintain or improve all property under the stewardship of the NPARL (including land, water, wildlife, and natural resources) in an environmentally sensitive manner.
- Develop and support energy conservation practices.


Dr. Robert Evans, ASRU Research Leader


Dr. John Gaskin, PMRU Research Leader

Introduction

The USDA-ARS Northern Plains Agricultural Research Laboratory (NPARL) in Sidney, MT conducts research on soil and water stewardship and the biological and cultural management of insects, pathogens and weeds within production systems that enhance profitability and environmental quality. In keeping with this stewardship emphasis, NPARL established its Environmental Management System (EMS) in October 2005 and updates it annually in accordance with Executive Order (E.O.) 13423 entitled “Strengthening Federal Environmental, Energy, and Transportation Management.” NPARL also regularly reviews its EMS plan and procedures to ensure that they conform to International Standard Organization (ISO) 14001 standards.

Leading By Example

The new Executive Order requires Federal agencies to lead by example in advancing the nation’s energy security and environmental performance by achieving these goals:

- **Vehicles:** Increase purchase of alternative fuel, hybrid, and plug-in hybrid electric vehicles when commercially available.
- **Petroleum Conservation:** Reduce petroleum consumption in fleet vehicles by 2% annually through 2015.
- **Alternative Fuel Use:** Increase alternative fuel consumption at least 10% annually.
- **Energy Efficiency:** Reduce energy intensity by 3% annually through 2015 or by 30% by 2015.
- **Greenhouse Gases:** By reducing energy intensity by 3% annually or 30% by 2015, reduce greenhouse gas emissions.
- **Renewable Power:** At least 50% of current renewable energy purchases must come from new renewable sources (in service after January 1, 1999).
- **Building Performance:** Construct or renovate buildings in accordance with sustainability strategies, including resource conservation, reduction, use-siting and indoor environmental quality.
- **Water Conservation:** Reduce water consumption intensity by 2% annually through 2015.
- **Procurement:** Expand purchases of environmentally-sound goods and services, including biobased products.
- **Pollution Prevention:** Reduce use of chemicals and toxic materials and purchase lower risk chemicals and toxic materials from top priority list.
- **Electronics Management:** Annually, 95% of electronic products purchased must meet Electronic Product Environmental Assessment Tool standards where applicable; enable Energy Star® features on 100% of computers and monitors; and reuse, donate, sell, or recycle 100% of electronic products using environmentally sound management practices.
- **Environmental Management Systems:** Implement EMS at all appropriate organizational levels to ensure use of EMS as the primary management approach for addressing environmental aspects of internal agency operations and activities.

Background

The Northern Plains Agricultural Research Laboratory (NPARL) in Sidney, MT, is one of more than 120 Agricultural Research Service (ARS) facilities in the U.S. NPARL is made up of two research units: the Agricultural Systems Research Unit and the Pest Management Research Unit.

The Agricultural Systems Research Unit (ASRU) focuses on irrigated and dryland cropping systems that will enhance soil and water quality, conserve natural resources, and reduce dependence on agrochemicals in the Upper Missouri River.

The Pest Management Research Unit (PMRU) focuses on developing ecologically based strategies, technologies, and products for the management of insect pests and weeds in crops and rangeland.

Purpose of the NPARL EMS Plan

The NPARL EMS Plan holds documentation on the identification of significant aspects, the setting of objectives and targets, the environmental management programs, the operational controls, the EMS audit programs and procedures, and all other EMS procedures, EMS records and other descriptive information useful to anyone being introduced to the EMS or to those responsible for the EMS.

This EMS Plan serves as a repository for documentation related to the EMS of the NPARL and includes:

- **EMS Procedures** that describe how to carry out key tasks within the EMS such as training, identifying environmental aspects, or managing records.
- **Programs and Controls** that operate under the EMS, such as programs for achieving EMS objectives and targets, and carrying out audits.
- **EMS Records or Directions** that enable individuals to locate appropriate records that confirm the completion of specific EMS activities such as the identification of environmental aspects, EMS training that has been given to specific employees, or the completion of management reviews.
- **Definitions, References, and Appendices** that contain additional information useful to individuals reviewing the EMS.

Scope

The principles in the Environmental Management System will apply to all NPARL employees and research units that are located at the Sidney, Montana location.

I. Administrative Responsibilities

1. Research Leaders have the ultimate responsibility for instituting the NPARL EMS, and shall provide leadership in, and support for EMS compliance.
2. The Location EMS Manager and EMS Coordinator will monitor for compliance with the objectives of the EMS and provide EMS training for staff. All EMS documents are maintained and stored by EMS Coordinator at <P:\Safety\EMS\NPARL EMS>
3. The EMS Committee will provide guidance in implementing tasks and will update the EMS in response to changing regulations or directives. The Committee will and does meet monthly in conjunction with another lab site meeting. In addition, the EMS coordinator attends monthly NPA EMS teleconferences to keep the committee abreast of any new EMS information. The NPARL EMS committee will also audit, review and revise any component of the EMS plan annually or as needed.
4. The EMS Committee performs self declaration annually for the past three years. The agency has developed the Declaration of Conformance Protocol and checklist to assist locations in conforming to the ISO 14001 standard. The conducting of second party audit for each location's EMS has been identified as the next step to promoting to uniformity and solidifying the principals of EMS. Agency requirement has issued that all ARS locations will have a second party audit performed with use of EMS Declaration of Conformance Protocol.
5. The NPARL Research Leaders shall ensure that the EMS objectives are followed within their Research Units.
6. Supervisors/worksite coordinators have the responsibility to ensure that their workers are trained in and follow the policies of the EMS.
7. Individual employees shall be responsible for following the directives and objectives of the EMS in their day-to-day work activities.
8. All levels of administration will strive to maintain the quality of the EMS by a continual process of "plan, do, check, and improve." This is currently practiced with a self audit performed by the lab's EMS committee and, in future, will include second and third party audits performed according to Area Office recommendations.

II. Identifying and Ranking Environmental Aspects and Impacts

The fundamental purpose of our EMS is to control and reduce environmental impacts of activities and procedures. This is the first step of defining our environmental "footprint" (i.e., how our operations and services affect the environment), leading to measurable goals for improving environmental performance through an EMS. The key

to this process is to only identify the environmental aspects that the Laboratory can **Control** and over which it can *have an Influence*.

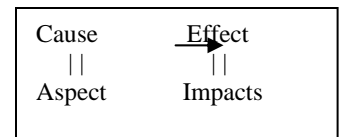
The aspect and impact analysis, and determination of significance are critical elements of EMS development because significant aspects and impacts must be considered in the determination of objectives and targets, which in-turn lead to programs and procedures. The scope of programs and procedures required in the EMS is determined in the aspects and impacts analysis process. Note that this process tends to be one of the most resource-intensive components of the entire EMS development.

A *significant environmental aspect* is an environmental aspect that has or can have a *significant environmental impact*. ISO 14001 uses 'significant' aspects as the basis for developing objectives and preparing programs. There is considerable flexibility within ISO 14001 regarding the evaluation of significance.

The EMS team will be responsible for:

- developing and performing a periodic (at least annual) review and update of annotated, operations-specific matrices that define the environmental aspects which are associated with NPARL operations (create *aspects register*)
- ensuring that such reviews are completed in time to support the generation or refinement of objectives and targets
- compiling and revising the environmental survey and significance aspect criteria matrix
- prioritizing aspects whose impacts are identified as significant for setting annual targets and objectives

Environmental Aspects – Environmental aspects are the activities that have the potential to interact with the environment in some way, potentially posing a risk if they are not managed appropriately.



Environmental Impact – Any change to the environment, whether adverse or beneficial, that results from the Laboratories activities, products or services. →

A. Identifying Aspects

The following questions will be considered when the EMS team identifies aspects and impacts:

- Which activities and services interface with the environment in a way that could result (or has resulted) in environmental impacts?
- What materials, energy sources, and other resources are used in regular operations?
- What are the primary sources of emissions to the air, water, or land?
- What are the primary types of waste produced? What are the primary sources associated with each waste? Does the treatment or disposal of these wastes have potential environmental impacts?
- How does our land or infrastructure (such as buildings and grounds) interact with the environment?

- Which activities (for example, chemical or fuel storage) might lead to accidental releases?

Note: Activities, products and services may be grouped together so that those with similar characteristics can be evaluated concurrently.

B. Evaluating Impacts

Using the aspects register to identify impacts use the following questions to address impacts:

- Are the impacts actual or potential?
- Are the impacts beneficial or damaging to the environment?
- What is the magnitude or degree of these impacts?
- What is the frequency or likelihood of these impacts?
- What is the duration and geographic area of these impacts?
- Which parts of the environment might be affected (for example, air, water, land, flora, or fauna)?
- Is the impact regulated in some manner?
- Have parties internal or external to the NPARL expressed concerns about these impacts?

C. Characterizing Risk

Exposure-How big of a problem is it?

- Global, regional, local

Severity-How bad will it get?

- Toxicity
- Volume
- Frequency-high, medium, low

Probability-How likely will it occur?

- Daily, weekly, monthly, annually, in emergencies, only during certain events, new project starts, when maintenance done

D. Ranking criteria to consider include:

- Regulatory Compliance Requirements*
- Likelihood of Negative Impact Occurring
- Frequency of Negative Impact
- Environmental Consequence of Potential Impact
- Human Health Consequence of Potential Impact
- Business Cost of Impact
- Cost or Level of Effort to Reduce Negative Impact
- Potential for Fine or Penalty
- Potential for Harm to Public Image

**Regulated – it's recommended that regulated impacts be significant by default. State and Federal regulations require that certain control measures be established for activities with varying degrees of environmental impact. In a sense certain impacts associated with the Laboratory's activities or operations have been predetermined as significant by these regulations. By labeling them as significant it is ensured they will be addressed by the EMS.*

III. Identifying Objectives and Targets

An *objective* is a goal that is consistent with NPARL policy, environmental aspects and impacts, and applicable environmental regulations.

A *target* is a more detailed performance goal related to and supporting a specific objective. Specific targets must be met for an objective to be achieved.

Performance indicators such as metrics or monitoring will be used to evaluate and measure environmental performance in relation to specific targets. A baseline will be established and records kept in appropriate manuals. Several metrics used at NPARL include mass of recycled items, electrical usage, water usage, and chemical and pesticide inventories.

Once our most important environmental aspects and impacts are identified and ranked, goals are set for improving the Laboratory's environmental management. Setting objectives and targets presents an opportunity to chart a course for the future regarding significant aspects. All significant aspects must be managed in accordance with the ISO 14001 requirements.

Objectives and Targets are reviewed and updated annually by the EMS team. Updates will also be reviewed by the EMS manager. If target date is accomplished, if applicable will be reported. Current objectives and targets are enclosed in this plan.

IV. Resulting Standard Operating Procedures

The following specific measures, organized into six broad categories, will be undertaken where possible to address environmental aspects and impacts and health and safety issues arising from operations at NPARL. All Departmental guidance, P&P's, FAR and Executive Orders requirements will be implemented. Throughout, we will make every effort to reclaim, recycle or reuse items wherever possible.

1. Heat, Electricity and Water Conservation

- a. We shall continue the practice of relamping existing fluorescent and incandescent bulbs with energy star/energy efficient (green tip) bulbs and non-PCB energy efficient ballasts. Including bio chambers.
- b. We will use power factor correction capacitors, variable speed drives, energy efficient motors, more efficient roof insulation, and in-floor heating (in new buildings) as well as caulking leaks to increase energy efficiency.
- c. We will purchase new energy efficient units and make improvements to existing units when replacing or renovating growth chambers.
- d. We will purchase more energy efficient units when replacing freezers, incubators, ovens, or refrigerators.
- e. We will encourage employees to consolidate autoclave waste to reduce the number of days the equipment is in use, generally to twice a week.
- f. Employees will be encouraged to turn off electrically powered equipment when leaving for the day.
- g. HVAC filters will be replaced on a monthly basis or as needed to lower energy usage.

- h. The HVAC will be set at 68 F in winter and 75 F in summer in North and South Buildings. Tech building has a program controlled thermostat set for 68 F in winter and 78 F in summer.
- i. Underground sprinklers will be set on timers to conserve water and energy. In addition all employees are directed to report any running toilets or leaking faucets or sprinklers to maintenance personnel for immediate repair to conserve water.
- j. Employees will be encouraged to shut off lab equipment (fume hoods, laminar flow hoods, biological safety cabinets) when not in use and to lower sashes on newer equipment to activate its energy saving mode.
- k. Lights will have motion sensors that will shut them off automatically when no movement is detected for 15 minutes. Employees will also be encouraged to shut off hallway lights when extra lighting is not needed.
- l. We will purchase Energy STAR products and will enable the energy saving features.
- m. We will purchase 100% E-PEAT (Silver or better) registered computers, flat screen monitors and other electronic products. For products not registered by EPEAT will purchase Energy Star products.
- n. Employees will be encouraged to shut monitors off if gone for a week or more.
- o. Where feasible NPARL maintains computer workstations with shared monitors to save energy and reduce e-waste.
- p. We will strive to build “Green Buildings” when feasible for new construction. Definition of a green building includes: a sustainable structure that is designed, built, renovated, operated or reused in an ecological and resource-efficient manner. Green buildings are designed to meet certain objectives such as protecting occupant health; improving employee productivity; using energy, water, and other resources more efficiently; and reducing the overall impact to the environment.
- q. We have annual goals to decrease energy usage by 2-5% and long term goals to install heat recovery system for containment facility and all existing buildings when it becomes economically feasible.
- r. NPARL research is designed to maximize efficiency of applications of water and agrochemicals to closely match plant needs and minimize any negative environmental impacts, which is supported by detailed monitoring programs.

2. Recycling

- a. We will recycle paper, magazines, phone books, newspapers, etc. We use a center 45 miles away and haul every two weeks at no cost to the government.
- b. Refrigerants will be reclaimed and recycled from non-working or obsolete refrigeration units. The reclaimed refrigerant will then be reused in existing units requiring the same refrigerants.
- c. Obsolete or non-working refrigerators, freezers and refrigeration equipment will be brought to the local landfill for recycling.
- d. We will recycle cardboard through the local Richland Opportunities Inc. (ROI) Recycling Program.

- e. Nickel-cadmium, lithium, and mercury containing batteries will be placed into e-cycling (electronic waste) box. This procedure is cost efficient and proper disposal.
- f. Alkaline batteries will be returned to vendors for recycling under the "Big Green Box" program.
- g. Vehicle batteries will be transferred to a local commercial vendor for recycling.
- h. Used vehicle oil will be transferred to a local farm equipment supplier to be reused in an EPA approved oil burning furnace.
- i. Used fluorescent bulbs containing mercury, high pressure sodium lamps and mercury vapor halogen lights will be recycled.
- j. 100 pounds of aluminum cans will be donated for recycling to local Boy Scout troops or to ROI, the funds from which are used to help with their recycling and other programs.
- k. Pop can tops are donated to Ronald McDonald house for support of kidney dialysis programs.
- l. All out-dated electronic equipment (including computers, monitors, and components) will:
 - 1. Have data storage devices purged of information and data according to DOD 5220.22-M sanitization requirements.
 - 2. Be placed on the government surplus property list and then donated to schools, other Federal or state agencies. "E-erase your E-waste" brochures will be included with all electronic equipment that is donated or purchased from NPARL to help educate the public about local recycling options for electronics.
 - 3. Be recycled via a contracted recycling firm specializing in electronic waste. (Note: NPARL held its first e-cycling event - open to the community - in June 2005. To date that event has collected nearly 102,000 lbs. of e-waste for recycling.)

3. Procurement

- a. Credit card holders will purchase environmentally preferred products and follow all ARS P&P's and FAR requirements.
- b. We will purchase items made of recycled material whenever practical, including such things as printer cartridges, tissue paper, and toilet paper.
- c. We are committed to purchasing office paper products containing at least 30% recycled paper. One ream of 30% recycled paper saves about 12,500 BTU's of energy, 1.6 pounds of Greenhouse gases and 6.4 gallons of waste water.
- d. When in need of uncommon chemicals, employees will be encouraged to determine whether the compounds are available elsewhere on site before purchasing.
- e. We will purchase Energy STAR compliant and green products wherever practical and ensure that the energy-saving features are turned on Green cleaning products
- f. When purchasing electronics we will meet the **Electronic Product Environmental Assessment Tool (EPEAT)** standards for registered products, unless there is no EPEAT standard for such products. EPEAT is an easy to use environmental procurement tool designed to help

institutional purchasers compare and select desktop computers, laptops and monitors based on their environmental attributes.

- g. Employees are encouraged to use alternative fuels such as E85 and bio diesel where available, in all flexi fuel vehicles.
- h. Green cleaning products will be used.

4. Environmental Practices

- a. Ozone-depleting chemicals such as R-11 or R-12 (Chlorofluorocarbon) will be replaced with environmentally acceptable refrigerants such as R-410A, R-401A, R-402A and R-134A (Hydrochlorofluorocarbon).
- b. Lab generators will be maintained to prevent unwanted air effluent.
- c. We will use non-hazardous ice melting compounds on sidewalks and parking lot surfaces.
- d. We will use environmental coolants where possible in the HVAC and other equipment requiring a coolant.
- e. Light ballasts containing PCB's will be removed and disposed of properly to prevent any harm to human health or the environment.
- f. All biological products (ex: plants, soil, containers, etc.) will be autoclaved to prevent any adverse impact on the environment.
- g. Employees are encouraged to use teleconferencing and carpooling when possible to reduce energy use and expense.
- h. Employees will be encouraged to limit non-essential travel involving USDA fleet vehicles or employee-owned vehicles.
- i. Employees are encouraged to use alternative fuels such as E85 and bio diesel where available, in all flexi fuel vehicles.

5. Hazardous Chemical Waste Reduction

- a. Researchers will be educated and reminded to purchase only needed quantities of chemicals.
- b. We will encourage the replacement of existing chemicals with less hazardous chemicals when possible.
- c. We will convert from alkyd to latex-based paints, where practical.
- d. We will convert to biodegradable solvents where possible.
- e. We will use less solvent and cleanser where practical when rinsing and cleaning equipment.
- f. We will recycle used hexane and methylene chloride under an existing program with Montana State University
- g. Researchers will be encouraged to transfer excess chemicals to other researchers rather than dispose of them as hazardous waste.
- h. We will reduce pesticide use by mixing only needed quantities or by converting to less hazardous pesticides.
- i. We will employ bio-control methods before pesticides, where possible.

6. Miscellaneous Related activities

- a. We will provide information on proper handling of asbestos, lead paint, and waste building products and will require proper and environmentally friendly disposal of these same products.
- b. Existing asbestos tiles will be treated with special care and will be removed when funding is available. In the meantime, all employees will be made aware of the location of any asbestos tiles on site and will be encouraged to report any tiles showing wear to safety personnel for removal to avoid the introduction of airborne fibers into the work environment.
- c. We will limit and monitor the types and quantities of hazardous substances being disposed of in the sanitary sewer and the storm sewer.
- d. We will continue to recycle or reuse products whenever possible.
- e. All biological products will be autoclaved before disposal to prevent any type of impact to the environment.
- f. We will use electronic file record keeping when practical to replace paper copies, and encourage double-sided printing and copying when paper copies are necessary.
- g. Employees will be encouraged to adopt healthy and energy-saving practices such as riding bicycles or walking to work. (Note: Several NPARL employees already do this, riding their bikes in the summer months and walking in winter.)
- h. We will encourage employee participation in the “Adopt a Highway Program,” under which employees pick up garbage along a 2-mile section of highway twice a year. This is done on a volunteer basis and the employees perform the clean up of the highway on their own time. NPARL employees have participated in this program for the past several years.
- i. We encourage employees to practice environmental safety and conservation at work and home by providing informational resources including pamphlets outlining this plan and a list of websites with additional energy saving and recycling tips (see next page and appendices).

*EMS Program, August 2005
Updated October 2009*

Helpful Web Sites

Check out these web sites for more information!

www.federalelectronicschallenge.net

www.epa.gov/wastewise/

www.epa.gov/rcc/plugin/reuse.htm

www.energy.gov/engine/content.do

www.buildinggreen.com

www.energystar.gov

www.mygreenelectronics.org

www.energyhog.org (Fun consumer webpage)

www.energysavers.gov/ (Consumers)

www.eere.energy.gov/consumer

www.energysavers.gov/homeowners.html

NPARL Environmental Management System

• *Appendices and Support Materials* •

Guiding Policies for NPARL's EMS Plan:

ARS & NPA EMS Policy Statements

NPARL Facility/Organization Environmental Management System
(EMS) Metrics 2009

Identifying NPARL Need for EMS Program:

NPA Appropriate Facilities

List of Potential Location Research Program and Facility Activities,
Aspects and Their Impacts on the Environment

Compliance policies/plans/projects for NPARL EMS program:

Nine Steps to Environmental Compliance

2008 ARS EMS Self-Declaration Checklist

2009 ARS EMS 2nd Party Audit & Declaration of Management Review

2009 NPARL EMS Committee Members

2009 NPARL Annual Environmental Goals

2009 NPARL Positive Aspects of EMS

2009 NPARL Objectives and Targets

2009 Environmental Impact Significance Rating
(Utilizing USDA-ARS-NPA rating)

2009 NPARL Funds for Environmental Compliance

2008 Affirmative Procurement and Federal Credit Card Holders

2009 Emergency Response Plan

Environmental Laws and Regulations Applicable to USDA, ARS,
NPA Operations

List of Internet Resources

REFERENCES

Executive Order (EO) 13423 *Strengthening Federal Environmental, Energy, and Transportation Management*, January 2007

Northern Great Plains Research Laboratory Environmental Management Plan by EMS coordinator Becky Wald.

International Organization for Standards (ISO) 14001: Requirements for an Environmental Management System-2004

U.S. Environmental Protection Agency (EPA) <http://www.epa.gov/ems/>

Northern Plains Area 'ENVIRONMENTAL MANAGEMENT SYSTEM PROGRAM CYs 2006-2007'

Agricultural Research Service Environmental Management System Policy Statement

The Agricultural Research Service (ARS) conducts research to develop solutions to agricultural problems of high national priority. In conjunction with this mission, ARS is committed to protecting human health and the environment; meeting or exceeding Federal, State, and local laws, regulations, codes, and guidelines; and employing sustainable pollution prevention practices. Whenever feasible, ARS will utilize pollution prevention initiatives as the means for achieving compliance. We will strive to minimize impacts and continually improve our environmental performance by:

- Maintaining a policy of commitment to environmental excellence.
- Developing annual goals, objectives, and targets to advance our program performance in terms of both regulated and unregulated impacts.
- Considering environmental impacts when making policy, planning, purchasing, and operating decisions.
- Identifying and complying with pertinent requirements in Federal, State, and local laws and regulations; permits; Department of Agriculture and ARS policies and procedures; and industry codes that we must adhere to.
- Requesting the necessary resources to successfully carry out our goals, objectives, and targets.
- Making personnel aware of their environmental roles and responsibilities, providing appropriate training, and holding employees accountable for their performance and actions, including recognizing them for outstanding performance.
- Effectively communicating with employees, partners, stakeholders, customers, and the general public, our commitment to the environment and soliciting their input in developing and achieving our goals and objectives.
- Routinely monitoring our environmental operations and conducting periodic inspections, audits, and reviews to ascertain that we meet applicable standards and to evaluate our program effectiveness.
- Correcting identified deficiencies in a timely manner and taking appropriate steps to prevent their recurrence.
- Clearly documenting and reporting the progress and achievements related to this policy.

James H. Bradley /s/ James H. Bradley
Deputy Administrator

Northern Plains Area Environmental Management System Policy Statement

The NPA will integrate environmental stewardship into its operations, and will manage its operations and programs in a manner that protects the environment, the safety and health of its employees, and the public. To ensure continuous improvement, the program will be reviewed and evaluated annually.

In support of this policy, the NPA will:

- Comply fully with all Federal, State, and local environmental laws and regulations.
- An Area EMS team will be formed to plan the EMS implementation. The Area EMS manager will lead the Environmental Management System (EMS) Program team. Team members will be from each location and will meet monthly by teleconference.
- Locations may use location safety committees to accomplish EMS activities.
- All appropriate staff members will be trained on all applicable laws and regulations.
- Use cost-effective practices to eliminate, minimize, or mitigate environmental impacts.
- Use environmentally preferred materials if those materials meet technical specifications.
- Establish appropriate objectives and performance indicators to guide and measure the effectiveness of our environmental management programs.
- Provide environmental management training.
- Reduce the amount of waste at our facilities, reuse and recycle whenever possible, and support pollution prevention.
- Monitor and report our environmental performance through annual environmental performance reviews.
- Maintain or improve all property under the stewardship of the NPA (including land, water, wildlife, and natural resources) in an environmentally sensitive manner.
- Develop and support energy conservation practices.

**FACILITY/ORGANIZATION
ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) METRICS
FOR FISCAL YEAR 2009**

(Note: These metrics will be used for Years 2009 through 2011.)

These metrics are provided to allow agencies, organization and facilities that are implementing an Environmental Management System to plan for reporting fiscal year 2009 progress, performance and successes. Each agency will be requested to provide a summary of this information. These metrics will be used until 2011 and may be amended by the E.O. Interagency Environmental Leadership Workgroup or the Office of the Federal Environmental Executive to reflect new information.

Part I: Facility/Organization-level Information

Please provide the following facility/organizational background information.

| | |
|--------------------------------|---|
| Agency / Department: | United States Department of Agriculture |
| Sub-Agency: | Agricultural Research Service |
| Facility Name: | Northern Plains Agricultural Research Laboratory (NPARL) |
| Description: | NPARL EMS PROGRAM |
| Inception Date: | August 29, 2005 |
| Full Implementation Date: | December 31, 2005 |
| Point of Contact: | Robert Evans |
| POC E-mail: | Robert.Evans@ars.usda.gov |
| Performance Track Recognition: | NO |
| Other Recognition: | NPARL received the Federal Electronic Challenge Bronze award this year for diligence in the Electronic Stewardship part of its EMS program (which follows the EO 13243 and ISO 14001 standards). The plan has been in place for the past 5 years. NPARL also started an annual community-wide E-rase your E-waste program to recycle electronics in 2005. This past year, that effort earned an honorable mention for electronic stewardship in the White House Closing the Circle awards program. |
| ISO 14001 Registration: | NO, not registered to ISO 14001 but follow the standard. |
| Comments: | NPARL is a member of the Federal Electronic Challenge (FEC) which promotes diligence in Electronic Stewardship as part of the EMS program. The lab has been an FEC member since 2007. |

Part II: EMS External Audit and Declaration of Conformance

Background: The Implementing Instructions for EO 13423 state that for purpose of determining conformance to the EMS requirements of EO 13423, an EMS shall be considered fully implemented and in conformance when:

- (1) The EMS has been the subject of a formal audit by a qualified party outside the control or scope of the EMS. **AND***
- (2) The audit findings have been recognized by the appropriate level of the agency (facility/organization) implementing the EMS. **AND***
- (3) The appropriate senior manager accountable for implementation of the EMS has declared conformance to the EMS requirements of EO 13423.*

*The Federal Environmental Executive issued clarification of these requirements in a document dated January 15, 2008, available at:
<http://www.fedcenter.gov/Documents/index.cfm?id=8864>.*

Note: EMS declarations made under EO 13148 are not valid for the purposes of declaration under EO 13423.

Once conformance of the EMS has been declared, the EMS shall then be audited at least every three years from the date of the initial declaration. An EMS audit may be considered completed “within three years” if the audit was scheduled within the three year deadline and was ultimately completed, but encountered unanticipated delays of up to three months. Based on this requirement, in reporting year 2010, these metrics will make available a response for EMSs that had an initial audit date of 2007

In FY 2009:

Not Currently In Conformance: The EMS for the facility/organization is not “fully implemented,” in accordance with the requirements of the CEQ Implementing Instructions (cited above).

Currently In Conformance: The EMS is “fully implemented” in accordance with the requirements of the CEQ Implementing Instructions (cited above).

Supplementary Data:

Date of Declaration of Conformance Fall of 2009

Declaration issued by Jackie Couture

(Title) EMS Location Coordinator

Date of completion of most recent EMS audit by a qualified party outside the control or scope of the EMS Bonnie King

Part III: EMS Performance Metrics for EMS Scorecard

Responses to these questions are scored as part of the agency EMS scorecard process.

1. Environmental Aspects

In FY 2009, within the scope of a facility's/organization's EMS:

- A. **Environmental aspects have not been identified** for all of the facility's/organization's activities, products, and services (including transportation and energy related activities).
- B. **Environmental aspects have been identified** for all of the facility's/organization's activities, products, and services (including transportation and energy related activities) but **without using an established procedure**.
OR
Using an established procedure, **environmental aspects have been identified** for all of the facility's/organization's activities, products, and services (including transportation and energy related activities). However, **significant aspects were not identified**.
- C. Using an established procedure, **environmental aspects have been identified** for all of the facility's/organization's activities, products, and services (including transportation and energy related activities) AND **significant environmental aspects for those activities, products, and services have been identified**. However, previously identified **environmental aspects were not reevaluated** OR were **not reevaluated using an established procedure**.
- D. Using an established procedure, both previously and newly identified **environmental aspects and significant environmental aspects were evaluated and updated** for all of the facility's/organization's activities, products, and services (including transportation and energy related activities).

2. Sustainable Practices

Note 1: Executive Order 13423 requires that EMSs address the environmental aspects of agency transportation and energy related activities. Section 2 of the EO directs Federal agencies to implement sustainable practices for:

- (a) Improvement in energy efficiency and reduction in greenhouse gas emissions,*
- (b) Use of renewable energy,*
- (c) Reduction in water consumption,*
- (d) Sustainable acquisition,*
- (e) Reduction of the use and disposal of toxic and hazardous chemicals and materials,*
- (f) Pollution and waste prevention/diversion and recycling programs,*
- (g) High performance and sustainable buildings,*
- (h) Vehicle fleet management, and*
- (i) Electronics stewardship.*

If a particular sustainable practice is determined to be not currently applicable to the reporting EMS, that determination should be documented and available to the parent

agency. That sustainable practice can then be excluded from evaluation for this reporting period.

Examples of “not applicable” include a determination that a particular sustainable practice relates to environmental activities (a) that are not present at the facility/organization or (b) that are outside the control of the organization/facility during the reporting period (e.g., high performance building or renewable energy use in a leased facility). Note: If an organization/facility has the potential to influence the responsible organization with regard to sustainable practices, (e.g., in a lessee tenant relationship), that organization/facility shall attempt to influence the other organization to implement sustainable practices, e.g., through a letter or meeting, before it concludes the practice is “not applicable.”

Note 2: If an agency has established agency-level requirements/programs to address the sustainable practices as required by Executive Order 13423, the facility/organization may adopt the Agency-level requirements/procedures to demonstrate conformance **provided that the facility/organization has implemented those requirements/programs.**

In FY 2009:

- A. The facility/organization has **not established programs** through its EMS to address applicable sustainable practices as required by Executive Order 13423.
- B. The facility/organization has **established some programs** through its EMS to address applicable sustainable practices as required by Executive Order 13423.
AND
The facility/organization has **implemented at least one** of the applicable sustainable practices through its EMS.
AND
The facility/organization has **established an implementation schedule** to implement the remainder of the applicable sustainable practices through its EMS.
- C. The facility/organization has **established and implemented programs** to address all applicable sustainable practices as required by Executive Order 13423 through its EMS.
- D. The facility/organization has **established and implemented programs** to address all applicable sustainable practices as required by Executive Order 13423 through its EMS.
AND
The facility/organization has **reviewed performance** of the EMS towards the objectives of the E.O. sustainable practices through their EMS monitoring and management review processes.

3. Objectives, Targets, and Programs

In FY 2009

- A. Measurable environmental **objectives, targets, and programs were not established and documented OR previously established and documented objectives, targets, and programs were not reviewed and updated** as appropriate.
- B. Measurable environmental **objectives, targets, and programs were established and documented OR previously established and documented objectives, targets, and programs were reviewed and updated AND less than 50% of the established targets were on schedule** to be met.
- C. Measurable environmental **objectives, targets, and programs were established and documented OR previously established and documented objectives, targets, and programs were reviewed and updated AND 50-79% of the established targets were on schedule** to be met.
- D. Measurable environmental **objectives, targets, and programs were established and documented OR previously established and documented objectives, targets, and programs were reviewed and updated AND 80% or greater of established targets were on schedule** to be met.

4. Environmental Training

Note: These metrics pertain to competence training for those whose tasks and/or activities have the potential to affect significant environmental aspects.

In FY 2009

- A. **Training requirements** to ensure individual competence and responsibility **were not identified or updated.**
- B. **Training requirements** to ensure individual competence and responsibility **were identified or updated** but **training was not available or was not carried out.**
- C. **Training requirements** to ensure individual competence and responsibility **were identified or updated** and **training was available, carried out and documented** during this reporting period.
- D. **Procedures** to ensure that training requirements for individual competence and responsibility **were established; training requirements** to ensure individual competence and responsibility **were identified or updated;** training (including refresher training) was **available and carried out and documented;** and training requirements for competence were **monitored and revised.**

5. Operational Controls

In FY 2009

- A. Documented **operational controls** to address activities associated with significant aspects and consistent with objectives and targets **were not established or updated.**
- B. Documented **operational controls** to address activities associated with significant aspects and consistent with objectives and targets **were established or updated and are partially implemented.**
- C. Documented **operational controls** to address activities associated with significant aspects and consistent with objectives and targets **were established or updated and are fully implemented.**
- D. Documented **operational controls** to address activities associated with significant aspects and consistent with objectives and targets **were established or updated and are fully implemented, AND previously documented operational controls were formally reviewed and/or updated** (i.e., supplemented, revised, deleted) as appropriate to ensure their ongoing effectiveness.

6. Contracts and Concessionaire Agreements

Note 1: The Instructions to Executive Order 13423 establishes “where contractor and concessionaire activities affect an agency’s environmental, transportation, or energy issues, those activities shall be addressed in the development, implementation, and maintenance of the EMS. Requirements shall be included in all appropriate contracts to ensure that the contractors’ roles and responsibilities under the EMS are properly addressed” (Instructions for Implementing Executive Order 13423, Section II B (2).

Note 2: An “appropriate contract” is one whose actions may have potential impact on the significant environmental aspects identified by the reporting EMS and entered into, revised, amended or otherwise modified after the date of Executive Order 13423.

Note 3: Appropriate contracts include legal arrangements with concessionaires.

Note 4: A documented determination of no appropriate contracts may be marked as a “D” provided that the procedure requires an annual review and a review of new contracts.

Note 5: Facilities/organizations are not precluded from modifying a contract existing prior to the date of Executive Order 13423 to include EMS considerations.

In FY 2009

- A. During this reporting period or previously, the facility/organization **did not establish a procedure** to identify appropriate contracts or identify appropriate contracts in which to include EMS requirements.
- B. During this reporting period or previously, the facility/organization **established a procedure** to identify appropriate contracts; **identified appropriate contracts** and the contractors’ roles and responsibilities under the EMS; and **established a schedule** to modify appropriate contracts.
However, the facility/organization **did not modify appropriate contracts** to include EMS requirements and defined roles and responsibilities.

C. During this reporting period or previously, the facility/organization **established a procedure** to identify appropriate contracts; **identified appropriate contracts** and the contractors' roles and responsibilities under the EMS; **established a schedule** to modify appropriate contracts; and was **in the process** of modifying contracts to include EMS requirements and defined roles and responsibilities in appropriate contracts. However, the facility/organization did **not complete modifications** to appropriate contracts or did **not review** whether contractors fulfilled defined roles and responsibilities.

D. The facility/organization **established a procedure** to identify appropriate contracts; **identified appropriate contracts** and the contractors' roles and responsibilities under the EMS; and **EMS requirements and defined roles and responsibilities were included** in all appropriate contracts. The facility/organization **reviewed the contractor activities** and **determined the status of contractors' fulfillment** of their defined roles and responsibilities during this reporting period.

7. Evaluation of Compliance with Regulatory Requirements

Note: Executive Order 13423 requires that each agency establish programs for environmental compliance review and audit. Furthermore, the Instructions for Implementing Executive Order 13423 establish that the EMS shall be used to support compliance with environmental regulations.

In FY 2009

A. During this reporting period or previously, the facility/organization **did not establish** as part of the facility/organization's EMS, **a program for an environmental compliance review and audit.**

B. During this reporting period or previously, the facility/organization **established** as part of the facility/organization's EMS, **a program for an environmental compliance review and audit** that includes:

- (a) Procedures to identify and account for applicable legal and other requirements,
- (b) Protocols to periodically evaluate compliance with those applicable legal and other requirements, including the frequency of compliance evaluations, and
- (c) A process or system for implementing corrective action based on that evaluation.

AND

The facility/organization has **identified applicable legal and other requirements.**

However, the facility/organization **has not implemented** the **protocols to evaluate compliance**, or the process or system to implement **corrective action** based on compliance evaluations.

C. During this reporting period or previously, facility/organization **established** as part of the facility/organization's EMS **an environmental compliance program** that includes:

- (a) Procedures to identify and account for applicable legal and other requirements,
- (b) Protocols to periodically evaluate compliance with those applicable legal and other requirements, including the frequency of compliance evaluations, and
- (c) A process or system for implementing corrective actions based on that evaluation.

AND

The facility/organization has **identified applicable legal and other requirements.**

AND

The facility/organization has **conducted evaluations of compliance** with applicable legal and other requirements.

However, the facility/organization **has not completed** the compliance **evaluation for the entire facility/organization** in accordance with the program established frequency, or **has not initiated corrective actions** for completed evaluations.

D. During this reporting period or previously, the facility/organization **established** as part of the facility/organization's EMS **an environmental compliance program** that includes:

- (a) Procedures to identify and account for applicable legal and other requirements,
- (b) Protocols to periodically evaluate compliance with those applicable legal and other requirements, including the frequency of compliance evaluations, and
- (c) A process or system for implementing corrective actions based on that evaluation.

AND

The facility/organization has **identified applicable legal and other requirements.**

AND

The facility/organization has **completed evaluations of compliance** with applicable legal and other requirements for the entire facility/organization, in accordance with the established frequency.

AND

Corrective actions have been initiated, scheduled or completed.

8. Management Review

The Instructions for Implementing Executive Order 13423 require that "Once implemented, an EMS shall be reviewed and updated annually or more frequently, as appropriate, by senior leadership accountable for implementation of that EMS." [§ II.A.(2), page 7]

*The purpose of this review (according to ISO 14001:2004) is to ensure the continuing suitability, adequacy and effectiveness of the EMS by presenting the appropriate information to senior management with authority over policy and resources for their **consideration and action**. The attention given to the management review process is a direct reflection of the commitment of the facility/organization to continual improvement. The review should include "assessing opportunities for improvement and the need for*

changes to the environmental management system, including the environmental policy and environmental objectives and targets.”

The review should be documented (for example: agenda, presentations, action items and actions taken).

In FY 2009

- A. Formal **senior leadership review** of the EMS was **neither planned/scheduled nor conducted**.
- B. Formal **senior leadership review** of the EMS was **planned/scheduled**, but was **not conducted**.
- C. Formal senior leadership review of the EMS **was conducted**. However, recommendations for continual improvement were neither **addressed** nor proposed by top management.
- D. Formal senior leadership review of the EMS **was conducted**, top management **responded to recommendations** or gave directions for continual improvement, and appropriate actions including modifications to elements of the EMS have been **initiated, scheduled or completed**.

Part IV: EMS Implementation Information

E.O. 13243 states, in Section 3, *Duties of Heads of Agencies*,

(I)n implementing the policy set forth in section 1 of this order, the head of each agency shall: ... (b) implement within the agency environmental management systems (EMS) at all appropriate organizational levels to ensure **(i) use of EMS as the primary management approach for addressing environmental aspects of internal agency operations and activities, including environmental aspects of energy and transportation functions, (ii) establishment of agency objectives and targets to ensure implementation of this order**, and (iii) collection, analysis, and reporting of information to measure performance in the implementation of this order; [*emphasis added*].

Likewise the Instruction for Implementing Executive Order 13423, in part II (A.), **Environmental Management Systems, Use of Environmental Management Systems**, states,

(E)ach agency shall, at all appropriate organizational levels, including agency, sub-agency, bureau, service, command, and/or facility, develop, **implement, and maintain an EMS to be used to identify and address agency environmental, transportation, and energy issues. ... The EMS objectives shall include the goals identified in Section 2 of the E.O.**

The Instruction goes on to state in (1) *Management framework*,

(T)he management system will serve as the management framework under which agencies and their facilities or organizations identify, manage, and improve the sustainable practices identified in Section 2 of the E.O. and identify and collect performance measurement information to address the reporting requirements of Section 3(g) of the E.O. EMS also shall be used to support compliance with environmental and energy regulations, to enable the prevention of pollution and efficient energy management, and to support other objectives identified by the organization [*emphasis added*].

The questions in this Part reflect the relationship identified in the Executive Order and Implementing Instruction between an EMS and the various programs that already respond to, or are being developed to respond to, the sustainable practices in Section 2 of the E.O. Responses to these questions **are not** scored as part of the agency EMS scorecard process.

1. Energy Use

- a. Has an assessment of the facility's/organization's energy use been conducted? Yes No
- b. Is energy use identified as a 'significant aspect'? Yes No
- c. Have objectives and targets been established to address energy use? Yes No

- d. Are these objectives and targets included in the EMS? Yes No
- e. Have plans and programs been implemented to address energy use? Yes No
- f. Are these plans and programs included in the EMS? Yes No

2. Greenhouse Gas Emissions

- a. Has an assessment of the facility's/organization's greenhouse gas emissions been conducted? Yes No
- b. Are greenhouse gas emissions identified as 'significant aspects'? Yes No
- c. Have objectives and targets been established for greenhouse gas emissions? Yes No
- d. Are these objectives and targets included in the EMS? Yes No
- e. Have plans and programs been implemented to address greenhouse gas emissions? Yes No
- f. Are these plans and programs included in the EMS? Yes No

3. Renewable Energy Use

- a. Has an assessment of the facility's/organization's renewable energy use been conducted? Yes No
- b. Is renewable energy use identified as a 'significant aspect'? Yes No
- c. Have objectives and targets been established for renewable energy use? Yes No
- d. Are these objectives and targets included in the EMS? Yes No

- e. Have plans and programs been implemented to address renewable energy use? Yes No
- f. Are these plans and programs included in the EMS? Yes No

Note: While the cost and availability of renewable energy resources for NPARL are too costly to incorporate and/or not available; the lab has performed a geothermal assessment for its buildings and is currently working on a heat recovery system for its containment facility. In addition, the lab has helped to promote a demonstration wind energy project targeting producers at its Froid Research Farm being conducted by the Roosevelt and Sheridan County Conservation Districts.

4. Water Use

- a. Has an assessment of the facility's/organization's water use been conducted? Yes No
- b. Is water use identified as a 'significant aspect'? Yes No
- c. Have objectives and targets been established for water use? Yes No
- d. Are these objectives and targets included in the EMS? Yes No
- e. Have plans and programs been implemented to address water use? Yes No
- f. Are these plans and programs included in the EMS? Yes No

5. Purchasing

- a. Has an assessment of the facility's/organization's purchasing practices been conducted? Yes No
- b. Are environmental aspects associated with purchasing identified as 'significant aspects'? Yes No
- c. Have objectives and targets been established for aspects associated with purchasing practices? Yes No
- d. Are these objectives and targets included in the EMS? Yes No

- e. Have plans and programs been implemented to address purchasing practices? Yes No
- f. Are these plans and programs included in the EMS? Yes No

6. Solid Waste Generation

- a. Has an assessment of the facility's/organization's solid waste generation been conducted? Yes No
- b. Is solid waste generation identified as a 'significant aspect'? Yes No
- c. Have objectives and targets been established to address solid waste generation? Yes No
- d. Are these objectives and targets included in the EMS? Yes No
- e. Have plans and programs been implemented to address solid waste generation? Yes No
- f. Are these plans and programs included in the EMS? Yes No

7. Purchasing and Using Toxic or Hazardous Chemicals

- a. Has an assessment of the facility's/organization's practices for purchasing and using toxic or hazardous chemicals been conducted? Yes No No purchasing or use of toxic or hazardous chemicals
- b. Is purchasing and using toxic or hazardous chemicals identified as a 'significant aspect'? Yes No
- c. Have objectives and targets been established for purchasing and using toxic or hazardous chemicals? Yes No
- d. Are these objectives and targets included in the EMS? Yes No

- e. Have plans and programs been implemented to address purchasing and using toxic or hazardous chemicals? Yes No
- f. Are these plans and programs included in the EMS? Yes No

8. Construction/Lease/Operation/Maintenance of Buildings

- a. Has an assessment of the facility's/organization's practices related to construction/lease/operation/maintenance of buildings been conducted? Yes No
- b. Are the environmental aspects associated with construction/lease/operation/ maintenance of buildings identified as 'significant aspects'? **If construction is happening.** Yes No
- c. Have objectives and targets been established for aspects associated with construction/lease/operation/maintenance of buildings? Yes No
- d. Are these objectives and targets included in the EMS? Yes No
- e. Have plans and programs been implemented to address aspects associated with construction/lease/operation/maintenance of buildings? Yes No
- f. Are these plans and programs included in the EMS? Yes No

9. Vehicle Fleet Use/Petroleum Products Use

- a. Has an assessment of the facility's/organization's vehicle fleet use/petroleum product use been conducted? Yes No No fleet or petroleum product use
- b. Are vehicle fleet use/petroleum products use identified as 'significant aspects'? Yes No

- c. Have objectives and targets been established for vehicle fleet use/petroleum product use? Yes No
- d. Are these objectives and targets included in the EMS? Yes No
- e. Have plans and programs been implemented to address vehicle fleet use/petroleum product use? Yes No
- f. Are these plans and programs included in the EMS? Yes No

10. Purchase/Use/Disposal of Electronic Equipment

- a. Has an assessment of the facility's/organization's purchase/use/disposal of electronic equipment been conducted? Yes No
- b. Are purchase/ use/disposal of electronic equipment identified as 'significant aspects'? Yes No
- c. Have objectives and targets been established for purchase/use/disposal of electronic equipment? Yes No
- d. Are these objectives and targets included in the EMS? Yes No
- e. Have plans and programs been implemented to address purchase/use/disposal of electronic equipment? Yes No
- f. Are these plans and programs included in the EMS? Yes No

11. Environmental Regulatory Compliance

- | | | | | |
|---|-------------------------------------|-----|--------------------------|----|
| a. Has a compliance assessment of the facility's/organization's regulated products, activities and services been conducted? | <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| b. Is environmental regulatory compliance identified as a factor in determining 'significant aspects'? | <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| c. Have objectives and targets been established for environmental regulatory compliance? | <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| d. Are these objectives and targets included in the EMS? | <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| e. Have plans and programs been implemented to address environmental regulatory compliance? | <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| f. Are these plans and programs included in the EMS? | <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No |

Part V: EMS Experiences

1. EMS Best Practices / Lessons Learned:

Please provide up to 3 bullet statements identifying any EMS best practices and/or lessons learned in the past year.

- Recycling all electronics at the end of the product life.
- Purchasing Energy Star/EPEAT electronic products
- Location electronic recycling efforts have snowballed to other government and private agencies.
- Replacement of 4 inefficient boilers with 96% energy efficient boilers.
- Make sure to add language requiring contractors to dispose of any waste such as coolant for boilers, HVAC, etc to all contracts prior to the replacement work being done to ensure use of the least expensive disposal option.
- Heat Recovery System for our containment facility is “in the works” as a best practice effort

2. EMS Challenges:

Please provide up to 3 bullet statements identifying EMS implementation challenges in the past year.

- Finding new ways to improve our EMS program with very little funding, which limits implementation of certain projects such as geothermal, etc..
- Recycling sources very limited in our area.
- Purchasing of biofuels is limited in our area.

3. External Communication:

Please provide up to 3 bullet statements identifying how your facility/organization uses the EMS to facilitate communication between your facility/organization, and your stakeholders and your neighbors.

- Information on our EMS program is available on our website; brochures are also available and our EMS statement is posted at front entrance of our facility.
- The annual community-wide Erase your Ewaste event held at the NPARL location parking lot was honored as one of the top ten programs in the Sidney community for 2008 by a local newspaper.
- Location personnel have regular and open communication with local, county, state and federal regulatory entities through participation in the Local Emergency Planning Committee and other organizations.

4. Highest Priority Aspects:

Please list up to 3 of your facility/organization’s highest priority significant environmental aspects. [Note: These may or may not be those identified in the Executive Order; they may include environmental aspects associated with local issues or other Agency priorities.]

- Recycling of electronics, paper, cardboard, used oil, fluorescent & mercury containing lights, solvents, batteries alkaline & rechargeable, etc. Anything that it’s possible to recycle in the area is recycled.
- Replacement of refrigerants

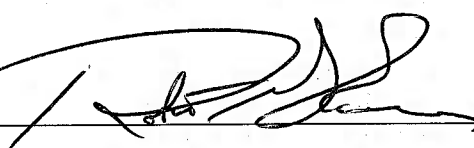
- Use of less toxic chemicals when feasible.
- Tracking greenhouse gas usage through spreadsheet developed by AO

5. EMS Benefits to Agency Mission:

Please provide up to 3 bullet statements identifying how EMS implementation has enabled your organization or agency to operate more effectively in accomplishing its missions. [These could include, for example, reduced number of off-normal events that disrupt agency schedules or operations; greater interoperability among sites; better relations with host communities, states, and their elected representatives; greater speed and agility in responding to unexpected events; improved ability to write performance based contracts; etc.]

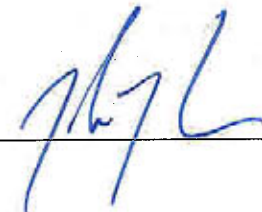
- Using stimulus funds to purchase hybrid vehicles to replace existing vehicles with a 10 mpg or less rating, resulting in lower fuel costs.
- Purchasing energy star and EPEAT products is not only environmentally sound, energy savings but also results in lower cost to location.
- Procurement contracts written to incorporate EO 13423 concepts such as purchase of biobased products, energy conservation and electronic stewardship.
- Replacement of 3 inefficient boilers with 96% energy efficient boilers and placing time controls on boilers have saved energy.

Location Coord.
RL ASRU



Date: 12/15/09

RL PMRU



Date: 12/15/09

NPA Appropriate Facilities

N=16

No shading indicates plan for that unit

Shading indicates units grouped within a single plan

| | | |
|---|--------------|----|
| Office of the Area Director | Fort Collins | CO |
| Great Plains Systems Research | Fort Collins | CO |
| Water Management Research | Fort Collins | CO |
| Soil Plant Nutrient Research | Fort Collins | CO |
| Crops Research Lab | Fort Collins | CO |
| National Center for Genetic Resources Preservation | Fort Collins | CO |
| Central Great Plains Research Station | Akron | CO |
| Northern Grain Insects Research Laboratory | Brookings | SD |
| High Plains Grasslands Research Station | Cheyenne | WY |
| US Meat Animal Research Center | Clay Center | NE |
| Northern Crop Science Laboratory | Fargo | ND |
| Biosciences Research Laboratory | Fargo | ND |
| Arthropod-Borne Animal Diseases Research Laboratory | Laramie | WY |
| Grand Forks Human Nutrition Research Center | Grand Forks | ND |
| Wheat, Sorghum & Forage Research (Keim Hall) | Lincoln | NE |
| Soil & Water Conservation Research (Keim Hall) | Lincoln | NE |
| Midwest Livestock Insects Research | Lincoln | NE |
| Administrative Office | Logan | UT |
| Forage & Range Research | Logan | UT |
| Pollinating Insect Biology, Management Systematics Research | Logan | UT |
| Poisonous Plant Research | Logan | UT |
| Northern Great Plains Research Laboratory | Mandan | ND |
| Grain Marketing & Production Research Center | Manhattan | KS |
| Fort Keogh Livestock and Range Research Laboratory | Miles City | MT |
| Northern Plains Agricultural Research Laboratory | Sidney | MT |

List of Potential Location Research Program and Facility Activities, Aspects and Their Impacts on the Environment.

Summary of NPARL Activities Addressed in this Enclosure:

- Laboratory Research Utilizing Hazardous Chemicals
- Laboratory Research Utilizing Radioactive Materials
- Laboratory Research Utilizing Biological Materials
- Research and Facility Maintenance Involving Use of Agricultural Pesticides
- Facility Construction Projects (New)
- Facility Construction Projects (Renovation)
- Use of Computer and Electronic Equipment
- Grounds Maintenance, Lawn and Ornamental Care
- Production and Maintenance of Drinking Water Supply
- Use of Water for Research Purposes (Aquatic Research, Irrigation)
- Temperature Control Inside Location Buildings
- Government Vehicle and Motorized Equipment Usage
- Wastewater Discharge from Location Activities
- Facility Maintenance Operations

Activity: Laboratory Research Utilizing Hazardous Chemicals

| Aspect | Impacts |
|--------------------------------|--|
| Purchasing Hazardous Chemicals | <p data-bbox="651 281 1328 315">Depletion of natural resources in the following ways:</p> <ul data-bbox="745 354 1451 495" style="list-style-type: none"><li data-bbox="745 354 1406 388">(a) Energy utilized in chemical manufacturing; and,<li data-bbox="745 390 1451 495">(b) Energy requirements for chemical storage (e.g., use of electricity for low-temperature refrigeration or ventilation). <p data-bbox="651 537 1395 571">Generation of hazardous waste by the following activities:</p> <ul data-bbox="745 611 1451 856" style="list-style-type: none"><li data-bbox="745 611 1369 680">(a) Duplicate purchasing of hazardous chemicals already on location inventory;<li data-bbox="745 682 1414 751">(b) Large-scale purchasing of unusable quantities of chemical; and,<li data-bbox="745 753 1451 856">(c) Chemical is not used, resulting in chemical entering hazardous waste stream due to expired use date. |
| Use of Hazardous Chemicals | <p data-bbox="651 905 1133 938">Contamination of land, water, and air.</p> <p data-bbox="651 978 1328 1012">Depletion of natural resources in the following ways:</p> <ul data-bbox="745 1052 1451 1339" style="list-style-type: none"><li data-bbox="745 1052 1451 1157">(a) Energy utilized in laboratory manipulations (e.g., use of electricity for electrophoresis, centrifugation, fumehood operation, etc.);<li data-bbox="745 1159 1338 1192">(b) Use of water, plastic ware, and paper; and,<li data-bbox="745 1194 1386 1339">(c) Increased chemical consumption due to use of macro chemical methodologies rather than employing use of newer microchemistry techniques. <p data-bbox="651 1379 1133 1413">Contamination of land, water, and air.</p> <p data-bbox="651 1453 1414 1522">Generation of chemical release, spills and hazardous wastes and the cost for disposal.</p> <p data-bbox="651 1562 1411 1631">NPARL policy: Dispose of hazardous waste properly following all current local, state and federal regulations.</p> |

Activity: Laboratory Research Utilizing Radioactive Materials

| Aspect | Impacts |
|--|--|
| Use of Radioactive Materials - ECD and 3 Neutron Scatter Soil Water Gauges, and CPN MC-3 Portaprobe (CS-137, AM-241) | Depletion of natural resources. None Contamination of facilities, land, water, and air. None Radioactive material releases. |
| | NPARL POLICY: All neutron scatter soil water probes are under the control of Associate User at all times or double locked in a secure location. ECD is in secured area. |

Activity: Laboratory Research Utilizing Biological Agents

| Aspect | Impacts |
|--|---|
| Research involving Biological Control Agents | Release resulting in contamination of plants, soil and land. Depletion of natural resources. |
| | NPARL has policy to autoclave all biological control agents not yet approved for release prior to disposal in local trash. Positive. |

Activity: Research and Facility Maintenance Involving the Use of Agricultural Pesticides

| Aspect | Impacts |
|---|--|
| Application & Disposal of Agricultural Pesticides | <p>Pesticide rinsate generation (container and spray equipment cleaning) and spills.</p> <p>Contamination of surrounding land, surface or ground water, and air (pesticide drift).</p> <p>Pesticide toxicity to wildlife.</p> <p>Generation of hazardous and universal waste (unused pesticide products) and cost to facility for waste disposal.</p> <p>Participate in Montana Pesticide Waste Disposal Program. With this program, users properly dispose of any pesticide that is outdated, unaware of name, are unwanted or unused at lower cost than commercial hazardous waste cost. Policy is that pesticides are only purchased during the year they are to be used in the amount to be used and at the time they are to be used to minimize left over chemical and reduce the need for storage.</p> <p>NPARL has policy that pesticides older than 5 years need to be disposed of through the Montana pesticide waste program. POSITIVE.</p> |

Activity: Facility Construction Projects (New)

| Aspect | Impacts |
|--------------------------------|---|
| Construction of New Facilities | <p>Depletion of natural resources (construction materials, fossil fuels). NEGATIVE</p> <p>Land and waterway contamination (run-off from construction sites). NEGATIVE</p> <p>NPARL promotes the use of green building products (lights, building materials, cleaning products, etc.) and recycles as much as possible.</p> |

Activity: Facility Construction Projects (Renovation)

| Aspect | Impacts |
|-----------------------------------|--|
| Renovation of Existing Facilities | Generation of hazardous waste (PCB containing materials, asbestos containing materials, mercury containing materials). NPARL promotes recycling or PROPER disposal of wastes. POSITIVE. Generation of solid waste. NEGATIVE Depletion of natural resources. NEGATIVE NPARL promotes using green building products and recycling to the extent possible. |

Activity: Use of Computer and Electronic Equipment

| Aspect | Impacts |
|---|---|
| Purchase, Operation, and Disposal of Electronic Equipment | Depletion of natural resources. NEGATIVE. NPARL policy: Purchasing energy star/EPEAT Silver Rated electronics a Positive. Generation of recyclable waste (electronics waste, lead acid batteries, toner cartridges, paper). NPARL policy: Recycle all electronic equipment. POSITIVE. |

Activity: Grounds Maintenance, Lawn and Ornamental Care

| Aspect | Impacts |
|---------------------|---|
| Mowing and Planting | Depletion of natural resources (pesticide, fertilizer, and water use). Use of these resources are at minimal and no waste and sprinklers on timers. POSITIVE Depletion of natural resources (fossil fuels for equipment operation). NEGATIVE |

Activity: Use of Water for Research Purposes (Aquatic Research, Irrigation)

| Aspect | Impacts |
|---|--|
| Production and High Volume Usage of Water for Irrigation and Water Management Research Purposes | Depletion of natural resources (surface or groundwater usage requirement). NEGATIVE Depletion of natural resources (use of electricity and fossil fuels for pumping). NEGATIVE Contamination of land and water (nutrient run-off). NEGATIVE NPARL research is designed to maximize efficiency of applications of water and agrochemicals to closely match plant needs and minimize any negative environmental impacts, which is supported by detailed monitoring programs. |

Activity: Temperature Control Inside Location Buildings

| Aspect | |
|---|--|
| Operation and Maintenance of Air Conditioning Systems | Ozone depletion (release of refrigerant containing ozone depleting substances). Reuse of old refrigerant (recycle) or replace with EPA approved refrigerant. POSITIVE |
| | Depletion of natural resources (fossil fuel). NEGATIVE |
| | NPARL policy is to set HVAC system temperatures at 78 degrees in summer and 68 degrees in winter. |

Activity: Government Vehicle and Motorized Equipment Usage

| Aspect | Impact |
|--------------------------|--|
| Motor Vehicle Activities | Generation of used oil, oil contaminated rags, used antifreeze, tires, batteries. |
| | NPARL policy recycling of used oil, batteries, tires, etc. |
| | Air emissions. |
| | Depletion of natural resources (fossil fuel, lubricants, tires). NEGATIVE |
| | 2009 Replaced 5 vehicles with poor fuel efficiencies with new Ford Escape Hybrids which are considerably more fuel efficient. POSITIVE. |

Activity: Wastewater Discharges from Location Activities

| Aspect | Impact |
|--|--|
| Laboratory Sink and Building Floor Drain Discharge into the Sanitary Sewer | Potential impacts at treatment plant. NPARL policy: No Solvents, flammables, explosives or heavy metals are allowed to be disposed of in local sewer. All acids and bases will be neutralized prior to sink disposal. POSITIVE |

Activity: Facility Maintenance Operations

Aspect Impact

Generation of Waste
from the Facility
Maintenance Activities

Generation of universal waste (spent fluorescent lamps,
PCB containing lamp ballasts, spent solvents, paints).
NPARL recycles all universal waste. Positive.

Generation of asbestos-containing waste (floor tiles only.)
NEGATIVE.

**As floor tiles are replaced they will be disposed of
properly and replaced with green building products to
the extent possible.**

Generation of universal waste (used oils, mercury-
Containing equipment).
NPARL policy: Reuse OR Recycle. POSITIVE.

Nine Steps to Environmental Compliance

1. **Find out what you do and have.** This includes:

- *Looking around the property* for obvious potentially hazardous conditions or regulated units, such as underground storage tanks, hazardous waste generation, oil spills, incinerators, fumehoods, archaeological sites, wetlands, etc.
- *Identifying existing and planned buildings* including support facilities (e.g., a historical building, a planned Biolevel 4 laboratory, paint shop, welding shop, electrical substation, pesticide washdown area, dishwashing).
- *Identifying the operations* carried out or planned (e.g., Biolevel 4 research, pesticide application, etc.).

2. **Find out what you do or have that is or may be regulated.** This could include, but is not limited to:

- Construction projects
- Research projects
- Sewage disposal
- Solid waste disposal (e.g., landfills)
- Surface impoundments
- Septic tanks/injection wells
- Hazardous waste
- Infectious/medical waste
- Radiological mixed waste
- Waste oil
- Underground storage tanks
- Above ground storage tanks
- Air pollutant emissions
- Incinerators
- Fuel burning equipment
- Irrigation water withdrawals
- Drinking water supply
- Wastewater discharges
- Stormwater discharges
- Hazardous substances
- Asbestos use or removal
- Polychlorinated biphenyls
- Pesticide use
- Land use
- Historical/archaeological sites
- Spills and other releases
- Wetlands
- Endangered species/critical habitat

3. **Find out what and whose rules may or do apply.** These may include:
 - Federal (USDA, EPA, Fish and Wildlife Service, Army Corp of Engineers, DOT, FAA, GSA, DOE, OMB, etc.)
 - State
 - Local (County)
 - Regional or intrastate
 - International

4. **Find out the what, when, and how of a regulatory/compliance requirement.** Review the regulations and compare them to the actual facility/operation to determine:
 - if a permit is required;
 - if records/periodic reports are required;
 - if an external review or approval is required before an operation is put on line;
 - if public hearings are required;
 - what procedures have to be followed; and,
 - when actions (i.e., reporting, recording, reviewing, etc.) are required to happen.

5. **Define who will be responsible for doing what, when and how.** This step includes:
 - Assigning responsibilities.
 - Developing a detailed plan of action with milestones, statement of work, cost estimate, etc.
 - Giving/getting authority, approvals, any needed permits, and funding for the needed project.
 - Identifying/committing required resources in the applicable timeframes.

6. **Do it!!** This includes executing the plan of action and other items in Step 5.

7. **Check for rule changes now and again.** This step is critical because:
 - something previously unregulated may come under regulation; and,
 - requirements may change.

8. **Keep doing it!** There is no such thing as "laurels" when it comes to environmental compliance. Credibility, however, is a useful, gainable item.

9. **Document the other 8 steps.** Being able to demonstrate that environmental requirements were identified and met is often just as important as actually meeting them.

Agricultural Research Service
Environmental Management System

Declaration of Conformance Protocol

Purpose: This document establishes the protocol for Environmental Management System (EMS) Declaration of Conformance within the Agricultural Research Service (ARS).

Background: Executive Order (E.O.) 13423, “Strengthening Federal Environmental, Energy, and Transportation Management,” which supersedes E.O. 13148, requires “appropriate facilities,” to develop and implement an EMS by December 2008. ARS Headquarters, Area Offices and Locations have been designated “appropriate facilities” and are required to have an EMS in place.

An important component of a successful EMS is declaration of conformance, which is a public statement that a facility conforms to nationally accepted standards. Declaring conformance of an EMS can help assure stakeholders, the general public, and surrounding communities, of our commitment to sound environmental management. Additionally, many States have recognition programs that provide increased regulatory flexibility for facilities with an EMS.

Policy: It is ARS policy that each facility declares that their EMS conforms to the International Standards Organization (ISO) 14001 standard. Facilities in non-conformance will develop an action plan and correct the deficiency(s) in a timely manner.

Roles and Responsibilities: EMS roles and responsibilities are in ARS Manual 230.0M, “Safety, Health, and Environmental Management Program.” Additional EMS guidance can be found in the “ARS EMS Implementation Guide”. Both documents are located at the ARS Administrative and Financial Management webpage at <http://www.afm.ars.usda.gov/>.

ARS Standards: The Agency has developed the Declaration of Conformance Protocol and attached Checklist to assist Locations in conforming to the ISO 14001 standard.

To utilize ARS’ Declaration of Conformance Checklist, Auditor(s) will have received, at a minimum, basic EMS training. Auditors should respond “yes”, “no” or indicate “not applicable” under the Comments column. Auditors should provide the source(s) of information used for answering each question. If the facility answers “no” to a question, milestones for correcting the deficiency should be developed in the “Corrective Actions with Milestones” sections provided. Corrective actions should be completed no later than July 1st of each year following the annual EMS declaration of conformance. The EMS Declaration of Management Review form at the end of the checklist should then be completed, summarizing the findings of the EMS audit. The Senior Management Official at the facility (e.g., Research Leader, Center Director, etc.) will review the checklist and sign the EMS Declaration of Management Review form.

Other Standards: Facilities desiring to declare conformance using other methods are acceptable as long as the requirements are at least as stringent as ISO standards.

Reporting: Annually, each facility will report on the EMS declaration of conformance activities that have taken place during the past calendar year. Locations will provide a copy of the ARS EMS Declaration of Management Review to the Area Office. Areas will consolidate the information into a summary report for the Facilities Division, Safety, Health and Environmental Management Branch (SHEMB). SHEMB will consolidate the Area information into the overall Agency report for the Department. Additionally, each Area will provide a follow-up report to FD, SHEMB, by July 30th of each year indicating the status of corrective actions at each of its facilities.

Evaluation: SHEMB and Area Offices will utilize the information to develop a plan for providing assistance, conducting higher level audits, and enacting system improvements.

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 1. Maintaining a Policy of Commitment to Environmental Excellence

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|--|-----|----|--------------------------|-----------|----------------------|---|
| | | | Document | Interview | Personal Observation | |
| 1.1 Has the Location developed an EMS policy statement specific to its mission and environmental activities? | JC | | JC | | | EMS Coordinators initials represent the EMS committee's answers. EMS committee reviews all EMS documents and audit checklist annually. |
| 1.1.1 Does the policy statement contain, at a minimum, a commitment to environmental compliance, pollution prevention and conservation practices, and continual improvement? | JC | | JC | | | |
| 1.2 Has the policy statement been signed by the current Senior Management Official at the Location? | JC | | JC | | | |
| 1.3 Is the policy statement reviewed annually and updated if necessary? | JC | | JC | | | |
| 1.4 Have efforts been made to communicate the policy statement to employees and contractors at the Location? | JC | | JC | | | |
| 1.5 Is the policy statement available to the public (e.g., by posting on a bulletin board in a publicly accessible location or posted to the Location web page)? | JC | | JC | | | Policy Statement is at the entrance of South building, on employee boards and on location Safety Website. |

Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 2. Considering environmental impacts when making policy, planning, purchasing, and operating decisions.

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|--|-----|----|--------------------------|-----------|----------------------|----------|
| | | | Document | Interview | Personal Observation | |
| 2.1 Has the facility established a written procedure to identify its significant environmental aspects and impacts? | JC | | JC | | | |
| 2.2 Has the facility identified and/or reevaluated its significant environmental aspects and impacts this calendar year? | JC | | JC | | | |

Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 3. Identifying and Complying with Pertinent Requirements in Federal, State, and Local Laws and Regulations; Permits; Department of Agriculture and ARS Policies and Procedures; and Industry Codes That We Must Adhere To

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|--|-----|----|--------------------------|-----------|----------------------|---|
| | | | Document | Interview | Personal Observation | |
| 3.1 Does the facility have a written procedure to identify and access applicable regulatory requirements, policies, and standards? | JC | | JC | | | |
| 3.2 Are applicable legal and other requirements (e.g., Departmental guidance, ARS P&Ps, FAR, and Executive Orders) taken into account as part of the implementation and maintenance of the facility's EMS? | JC | | JC | | | NPARL has updated purchasing program to follow legal requirements including electronic purchases to meet EPEAT silver standards to which is above the FAR requirement of Bronze. |

Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 4. Developing Annual Goals, Objectives, and Targets to Advance Our Program Performance in Terms of Both Regulated and Unregulated Impacts

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|--|-----|----|--------------------------|-----------|----------------------|---|
| | | | Document | Interview | Personal Observation | |
| 4.1 Has the facility developed measurable annual goals and objectives? | JC | | JC | | | |
| 4.1.1 Are the goals and objectives documented and based in part on: <ul style="list-style-type: none"> • Significant environmental impacts associated with facility and research-related operations; • Deficiencies noted by employees discovered during day-to-day monitoring activities; • Regulatory issues and trends discovered during internal and external inspections, reviews, or audits; • Pollution prevention and conservation initiatives; and/or, • Agency-wide emphasis programs, including the new sustainable practices goals in Section 2 of Executive Order 13423. | JC | | JC | | | Examples: Watering of lawn is performed at night to prevent excessive evaporation, lights in hallways are off, fume hood sashes shut when not in use, automated light switches, HVAC goes into unoccupied mode after normal working hours, use less toxic materials in lab and maintenance, recycle batteries, electronics, cans, paper, etc.. Purchasing bio products and flexi fuel vehicles. Had Energy Audit performed by MDU full report not received but the auditor implied NPARR was energy efficient. |
| 4.1.2 Have goals and objectives been approved and endorsed by the Senior Management Official at the facility? | JC | | JC | | | |
| 4.2 Have the goals and objectives been prioritized based on guidance in the ARS EMS Implementation Guide or some other prioritization method the facility has developed? | JC | | JC | | | |
| 4.3 Have responsibilities for goals and objectives been assigned? | JC | | JC | | | EMS committee and the EMS coordinator documents the goals. |
| 4.4 Have milestones for completion been established? | JC | | JC | | | Examples: Refrigerants will be reclaimed and recycled from non-working or obsolete refrigeration units. The reclaimed refrigerant will then be reused in existing units requiring the same refrigerants. Ozone-depleting chemicals such as R-11 or R-12 (Chlorofluorocarbon) will be replaced with environmentally acceptable refrigerants such as R-22, R-123 and R-134A (Hydrochlorofluorocarbon). EWASTE Program expanded to purchasing of electronics. |

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 4. Developing Annual Goals, Objectives, and Targets to Advance Our Program Performance in Terms of Both Regulated and Unregulated Impacts

| | | | | | | |
|--|----|--|----|--|--|---|
| 4.5 Is progress towards achieving milestones reviewed periodically and documented? | JC | | JC | | | Example: Ewaste report is written annually for community event to which is given to Montana DEQ and posted on location safety website. |
|--|----|--|----|--|--|---|

Corrective Action with Milestones. For each question marked “No” above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 5. Requesting the Necessary Resources to Successfully Carry Out Our Goals, Objectives, and Targets

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|---|-----|----|--------------------------|-----------|----------------------|---|
| | | | Document | Interview | Personal Observation | |
| 5.1 Has an individual been delegated authority and assigned overall responsibility for the EMS (i.e., EMS Coordinator) by the Senior Management Official at the facility? | JC | | JC | | | EMS Coordinator has been delegated to Safety Specialist since 2005. |
| 5.2 Has an EMS Committee been established by the Senior Management Official at the facility? | JC | | JC | | | NPARL Committee consist of EMS coordinator, Location Coordinator, RL, AO, IT Specialist, Info Specialist, Utility Repairer and Purchasing Agent. Since 2005. |
| 5.3 Has the establishment of the EMS Coordinator and EMS Committee been documented in writing via ARS Form 309 or through some other means? | JC | | JC | | | Since 2005. |
| 5.4 Has the EMS Committee met on a recurring basis (i.e., not less than three times per year)? | JC | | JC | | | EMS committee meets monthly. |
| 5.5 Has the Senior Management Official at the facility dedicated other resources (e.g., financial, materials, equipment) to support the facility's EMS efforts? | JC | | JC | | | |
| 5.6 As necessary, has the facility requested, through the Annual Resource Management Plan (ARMP) budget process, funding and resources needed to: prevent or correct human health issues; prevent or clean up environmental releases; correct compliance issues or violations; ensure continued compliance with new regulatory requirements; and, support pollution prevention, conservation initiatives, including resources for the new sustainable practices goals in Section 2 of EO 13423, and other projects that will enhance the overall environmental program? | JC | | JC | | | Projects are added to ARMPS annually by Location Coordinator, AO and RL. NPARL has no projects where funding is needed in ARMPS for any environmental or safety corrections. |
| 5.7 Where environmental projects have been identified in the ARMP High Priority Requirements List (HPRL), has the compliance status been identified in the project narrative, and for pollution prevention and conservation projects, has a cost payback period or the environmental benefits been included in the project narrative, to ensure they receive appropriate consideration. | JC | | JC | | | NPARL has not had a HPRL project. |

Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 6. Making Personnel Aware of Their Environmental Roles and Responsibilities, Providing Appropriate Training, and Holding Employees Accountable for Their Performance and Actions, Including Recognizing Them for Outstanding Performance

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|---|-----|----|--------------------------|-----------|----------------------|--|
| | | | Document | Interview | Personal Observation | |
| 6.1 Do the EMS Coordinator and other key personnel who have a critical role in carrying out the facility's EMS have environmental duties in their performance plan? "Key" personnel may include employees who must adhere to environmental regulations through licenses, training, etc. Examples could include: Incinerator Operators, Pesticide Applicators, Wastewater Treatment Operators, and Water System Operators. | JC | | JC | | | EMS coordinator |
| 6.2 Are the performance ratings of the EMS Coordinator and other key personnel who have a critical role in carrying out the facility's EMS based in part on their environmental duties? | JC | | JC | | | |
| 6.3 Is there a written procedure in place to ensure that employees receive EMS awareness training? | JC | | JC | | | In written EMS Program and EMS Policy Statement |
| 6.4 Have current and newly hired employees received EMS awareness training? | JC | | JC | | | EMS training is performed annually and new hires on their first day. |
| 6.5 Does the facility have a written procedure to identify environmental training requirements/needs for each position at the facility? | JC | | JC | | | All employees are trained on EMS and EMS committee members have taken 3 EMS courses on Aglearn. |
| 6.6 Are environmental training requirements/needs documented and tracked via Individual Development Plans (IDPs), ARS Form 48, or equivalent? | JC | | JC | | | Electronic format by EMS coordinator and AO has aplearn documentation. |
| 6.7 Has completed environmental training been documented? | JC | | JC | | | Electronic Format |

Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 7. Effectively communicating with employees, partners, stakeholders, customers, and the general public, our commitment to the environment and soliciting their input in developing and achieving our goals and objectives.

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|---|-----------|----|--------------------------|-----------|----------------------|---|
| | | | Document | Interview | Personal Observation | |
| 7.1 Does the facility have a procedure for communicating reportable events (e.g., fatalities, environmental spills, external regulatory inspections or NOVs, etc.) within the organization (i.e., to the Senior Manager at the facility and the next higher level of management)? | JC | | JC | | | Written procedures are in EMS program, COOP, CHP, etc. |
| 7.2 Does the Location have an Occupant Emergency Plan or COOP that establishes procedures to identify and respond to emergency situations? | JC | | JC | | | Have Occupant Emergency Plan and COOP. |
| 7.3 Does the facility periodically test and document such emergency procedures? | JC | | | | | |
| 7.4 Does the facility have a documented procedure on dealing with communications (e.g., local community concerns, FOIA requests, regulatory agency requests, etc.) from external parties? | JC | | | | | Location works closely with Ricland County Local Emergency Planning Committee. |

Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 8. Routinely Monitoring Our Environmental Operations and Conducting Periodic Inspections, Audits, and Reviews to Ascertain That We Meet Applicable Standards and to Evaluate Our Program Effectiveness

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|--|-----------|----|--------------------------|-----------|----------------------|--|
| | | | Document | Interview | Personal Observation | |
| 8.1 Does the facility maintain procedures for monitoring and measuring operations of significant environmental impacts (e.g., energy usage, water usage, toxic and hazardous materials usage, etc.)? | JC | | | | | AO monitors the energy use and water usage. All chemical purchase follow the Hazardous Material and controlled substance List 1 & 2 and will be purchased through Purchasing Agent. |
| 8.2 As required by Agency policy, has the facility conducted an annual compliance inspection (e.g., ARS Inspection/Abatement Program) that includes an environmental component in the current fiscal year? | JC | | JC | | | Safety Specialist/EMS Coordinator and CD Biological Safety Officer. |
| 8.3 Have written report(s) of compliance inspections / audit findings been provided to the Senior Management Official at the facility? | JC | | JC | | | Annually Safety Inspections are posted on Employee boards. |

Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 9. Correcting Identified Deficiencies in a Timely Manner and Taking Appropriate Steps to Prevent Their Recurrence

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|--|-----------|----|--------------------------|-----------|----------------------|---|
| | | | Document | Interview | Personal Observation | |
| 9.1 Does the facility have a written procedure for ensuring that deficiencies are corrected? | JC | | | | | No Deficiencies at this time |
| 9.2 Have deficiencies been corrected in a timely manner or has a corrective action plan been developed for long-term improvements? | JC | | | | | Corrective action plan is developed. |
| 9.3 Have corrective actions been documented? | JC | | | | | Corrective action will be documented but no deficiencies at this time. |
| 9.4 Do the findings identify the root cause of deficiencies and the procedures/actions needed to prevent recurrence? | JC | | | | | Findings would be placed into the Safety Health and Environmental Investigative Report form. |

Corrective Action with Milestones. For each question marked “No” above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Conformance Checklist v2008

SECTION 10. Clearly Documenting and Reporting the Progress and Achievements Related to This Policy

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|--|-----|----|--------------------------|-----------|----------------------|--|
| | | | Document | Interview | Personal Observation | |
| 10.1 Has measurable EMS performance information been identified, collected, and provided to allow the Senior Management Official to carry out an annual EMS review? | JC | | JC | | | |
| 10.2 Does the Senior Management Official at the facility annually evaluate the progress made on implementing the EMS? | JC | | JC | | | EMS committee with Senior Management discuss the progress of EMS projects at Monthly meetings. |
| 10.3 Did the Senior Management Official at the facility respond to recommendations for continual improvement and are the Senior managers aware of any external EMS communications, including complaints? | JC | | JC | | | |
| 10.4 Does the facility have a written record and document control system explaining where EMS documents will be legible, kept, maintained/updated, stored? | JC | | JC | | | EMS coordinator stores and maintains all EMS documents on local Public drive accessible to all employees and has on NPA EMS share point site. |

Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

ARS Environmental Management System Declaration of Management Review Form v2008

Facility Information.

Facility Name: USDA/ARS Northern Plains Agricultural Research Laboratory

City: Sidney State: MT Zip Code: 59270

Type of Audit. Please check only one:

- 1st party.** An internal evaluation conducted by the participants within the scope of the EMS under consideration (e.g., EMS Coordinator, EMS committee members, etc.)
- 2nd party.** An independent evaluation conducted by reviewers from outside the scope of the EMS under consideration (e.g., other Agency personnel, Contractors, Regulators, etc.) has determined the EMS is / is not in conformance.
- 3rd party.** An independent evaluation conducted by an American National Standards Institute – Registrar Accreditation Board. This formal process is conducted in conformance with ISO 14001 Standards (i.e., for facilities that elect to use this standard.) This results in the facility being fully ISO 14001 certified.
- A 2nd party audit has not yet been conducted; therefore, conformance cannot be declared.

Reviewer(s):

| Name (print): | Title: | Signature (optional): |
|-----------------------|------------------------|-----------------------|
| <u>Jackie Couture</u> | <u>EMS Coordinator</u> | <u></u> |
| <u></u> | <u></u> | <u></u> |
| <u></u> | <u></u> | <u></u> |
| <u></u> | <u></u> | <u></u> |

Corrective Actions. For each question answered "No" in the above checklist, please list the question number for the deficiency and the anticipated corrective action date (e.g., Q 6.1 - 05/01/06). Deficiencies should be corrected by no later than July 1st.

Attestation: As the Senior Management Official, I certify that I have reviewed the information that is being submitted and determined that it is complete, factual, and accurate.

Dr. Robert Evans Location Coordinator 
 Name (print): Dr. Robert Evans Title: Location Coordinator Signature:

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

The documents reviewed may be found at:

<https://arsnet.usda.gov/sites/NPA/NPASHEMS/EMS%20DELIVERABLES/Forms/AllIftems.aspx?RootFolder=%2fsites%2fNPA%2fNPASHEMS%2fEMS%20DELIVERABLES%2f2009%2fSIDNEY&View=%7b96DD7B46%2dE79D%2d4798%2dA3AE%2d2A6BE7E77968%7d>

| SECTION 1. Maintaining a Policy of Commitment to Environmental Excellence | | | | | | |
|---|-----|----|--------------------------|-----------|----------------------|--|
| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
| | | | Document | Interview | Personal Observation | |
| 1.1 Has the Location developed an EMS policy statement specific to its mission and environmental activities? ISO 4.2 | BK | | BK | | | |
| 1.1.1 Does the policy statement contain, at a minimum, a commitment to environmental compliance, pollution prevention and conservation practices, legal and other requirements, and continual improvement? ISO 4.2 | BK | | BK | | | |
| 1.2 Has the policy statement been signed by the current Senior Management Official at the Location? | BK | | BK | | | |
| 1.3 Is the policy statement reviewed annually and updated if necessary? | BK | | BK | | | |
| 1.4 Have efforts been made to communicate the policy statement to employees and individuals working on behalf of the Location? ISO 4.2 f | BK | | | | | New employee orientation |
| 1.5 Is the policy statement available to the public (e.g., by posting on a bulletin board in a publicly accessible location or posted to the Location web page)? ISO 4.2 g | BK | | | | | Policy is posted on the public facing website, bulletin boards Brochures are available at the Receptionist Desk |
| <p>Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).</p> <p>NONE</p> | | | | | | |

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

| SECTION 2. Considering environmental impacts when making policy, planning, purchasing, and operating decisions. | | | | | | |
|---|------------|-----------|---------------------------------|------------------|-----------------------------|---|
| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
| | | | Document | Interview | Personal Observation | |
| 2.1 Has the facility established a written procedure to identify its significant environmental aspects and impacts? ISO 4.3.1 | BK | | BK | | | |
| 2.2 Has the facility identified and/or re-evaluated its significant environmental aspects and impacts this calendar year? | BK | | | BK | | This is done monthly at Lab Management meetings |
| <p><u>Corrective Action with Milestones.</u> For each question marked “No” above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).</p> <p>None</p> | | | | | | |

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

| SECTION 3. Identifying and Complying with Pertinent Requirements in Federal, State, and Local Laws and Regulations; Permits; Department of Agriculture and ARS Policies and Procedures; and Industry Codes That We Must Adhere To | | | | | | |
|---|------------|-----------|---------------------------------|------------------|-----------------------------|--|
| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
| | | | Document | Interview | Personal Observation | |
| 3.1 Does the facility have a written procedure to identify and access applicable regulatory requirements, policies, and standards? ISO 4.3.2, 4.3.2 a | BK | | BK | | | Nine Steps to Environmental Compliance |
| 3.2 Are applicable legal and other requirements (e.g., Departmental guidance, ARS P&Ps, FAR, and Executive Orders) taken into account as part of the implementation and maintenance of the facility's EMS? ISO 4.3.2 b | BK | | BK | | | |
| <p><u>Corrective Action with Milestones.</u> For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).</p> <p>None</p> | | | | | | |

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

| SECTION 4. Developing Annual Goals, Objectives, and Targets to Advance Our Program Performance in Terms of Both Regulated and Unregulated Impacts | | | | | | |
|---|------------|-----------|---------------------------------|------------------|-----------------------------|--|
| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
| | | | Document | Interview | Personal Observation | |
| 4.1 Has the facility developed measurable annual objectives and targets ? ISO 4.3.3 | BK | | BK | | | E-waste is weighed, and the location knows exactly how much is disposed in its annual activity |
| 4.1.1 Are the objectives and targets documented and based in part on: <ul style="list-style-type: none"> • Significant environmental impacts associated with facility and research-related operations; • Deficiencies noted by employees discovered during day-to-day monitoring activities; • Regulatory issues and trends discovered during internal and external inspections, reviews, or audits; • Pollution prevention and conservation initiatives; and/or, • Agency-wide emphasis programs, including the new sustainable practices goals in Section 2 of Executive Order 13423. | BK | | BK | | | |
| 4.1.2 Have objectives and targets been approved and endorsed by the Senior Management Official at the facility? | BK | | BK | | | |
| 4.2 Have the objectives and targets been prioritized based on guidance in the ARS EMS Implementation Guide or some other prioritization method the facility has developed? | BK | | BK | | | |
| 4.3 Have responsibilities for objectives and targets been assigned? ISO 4.3.3 | BK | | BK | | | |
| 4.4 Have milestones for completion been established? ISO 4.3.3 | BK | | BK | | | |
| 4.5 Is progress towards achieving milestones reviewed periodically and documented? | BK | | BK | | | |
| <p>Corrective Action with Milestones. For each question marked “No” above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).</p> <p>None</p> | | | | | | |

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

| SECTION 5. Requesting the Necessary Resources to Successfully Carry Out Our Goals, Objectives, and Targets | | | | | | |
|--|------------|-----------|---------------------------------|------------------|-----------------------------|--|
| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
| | | | Document | Interview | Personal Observation | |
| 5.1 Has an individual been delegated authority and assigned overall responsibility for the EMS (i.e., EMS Coordinator) by the Senior Management Official at the facility? ISO 4.4.1 | BK | | BK | | | Yes, Jackie Couture who is the full-time safety and occupational Health Specialist |
| 5.2 Has an EMS Committee been established by the Senior Management Official at the facility? | BK | | | | BK | |
| 5.3 Has the establishment of the EMS Coordinator and EMS Committee been documented in writing via ARS Form 309 or through some other means? | BK | | BK | | | |
| 5.4 Has the EMS Committee met on a recurring basis (i.e., not less than three times per year)? | BK | | BK | | | Monthly Lab Management Meeting |
| 5.5 Has the Senior Management Official at the facility dedicated other resources (e.g., financial, materials, equipment) to support the facility's EMS efforts? ISO 4.4.1 | BK | | BK | | | Dollar amount spent on environmental issues are in the current plan |
| 5.6 As necessary, has the facility requested, through the Annual Resource Management Plan (ARMP) budget process, funding resources needed to: prevent or correct human health issues; prevent or clean up environmental releases; correct compliance issues or violations, ensue continued compliance with new regulatory requirements; and, support pollution prevention, conservation initiatives, including resources for the new sustainable practices goals in Section 2 of EO 13423, and other projects that will enhance the overall environmental program? | BK | | BK | | | Projects must be proposed to get onto Capital Project and Repair Plan, and ultimately the High Priority Requirements List. |
| 5.7 Where environmental projects have been identified in the ARMP High Priority Requirements List (HPRL), has the compliance status been identified in the project narrative , and for pollution prevention and conservation projects, has a cost payback period or the environmental benefits been included in the project narrative, to ensure they receive appropriate consideration | BK | | BK | | | Biocontainment Heat recovery system approved. Energy efficient vehicles provided under ARRA. |

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

SECTION 5. Requesting the Necessary Resources to Successfully Carry Out Our Goals, Objectives, and Targets

Corrective Action with Milestones. For each question marked “No” above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

None

**EMS Audit Checklist v. 2008
Declaration of Conformance**

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

| SECTION 6. Making Personnel Aware of Their Environmental Roles and Responsibilities, Providing Appropriate Training, and Holding Employees Accountable for Their Performance and Actions, Including Recognizing Them for Outstanding Performance | | | | | | |
|---|------------|-----------|---------------------------------|------------------|-----------------------------|--|
| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
| | | | Document | Interview | Personal Observation | |
| 6.1 Are the EMS duties of the EMS Coordinator or others with a critical role in the facility's EMS (e.g., Incinerator Operators, Pesticide Applicators, Wastewater Treatment Operators, and Water System Operators) documented and communicated to employees? | BK | | BK | | | |
| 6.2 Are the performance ratings of the EMS Coordinator and other key personnel who have a critical role in carrying out the facility's EMS based in part on their environmental duties? | BK | | BK | | | |
| 6.3 Is there a written procedure in place to ensure that employees receive EMS awareness training? ISO 4.4.2 | BK | | BK | | | |
| 6.4 Have current and newly hired employees received EMS awareness training? ISO 4.4.2 | BK | | BK | | | |
| 6.5 Does the facility have a written procedure to identify environmental training requirements/needs for each position at the facility? | BK | | BK | | | Barb Flammond is the AgLearn Coordinator, and as such, enters the environmental training into that database. |
| 6.6 Are environmental training requirements/needs documented and tracked via Individual Development Plans (IDPs), ARS Form 48, or equivalent? | BK | | | BK | | Not necessarily on IDPs |
| 6.7 Has completed environmental training been documented? ISO 4.4.2 | BK | | BK | | | See item 6.6 Comment |

**EMS Audit Checklist v. 2008
Declaration of Conformance**

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

SECTION 6. Making Personnel Aware of Their Environmental Roles and Responsibilities, Providing Appropriate Training, and Holding Employees Accountable for Their Performance and Actions, Including Recognizing Them for Outstanding Performance

Corrective Action with Milestones. For each question marked "No" above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

Excel spreadsheet

Draft EMS Training Plan

New Employees

1. Awareness Training (online)
2. Summary brochure in employee safety folders

Annual Re-training of Employees

1. Online
2. In conjunction with earth day

EMS Team Members

1. AgLearn Training
2. EPA online training
3. What is an EMS?
4. Read the current EMS plan
5. Read the Executive Order
6. EMS Annual Reports (scorecard and self declaration)
7. EMS Audits
8. Participation in monthly EMS telecon when possible (EMS Coordinator; optional for other members)

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

SECTION 7. Effectively communicating with employees, partners, stakeholders, customers, and the general public, our commitment to the environment and soliciting their input in developing and achieving our objectives and targets.

| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
|---|-----|----|--------------------------|-----------|----------------------|---|
| | | | Document | Interview | Personal Observation | |
| 7.1 Does the facility have a procedure for communicating reportable events (e.g., fatalities, environmental spills, external regulatory inspections or NOVs, etc.) within the organization (i.e., to the Senior Manager at the facility and the next higher level of management)? | BK | | BK | | | SOPs are available for the various reporting requirements, Inspections from outside organizations (eg EPA, OSHA) On shared drive |
| 7.2 Does the Location have a specific plan (Pesticide Spill Preparedness, Spill Prevention Control and Countermeasures) that establishes procedures to identify and respond to emergency EMS situations? | BK | | BK | | | |
| 7.3 Does the facility periodically test and document such emergency procedures? | BK | | | BK | | |
| 7.4 Does the facility have a documented procedure on dealing with communications (e.g., local community concerns, FOIA requests, regulatory agency requests, etc.) from internal and external parties? ISO 4.4.3 | BK | | BK | | | The ARS Manual 230.0 (12/05/2005) Section 9. Public Relations/Freedom of Information Act (FOIA) Requests and Record Retention covers this. Location also has a procedure. |

Corrective Action with Milestones. For each question marked “No” above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).

None

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

| SECTION 8. Routinely Monitoring Our Environmental Operations and Conducting Periodic Inspections, Audits, and Reviews to Ascertain That We Meet Applicable Standards and to Evaluate Our Program Effectiveness | | | | | | |
|--|------------|-----------|---------------------------------|------------------|-----------------------------|-----------------|
| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
| | | | Document | Interview | Personal Observation | |
| 8.1 Does the facility maintain procedures for monitoring and measuring operations of significant environmental impacts (e.g., energy usage, water usage, toxic and hazardous materials usage, etc.)? ISO 4.5.1 | BK | | | BK | | |
| 8.2 As required by Agency policy, has the facility conducted an annual compliance inspection (e.g., ARS Inspection/Abatement Program) that includes an environmental component in the current fiscal year? ISO 4.5.2 | BK | | | BK | | |
| 8.3 Have written report(s) of compliance inspections / audit findings been provided to the Senior Management Official at the facility? ISO 4.6 | BK | | BK | | | |
| <p><u>Corrective Action with Milestones.</u> For each question marked “No” above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).</p> | | | | | | |

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

| SECTION 9. Correcting Identified Deficiencies in a Timely Manner and Taking Appropriate Steps to Prevent Their Recurrence | | | | | | |
|---|------------|-----------|---------------------------------|------------------|-----------------------------|--------------------------|
| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
| | | | Document | Interview | Personal Observation | |
| 9.1 Does the facility have a written procedure for ensuring that deficiencies are corrected? ISO 4.5.3 a | BK | | | BK | | |
| 9.2 Have deficiencies been corrected in a timely manner or has a corrective action plan been developed for long-term improvements? ISO 4.5.3 | BK | | | BK | | |
| 9.3 Have corrective actions been documented? ISO 4.5.3 b | BK | | | BK | | |
| 9.4 Do the findings identify the root cause of deficiencies and the procedures/actions needed to prevent recurrence? ISO 4.5.3 b and c | BK | | BK | | | Incident/Accident Report |
| <p>Corrective Action with Milestones. For each question marked “No” above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).</p> | | | | | | |

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

| SECTION 10. Clearly Documenting and Reporting the Progress and Achievements Related to This Policy | | | | | | |
|---|------------|-----------|---------------------------------|------------------|-----------------------------|-----------------|
| QUESTION: | YES | NO | Source of Y/N Conclusion | | | Comments |
| | | | Document | Interview | Personal Observation | |
| 10.1 Has measurable EMS performance information been identified, collected, and provided to allow the Senior Management Official to carry out an annual EMS review? ISO 4.4.1 b | BK | | BK | | | |
| 10.2 Does the Senior Management Official at the facility annually evaluate the progress made on implementing the EMS? ISO 4.6 | BK | | BK | | | |
| 10.3 Did the Senior Management Official at the facility respond to recommendations for continual improvement /// and are the Senior managers aware of any external EMS communications, including complaints? ISO 4.6 b and h | BK | | BK | | | |
| 10.4 Does the facility have a written record and document control system explaining where EMS documents will be legible, kept, maintained/updated, and stored? ISO 4.4.5 e, but there are other sections of 4.4.5 that are not well addressed by Item 10.4 | BK | | BK | | | |
| <p>Corrective Action with Milestones. For each question marked “No” above, please reference the question number and provide a description of the corrective action(s) to be taken along with the anticipated completion date(s).</p> | | | | | | |

2nd Party Auditor: _____
Signature

10/20/2009
Date

EMS Audit Checklist v. 2008

Declaration of Conformance

Location Name: Northern Plains Agricultural Research Laboratory; Sidney, MT

| NPA Hazard Abatement Plan | | | |
|---|-------------------|----------------------------|--|
| FY __ thru __ | | | |
| Section A: Hazard Identification | | | |
| 1. Hazard ID #: | 2. City: | 3. State: | 4. MU Account Code: |
| 5. Building #: | 6. Building Name: | | |
| 7. Room #: | 8. Wall: N S E W | 9. Discovered by: | 10. Phone #: |
| 11. Hazard Category: | | | |
| 12. Hazard Description: | | | |
| A. Equipment Name: | | | |
| B. Serial #: | | | |
| 13. Regulatory Standard not complied with: | | | |
| 14. Hazard Level Determination: | | 15. ARMPS Deficiency Code: | |
| Section B: Interim Control of Hazard | | | |
| 1. Date that warning or caution to employees posted: __/__/__ | | | |
| 2. Other interim measures taken to lessen the hazard until final corrections can be made: | | | |
| Section C: Final Corrective Measures | | | |
| 1. Description of Final Corrective Measures: | | | |
| 2. Estimated Cost to Correct: | | | |
| | 3. Funding Source | 4. Amount | 5. Date Funded |
| | a. Location | | |
| | b. Area Director | | |
| | c. HPRL FY __ | | |
| | d. HPRL FY __ | | |
| | e. HPRL FY __ | | |
| | 6. Total | | |
| 7. Status: | | | |
| | | | 8. Estimated Completion Date: __/__/__ |
| Section D. Other Comments/Rationale () see reverse | | | |
| 1. | | | |
| 2. | | | |

ARS Environmental Management System Declaration of Management Review Form v2008

Facility Information.

Facility Name: **Northern Plains Agricultural Research Laboratory**

City: **Sidney** State: **Montana** Zip Code: **59270**

Type of Audit. Please check only one:

1st party. An internal evaluation conducted by the participants within the scope of the EMS under consideration (e.g., EMS Coordinator, EMS committee members, etc.)

2nd party. An independent evaluation conducted by reviewers from outside the scope of the EMS under consideration (e.g., other Agency personnel, Contractors, Regulators, etc.) has determined the EMS is / ~~is not~~ in conformance.

3rd party. An independent evaluation conducted by an American National Standards Institute – Registrar Accreditation Board. This formal process is conducted in conformance with ISO 14001 Standards (i.e., for facilities that elect to use this standard.) This results in the facility being fully ISO 14001 certified.

A 2nd party audit has not yet been conducted; therefore, conformance cannot be declared.

Reviewer(s):

Name (print):

Title:

Signature (optional):

Bonnie M King

Area Safety & Health Manager

Corrective Actions. For each question answered “No” in the above checklist, please list the question number for the deficiency and the anticipated corrective action date (e.g., Q 6.1 - 05/01/06). Deficiencies should be corrected by no later than July 1st.

NONE

Attestation: As the Senior Management Official, I certify that I have reviewed the information that is being submitted and determined that it is complete, factual, and accurate.

Name (print):

Title:

Signature:

LOCATION ENVIRONMENTAL MANAGEMENT SYSTEM COMMITTEE

| | | |
|--|--|--|
| INSTRUCTIONS: 1. Post a copy in a prominent place for employee's information by October 15 of each year. 2. Send a copy to the Area Safety, Health and Environmental Office by October 1 of each year. 3. Provide updated copies as changes in appointments or membership occur. | DATE 10/01/2009 No. of permanent full-time employees at location 45 | LOCATION NAME & ADDRESS USDA/ARS/NPARL 1500 North Central Ave. Sidney, MT 59270 |
|--|--|--|

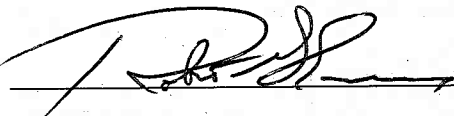
Committee Members/Representative

| NAME | PHONE | JOB SERIES AND TITLE | OFFICE ADDRESS |
|------------------------------------|--------------|--|---|
| EMS Coordinator - Jackie Couture * | 406-433-9422 | Safety Occupational Health Specialist GS-0018 | 1500 North Central Ave. Sidney, MT 59270 |
| Recorder – Barbara Flammond * | 406-433-9432 | Administrative Officer GS-0341 | Same as above |
| Robert Evans * | 406-433-9496 | RL ASRU/Location Coordinator GS-0890 | Same as above |
| John Gaskin* | 406-433-9486 | RL PMRU GS-0430 | Same as above |
| Kevin Dahl * | 406-433-9409 | IT Specialist GS-2210 | Same as above |
| Beth Redlin * | 406-433-9416 | Tech Info Specialist GS-1412 | Same as above |
| Eric Steinbeisser | 406-433-9421 | Utility System Repairer WG-4742 | Same as above |
| Kelly Roberts* | 406-433-9480 | Purchasing Agent | Same as above |
| (*) Continuing members | | | |

| | | |
|--|--|---|
| SUBMITTING OFFICIAL (Name, title, & mailing address) Robert Evans, Location Coordinator 1500 North Central Ave. Sidney, MT 59270 406-433-9496 | CONTACT (Name & title) Jackie Couture, EMS Coordinator PHONE: 406-433-9422 FTS: 406-433-9422 | COOPERATOR/UNIVERSITY SAFETY OFFICE SERVICING LOCATION (Name and title, if applicable) na |
|--|--|---|

| Year Environmental Goals | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------------------------------|--|---|--|--|---|
| | First Party (self) Audit Energy audit with MDU Implement Executive 13423 Place floor heating in New Greenhouses with new construction. Estimated cost: \$4,000.00 Remodel building #1 to include energy efficient windows and doors. Retrofit building #1 & old greenhouse with heating system with closed loop geothermal. Guess Cost \$50,000 Purchase Energy Star & EPEAT (silver or greater) products only. Pollution Prevention Procurement: Purchase environmentally preferable products. Dispose of Electronic and Pesticide wastes with community collection programs. Purchase only green tip fluorescent lights. Recycle paper/cans/oil/batteries to reduce solid waste Print on both sides of paper Practice Green Chemistry Use Bio Alternatives Replace 4 boilers in building #1 with 1 boiler that is energy efficient. | Second Party Audit Monitor Executive 13423 Pollution Prevention Replace Fume hoods in Lab 29, 14, & 3 with energy efficient models. Recycle paper/cans/oil/batteries to reduce solid waste disposal Dispose of Electronic and Pesticide wastes with community collection programs. Purchase Energy Star & EPEAT (silver or greater) products only. Print on both sides of paper Procurement: Purchase environmentally preferable products. Practice Green Chemistry Use Bio Alternatives Install hand dryers in the bathrooms. Add occupant sensors in labs to save energy costs by switching the HVAC and fume hood from occupied or unoccupied as needed. | Third Party Audit Monitor Executive 13423 Pollution prevention Retrofit buildings #3, 4 & 5 with closed loop geothermal heating systems. Guess Cost#50,000.00 Replace Fume hoods in Lab 29, 14, & 3 with energy efficient models. Recycle paper/cans/oil /batteries to reduce solid waste disposal Dispose of Electronic and Pesticide wastes with community collection programs. Purchase Energy Star & EPEAT (silver or greater) products only. Print on both sides of paper Procurement: Purchase environmentally preferable products. Practice Green Chemistry Remodel building #1 to properly remove asbestos tiles. Install hand dryers in the bathrooms | Audit Monitor Executive 13423 Replace Fume hoods in Lab 29, 14, & 3 with energy efficient models. Recycle paper/cans/oil /batteries to reduce solid waste disposal Dispose of Electronic and Pesticide wastes with community collection programs. Purchase Energy Star & EPEAT (silver or greater) products only Print on both sides of paper Procurement: Purchase environmentally preferable products. Practice Green Chemistry Use Bio Alternatives Remodel building #1 to properly remove asbestos tiles. Install hand dryers in the bathrooms | Audit Monitor Executive 13423 Retrofit building #18 with closed loop geothermal heating system. Guess Cost \$70,000.00 Recycle paper/cans/oil /batteries to reduce solid waste disposal Dispose of Electronic and Pesticide wastes with community collection programs. Purchase Energy Star & EPEAT (silver or greater) products only. Procurement: Purchase environmentally preferable products. Print on both sides of paper Practice Green Chemistry Use Bio Alternatives Remodel building #1 to properly remove asbestos tiles. |

Facilities Coordinator: _____



Date: _____

12/15/09

NPARL Positive Aspects of EMS

Past/Current practices: Worked to reduce wastes and increase efficiency for many years. NPARL started purchasing paper products and remanufactured toner cartridges since 1999. We have increased recycling and reuse of materials and reduced solid and hazardous wastes.

Future practices: Mandated purchasing environmental preferable products such as Energy Star, EPEAT and other FEMP. Promote use of less hazardous chemicals and reduce, reuse or recycle of waste through each employee's daily practices. Strive to incorporate the use of advanced technologies and practices for energy efficiency, water conservation, and use of solar and other renewable energy.

Past /Current Practices:

Recycle paper, magazines, and pop cans/tops

Power saving light switches

Green light bulbs are purchased and used for energy saving/recycled through company

Used oil is brought to local implements to dispose of properly or reused

Batteries are recycled (recharge) or returned (auto) when purchase of new battery

Use the less toxic chemicals for experiments when possible and amount needed only (waste reduction/prevention)

Pesticides, herbicide and insecticides are used in less toxic form and only as needed (waste reduction/prevention)

Biocontrol is main aspect for PMRU

Fumehood have energy saving devices in Building #18 & Rm #23

HVAC is kept at 69 degrees and has unoccupied mode to save energy when not in use

HVAC maintained changing filters either once a month or as recommend to save energy

Underground sprinklers are on timer

Coffee pots, equipment, etc are all on timers to save energy

Use of propylene glycol is used for coolant for less toxic effect to environment

All computers, copiers, etc are Energy Star products. This is purchasing requirement/regulation.

Paper products that are purchased contain recycled content.

Purchasing product with a high percentage of recycled content is encouraged.

All bio agricultural agents (plants, soil, etc)/lab supplies are autoclaved (environmental)

Computer products are recycled to meet MT regulations brought to landfill (no program)

Toner cartridges are sent back to distributor to be recycled/disposed of properly.

Flat Screen monitors we have 36. Energy efficient.

Energy Efficient motors are purchased when possible

Floor heating has been installed in new shop

New furnaces are 92% energy efficient.

All refrigerant equipment using R-12 is changed to a new environmentally friendly refrigerant (R-401A).

All florescent lighting is changed out to electronic ballasts and T-8 lamps energy saving and environmental friendly compare to past sources.

Only environmentally friendly boiler & HVAC chemicals are purchased.

Will replace CRT monitors with flat LCD screen monitors for energy savings, ergonomic and less impact on environment.

Have added energy-saving covers for all greenhouse roofs at NPARL.

NPARL Objectives and Targets for 2009

| Objective | Target | Date Accomplished |
|--|---|--|
| Develop and sign EMS Plan | Draft plan in 2005 and sign by October 2009 | |
| Emergency Preparedness Plan | Review, make changes and sign current plan (under Facility Self-Protection Plan) by July 2009. Any changes communicated to all staff | July 2009 |
| Chemical Hazard Communication Plan | Review, make changes to current plan by January 2009. Any changes communicated to all staff | January 2009 |
| Reduce hazardous waste generation from labs | Where applicable, revise laboratory methods to reduce and/or eliminate use of hazardous chemicals. Continue training employees on the safe use and disposal of hazardous chemicals. | Performed on a continuous basis & review at safety day |
| EMS training-EMS team | Ag Learn Courses | July 2008 |
| EMS training-NPARL employees | February 2009 | February 2009 |
| EMS Training-new employees | Training power point/brochure | Performed on first day |
| Reduce chemical, especially hazardous usage | Where applicable, revise laboratory methods to reduce and/or eliminate use of hazardous chemicals. | Performed on a continuous basis |
| Purchase "greener" janitorial chemicals | Where applicable use products safer for the environment and employees | Performed on a continuous basis |
| Florescent bulbs | Bulbs replaced by less mercury/lead "green tip" bulbs | Performed on a continuous basis |
| Replace traditional computer monitors with flat screens | Replace older monitors with flat screens. Replace as many monitors with flat screens as possible. | Most computer screens have been replaced with flat screens |
| New computer purchases | All new computers will be <i>Energy Star</i> ® rated /EPEAT and with flat screens. | Performed on a continuous basis |
| Recycling program | Continue to monitor, record and increase awareness and metrics. | Performed on a continuous basis |
| Recycling program | Continue recycling computers, used oil, florescent bulbs, batteries, cardboard, tin, aluminum, paper, etc. | Performed on a continuous basis |
| Improve solid waste management, optimize existing recycling program | Increase recycling diversion rate to 25% by November 2009 (relative to 2006). | |
| Conserve energy in buildings | Decrease kwh use by 10% by November 2009 (relative to 10 yr average). | |
| Energy conservation awareness | | |
| Paper consumption | Subscription sharing: distribution list for articles that go to multiple employees; use print preview before printing; double side printed copies; 30% recycled paper used for copying; print highlighted text, not whole document; fax or e mail from computers instead of hard copy; email as attachment & edit on screen; use folders and archives for storing mail; view magazines, articles, journal, etc. electronically if available; use CD-ROM, diskette or internet to distribute trainings & presentations | Performed on a continuous basis |
| Improve hazardous waste compliance | | |
| Improve Laboratory's environmental standing and image with the local community | Produce and disseminate EMS brochure and Policy; displayed at front entrance of the location . Location website displays location EMS program, brochure & policy. Also participate with community officials in hosting annual community wide e-waste recycling effort. | Performed on a annual basis |
| Pesticide reduction or alternatives | Use bio control where feasible including greenhouses. Apply integrated pest management (IPM) to reduce pesticide use and increase crop productivity. | Performed on a continuous basis |
| Pesticide waste, outdated pesticides and unused pesticides | Utilize MT pesticide disposal program for all outdated pesticides, unused pesticides and pesticide waste. All pesticides and chemicals from retired and retiring scientist/projects will be updated annually. | Performed on a continuous basis |

ENVIRONMENTAL IMPACT SIGNIFICANCE RATING (Utilizing USDA-ARS-NPA rating)

| ACTIVITY / ASPECT | | Condition | Severity | Distribution | Frequency | Regulated | Public Relations |
|-------------------|---|-----------|----------|--------------|-----------|-----------|------------------|
| Buildings | Electricity Consumption | 1 | 2 | 5 | 4 | 0 | 3 |
| | Water usage | 1 | 2 | 4 | 4 | 2 | 3 |
| | Noise | 1 | 2 | 1 | 4 | 2 | 2 |
| | Waste generation (soil, plant, chemical) | 1 | 2 | 4 | 4 | 2 | 3 |
| | Air exhaust | 1 | 2 | 5 | 4 | 2 | 3 |
| | Paper consumption | 1 | 2 | 5 | 4 | 0 | 3 |
| | Cleaning supplies | 2 | 2 | 3 | 4 | 0 | 2 |
| | | | | | | | |
| | | | | | | | |
| Roadways | Dirt, grassed | 2 | 2 | 2 | 3 | 0 | 3 |
| | Maintained | 2 | 2 | 2 | 4 | 0 | 3 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| ACTIVITY / ASPECT | | Condition | Severity | Distribution | Frequency | Regulated | Public Relations | |
|-----------------------|--|--|----------|--------------|-----------|-----------|------------------|---|
| Lawn | Chemicals (pesticides) | 2 | 2 | 2 | 3 | 2 | 2 | |
| | Water | 2 | 2 | 2 | 3 | 2 | 2 | |
| | Species selection | 2 | 2 | 2 | 3 | 0 | 3 | |
| | Fertilizer | 2 | 2 | 2 | 3 | 2 | 3 | |
| | Mowing (fuel consumption, human energy) | 2 | 2 | 2 | 3 | 2 | 2 | |
| Research plots | Plot area | Chemicals (pesticide, insecticide, fungicide application) | 1 | 2 | 2 | 4 | 2 | 3 |
| | | Fuel consumption | 1 | 1 | 2 | 4 | 0 | 3 |
| | Alleyways | Chemicals (pesticide, insecticide, fungicide application) | 1 | 2 | 2 | 4 | 2 | 3 |
| | | Fuel consumption | 1 | 1 | 2 | 4 | 2 | 3 |

| | | | | | | | | |
|-----------------------|--|--|---|---|---|---|---|---|
| | | Mowing | 1 | 1 | 2 | 4 | 0 | 3 |
| | Non-research areas | Chemicals (pesticide, insecticide, fungicide application) | 1 | 2 | 2 | 4 | 2 | 3 |
| | | Fuel consumption | 1 | 1 | 2 | 4 | 2 | 3 |
| | Dormant research areas | Chemicals (pesticide, insecticide, fungicide application) | 1 | 2 | 2 | 4 | 2 | 3 |
| | | Fuel consumption | 1 | 1 | 2 | 4 | 2 | 3 |
| | | Mowing/weed control | 1 | 1 | 2 | 4 | 0 | 2 |
| Transportation | Research-related (by automobile) | | 1 | 1 | 4 | 4 | 2 | 3 |
| | Regional (by automobile) | | 1 | 1 | 4 | 4 | 2 | 3 |
| | National/International (by airline) | | 1 | 1 | 5 | 4 | 2 | 3 |

| USDA-ARS-NPA Environmental Impact Significance rating | | |
|--|-------------|---------------------------------------|
| Criteria | Rank | Impact |
| Condition | 1 | Normal use |
| | 2 | Maintenance |
| | 3 | Emergencies |
| | 4 | End of life disposal |
| | 5 | Construction |
| Severity | 1 | Minimal, short term, reversible |
| | 2 | Moderate |
| | 3 | Critical |
| | 4 | Severe but reversible |
| | 5 | Severe but irreversible |
| Distribution | 1 | On-site |
| | 2 | Local |
| | 3 | Regional |
| | 4 | National |
| | 5 | Global |
| Frequency | 1 | Almost never |
| | 2 | Every other month |
| | 3 | Once per month |
| | 4 | Daily |
| Regulated | 0 | Not regulated |
| | 1 | Not regulated but will soon be |
| | 2 | Regulated |
| Public Relations | 1 | No concerns have been raised |
| | 2 | Concern raised internally |
| | 3 | Concern raised externally |
| | 4 | Adverse effect on community relations |
| | | |

FY 09 Environmental Compliance Funds

Universal Waste (antifreeze, used oil, light recycling, computer recycling, etc.)
& Hazardous Waste Disposal:

\$2,709.92

Pollution Prevention/equipment/supplies/and other: \$ (equipment, design work, filters & coolant for HVAC, energy saving devices, lights EPA approved, water treatment supplies, Janitorial supplies, HEPA filters for insect rearing building, autoclave supplies, bio cabinets and fumehood certification/maintenance)

\$11,150.52

Individual Project: \$ cost for re-lamping the cold storage to be energy efficient:
\$2,851.27, new boilers for South and North building **\$137,988.64 NB: \$98,011.00**

\$238,850.91

Emergency Spill Response & Prevention: (second containment mobile basins for 55 gallon barrels)

\$770.38

Personnel time: \$ (Maintenance -65% time and Safety-20% time)

\$53,853.00

Training/Conferences/travel: \$ (Safety Specialist and Maintenance travel costs environmental/energy saving, hazmat, refrigerant, HVAC, etc)

\$2,756.87

Audit/Inspection/Assessment: \$

\$0.00

Grand Total: **\$310,091.60**

Affirmative Procurement and Federal Credit Card Holders

Executive Order 13423 and the Federal Government's Mandatory Environmentally Preferable Purchasing Program

Environmentally Preferable Purchasing includes a multitude of attributes. Some are:

- Recycled Content
- Biobased Products
- Reduced Toxicity
- Energy Star® or Energy Saving products

Purchasing Recycled Content Products

- The Resource Conservation and Recovery Act (RCRA), 1976, first required affirmative procurement of recycled products.
- Applies to any Federal agency or contractor using appropriated Federal funds
- Applies for procurements exceeding \$10,000 in a year for the entire agency
- The Agency must follow the EPA Comprehensive Procurement Guidelines
- Unless the product is at an unreasonable price, will not meet reasonable performance requirements and is unavailable in a reasonable timeframe at a sufficient level of competition.
- Recovered Materials Advisory Notices (RMANs) provide recycled content recommendations and guidance on buying recycled content products
- Visit <http://www.epa.gov/cpg/>
- Go to mandatory sources first (JWOD, Unicor, Small Business, etc.)
- Document recycled procurement

Federal Biobased Product Procurement Preference Program – BiopreferredSM

- The 2002 Farm Bill required USDA to develop a Federal Biobased Product Procurement Preference Program. Formerly FB4P.
- Biobased – A commercial or industrial product (other than from food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal, or marine) or forestry materials.
- Visit <http://www.biobased.oce.usda.gov/fb4p/>
- Use biobased if comparable in cost, quality, and availability to non-biobased
- Recycled trumps biobased

Reduced Toxicity

- Enhances indoor air quality, health and safety
- Low Volatile Organic Compounds (VOCs)
- Low/no Urea Formaldehyde
- Reduce hazardous materials
- Non Ozone-depleting compounds. Visit the Significant New Alternatives Policy (SNAP) website at <http://www.epa.gov/ozone/snap/>

Energy Star® or Energy and Water Efficient products

- Include requirements for Energy Star® Visit <http://www.energystar.gov/>

- Energy Star® is a government-backed program helping businesses and individuals protect the environment through superior energy efficiency
- For FEMP designated energy efficient products see <http://www1.eere.energy.gov/femp/procurement/>
- Use the Electronic Product Environmental Assessment Tool (EPEAT) at <http://www.epeat.net/>.
- Use WaterSenseSM labeled products, <http://www.epa.gov/watersense/index.htm>

More information:

- Refer to the EPA Environmentally Preferable Purchasing website at <http://www.epa.gov/epp/>
- OFEE Green Purchasing Program website at <http://www.ofee.gov/gp/gp.htm>.
- Consider life cycle cost, recyclability, and ultimate disposal in purchase decisions.
- GSA www.gsa.gov
- DLA www.dscr.dla.mil
- EPA <http://notes.erg.com>
- CA Waste Management Board's Recycled Content Database www.ciwmb.ca.gov/rcp/

Recycled product categories

- Construction
- Landscaping
- Non-paper office
- Paper and paper products
- Parks and Recreation
- Transportation
- Vehicular
- Miscellaneous

Biobased product resources

- For a list of categories for designated biobased products visit <http://www.biobased.oce.usda.gov/fb4p/DesignationItemList.aspx>
- For product manufacturers see the Biobased catalog at <http://www.biobased.oce.usda.gov/fb4p/Catalog.aspx>

EMERGENCY Response Plan

Emergencies, both major and minor, are a part of our everyday lives. We deal effectively with them if we are prepared and in control. The LOCATION COORDINATOR or person in charge will be responsible to guide fire and law enforcement officers on arrival.

Safety requires that all tenants be well informed of the proper steps to take in the event of an emergency. Studies prove that panic in an emergency is a major cause of injury or death.

All occupants should familiarize themselves with the information in these Emergency Procedures.

Anyone having knowledge of any accidental release to environment or unsafe working environment at the NPARL should inform the LOCATION COORDINATOR, Robert Evans at **406-433-9496 Work Or 406-488-8806 Home.**

We appreciate your cooperation and look forward to working with you as a team to produce a safe and comfortable work environment.

Emergency Assembly Points

Assemble in the North parking lot for all North buildings and South parking lot for all South buildings. All employees will assemble and be accounted. The LOCATION COORDINATOR will then give further instructions.

Accounting of the building occupants at the assemble point is the responsibility of the secretary, or state administrative assistant in the absence of the secretary or state administrative assistant, whoever is responsible for answering the telephone will be responsible for count of occupants in all buildings. **Location Emergency phone number to receive updated emergency information (406) 433-9411.**

Severe Weather Instructions

There is two weather radios and emergency alert web source that is on constant alert to notify if severe weather is approaching this area. The alert from the radio and the person receiving the alert will notify the LOCATION COORDINATOR and send e-mail to all employees. When hazardous conditions develop during regular working hours, the LOCATION COORDINATOR will decide whether or not to dismiss employees. If weather continues to next day or day there will be a recorded message with information of closure of the location can be heard if dial (406) 433-9411 or you can contact your supervisor for further instructions to prevent unnecessary travel. If dismissal is necessary, the LOCATION COORDINATOR will assign employees to assist in notification of all employees.

When conditions permit work activities to resume at NPARL, the LOCATION COORDINATOR will activate the Emergency Preparedness Plan to notify employees to return to work. The LOCATION COORDINATOR's Secretary is responsible for updating phone numbers on the Emergency Preparedness Plan.

HAZARDOUS CHEMICAL LEAK OR SPILL

Safety equipment stations contain materials and commercial spill kits (with instructions) consistent with the hazards to handle chemical spills and leaks where chemicals are used. First aid kits, eyewash stations, and emergency showers are strategically located through the facility.

General Spill Procedures:

- If a chemical spill occurs, the following general procedures may be used but should be tailored to individual needs:
- Attend to any persons who may have been contaminated. Rinse contaminated personnel for 15 minutes. Affected personnel should be assisted to hospital/clinic for further medical treatment.
- Notify persons in the immediate area about the spill.
- Evacuate all nonessential personnel from the spill area.
- If the spilled material is flammable, turn off ignition and heat sources.
- Spill control materials are provided in labs of North building and outside of labs in South building. These are to be used by lab technicians only to contain or neutralize small spills. Lab technicians will place the spill cleanup material into proper secondary containment and will contact safety specialist to dispose of material properly. Contact Safety Specialist if large spill.
- Avoid breathing vapors of the spilled material. Use a respirator appropriate to the hazard if necessary.
- Establish exhaust ventilation if it is safe to do so.
- Notify victim supervisor, Research Leader and Safety Officer immediately.
- If outside, move to upwind side of spill.

MEDICAL EMERGENCY

Life Threatening Medical Emergencies: CALL 911

1. Notify the Sidney Health Center **406-488-2120**. Calmly describe the type of medical emergency. After hours, or on weekends and holidays, contact Sidney Health Center **406-488-2100**.
2. Keep the person warm and comfortable.
3. Remain calm.

For other medical situations, notify the Sidney Health Center at **406-488-2100**. The Health Center is located 216 14th Ave. South West. Of Sidney, Montana. (**Sidney, Montana USDA/ARS hours are from 6:00 am to 6:00 pm Monday thru Friday**).

Environmental Laws and Regulations Applicable to USDA, ARS, NPA Operations

LAWS

Resource Conservation and Recovery Act (RCRA)

- Chemical Inventory
- Hazardous Waste Minimization
- Record keeping
- Hazardous Waste Disposal
- Manifesting
- Small Quantity Generator
- Hazardous Wastes
- 3016 Inventory
- Radiological Mixed Wastes
- Part B Permits for Treatment/Storage/Disposal Facilities
- Recycling of Materials
- Infectious and Biological Wastes
- Solid Waste
- Underground Storage Tanks
- Hazardous Waste Determinations
- National Priority List
- Chemical Labeling
- Transporting
- Packaging

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

- HWC Funding
- Pre-remedial/Remedial Activities
- Preliminary Assessments
- Site Inspections
- Record keeping
- Environmental Releases
- Hazard Ranking System
- Potentially Responsible Party Settlements
- SARA
- Water Pollution
- Wetlands
- Hazardous Substance List
- A Reportable Spill
- Emergency Planning and Community Right-To-Know

National Environmental Policy Act (NEPA)

- Environmental Assessments
- Environmental Impact Statements
- Categorical Exclusions

- Endangered Species
- Finding of No Significant Impact
- Research planning CRIS

Clean Air Act

- Hazardous Pollutants
- Air Emission Sources
- Fume Hood/Ventilation Program
- National Air Permit System

Clean Water Act

- The National Pollutant Discharge Elimination System
- Oil Spills and Discharge of Hazardous Substances

Safe Drinking Water Act

- Drinking water well

Toxic Substance Control Act (TSCA)

- PCB's
- Chemical Inventories

Asbestos Hazard Emergency Response Act

- Asbestos
- Abatement
- Asbestos Containing Building Materials
- Sampling/Analysis
- Record keeping
- Personal Protective Equipment
- Containment
- Friability
- Amosite/Chrysotil

Federal Insecticide, Fungicide and Rodenticide Act

- Regulate pesticide use through labeling, packaging, composition, and disposal
- Worker Protection Standard

Pesticide Registration Improvement Act of 2003

This new legislation establishes pesticide registration service fees for registration actions in three pesticide program divisions: Antimicrobials, Biopesticides and Pollution Prevention, and the Registration Divisions

The Patriot Act of 2002

The Public Health Security and Bioterrorism Preparedness and Response Act of 2002

The Agricultural Bioterrorism Protection Act of 2002

Executive Orders

- E.O. 13221 “Energy Efficient Standby Power Devices” – July 31, 2001

- **E.O. 13423 “Strengthening Federal Environmental, Energy, and Transportation Management”-January 26, 2007**

State, County and City

- Be sure to check for local requirements

REGULATIONS

Department

- **USDA Department Regulation 4400-1**
- **USDA Department Regulation 9610-1 USDA Security Policies & Procedures for Bio-safety Level 3 Facilities, 8/30/2002**

ARS

- **ARS P&P 124.1 Radiation Safety Program**
- **ARS P&P 134.2 ARS Energy Management Plan**
- **ARS Manual 212.20, Energy Savings Performance Contracts – Delivery Order**
- **ARS Manual 221.1, Personal Property, Motor Vehicle, and Air Craft Management**
- **ARS P&P 230.0, Safety, Health and Environmental Management Program**
- **ARS Manual 230.0 Safety, Health and Environmental Management Program**
- **ARS P&P 230.1, Tracking Hazardous Waste Clean Up Funds**
- **ARS P&P 240.3 Physical Protection, Security and Conduct while on REE Facilities**
- **ARS Manual 242.1 Facilities Design Standard**
- **ARS P&P 242.5 Economic Analysis & Decision for ARS Facility Modernization**
- **ARS P&P 242.7 Value Engineering**
- **ARS P&P 251.8 Records Management**
- **ARS P&P 402.1 Flexible Work Schedules**
- **ARS P&P 402.5 ARS Flexible Workplace Program**
- **ARS P&P 461.5 Misconduct, Discipline and Adverse Actions**
- **ARS P&P 600.3 Cooperative Research to Evaluate Chemicals Potentially Beneficial to Agriculture**
- **ARS P&P 600.12 Guidelines and Precautions to be Taken by Personnel in Storing, Using, Handling, and Disposing Agricultural Chemical Pesticides**
- **ARS P&P 601.2 Transfer of Biological Agents and Related Information to Non-USDA Locations or Individuals DRAFT**
- **ARS P&P Minimizing Risks of Releasing Weedy or Poisonous Plants**

Northern Plains Area (NPA)

- **PM-01-003 - Control of Sensitive Property**
- **PM-02-002 - Children in the Workplace**
- **PM-03-001 - Performance Reports for Cooperative Agreements, NPA**
- **PM-03-002 - Equal Employment/Civil Rights Performance Element**
- **PM-03-003 - Use of High Consequence Livestock Pathogens and Toxins**
- **PM-03-004 - Facilities Construction Authorities**
- **PM-03-005 - Occupant Emergency Program**

Internet Resources:

NPA Safety Sharepoint Page: password protected

<https://sps.arsnet.usda.gov/sites/Safety/NPA/default.aspx>

Energy Star: http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_management

EPEAT:

<http://www.epeat.net>

EPA: <http://www.epa.gov/ems/>

US Department of Energy

<http://www.energy.gov/engine/content.do>

<http://www.energysavers.gov>

Building Green

<http://www.buildinggreen.com>

Geothermal

<http://www.geothermal.com>

Northwest Energy Efficiency Alliance

<http://www.nwalliance.org/projects/projectdetail.asp?PID=27>

American Council for an Energy-Efficient Economy

http://aceee.org/ogeece/ch1_index.htm

Federal Electronics Challenge

<http://www.federalelectronicschallenge.org/>

National Recycling Coalition

<http://www.nrc-recycle.org/howto/index.htm>

National Safety Council

<http://www.nsc.org/xroads/electronics.cfm>

E-raise Your E-waste

<http://www.ars.usda.gov/Main/docs.htm?docid=8445>

FedCenter Gov

<http://www.fedcenter.gov/>

Office of Federal Environmental Executive

<http://www.ofee.gov/>