

USDA, ARS, SAA Fort Lauderdale Location

Invasive Plant Research Lab

3225 College Avenue

Fort Lauderdale, FL 33314

Environmental Management System Manual

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1.0 EMS Scope

The USDA, ARS, SAA Fort Lauderdale EMS is designed to minimize and/or prevent environmental impacts that result from the operations both on the location, as well as field site activities directed by ARS Fort Lauderdale. All of the projects and operations conducted by ARS coordinated from Fort Lauderdale, Florida are considered within the scope of the EMS. The activities of all of the occupants of the facility are subject to the policies and procedures described in this manual. The Fort Lauderdale EMS is designed to conform to the current Executive Order #14057: set forth on August 2022 *"Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability"*; and #13990: *"Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis"* set forth on January 20, 2021 and, the Executive Order #13834: *"Efficient Federal Operations"* set forth on May 17, 2018; and the Executive Order #13693: *"Planning for Federal Sustainability in the Next Decade"* put forth on June 10 2015; and the *"Executive Order 13148: Greening the Government Through Leadership in Environmental Management"* set forth on April 26, 2000 and the *Executive Order: Strengthening Federal Environmental, Energy, and Transportation Management* set forth on January 24, 2007. Presently the Fort Lauderdale EMS is also following the *Policies and Procedures* of the *ARS Energy Management Plan 134.2* set forth July 6, 1998.

2.0 Terms and Definitions

USDA – United States Department of Agriculture

ARS – Agriculture Research Service

SAA – South Atlantic Area

Environmental Aspect – Element of an organization's activities, products or services that can interact with the environment.

EMS – Environmental Management System

ISO – International Organization for Standardization

EMP – Environmental Management Program

EMS Coordinator – Maintains the EMS. The responsibilities of the EMS Coordinator are outlined in section 6.1 of this manual.

EMS Committee – The EMS committee consists of employees from all aspects of the Location i.e. office, procurement, laboratory technicians, and field personnel. The responsibilities of the committee are outlined in section 6.1 of this manual. A complete list of committee members can be found on page 11 of this manual.

Environmental Objective – Overall environmental goal, arising from the energy and environmental policy, that an organization sets it itself to achieve, and which is quantified where practicable. (ISO 14001: 1996)

Environmental Target – Detailed performance requirement, quantified where practicable, applicable to the organization or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives. (ISO 14001:1996)

Stakeholders – Includes but not limited to customers who use services provided by ARS Fort Lauderdale and/or suppliers of goods and services.

3.0 Facility Description

The Fort Lauderdale IPRL Location is considered a fairly small location with approximately 36 Federal employees. Geographically, the Fort Lauderdale Location is divided into two locations within the State of Florida with worksites. IPRL is co-located on the University of Florida campus in Davie, FL. IPRL's access to the location is independent of the University of Florida. IPRL is a quarantine facility used in the rearing of insects to test for host specificity on the target invasive weeds in Florida. Research is conducted in quarantine space, labs and in the field.

4.0 Policy Statement

The United States Department of Agriculture, Agricultural Research Service, Invasive Plant Research conducts research to develop solutions to control invasive species of high national priority. In conjunction with this mission, the Environmental Management System 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, the Environmental Management System 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 process and achievements related to this policy.

5.0 EMS Planning

EMS planning activities determine the environmental aspects and the impacts of the work conducted at the Fort Lauderdale Location. EMP's are designed to control and reduce, when possible, the impacts associated with the identified aspects.

5.1 Determination of Significant Environmental Aspects

Significant Environmental Aspects are determined through an open and participative process. The EMS Committee identifies facility activities that may impact the environment through designated meetings usually toward the end of the fiscal year. These ideas are discussed, identified and documented. The EMS coordinator sums creates an outline, which is discussed or emailed to all committee members for their review. When all committee members agree with the outline, it will be documented as our highest priority aspects for that year. There are three aspects selected but not limited to the following list:

Priority Chemical Reduction
 Purchasing of Hazardous Chemicals
 Use of Hazardous Chemicals
 Application of Hazardous Chemicals
 Office Products/Paper Consumption
 Use of Lighting and Electrical Equipment

Generation of Waste (Hazardous, Universal, and Solid)
Temperature Control of Buildings
Ground Maintenance
Motor Vehicle Activities
Custodial Operations

5.2 Legal and Other Requirements

The legal and other requirements that apply to EMS are a combination of the following documents: The President's Federal Register Executive Orders; 14057 "Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability" and the 13990 "*Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*", 13834 *Efficient Federal Operations*", 13693 *Planning for Federal Sustainability in the Next Decade*, 13423 *Strengthening Federal Environmental, Energy, and Transportation Management*, 13148 *Greening the Government through Leadership in Environmental Management*, 13149 *Greening the Government through Federal Fleet and Transportation Efficiency*, 13150 *Federal Workforce Transportation*; Instructions for Implementing Executive Order 13423; ARS Manual 230.0; ARS Policy & Procedures 134.2 – ARS; USDA, ARS, EMS Implementation Guide January 2005; EMS Requirements of American National Standard ANS/ISO/ASQ E14001-2004.

5.3 Objectives and Targets

The EMS Committee constructs objectives and targets for each significant environmental aspect. Objectives and targets are updated annually with the significant environmental aspects. This is constructed after completed the annual EMS report. Objectives and targets are developed considering where the greatest environmental performance improvements can be made and estimates are determined of the resources needed to achieve the objectives and targets. The EMS committee reviews the resource estimates and decides which targets to pursue considering the operational and resource constraints that exist at that time. After the decision is made regarding which targets will be pursued, the EMS committee will call a meeting and include the research leader to present the environmental objectives and targets for the upcoming year. The EMS committee will amend their plan if needed, and document the plan for the next fiscal year. The plan is discussed at least twice yearly to measure how much progress is made throughout the year.

5.4 Environmental Management Programs

EMP's are in place for each significant environmental aspect. The programs are designed to manage the activities that substantially contribute to the impacts of the significant aspects and to achieve EMS targets and objectives. The details of the EMP's including individual responsibilities are documented in the EMP Forms. The EMS Coordinator is responsible for maintaining the EMP Forms, and assigning EMS Committee members to be responsible for certain duties pertaining to these activities.

6.0 Implementation and Operation

The EMS is implemented and operated through a responsibility structure set forth by the EMS Committee.

6.1 Structure and Responsibility

The following individuals and group have specific responsibilities within the structure of the EMS:

Individual/Group**Responsibilities**

EMS Coordinator

Implement and maintain the EMS for continued conformance to current Executive Order. Reports to Research Leader. Held accountable through annual performance reviews.

Research Leader

Has overall responsibility of the EMS program.

EMS Committee

Directly participates in the design, implementation, and operation of the EMS. Held accountable through annual performance reviews.

Environmental Protection Specialist
ARS, SAA Area Office

Conducts internal audits to determine system conformance. Provides EMS annual reports to the EMS Coordinator to measure location conformance.

Research Scientists

Incorporate at least one technician/office personnel from their staff to participate in the EMS committee. Provide time for their staff to participate in occasional EMS activities. Volunteer at least once a year to participate in an EMS meeting.

Location Staff

Be familiar with EMS structure, points of contact, policies, and procedures contained in the EMS documents. Attend annual EMS training.

6.2 Training & Awareness

All the staff at the Ft. Lauderdale SAA, receives annual EMS training and awareness of current activities concerning EMS. Each year we have designated Earth Day for an environmental activity so the entire staff can participate.

6.3 EMS Competence

Actual competencies are determined by knowledge, skills, and abilities when an individual is hired for a given job. Competencies are further developed through formal training and/or on-the-job training to comply with EMS policy.

6.4 EMS Communications

Several modes of communication are used among the levels and functions of the location to remain current on EMS activities. This communications include but not limited to:

Written EMS procedures

EMS Committee Meetings

Staff Meetings

Emails

Any written inquiries from the staff or other external parties regarding environmental performance or aspects of the EMS are forwarded to the EMS Coordinator. The EMS Coordinator is responsible for providing a documented response in a timely manner.

6.5 System Documentations

The key EMS Documentations include:

EMS Document	Document Purpose
EMS Manual	To describe the overall structure and function of the EMS.
Environmental Management Program Form	To document the specific content of the EMS components relative to each identified significant aspect.
Corrective Action Forms	To initiate the process of investigating the need for changes to EMS procedures.
Operational Control Forms	To document actions taken for each significant aspect.
Audit Correction Action Form	To define audit findings and responses to the findings.
Procedures	To standardize specific procedures to be followed.
Suggestion and Idea Form	To receive suggestion and ideas to improve environmental performance.

6.7 Operational Controls

Operational controls are in place for activities associated with identified significant environmental aspects. New operational controls can result from the completion of objectives and targets. Current and closed operational controls are documented on the *EMS Operational Control Form FTL-OC* and collected in the EMS files held by the EMS Coordinator.

6.8 Emergency Preparedness and Response

Emergency preparedness and response procedures are documented in: (1) the document “Occupant Emergency Plan 2009 – REVISED” found on the IPRL server at \\Iprl-one\public\Public Documents\Admin\Occupant Emergency Plan; (2) the IPRL Hazardous Weather Plan (document -“FtLaudHazWeathP14”), the H5N1 Pandemic Plan (document- “IPRL PANDEMIC2009”), the H1N1 Pandemic Plan (document- “Draft USDA H1N1 Pandemic Plan”, and the “USDA Emergency Telephone Numbers” – all found at \\Iprl-one\public\Public Documents\Admin\COOP Business recovery Pandemics. All staff at IPRL have been instructed on these plans with periodic refresher training.

7.0 Checking and Corrective Actions

The EMS Committee checks on the operation of the EMS and strives to continually improve environmental stewardship in the operation of the facility.

7.1 Monitoring and Measuring

Monitoring and measuring of operations and activities relative to significant aspects is conducted by the EMS Committee. The records associated with monitoring and measuring are specified in the EMP documents *FTL-EMP*. These documents are maintained and filed with the EMS Coordinator.

7.2 Nonconformance and Corrective and Preventive Action

When non-conformances are detected, corrective action is initiated by the EMS Coordinator. Implementation of the corrective actions is the responsibility of the EMS Coordinator and is tracked using the *EMS Corrective Action Form FTL-CA*. The EMS Coordinator will provide recommendations to the Research Leader for corrective actions as needed. The EMS Committee is responsible for coordinating completion of agreed actions within the Location. Examples of preventive actions include regular inspections, annual training and environmental audits.

7.3 Records

The specific records associated with each significant aspect are listed on the EMP forms. The EMS Coordinator maintains all the EMS records.

7.4 EMS Audits

Systems audits are used to ensure conformance to *E.O. 14057* and to identify continual improvement opportunities. Two types of EMS audits may be conducted at the facility : internal (conducted by a EMS Committee member) and external third-party audits. Internal audits are done annually. Due to the size of our location EMS audits are conducted in conjunction with our Safety Audits. The auditors conduct the audit and submits a written report first to the Research Leader. The EMS/Safety committee reviews the report to be later

reviewed by the Research Leader. The Research Leader reviews the report and distributes job assignments to designated staff members. All job assignments are sent to the designated staff member by email and are requested with a due date. It is the responsibility of the EMS/Safety Committee to ensure that needed corrective actions are completed in a timely manner.

The facility may be audited by a third party to determine conformance of the EMS to *E.O. 14057*. Similar to internal audits, it is the responsibility of the EMS Coordinator and the EMS Committee to ensure that corrective actions are documented and completed in a timely manner.

8.0 Management Reviews

Yearly reviews are requested by the Environmental Protection Specialist located at the South Atlantic Area Office. The reviews are currently titled *Environmental Management System Metrics*. This is a five part document with headings of the following:

Part I: Facility/Organization-Level Information

Part II: EMS External Audit and Declaration of Conformance

Part III: EMS Performance Metrics for EMS Scorecard

These responses are measured with A,B,C or D answers under the following titles:

1. Environmental Aspects
2. Sustainable Practices
3. Objects, Targets, and Programs
4. Environmental Training
5. Operational Controls
6. Contracts and Concessionaire Agreements
7. Evaluation of Compliance with Regulatory Requirements
8. Management Review

Part IV: EMS Implementation Information

These responses are measured with a Yes or No answer under the following titles:

1. Energy Use
2. Greenhouse Gas Emissions
3. Renewable Energy Use
4. Water Use
5. Purchasing
6. Solid Waste Generation
7. Purchasing and Using Toxic or Hazardous Chemicals
8. Construction/Lease/Operation/Maintenance of Buildings
9. Vehicle Fleet Use/Petroleum Products Use

- 10. Purchase/Use/Disposal of Electronic Equipment
- 11. Environmental Regulatory Compliance

Part V: EMS Experiences

These responses are measured with a up to 3 bullet statements under the following headings:

- 1. EMS Best Practices/Lessons Learned
- 2. EMS Challenges
- 3. External Communications
- 4. Highest Priority Aspects
- 5. EMS Benefits to Agency Mission

This report must be completed before June of current Fiscal Year. After completion it is first reviewed by the EMS Committee, second approved by the Research Leader, third forwarded electronically to the South East Area Environmental Protection Specialist. The last part of this report is then reviewed by USDA, ARS, Headquarters. The final grade is given to the SEA Environmental Protection Specialist. This will determine if the USDA, ARS, Fort Lauderdale Location is in compliance with EMS policy for the past year.

9.0 USDA, ARS, SAA Fort Lauderdale Location EMS Committee Members

NAME/TITLE	Scientist Represented	Aspect Represented	Phone	Member since
Eileen Pokorny EMS Coordinator Technician	Melissa Smith	Procurement, Field/Lab	954-475-6575 954-815-4907	July 2005
Paul Madeira Plant Physiologist	Melissa Smith	Procurement, Lab	954-475-6553	July 2005
Luke Kasarjian Technician	Melissa Smith	Procurement, Field/Lab	954-475-6571	March 2009
Lexa Greenley Administrative Officer	Melissa Smith	Procurement, Office	954-475-6541	August 2020
Jorge Leidi Technician	Greg Wheeler	Procurement, Field/Lab	954-475-6581	July 2005