United States Department of Agriculture

Animal and Plant Health Inspection Service

Plant Protection and Quarantine

National Plant Health Emergency Management Framework

First Edition Issued March 2009

Emergency Management

Contents

Emergency Management

Deputy Administrator's Letter

October 19, 2011

Dear colleagues and stakeholders,

The goal of APHIS' Plant Protection and Quarantine (PPQ) program is to protect America's agricultural and natural resources from the introduction and establishment of exotic, economically significant invasive plant pests. Accordingly, PPQ provides Federal leadership in maintaining a strong domestic agricultural safeguarding system that provides a continuum of protection based on activities that are conducted to prevent, prepare for, respond to, and recover from invasive pest introductions in the United States.

PPQ's success at effectively maintaining this safeguarding system is heavily dependent upon the close cooperation and coordination of key stakeholders, including Federal partners; State, local, and Tribal governments; industry; non-governmental institutions; and researchers and academics. Working closely with these stakeholders, PPQ ensures that science-based pest prevention early detection, rapid response, and practical recovery systems are available to provide maximum protection of U.S. agricultural and natural resources, while posing minimal hazard to consumers, producers, and the environment.

To ensure that all the highly skilled individuals and experts involved in maintaining PPQ's safeguarding system, including our many external partners, fully understand the roles and responsibilities of the many interrelated aspects of the prevention, preparedness, response, and recovery continuum, we have developed this Emergency Management Framework as a reference that clearly identifies and outlines the element of this entire system. Through this framework, PPQ officials and their many cooperators will gain a greater capacity to operate together quickly and effectively within the safeguarding system to ensure America's agricultural and natural resources remain healthy and productive.

As always, thank you for your hard work and support.

Sincerely,

Rebecca A. Bech, Deputy Administrator
USDA–APHIS–PPQ

Emergency Management

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Contents

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Chapter

1

Introduction

Contents

Purpose

The United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine (USDA–APHIS–PPQ) *National Plant Health Emergency Management Framework* describes how PPQ and its cooperators respond to plant health and homeland security emergencies.

In addition to providing background information and resources that responders need, the framework describes the roles and responsibilities of PPQ Program Managers at the headquarters, regions, and State levels in PPQ and the Center for Plant Health Science and Technology (PPQ–CPHST), and State plant protection agencies in the 48 contiguous States, Hawaii, and Alaska, U.S. Territories and Commonwealth, and Tribes.

The framework addresses the role of other Federal agencies and other APHIS units, which could vary depending on the nature of the issues and the extent of their involvement. The framework also describes the roles and responsibilities of the interrelated components of PPQ's safeguarding system, including preparedness, pest exclusion, response, and recovery elements.

Pest exclusion is synonymous with prevention. Pest exclusion involves activities conducted to eliminate or mitigate the risk of invasive plant pest introductions. Examples of preventive efforts include:

- Offshore Pest Preclearance programs to ensure that foreign commodities are free of plant pests before they reach U.S. shores

- Agriculture Quarantine Inspections at border crossings and other U.S. ports of entry, which are conducted by the U.S. Department of Homeland Security's Customs and Border Protection (DHS–CBP) in harmony with PPQ and its plant pest regulatory authority
- Smuggling Interdiction and Trade Compliance activities to prevent smuggling of prohibited and potentially infested plant commodities and ensure that phytosanitary requirements are being met and enforced over imported and domestic commodities moving interstate and sold at retail markets

Preparedness is essential to maintaining the ability to implement an effective emergency response to an invasive plant pest introduction. The ways that preparedness supports PPQ and cooperators include the following:

- Identifying necessary resources for pest management and emergency response
- Establishing the required infrastructure needed to maintain a strong safeguarding system, especially related to pest early warning systems (e.g., the Offshore Pest Information Programs), survey systems (e.g., the Cooperative Agricultural Pest Survey Program), and identification and diagnostic systems (e.g., the National Identification Service and National Plant Diagnostic Network)
- Conducting appropriate training to ensure and maintain rapid, consistent, and effective pest management and emergency response capabilities

The response element of the safeguarding system involves the activities that occur immediately after a significant invasive plant pest incident or outbreak is detected. Significant aspects of the response element performed by PPQ and its cooperators include the following:

- Rapid detection and delimiting surveys
- Mobilization of emergency personnel and resources using the Incident Command System under a Unified Command structure
- Establishing a Technical Working Group to consider scientific aspects of the response
- Obtaining emergency funding
- Enacting an emergency regulatory framework
- Maintaining compliance to environmental laws
- Implementing protocols for communications, public outreach, and data management

The recovery element of the safeguarding system relates to the development and implementation of activities designed to provide stability and protection

following an invasive plant pest emergency. Aspects of recovery include the following:

- Demobilization of emergency response personnel and resources
- Critique of the response program
- Development of a long-term recovery plan
- Development of a long-term safeguarding system
- Identification and application of science-based pest solutions
- Sustained public outreach

The framework covers all four of these elements in more detail, providing PPQ employees and cooperators with a guide to fully understand all aspects of the U.S. plant health safeguarding system. This knowledge will serve to enhance the capabilities of PPQ employees and cooperators to operate quickly, effectively, and in coordination with one another to successfully maintain this national safeguarding system.

Users

All PPQ employees, Federal and State cooperators, and stakeholders should be familiar with and use the framework for guidance and to promote uniformity.

Scope

The framework is divided into eight chapters:

1. *Introduction* on page 1-1
2. *Plant Protection and Quarantine* on page 2-1
3. *Pest Exclusion* on page 3-1
4. *Preparedness* on page 4-1
5. *Response* on page 5-1
6. *Recovery* on page 6-1
7. *Roles and Responsibilities* on page 7-1
8. *State Plant Protection Resources* on page 8-1

The framework also includes a glossary and an index.

The introduction chapter contains basic information about the framework. This chapter includes the framework's purpose, scope, users, and application; a list of related documents that provide the authority for the framework content; and directions about how to use the framework.

Authorities and Enabling Legislation

The primary legislation that enables or directly relates to PPQ emergency response authorities are as follows:

- Plant Protection Act of 2000
- Cooperation with State Agencies in the Administration and Enforcement of Certain Federal Laws Act, approved September 28, 1962
- Homeland Security Presidential Directives
- Agriculture Bioterrorism Protection Act
- Federal Insecticide, Fungicide, and Rodenticide Act, as Amended
- Privacy Act
- National Environmental Policy Act
- Endangered Species Act
- Agriculture Bioterrorism Protection Act of 2002
- Public Health Security and Bioterrorism Preparedness and Response Act of 2002
- Federal Noxious Weed Act
- Federal Seed Act
- Noxious Weed Control and Eradication Act of 2004

Refer to the PPQ *Emergency Response Manual* (formerly PPQ *Emergency Programs Manual*) for more information on these acts and directives.

PPQ Emergency Response Manual
http://www.aphis.usda.gov/import_export/plants/manuals/emergency/index.shtml

PPQ has aligned the framework with key national and USDA emergency management policies and plans, including the following:

- Homeland Security Directives (especially HSPD 5, 7, 8, and 9)
- The National Response Framework
- The National Incident Management System
- USDA's Strategic Plan

- APHIS' 2010–2015 Strategic Plan
- PPQ's 2010–2015 Strategic Plan

To successfully fulfill its emergency management responsibilities, PPQ cooperates closely with other APHIS program areas and Federal agencies; State, local, Tribal, territorial, and foreign governments; non-governmental organizations; and the private sector.

How To Use

The framework is a portable electronic document that is updated periodically. Please download the current version of the framework from its source, and use Adobe Reader® to view it on your computer screen. You can print the framework for convenience. However, links and navigational tools are only functional when the document is viewed in Adobe Reader®. Printed copies of the framework are obsolete once a new version has been issued.

Conventions

Conventions are established by custom and are widely recognized and accepted.

EDP–EM

The small, bold-face subheadings in the left column indicate the acronym of the PPQ units responsible for the activities described. Use these subheadings to quickly find the information that is specific to a unit.

Find Web site addresses, and other information on how to use the resources, in a shaded box at the end of each topic.

Name of Web site
URL

Boldfacing

Boldfaced type is used to highlight negative or important words. These words are: *never, not, do not, other than, prohibited.*

Lists

Bulleted lists indicate that there is no order to the information being listed. Numbered lists indicate that information will be used in a particular order.

Disclaimers

All disclaimers are located on the unnumbered page that follows the cover.

Table of Contents

Every chapter has a table of contents that lists the heading titles at the beginning to help facilitate finding information.

Control Data

Information placed at the top and bottom of each page helps users keep track of where they are in the framework. At the top of the page is the chapter and first-level heading. At the bottom of the page is the month, year, title, and page number. PPQ-Emergency and Domestic Programs-Emergency Programs (PPQ–EDP–EM) is the unit responsible for the content of the framework.

Change Bar

A vertical black change bar in the left margin is used to indicate a change in the framework. Change bars from the previous update are deleted when the chapter or appendix is revised.

Decision Tables

Decision tables are used throughout the framework. The first and middle columns in each table represent conditions, and the last column represents the action to take after all conditions listed for that row are considered. Begin with the column headings and move left-to-right, and if the condition does not apply, then continue one row at a time until you find the condition that does apply.

Table 1-1 How to Use Decision Tables

If you:	And if the condition applies:	Then:
Read this column cell and row first	Continue in this cell	TAKE the action listed in this cell
Find the previous condition did not apply, then read this column cell	Continue in this cell	TAKE the action listed in this cell

Footnotes

Footnotes comment on or cite a reference to text and are referenced by number. The footnotes used in the framework include general text footnotes, figure footnotes, and table footnotes.

General text footnotes are located at the bottom of the page.

When space allows, figure and table footnotes are located directly below the associated figure or table. However, for multi-page tables or tables that cover the length of a page, footnote numbers and footnote text cannot be listed on the same page. If a table or figure continues beyond one page, the associated footnotes will appear on the page following the end of the figure or table.

Heading Levels

Within each chapter and section there can be four heading levels; each heading is green and is located within the middle and right side of the page. The first-level heading is indicated by a horizontal line across the page, and the heading follows directly below. The second-, third-, and fourth-level headings each have a font size smaller than the preceding heading level. The fourth-level heading runs in with the text that follows. The small, bold-face acronyms in the left column indicate the units responsible for the activities described in the accompanying text.

Hypertext Links

Figures, headings, and tables are cross-referenced in the body of the framework and are highlighted in boldface type. These appear in blue hypertext in the online framework.

Italics

The following items are italicized throughout the framework:

- Cross-references to headings and titles
- Names of publications
- Scientific names

Numbering Scheme

A two-level numbering scheme is used in the framework for pages, tables, and figures. The first number represents the chapter. The second number represented the page, table, or figure. This numbering scheme allows for identifying and updating. Dashes are used in page numbering to differentiate page numbers from decimal points.

Transmittal Number

The transmittal number contains the month, year, and a consecutively-issued number (beginning with -01 for the first edition and increasing consecutively for each update to the edition). The transmittal number is only changed when the specific chapter sections, appendixes, or glossary, tables, or index is updated. If no changes are made, then the transmittal number remains the unchanged. The transmittal number only changes for the entire framework when a new edition is issued or changes are made to the entire framework.

How to Cite the Framework

Cite the framework as follows: U.S. Department of Agriculture, Animal Plant Health Inspection Service, Plant Protection and Quarantine. National Plant Health Emergency Management Framework (Washington, D.C.: Government Printing Office, 2012), http://www.aphis.usda.gov/plant_health/plant_pest_info/biosecurity/download/PHE-framework_2012.pdf.

How to Find More Information

Contact the Coordinator of National Emergency Preparedness for further information concerning the framework.

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Chapter

2

Plant Protection and Quarantine

Contents

Introduction

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA–APHIS) in cooperation with other Federal and State agencies with closely allied missions safeguards agricultural and natural resources to ensure an abundant, high-quality, and varied food supply. Plant Protection and Quarantine (APHIS–PPQ) is an integral component of USDA–APHIS responsible for safeguarding plant health in the United States.

Mission Statement

Plant Protection and Quarantine safeguards agriculture and natural resources from the risks associated with the entry, establishment, or spread of animal and plant pests and noxious weeds. Fulfillment of its safeguarding role ensures an abundant, high-quality, and varied food supply, strengthens the marketability of U.S. agriculture in domestic and international commerce, and contributes to the preservation of the global environment.

Plant Protection and Quarantine is divided into seven major units:

- Office of the Deputy Administrator
- Emergency and Domestic Programs
- Plant Health Programs
- Center for Plant Health Science and Technology
- Professional Development Center
- Eastern and Western Regional Offices

While each unit has a specific designated area of responsibility, they all work in close coordination to fulfill PPQ's overall safeguarding mission. The roles and responsibilities of each of these PPQ subunits are described in this chapter.

Refer to the APHIS–PPQ Web site for further information.

PPQ Mission, Goals, and Objectives
http://www.aphis.usda.gov/about_aphis/programs_offices/plant_protection/index.shtml

Office of the Deputy Administrator

The PPQ Deputy Administrator provides executive leadership and strategic direction to PPQ's nationally dispersed staff and operational activities. The PPQ Deputy Administrator reports directly to the APHIS Administrator and is a member of the APHIS Management Team.

Emergency and Domestic Programs

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP) staff provide national coordination for the policy and regulatory framework associated with emergency and domestic preparedness, response, and recovery efforts against threats to plant health. PPQ–EDP provides budgetary, technical, and environmental documentation support to national pest programs. PPQ–EDP also supports efforts to ensure that science-based systems for early detection, rapid response, and practical recovery are available to provide maximum protection for U.S. agricultural and natural resources, while safeguarding the environment and posing minimal hazard to consumers and producers.

These capabilities are also available, as needed and when applicable, to support Federal disaster response efforts and other significant homeland security needs. PPQ–EDP is based in Riverdale, Maryland.

Plant Health Programs

Plant Protection and Quarantine's Plant Health Programs (PPQ–PHP) staff provides national coordination for phytosanitary quarantine and trade policies; plant and plant material import, export, and regulated use permitting; pest identification services; plant health regulatory coordination; and regulatory support for enforcement of quarantines on animal products and by-products.

PPQ–PHP ensures that science-based safeguarding systems are in place to prevent the introduction of exotic plant and animal pests into the United States, and support PPQ pest detection and regulatory response efforts.

PPQ–PHP works in close coordination with the U.S. Department of Homeland Security's Customs and Border Protection (DHS–CBP) to provide the regulatory pest exclusion authority and guidance for Agriculture Quarantine Inspection at U.S. ports of entry and border crossings. PPQ–PHP is based in Riverdale, Maryland.

Center for Plant Health Science and Technology

Plant Protection and Quarantine's Center for Plant Health Science and Technology (PPQ–CPHST) supports PPQ regulatory decisions and operations through methods development work, scientific investigation, analyses, and technology. PPQ–CPHST works to identify pathways used by exotic plant pests and noxious weeds; assess risks posed by exotic pests to food, fiber, and the environment; develop, adapt, and support technology to detect, identify, and mitigate impact of significant exotic pests; and ensure methods, protocols, and equipment used by PPQ are effective and efficient.

PPQ–CPHST is headquartered in Raleigh, North Carolina, and is comprised of eight principal laboratories and four supporting units across the United States and in Guatemala.

PPQ Center for Plant Health Science and Technology
http://www.aphis.usda.gov/plant_health/cphst/index.shtml

Professional Development Center

Plant Protection and Quarantine's Professional Development Center (PPQ–PDC) supports PPQ by designing, developing, and delivering scientific, technical, nontechnical, and leadership training and educational programs for all PPQ employees. In addition, the PPQ–PDC provides scientific and technical training to the U.S. Department of Homeland Security's Customs and Border Protection (DHS–CPB) in support of the agriculture inspection function at U.S. ports of entry.

The PPQ–PDC provides PPQ and cooperators with vital training related to plant health emergency response, including full scale and simulation exercises using the Incident Command System (ICS). The PPQ–PDC is located in Frederick, Maryland.

PPQ Eastern and Western Regions

Plant Protection and Quarantine's Eastern and Western Regional Offices provide regional leadership and coordination for emergency and domestic pest exclusion, preparedness, response, and recovery efforts against these plant health threats. These regional offices also provide operational and administrative leadership to all PPQ field offices within their region. The Eastern Regional Office is based in Raleigh, North Carolina, and the Western Regional Office is based in Ft. Collins, Colorado.

Another critical component of PPQ's organization is the State Plant Health Director's (SPHD) office. PPQ maintains a SPHD in every U.S. State and Puerto Rico; there are a few instances where a SPHD is assigned more than one State or U.S. Territory. SPHDs oversee operational activities within their assigned State or States. They work closely with their counterpart State Plant Regulatory Official (SPRO) to ensure communication and coordination, conduct joint training of the work force, and manage plant pest emergency preparedness, pest exclusion, response, and recovery efforts at the local level.

Chapter

3

Pest Exclusion

Contents

Introduction

Pest exclusion involves activities conducted to eliminate or mitigate the risk of invasive plant pest introductions. Pest exclusion—also known as prevention—encompasses the array of activities that include the development and management of regulatory policy and programs that ensure safe trade and the exclusion of quarantine plant pests and foreign animal diseases.

Plant Protection and Quarantine's Plant Health Programs (PPQ–PHP) unit works with trading partners and international plant protection organizations to develop and implement early detection and control strategies designed to prevent the entry of invasive pests and diseases into the United States. In addition, PPQ partners with the U.S. Department of Homeland Security's Customs and Border Protection (DHS–CBP), and State plant protection resources, to ensure the continued success of agricultural inspections at all U.S. ports of entry and inspections at interim or final destinations.

PPQ's pest exclusion strategies include the following:

- Offshore Pest Surveillance
- Phytosanitary Issues Management
- Risk and Pathway Analysis
- Development of trade-related regulations
- Issuance of permits
- CBP-Agriculture Quarantine Inspection
- Plant inspection stations
- Development of AQI and Port Technologies
- Preclearance and Offshore Programs
- Predeparture Program
- Mitigation of agricultural pests in neighboring and offshore countries
- Smuggling Interdiction and Trade Compliance
- Select Agent Program

Offshore Pest Surveillance

APHIS–PPQ

RIPPS–OPIP

The offshore pest surveillance activities include collecting, synthesizing, analyzing, communicating, and utilizing relevant offshore plant disease or pest information. PPQ's Center for Plant Health Science and Technology (PPQ–CPHST) facilitates the analysis and sharing of international information for conducting risk assessments and identifying emerging plant health threats. This information allows PPQ and cooperators to develop and implement safeguarding measures to prevent or mitigate the risk of invasive plant pest introductions.

Currently, APHIS plant health specialists located overseas monitor, collect, and report key agricultural pest information such as new pest finds and in-country outbreaks via the Offshore Pest Information System (OPIS), a Web-based, secure, system focused on risk. For further information or to request access, refer to the OPIS Web site.

In addition, PPQ uses Exotic Pest Information Collection and Analysis (EPICA), which conducts plant pest surveillance on the Web by continuously collecting, analyzing, distributing, and archiving relevant new information about plant pests of quarantine significance. EPICA also reports on notable pest interceptions at U.S. ports of entry. The information is summarized in a weekly email sent to subscribers, and archived in the Global Pest and Disease Database (GPDD). The EPICA archive in the GPDD is Web-accessible and searchable, and provides access to the original news sources. To receive the

weekly EPICA notification or to provide feedback, refer to the EPICA Web site.

Offshore Pest Information System (OPIS)
http://www.aphis.usda.gov/international_safeguarding/index.shtml

Exotic Pest Information Collection and Analysis (EPICA)
https://www.gpdd.info/public/epica.pdf

Phytosanitary Issues Management

APHIS–PPQ

PPQ–PHP

PHP–PIM

Plant Health Programs' Phytosanitary Issues Management (PHP–PIM) staff ensures that export and import of agricultural commodities occur in accordance with science-based standards that effectively mitigate pest risks.

Plant Health Programs-PIM is recognized as the National Plant Protection Organization (NPPO) for the United States under the International Plant Protection Convention (IPPC), and acts on behalf of PPQ's Plant Health Programs. PHP–PIM serves as the primary point of contact for all technical plant health communication with trading partners, takes the lead in developing plant health policy and strategy, and implements technical solutions to phytosanitary trade barriers.

The PHP–PIM unit addresses phytosanitary technical barriers by:

- Encouraging trading partners to harmonize with international standards and guidelines
- Initiating and presenting scientific and technical studies to support safe, science-based trade
- Building domestic and international consensus among trading partners, industry, the scientific community, and other Federal agencies for feasible, science-based solutions to technical trade barriers

PHP–PIM also manages an internationally accepted system of phytosanitary certification in accordance with international standards, and manages PPQ's International Standard Development program.

Phytosanitary Issues Management
http://www.aphis.usda.gov/import_export/plants/plant_exports/phytosanitary_management.shtml

Risk and Pathway Analysis

APHIS–PPQ

PPQ–CPHST

CPHST–PERAL

The Plant Epidemiology and Risk Analysis Laboratory (PERAL), within the national Risk and Pathway Analysis (RPA) program in PPQ–CPHST, collects and interprets scientific and technical information regarding plant pest risks with respect to the uses of plant products or conveyances that may result in the spread of plant pests. PERAL helps PPQ design risk-based policies and regulations for import, export, and domestic programs.

The PERAL risk and pathway analyses identify, assess, and prioritize new pest threats, provide scientific support for regulatory updates and revisions, and identify gaps in knowledge that guide establishment of research priorities.

The program uses state-of-the-art tools and methodologies for pest and pathway risk assessments. These include sophisticated spatial technology systems that integrate weather, pest distribution, and other databases to analyze pest dynamics, identify pests of greatest concern, and identify potential pathways for the introduction of harmful exotic pests.

The PERAL staff includes economists that provide economic and cost-benefit analyses required for emergency responses. In addition to the regulatory significance and potential environmental impact, PPQ and its cooperators consider the potential economic impact of the pest on local, interstate, and international trade in developing emergency response and regulatory plans. Cost-benefit is an important aspect of considering the feasibility of programs or program options.

Plant Epidemiology and Risk Analysis Laboratory (PERAL)
http://www.aphis.usda.gov/plant_health/cphst/peral.shtml

Development of Trade Regulations

APHIS–PPQ

Plant Health Programs' Regulations, Permits, and Manuals (PHP–RPM) unit develops regulations that set conditions for importing plants, plant products, and commodities into the United States. One of PPQ's primary functions is to facilitate the two-way trade of agricultural and other products while preventing the introduction of pests into the United States. To this end, PPQ conducts rigorous and defensible pest risk analyses and develops regulations to support trade agreements.

The APHIS regulatory development process begins with PHP–RPM unit which shapes the initial regulation prior to sending it to the Regulatory Analysis and Development (PPD–RAD) unit in APHIS' Policy and Program Development (APHIS–PPD). PHP–RPM works with PPQ's trade staff to develop the regulations that set the conditions for plants and plant products to enter the United States via the trade agreements negotiated.

Additionally, PHP–RPM is responsible for updating and revising PPQ's regulations governing the importation of plants for planting (7 CFR 319.37 *also known as* Quarantine 37 or Q-37). The regulatory process gives the public the opportunity to view PPQ's risk analysis and ensure all pest risks have been appropriately considered and mitigated.

Permits to Safeguard Plants, Plant Products and Other Organisms

PHP–RIPPS

Plant Health Programs' Registration, Identification, and Permits and Plant Safeguarding (PHP–RIPPS) issues the permits that are required for the importation, transit, domestic movement, and environmental release of organisms that impact plants. PHP-Regulations, Permits, and Manuals (PHP–RPM) issues permits for the importation and transit of plants and plant products under authority of the Plant Protection Act. PPQ permits establish the conditions under which plants and plant products may enter the country, and require inspection at ports of entry to ensure those conditions have been met.

Organism permits are required for plant pests (e.g., insects and snails), plant pathogens (fungi, bacteria, and viruses), biological control agents, bees, Federal noxious weeds and parasitic plants. Plant and plant product permits are required for plants for planting such as nursery stock and small lots of seed, plant products such as fruits and vegetables, timber, cotton, and cut flowers.

Transit permits are required to ship regulated plant products into, through, and out of the United States. Soil permits are required in many cases and departmental permits are needed to import prohibited plant materials for research. APHIS regulates these organisms because they can provide a pathway for the introduction of a variety of plant pests into the United States. For further information, refer to the Permits Web site.

Plant, Organism, and Soil Permits
http://www.aphis.usda.gov/plant_health/permits/index.shtml

CBP Agriculture Quarantine and Inspection

APHIS–PPQ

PPQ–PHP

PHP–QPAS

DHS

DHS–CBP

Agriculture Quarantine and Inspection (AQI), which is a series of inspection and pest exclusion efforts designed to keep prohibited agricultural items from entering the country, plays a major role in preventing the unintentional introduction of invasive pests into the United States.

The U.S. Department of Homeland Security's Customs and Border Protection (DHS–CBP) conducts agriculture quarantines and inspections to protect the United States at international ports of entry and border crossings from the threat of invasive pests. This includes inspection of items, including commercial cargo, individual shipments, and passengers, that could transport and introduce pests that can potentially cause serious damage to America's crops, livestock, and the environment.

Most ports of entry convene a pest risk committee comprised of representatives from DHS–CBP, PPQ, the State, and other key stakeholders. The committee reviews and analyzes current pest interception and trade non-compliance data at the ports of entry, in order to identify potential foreign pest threats and emerging risk patterns or situations. The pest risk committee's work supports DHS–CBP's risk management planning, resource allocation and risk decisionmaking; PPQ's decisions regarding the policies and procedures followed by DHS–CBP at ports of entry; and the planning of early pest detection surveys at the State level.

Plant Protection and Quarantine provides DHS–CBP with the necessary agriculture quarantines and inspections policies and procedures along with the technical support to carry out AQI activities including training; providing scientific expertise and regulatory authority; and identifying intercepted plant materials, pests, and diseases in a timely manner.

The Quarantine Policy Analysis and Support (PHP–QPAS) staff provides technical support by analyzing results of agricultural cargo inspections at U.S. ports of entry and the associated pest interception data. This information is used to develop a comprehensive early warning system and to identify potential pathways at high risk. This allows for more focused inspection, as well as traceback and trace-forward activities.

Plant Inspection Stations

APHIS–PPQ

PHP–RIPPS

PIS

Plant Health Programs' Registration, Identification, Permits and Plant Safeguarding (PHP–RIPPS) is responsible for managing PPQ's plant inspection stations. Federal regulations require that most imported plants and seeds enter the United States through certain ports of entry where PPQ operates plant inspection stations for the inspection and clearance of those items. Currently, PPQ has 17 such plant inspection stations in the United States located at or near major international airports and seaports.

At the stations, PPQ plant health safeguarding specialists inspect imported plants and seeds to insure that they are free of plants pests and diseases that are not known to occur in the United States and which could be damaging to either U.S. agriculture or natural resources. These specialists also ensure that the plants and seeds comply with Federal import regulations and permitting requirements. When regulated pests or diseases are detected, PPQ may require that the planting material be treated, exported, or destroyed.

At the stations, PPQ also enforces the rules and regulations that apply to the import, export and re-export of plant species protected by the Endangered Species Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Many of the plant inspection stations also issue phytosanitary certificates for the export of plants, seeds, and other propagative materials.

Development of AQI and Port Technologies

APHIS–PPQ

APHIS–CPHST

CPHST–AQIPT

The Center for Plant Health Science and Technology's Agriculture Quarantine Inspection and Port Technology (AQIPT) and the Treatment Quality Assurance (TQA) staffs provide the scientific basis upon which agricultural import inspections and treatment technologies are based to ensure the safety of agricultural imports. Quarantine inspections and mitigating treatments represent the last line of defense against exotic invaders.

The responsibilities of the AQIPT staff include supporting the development of treatment manuals for ports of entry; certifying vessels and containers for transporting commodities; developing alternatives to the use of methyl bromide; maintaining a database for monitoring the use of fumigants; certifying international commodity treatment facilities in preclearance programs; and developing detection technologies for deployment at ports, such

as chemical sensors, acoustic detectors, and agricultural x-ray technology. For further information, refer to the Web site of the Treatment Quality Assurance Unit.

CPHST-Treatment Quality Assurance Unit
http://www.aphis.usda.gov/plant_health/cphst/tqau.shtml

Offshore Preclearance

APHIS–PPQ

PHP–POP

PPQ–PHP

QPAS

Plant Health Program's Preclearance and Offshore Programs (PHP–POP) represents the first line of defense in preventing the unintentional introduction of invasive plant pests and diseases into the United States.

Plant Protection and Quarantine coordinates preclearance inspections, treatments, and other mitigation measures in foreign countries in accordance with phytosanitary procedures agreed upon by APHIS, the host country's National Plant Protection Organization (NPPO), and the participating industry. These procedures are designed to identify and mitigate the risk of exotic pest introductions through action taken in foreign countries before shipment occurs.

Quality assurance inspections may be performed at U.S. ports of entry to ensure compliance with the program guidelines. In some cases site visits may be necessary to approve the phytosanitary approach and verify compliance standards are being properly administered.

PPQ employs other offshore mitigations to keep plant pests out of the United States while allowing trade to continue. APHIS' regulations for plants in growing media are a notable example. They allow shipments of certain genera of plants to enter the country provided the plants undergo specified sanitation and cultural practices, including the following:

- Inspection of stock plants
- Use of approved growing media and practices for rooting and growing of plants
- Sanitation practices to exclude plant pests (e.g., cleaning and disinfection of floors, freedom from soil, screening, and automatic closing doors)
- Requirement that plants be rooted and actively grown for at least 4 months prior to export to the United States in a greenhouse devoted exclusively to the production of plants to be exported to the United States
- Requirement that plants be irrigated using approved delivery and purification systems or pest-free water sources

- Storage and packaging of plants in soil-free areas
- Inspection of plants by APHIS or the NPPO no more than 30 days before export and found free of quarantine pests

Predeparture

CONUS

OCONUS

DHS–CBP

USDA's Animal and Plant Health Inspection Service (APHIS) has determined that it is necessary to restrict the interstate movement of cut flowers, fruits, vegetables, plants and portions of plants from Hawaii, Puerto Rico, the U.S. Virgin Islands, Guam, and the Commonwealth of the Northern Mariana Islands, as a means to prevent the introduction of quarantine pests into the U.S. mainland.

Predeparture inspections are conducted on air passengers and cargo destined for the continental United States (CONUS), when originating outside the continental United States (OCONUS). Predeparture inspectors inspect agricultural products for a variety of harmful pests and for prohibited products carried by passengers or moving as maritime or air cargo. The air passengers (or their representative) present the luggage for agriculture inspection prior to check-in at the airline counter. If quarantine pests or prohibited materials are discovered during the inspection, the appropriate regulatory action is taken. Cargo shipments are presented for inspection and treated when required.

Predeparture inspections are conducted by APHIS personnel in Hawaii and Puerto Rico. DHS–CBP personnel conduct the predeparture inspections in the Virgin Islands.

Mitigating Agricultural Pests in Neighboring and Offshore Countries

APHIS–PPQ

AQI

CSI

Plant Protection and Quarantine is working with neighboring countries to develop an international strategy designed to prevent or minimize the risk of accidental introductions or natural dispersal of invasive pest species into the continental United States. Mitigation actions include the development of joint safeguarding measures, and sharing expertise on how to employ various control tactics leading to the eradication or control of the targeted pests.

The implementation of mitigation measures in nearby countries not only assists their governments in dealing with new exotic plant pests, but it also builds international partnerships and protects the United States from the increased risk of accidental introduction of plant pests. Agriculture Quarantine and Inspection (AQI) is a resource-intensive activity and as a result only a

percentage of incoming cargo and passengers can be inspected. Therefore, it does not serve as a stand alone prevention tool and must be used in concert with other measures within the safeguarding continuum.

Examples of PPQ's offshore efforts include the Gypsy Moth Program with Japan and Russia; working with Italian shippers on packing material; the Pink Hibiscus Mealy Bug Program in the Caribbean; the Gladiolus, and Citrus Health Response, Programs with Mexico and Belize; and the Pale Cyst Nematode Program and other programs with Canada.

PPQ is pursuing the North American Perimeter Approach, and Greater Caribbean Safeguarding Initiative, to support this approach with neighboring countries.

North American Perimeter Approach

USDA's APHIS and the Canadian Food Inspection Agency (CFIA) are developing partnerships to harmonize plant protection through an effort called the North American Perimeter Approach (NAPA). The benefits of such coordination will be increased plant protection for both countries and more efficient movement of trade. Recognizing that there are similarities and differences in the respective regulatory authorities and approaches to agricultural imports, a U.S.-Canada Harmonization Steering Committee was formed to oversee harmonization efforts.

Greater Caribbean Safeguarding Initiative

Plant pests that enter Caribbean countries could potentially spread to the United States through the importation of plants and plant products, or as a result of weather events. In the mid 1990's, PPQ began a safeguarding initiative to identify potential pathways for pests entering Florida from Caribbean countries. Within a few years, the initiative expanded to include off-shore coordination and technical assistance to help the Caribbean countries with their own safeguarding initiatives.

Recently, PPQ began expanding the initiative, known as the Greater Caribbean Safeguarding Initiative (GCSI), with the goal of protecting the health and value of agricultural, natural and other resources in the greater Caribbean region by excluding, detecting, and controlling exotic pests that arrive and become established.

Greater Caribbean Safeguarding Initiative
http://www.aphis.usda.gov/international_safeguarding/plants/gcsi/index.shtml

Smuggling Interdiction and Trade Compliance

APHIS–PPQ

PPQ–PHP

QPAS

PPQ–SITC

Smuggling Interdiction and Trade Compliance (SITC) plays a major role in interdicting prohibited agricultural products that may harbor pests of regulatory significance before or after they reach U.S. markets. SITC's work is accomplished through numerous market surveys, analysis of trends, and the use of intelligence tools and data systems.

Smuggling Interdiction and Trade Compliance Officers and analysts are experts in developing commercial targeting information, examining trends in international trade, and identifying contraband in commerce and at the consumer level. SITC staff also works closely with CBP at U.S. ports of entry to interdict smuggled products. The SITC staff seeks to detect and prevent the unlawful entry and distribution of prohibited products that may harbor exotic plant and animal pests, diseases, or invasive species. These harmful organisms could seriously damage America’s crops, livestock, and environment.

In the marketplace, SITC Officers conduct inspections and intense trade compliance activities to uncover prohibited or non-compliant items. This work may trace back to the port of entry and the responsible importer. Once a smuggling pathway is identified, every attempt is made to shut it down, often resulting in civil or criminal prosecution, and recalls to safeguard American agriculture. The marketplace for SITC encompasses major distribution centers; flea markets; animal, plant, and insect trade shows; large and small chain stores; roadside vendors; and neighborhood corner stores.

The SITC staff works closely with other Federal, State, and local agencies in order to accomplish the program’s mission. SITC Officers work with PPQ’s State Plant Health Directors (SPHD) to aid in the identification of hot zones where high risk pathways for plant pest introduction exist.

Through partnerships with other agencies, SITC has provided other Federal entities (DHS–CBP, USDA’s Office of the Inspector General, APHIS’ Investigative and Enforcement Services program, U.S. Immigration and Customs Enforcement, USDA’s Food Safety and Inspection Service, U.S. Food and Drug Administration, and others) and State agriculture agencies with information leading to seizures, the stop sale of products, criminal prosecutions, and administrative violations.

While the SITC initiatives are often reactive, SITC also carries out proactive activities that ultimately result in less cost to the American public for eradication programs. SITC Officers watch for increased threats with heightened vigilance to monitor potentially high-risk smuggling pathways. The

SITC staff work closely with liaison groups and industry to identify and address potential smugglers and various trade compliance issues. SITC Officers are flexible enough to be responsive to a wide breadth of agricultural threats, issues, and challenges, including participation in plant health emergency response programs where they may be tasked with attempting to determine the point of introduction of exotic plant pest and its entry pathway.

Select Agent Program

APHIS–PPQ

PHP–RIPPS

PPQ–PHP

Plant Health Programs' Registration, Identification, Permits, and Plant Safeguarding (PHP–RIPPS) manages the Select Agent Program (SAP). SAP helps safeguard agricultural agents that have the potential to accidentally or intentionally cause significant damage to U.S. agricultural resources or threaten public safety. Select agents are pathogens that have been deemed a severe threat to the public, animal or plant health, or animal or plant products.

DHS–CDC

The U.S. Departments of Agriculture, and of Health and Human Services (HHS), are responsible to prevent, prepare for, and respond to acts of bioterrorism and other public health emergencies that could threaten either public health and safety or American agriculture. USDA–APHIS and HHS' Centers for Disease Control and Prevention (CDC) jointly regulate entities and individuals possessing, using, or transferring select agents and toxins.

Select Agent Programs provide regulatory oversight to specifically safeguard plant pest select agents. This regulatory oversight includes inspection of entities for biocontainment and physical security. Entities must maintain biocontainment, security, and incident response plans. In addition, all individuals and private or commercial entities must complete a U.S. Department of Justice (DOJ) Security Risk Assessment (SRA) for the facility, its owners, and the designated responsible official.

Facilities must also meet biosafety requirements that are commensurate with the risk that the select agent or toxin poses. They must establish security measures that provide graded protection in accordance with the threat that the agent or toxin poses.

Plant Protection and Quarantine also helps safeguard agricultural agents that have the potential to accidentally cause significant damage to U.S. agricultural resources. This is accomplished through PPQ permits. Permits are required for the importation, transit, domestic movement, and environmental release of

organisms that impact plants, and the importation and transit of plants and plant products under the authority of the Plant Protection Act.

Select Agent Program
http://www.aphis.usda.gov/programs/ag_selectagent/

Chapter

4

Preparedness

Contents

Introduction

Preparedness encompasses planning an effective response to a plant health emergency, identifying the necessary resources, establishing the required infrastructure, and conducting training and exercises to ensure an effective response. PPQ works with Federal agencies, State, Tribal, and local governments, and industry to prepare, build, and sustain operational capacity and capabilities, including early detection, timely, accurate, and confirmed diagnostics, and effective containment and, control strategies against plant health threats and pest introductions.

Preparedness includes the following early warning systems:

- North American Plant Protection Organization's (NAPPO) Alert System
- European and Mediterranean Plant Protection Organization
- State and Federal pest detection programs (CAPS, NAPIS, NPDN, State agencies survey programs, Cooperative Extension Service, universities, U.S. Forest Service, etc.)
- SITC National Information and Communication System (SNICAS)
- Pest Interception Data

- DHS Enforcement Alerts
- USDA Significant Pest Alerts
- State and University Pest Alerts

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP) uses data provided by these early warning systems to prepare and develop response strategies.

Preparedness also includes the following:

- Identification and diagnostic services
- PPQ-New Pest Advisory Group assessments and recommendations
- New Pest Response Guidelines
- Formation of Incident Command Teams
- Incident Command System training including emergency response exercises with cooperators

Early Warning Systems

Offshore Pest Surveillance

APHIS–PPQ

PPQ–EDP

PPQ–PHP

In addition to developing pest exclusion strategies, information collected through offshore pest surveillance helps PPQ-Emergency and Domestic Programs (PPQ–EDP) to identify immediate pest threats, and prioritize the development of the New Pest Response Guidelines (NPRG). NPRG's are frameworks of the methods and tools used to contain and control plant pests.

This information is evaluated and also used in the following ways to:

- Modify domestic and Cooperative Agricultural Pest Survey Program (CAPS) pest surveys to target pests identified as emerging threats
- Develop New Pest Response Guidelines
- Support risk assessments
- Communicate with State cooperators and stakeholders
- Promote cooperation and coordination with foreign and domestic partners to mitigate agricultural pest risks

NAPPO Phytosanitary Alert System

APHIS–PPQ

PPQ–CPHST

CPHST–PERAL

The North American Plant Protections Organization's (NAPPO) Phytosanitary Alert System (PAS) is hosted in Raleigh, North Carolina, at PPQ's Center for Plant Health Science and Technology (PPQ–CPHST). The system adapts to the basic needs of the plant protection services of NAPPO's member countries—the United States, Canada, and Mexico—and serves as a readily accessible, user-friendly aid to the daily operations of PPQ and cooperators. The alert system gathers, on a broad international scale, crucial intelligence about pests of importance to NAPPO countries. The system then filters the data, repackages it for NAPPO's needs, and disseminates it through the PAS Web site.

The information comes from a variety of sources, including records from port of entry interceptions, domestic plant pest surveys, the Web, primary literature, and submissions from users. The most significant information is posted for the target audience, which consists of the plant protection services of Canada, Mexico, and the United States.

The system provides many benefits, including the following:

- Focused domestic plant pest surveys
- Port of entry inspections that flag specific pests and pathways
- Better information for decision-making on permits, risk assessments, and regulations
- Increased lead time to prepare action plans for emergency response and eradication

Refer to the Web site of NAPPO for further information or to subscribe to the alerts.

North American Plant Protection Organization Alert System (NAPPO)
Web site: http://www.aphis.usda.gov/international_safeguarding/index.shtml

European and Mediterranean Plant Protection Organization

The European and Mediterranean Plant Protection Organization (EPPO) is an intergovernmental organization responsible for European cooperation in plant health. Founded in 1951 by 15 European countries, EPPO now has 50 members, covering almost all countries of the European and Mediterranean region. The objectives of EPPO are to protect plants; develop international strategies against the introduction and spread of plant pests; and, to promote safe and effective control methods. In addition, EPPO publishes three bulletins each year featuring newly detected invasive plant pests in the region.

Plant Protection and Quarantine uses the information provided through EPPO to develop the following preparedness strategies:

- Surveys for domestic plant pests
- Inspections at ports of entry that flag specific pests and pathways
- Development of New Pest Response Guidelines
- Greater lead time to prepare emergency response plans

For further information, refer to the EPPO Web site.

European and Mediterranean Plant Protection Organization
http://www.eppo.org/

Pest Detection Program

APHIS–PPQ

PPQ–EDP

EDP–PDP

The goal of PPQ's Pest Detection Program (EDP–PDP) is to protect America's agricultural and natural resources by ensuring the early detection of harmful or economically significant plant pests and weeds. A strong domestic agricultural pest detection system is an essential element in providing a continuum of checks from offshore preclearance programs, domestic port inspections and surveys at rural and urban sites across the United States.

Plant Protection and Quarantine's pest detection and survey activities have traditionally included trapping exotic fruit flies and tracking the occurrence of domestic plant pests such as the imported fire ant, gypsy moth, Japanese beetle, and witchweed. Other activities have included national surveys of various exotic plant pests, diseases, and weeds as well as pest detection activities to help meet the various export requirements of foreign countries.

The mission of the EDP–PDP is to provide a distribution profile of plant pests in the United States deemed to be of regulatory significance to PPQ, State departments of agriculture, cooperators, and international trading partners by the following:

- Confirming the presence or absence of plant pests impacting the domestic and international movement of plants and plant products
- Establishing and maintaining a comprehensive network of cooperators and stakeholders to facilitate PPQ's mission and safeguard U.S. plant resources
- Providing a detection program framework to identify exotic pest threats as early as possible

Surveys are accomplished under the Cooperative Agricultural Pest Survey (CAPS) program, for which PPQ provides funding through cooperative agreements with State departments of agriculture and universities. CAPS is a national plant pest detection system that allows flexibility in setting survey priorities at the national, regional and State levels. Survey data is entered into the pest detection database which sends out alerts when first finds have been detected in a county or State. Alerts are sent only to State Plant Health Directors (SPHDs), State Plant Regulatory Officials (SPROs), PPQ Pest Survey Specialists, and State Survey Coordinators.

For further information, refer to the EDP-Pest Detection Program Web site.

EDP-Pest Detection Program
http://www.aphis.usda.gov/plant_health/plant_pest_info/pest_detection/index.shtml

SITC National Information Communication Activity System

The SITC National Information Communication Activity System (SNICAS) was established to collect, communicate, and record activities associated with the Smuggling Interdiction and Trade Compliance (SITC) program. PPQ and cooperators use SNICAS as an emergency response or early warning tool. When the data is collected, it is communicated immediately to program managers and State officials.

When an alert is generated for a significant or high-risk seizure, program managers can immediately access the system, evaluate the situation, and respond quickly. Agency personnel can also use SNICAS data to identify commodity and pest pathways of significant risk. This data is shared with Customs and Border Protection (DHS–CBP) to intercept smuggled agricultural commodities. It is also leveraged during Agriculture Quarantine Inspections (AQI) for early detection or interception of agriculture quarantine significant commodities, pests, or diseases.

The SITC National Information Communication Activity System data is also used and leveraged internally by Emergency and Domestic Programs (PPQ–EDP) for the early detection of pests and diseases during targeted detection (hot zone) survey initiatives.

DHS Pest Interception Data

Plant Protection and Quarantine uses the Agriculture Quarantine Activity System (AQAS) database to record program activities and store statistical data. Another database, the PIN 309, consists of pest identification records. The PIN 309 database is a component of the Agricultural Quarantine Activity System (AQAS); it is continuously monitored by the Plant Health Program's National Identification Services (RIPPS–NIS) staff for notable pest interceptions.

When a significant plant pest interception is noted in the PIN 309 database, RIPPS–NIS staff will notify Quarantine Policy, Analysis, and Support (PHP–QPAS). PHP–QPAS in turn will notify the DHS–CBP Agriculture Programs and Trade Liaison (APTL) by issuing a significant pest bulletin using the process mentioned above.

The APTL will notify their Director of Field Operations (DFO) who will distribute the information to their managers and supervisors at ports of entry. The DHS–CBP Agriculture Specialists will receive their instructions on how to conduct more intensive examinations to increase the chances of detecting the newly discovered significant pests in imported cargo shipments.

Preparedness Infrastructure

Identification and Diagnostic Services

APHIS–PPQ

APHIS–CPHST

EDP–PDP

Plant Protection and Quarantine (PPQ) and its cooperators are often confronted with invasive plant pests and diseases that are new in the United States. The arrival of new pests presents a challenge in providing timely and accurate identification and diagnostics which are critical to preparedness and response activities.

CPHST–MDB

The CPHST's Molecular Diagnostics and Biotechnology (MDB) program provides scientific support to PPQ for the development and validation of molecular diagnostic methods, as well as for the development of genetically modified organisms for use in pest management programs.

The CPHST–MDB develops, adapts, and validates molecular or biochemical assays for pests for which there are no diagnostic tools. Once developed and validated, these tools are used by the National Identification Service (RIPPS–NIS) and collaborating laboratories in support of emergency response.

The RIPPS–NIS coordinates the identification of plant pests in support of USDA's regulatory and emergency programs. Refer to *Identification and*

Diagnostics on page 5-10 for additional information concerning the role of RIPPS–NIS.

New Pest Advisory Group

APHIS–PPQ

PPQ–CPHST

CPHST–PERAL

The role of the PPQ-New Pest Advisory Group (NPAG) is to evaluate new pests that present an imminent threat that could result in a plant health emergency. The NPAG gathers information regarding the biological and ecological parameters of the pest and potential environmental and economic impact and other technical information required by the PPQ decisionmaking framework.

After assessing the risk to United States plant health, and consulting with experts and regulatory personnel, the PPQ–NPAG will make a recommendation to PPQ management for a course of action. A frequent trigger for the NPAG is a confirmed pest identification report from the National Identification Service (RIPPS–NIS); the Center for Plant Health Science and Technology (PPQ–CPHST); the Systematic Entomology Laboratory (SEL) of USDA's Agricultural Research (ARS) Service; or other laboratories designated by APHIS.

The PPQ-New Pest Advisory Group (NPAG) also assesses other high risk pests before they arrive in the United States, such as the tomato leaf miner and red palm weevil. The NPAG will write a report, which will be used to develop New Pest Response Guidelines.

The PPQ–NPAG coordinates information and solicits expertise from Federal and State agencies, university systems, and international organizations. PPQ–NPAG assembles an ad hoc group to ensure expert evaluation and cooperates with other groups or organizations in analyzing new or imminent threats. The group then forwards the NPAG report, which recommends the response that PPQ and cooperators should contemplate. The report provides key elements, including the biological and ecological parameters of the pest, its host range, potential pathways and spread, economic impact on agricultural and natural resources, potential environmental impacts, trade implications, and control methods.

Refer to the Web site of the PPQ–NPAG for further information.

PPQ-New Pest Advisory Group
http://www.aphis.usda.gov/plant_health/cphst/npag/index.shtml

New Pest Response Guidelines

APHIS–PPQ

PPQ–EDP

PPQ–PHP

EDP–EP

New Pest Response Guidelines (NPRG) are developed by Emergency and Domestic Programs (PPQ–EDP) and the Center for Plant Health Science and Technology (PPQ–CPHST) in consultation with subject matter experts, scientists, and pest specialists. NPRG's provide information on the methods and tools used to contain, control, or eradicate an individual pest species or a group of pests. NPRGs are either developed in response to a pest detection in the United States or prior to the arrival of a pest.

Plant Protection and Programs has adopted the Analytic Hierarchy Process (AHP) Prioritized Pest List used by the Cooperative Agricultural Pest Survey (CAPS) program to prioritize pests for the development of NPRGs. To develop the AHP list, the AHP core team compiles a list of pests of concern from sources including professional societies, the APHIS Regulated Plant Pest List, the Offshore Pest Information System (OPIS), the PPQ-New Pest Advisory Group (NPAG), and others. The team uses AHP software to prioritize pests based on weighted criteria developed by the national CAPS committee. The national CAPS committee is composed of representatives from PPQ and the National Plant Board.

The AHP Prioritized Pest List criteria sets a strategic objective to identify high-risk pests for the CAPS early detection surveys. The criteria considers the following:

- Economic impact to include foreign trade (market loss), production costs and domestic trade (increased costs for production including research and development, transportation, and processing), and public costs (cost to governments for control or eradication, cost of increased imports for lost crop)
- Environmental impact to include human health, health of native flora and fauna, health of livestock and pets, and health of plants with aesthetic value
- Impact to the CAPS program to include survey and identification feasibility

New Pest Response Guidelines are written for individual pest species on the AHP Prioritized Pest List, as well as for groups of pests that share the same characteristics. The latter NPRGs are organized by grouping the same taxa with known detection and control methods. NPRGs are developed for individual pest species when the pest does not fit the general guidelines criteria based on its unique characteristics. These unique pests are prioritized based on the pest's AHP ranking. It should be noted that a pest has priority over the AHP ranking list if it is deemed an immediate threat to the United States.

The criteria for preparing NPRG's prior to the arrival of a pest provides a rapid turnaround time for product development by focusing on both general and pest specific guidelines. The process also enables coordination between PPQ–EDP, PPQ–PHP, CAPS, and PPQ–CPHST in identifying gaps in research and development of pest detection methodology, consistency in the system used to rank pests, and risk analysis development.

For further information, refer to the New Pest Response Guidelines Web site.

PPQ New Pest Response Guidelines
http://www.aphis.usda.gov/import_export/plants/manuals/emergency/index.shtml
or
http://www.aphis.usda.gov/import_export/plants/manuals/online_manuals.shtml

Incident Command System

APHIS

MRPBS

HRD–TED

APHIS–PPQ

PPQ–PDC

PPQ–EDP

PPQ–PHP

Plant Protection and Quarantine (PPQ) has four Incident Command Teams: Alpha, Bravo, Charlie and Delta. Since 2006, the participants have been trained in the Incident Command System. The teams have responded to past emergency programs, and are on call should a plant pest emergency occur.

Training

The ability to conduct coordinated responses to emergencies has taken on new importance as reflected in the Homeland Security Presidential Directive 5 (HSPD-5), issued February 28, 2003. This directive requires that all Federal departments and agencies adopt the National Incident Management System (NIMS) in the event of a domestic emergency. NIMS was designed to provide a consistent nationwide framework for Federal, State, and local governments. The governments use NIMS to prepare for, respond to, and recover from, domestic incidents regardless of cause, size, or complexity. NIMS is based upon the Incident Command System (ICS).

The ICS is a structured management system designed to bring multiple responding agencies, including those from different jurisdictions, together under a single command structure when an incident occurs. ICS training, required for all PPQ personnel, enables personnel to operate efficiently during an incident or event. PPQ has actively been involved in providing ICS training to its workforce and stakeholders who are likely to assume a role during an emergency response.

In keeping with the NIMS-Incident Management Systems Division's (IMSD) recommendations, APHIS–PPQ implements the following ICS training as part

of its preparedness efforts. The ICS program offers courses online and in classrooms.

Online Courses

USDA's Agriculture Learning (AgLearn) system and the Federal Emergency Management Agency (FEMA) host the ICS courses online.

ICS-100.a. Introduction to Incident Command System (ICS-100.a) provides the foundation for the advanced ICS training. This course describes the history, features, principles, and organizational structure, of the ICS. It also explains the relationship between ICS and NIMS. This course is for personnel who require a basic understanding of the ICS. The target audience includes staff involved with emergency planning, and response or recovery efforts. The course objective is to enable participants to demonstrate basic knowledge of the ICS.

ICS-200.a. This course was designed to enable personnel to operate efficiently during an incident or event within the ICS. This course focuses on the management of single resources. It provides training on and resources for personnel who are likely to assume a supervisory position within the ICS. The course primarily targets response personnel at the supervisory level.

ICS-700.a. Introduction to NIMS (ICS-700.a) provides training on and resources for the NIMS, which provides a consistent nationwide template to enable all government, private sector, and non-governmental organizations to work together during domestic incidents.

ICS-800.b. Introduction to National Response Framework (NRF) (ICS-800.b) provides training on and resources for the NRF, which specifies how the resources of the Federal government will work in concert with State, local, and Tribal governments and the private sector to respond to incidents of national significance.

Classroom Courses

ICS-300. Intermediate ICS (ICS-300) provides training on and resources for personnel who require advanced application of ICS. The target audience includes all individuals who may assume a supervisory role in expanding incidents. The course topics include ICS fundamentals review, incident/event assessment, Unified Command, incident resource management, planning process, demobilization, transfer of command, and closeout.

ICS-400. Advanced ICS (ICS-400) provides training designed to enable personnel to operate efficiently in the advanced application of ICS. The course provides training for senior personnel who are expected to perform in a management capacity in a major or complex incident environment. Course

units and lessons provide fundamentals review for Command and General Staff, Unified Command (optional), major or complex incident or event management, Area Command, and Multiagency Coordination Exercises.

Exercises allow emergency management personnel, from first responders to senior officials, to train and practice pest exclusion, protection, response, and recovery capabilities in a realistic but risk-free environment. Exercises are also a valuable tool for assessing and improving performance, while demonstrating community resolve to prepare for major incidents.

Plant Protection and Quarantine (PPQ) follows the tenets of the Homeland Security Exercise and Evaluation Program (HSEEP), a capabilities- and performance-based exercise program. The intent of HSEEP is to provide common exercise policy and program guidance capable of instituting a national standard for all exercises. HSEEP reflects lessons learned and best practices of existing exercise programs and can be adapted to a variety of scenarios and events (e.g., natural disasters, terrorism, and technological disasters). PPQ is compliant with the following specific performance requirements:

- Conduct an annual training and exercise planning workshop and maintain a multiyear training and exercise plan
- Plan and conduct exercises in accordance with the guidelines set forth in HSEEP policy
- Develop and submit a properly formatted After Action Report/ Improvement Plan (AAR/IP)
- Track and implement corrective actions identified in the AAR/IP

The multiyear training and exercise plan identifies an entity's priorities as articulated in the entity's strategy, and identifies the capabilities that are most relevant to achieving those priorities. It then outlines a multiyear schedule of training and exercises that an entity will undertake to enhance and validate its capabilities. It also graphically illustrates a multiyear schedule for training and exercise activities that support those priorities. A multiyear plan employs a building-block approach in which training and exercise activities focus on specific capabilities in the following cycle of increasing complexity:

- Seminar: A seminar is an informal discussion, designed to orient participants to new or updated plans, policies, or procedures
- Workshop: A workshop resembles a seminar but is employed to build specific products, such as a draft plan or policy
- Tabletop Exercise: A tabletop exercise involves key personnel discussing simulated scenarios in an informal setting; tabletop exercises can be used to assess plans, policies, and procedures

- Games: A game is a simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedure designed to depict an actual or assumed real-life situation
- Drill: A drill is a coordinated, supervised activity usually employed to test a single specific operation or function within a single entity
- Functional Exercise: A functional exercise examines or validates the coordination, command, and control between various multi-agency coordination centers. A functional exercise does not involve any boots on the ground
- Full-Scale Exercises: A full-scale exercise is a multi-agency, multi-jurisdictional, multi-discipline exercise involving functional and boots on the ground response

The PPQ Professional Development Center (PPQ–PDC) employees design and facilitate full-scale exercises for individual responders from PPQ and other Federal, State, local, and Tribal authorities. These exercises usually last from 1 to 3 days. These exercises provide the opportunity to improve capabilities in responding to plant pest and all-hazard emergencies. These exercises emphasize both strategic and practical skills, and they provide an opportunity to execute plans, procedures, and cooperative agreements.

PPQ and cooperators implement an assortment of discussion and operations exercises annually. The exercises are planned with built-in flexibility to allow updates to drive the activity. Each exercise consists of the following major components:

- Scenario simulating an outbreak of a plant pest or weed
- Simulations focused on communication with the public and addressing problems arising during the response
- Evaluation, lessons learned, and a report written to identify strengths and weaknesses

National Incident Management System
http://www.fema.gov/index.shtm

USDA Agriculture Learning (AgLearn)
http://www.aglearn.usda.gov/

Chapter

5

Response

Contents

Introduction

Emergency response involves those activities that occur immediately after a plant health emergency has been declared. APHIS–PPQ works with Federal agencies; State, Tribal and local governments; and industry to implement coordinated emergency responses. Ultimately, there must be a well-coordinated response that includes the aforementioned parties. They work together to contain, control, or eradicate the pests and diseases that caused the emergency.

Plant Protection and Quarantine (PPQ) uses the Incident Command System (ICS), which provides responding agencies and entities with a unified strategy for working together in response to plant health emergencies. In consultation with the PPQ Deputy Administrator's office, the Emergency and Domestic Programs (PPQ–EDP) unit provides national coordination for policy and regulatory framework formulation for plant health emergency response activities. In doing so, PPQ–EDP works closely with PPQ's Center for Plant Health Science and Technology (PPQ–CPHST), State departments of agriculture, and appropriate research institutions to identify the best survey and control or eradication methods.

PPQ's Emergency and Domestic Programs (PPQ–EDP) also works with PPQ's Plant Health Programs (PPQ–PHP) and the National Plant Board to develop regulations and address impacts on international trade; and with the Eastern and Western Regions to provide operational and administrative support and direction.

Plant Protection and Quarantine responses include the following:

- Authorities
- Communication and outreach
- Rapid detection and delimiting surveys
- Assembly of a Technical Working Group
- Identification and diagnostics
- Emergency funding
- Mobilization
- Single Incident Command and Unified Command
- Data management
- Emergency management coordination
- Emergency situation report
- Regulatory framework
- Environmental monitoring
- Pest mitigation strategies

Authorities

Plant Protection Act

The Plant Protection Act of 2000 (PPA) provides the authority for the Secretary of Agriculture to prevent the introduction or spread of a plant pest or noxious weed. Section 414 provides the authority to take emergency action to seize, quarantine, treat, or destroy articles or products related to plant pests new to or not known to be widely prevalent in the United States. Section 415 provides the authority for the Secretary of Agriculture to declare an Extraordinary Emergency.

This Act provides the authority to regulate the movement of plant pests and their carriers, into or through the United States, and to take emergency measures pending promulgation of quarantines and regulations.

This authority incorporates provisions of older statutes that were repealed, including the Federal Plant Pest Act, most of the Federal Noxious Weed Act, and the Golden Nematode Act among others.

The PPA provides the authorities that support emergency response. The PPA, codified in Federal regulations, provides the foundation for flexible but

effective programs for protecting the United States against threatening pests and to promulgate or modify existing regulations wherever necessary.

As the PPA relates to emergency response programs, it provides the U.S. Secretary of Agriculture with the authority to do the following:

- Establish or modify quarantines and regulations as necessary to carry out programs against new plant pests that become established in the United States
- Restrict and prohibit the entry and interstate movement of plants and plant products to prevent the entry and interstate spread of plant pests
- Declare an Extraordinary Emergency when a new economically significant plant pest is present in the United States and that presence threatens the agriculture of the United States and State measures are determined inadequate
- Cooperate with States, farmers, associations, and other countries, to carry out operations to control or eradicate pests which pose a significant economic hazard or that threatens the United States

State Authorities

In many cases State authorities are needed and are useful to augment or compliment Federal authority. Examples include access to private properties for inspection, or control activities and intrastate quarantine measures. State authorities can be put into effect more quickly than Federal authorities, which could be more robust and can regulate intra-state movement of regulated articles.

Declaration of Emergency

When it is necessary to secure funding beyond what is available in contingency funds for an emergency, a Declaration of Emergency is issued by the U.S. Secretary of Agriculture to request a transfer of Commodity Credit Corporation (CCC) funds or other USDA funds to APHIS for a specific PPQ program activity.

The Declaration may be issued in conjunction with regulations (for example, an interim or proposed rule to contain plant pests). A Declaration of Emergency may also be declared at the State level by the Governor, head of the department of agriculture, or other appropriate governmental official to allow for emergency funding and emergency regulation enactment.

Declaration of Extraordinary Emergency

A Declaration of Extraordinary Emergency is issued by the U.S. Secretary of Agriculture and provides PPQ with the authority to conduct survey and eradication measures and control the movement of regulated articles within a State and/or to pay compensation, at the Secretary's discretion, for economic

losses caused by an action of the Secretary. It also gives PPQ authority to quarantine part of a State. A Declaration of Extraordinary Emergency is undertaken by the Secretary only after review and consultation with the Governor of the affected State or appropriate State officials with the finding that the measures the State is taking are not adequate to eradicate the pest or noxious weed.

A Declaration of Extraordinary Emergency must be published in the *Federal Register*. If necessary, subsequent *Federal Register* notices are used to publish an interim, proposed, or final rule.

Communication and Outreach

APHIS–PPQ
PPQ–EDP
PPQ–PHP
LPA
SPRO
PPQ–ER
PPQ–WR

Communication and outreach efforts play a central role in emergency response. Effective emergency response will not be fully successful without the participation and coordination with cooperators, including State, local, and Tribal authorities; the private sector; and international trading partners.

In addition to communicating closely with the State in which the response is being mounted, Plant Protection and Quarantine (PPQ) provides timely communication to the rest of the States, potentially impacted industries, stakeholders, and trading partners. The communication includes the biological and ecological parameters of the pest, and its regulatory significance, economic importance, potential impact on industries, trade implications, affected States, and other pertinent information.

PPQ has established the following standard operating procedures and tools to ensure that timely communication is provided during plant health emergencies:

Informational Memoranda

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP) forwards an informational memorandum to PPQ's Deputy Administrator summarizing the nature of the emergency. This includes information regarding the biological and ecological parameters of the pest, its regulatory significance, its economic importance, potentially impacted industries, trade implications, involved States, and other pertinent information, including proposed response actions.

Governmental Officials and Stakeholders

It is very important to reach out to key elected and State officials and industry and environmental stakeholders that have jurisdiction or a vested interest in the area where the pest or noxious weed incursion has occurred in advance of a press release or other general dissemination of information. Providing them with accurate and up to date information allows for an early assessment and development of a measured response when the media and the public inquires as to a response from particular individuals, agencies, or organizations.

Press Releases

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP) works with APHIS' Legislative and Public Affairs (LPA) to draft a press release designed to inform the public of the plant health emergency and proposed response. The drafting of the press release is coordinated with the PPQ regional staff, and the State Plant Health Director (SPHD) and State Plant Regulatory Officials (SPRO) who are coordinating with their Public Information Officer, where applicable, of the State in which the emergency is taking place. The press release should go out only after the USDA and affected States sign off and identify who will take the lead in sending it out and responding to inquiries.

Regional, State, Media, and Public Exchange

Plant Protection and Quarantine's regional offices work with SPHDs and their SPRO counterparts to share and coordinate information among each other and also forwards information to PPQ Headquarters in the form of situation reports, conference calls, and other written and verbal communications. PPQ regional staff and SPHDs also work with LPA field Public Affairs Officers to coordinate the dissemination of information to stakeholders, the media, and the general public.

APHIS informs the National Association of State Departments of Agriculture (NASDA) and holds a question-and-answer session regarding biological and ecological parameters of the pest, its regulatory significance, its economic importance, potentially impacted industries, trade implications, involved States, and the proposed response.

SPRO Letters

A State Plant Regulatory Official (SPRO) letter is a notice to State and Territory agricultural regulatory officials, which serves as one of the main communication avenues used by PPQ's Deputy Administrator for informing the States and stakeholders about various important plant health developments and policies. SPRO letters are used to transmit information about Federal Quarantine Orders, program and regulatory updates, and new pest detections in a timely manner.

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP) coordinates the drafting of the SPRO letter with the PPQ regional staff, the SPHD, and the SPRO in which the emergency is taking place. In addition, PPQ–EDP coordinates with the Phytosanitary Issues Management (PHP–PIM) unit to ensure the information meets International Plant Protection Convention (IPPC) standards. Multiple SPRO letters may be needed as new information on the status of the new plant health emergency is available.

State Plant Regulatory Official (SPRO) Letters
http://nationalplantboard.org/laws/spro.html

National Plant Board Teleconference

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP) convenes a teleconference with the National Plant Board (NPB) shortly after the detection of a new plant pest or an outbreak has occurred to provide initial information about the incident. NPB members and leadership are briefed on a broad range of issues related to the incident, including the pest's regulatory importance, infestation delimitation, response strategies, biological and ecological consideration, economic impact, trade implications, and other pertinent information. It is important to have both the SPHD and SPRO from the impacted States available to participate on the call.

Industry Teleconference

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP) convenes a teleconference with representatives from potentially impacted industries shortly after the detection of a new plant pest or an outbreak has occurred to provide initial information about the incident. Industry representatives are briefed on a broad range of issues related to the incident, including the pest's regulatory importance, infestation delimitation, response strategies, biological and ecological consideration, economic impact, trade implications, and other pertinent information. This teleconference may not be the first contact with industry leaders, as it is important to provide initial information to effected industry leaders as quickly as possible.

NAPPO and Trading Partners

Plant Protection and Quarantine's Plant Health Programs (PPQ–PHP) informs North American Plant Protection Organization (NAPPO) and trading partners of the situation, including the background information about the pest, response plan, regulatory status and safeguard measures designed to contain, control, or eradicate the pest.

Pest Alerts

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP) works with APHIS-Legislative and Public Affairs (LPA), subject matter experts, PPQ–CPHST, the SPHD and SPRO in the impacted State or States, and others to develop a pest alert fact sheet about the pest, its biological and ecological parameters, and its regulatory significance. The pest alerts are electronically produced and distributed via the Web to State, Federal, and Tribal cooperators, industry, and stakeholders.

Daily Situation Reports

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP), Eastern and Western Regions, and State cooperators generate daily situation reports—using information from Incident Command System (ICS) status reports and other sources—as soon as response activities begin through the Unified Command structure. Reports include information on survey and diagnostic results, traceback and trace-forward information, treatment information, Unified Command actions and activities, including the number of responders operating under the Unified Command.

Daily situation reports are distributed to all SPROs. PPQ–EDP receives feedback from individual SPROs via email and phone calls. Periodic subject-specific teleconferences are convened to apprise the general NPB membership of the program's progress.

New Pest Web Site

Shortly after a new plant pest is found and all affected parties and States have been informed, PPQ–EDP creates a Web page on the APHIS–PPQ Web site in cooperation with the impacted State's SPHDs and SPROs. The site provides timely information about the pest, its biological and ecological parameters, and the proposed response. The Web site is routinely updated to provide up-to-date information about the pest situation. Refer to the plant pest program Web site for further information about programs.

Plant Pest Program Information
http://www.aphis.usda.gov/plant_health/plant_pest_info/index.shtml

Rapid Detection and Delimiting Surveys

APHIS–PPQ

Rapid detection and delimiting surveys are essential and implemented at the onset of the response. Survey data is necessary for the overall response strategy, including the ability to contain, control, and eradicate the pest.

SPHD

CPHST

SDI

PPQ field staff, under the oversight of the State Plant Health Director (SPHD), along with State cooperator resources under the direction of the SPRO, play a primary role in conducting pest survey activities within every State. The Survey, Detection, and Identification (SDI) unit within PPQ–CPHST provides technical support and demonstrated methodologies to PPQ field survey operations for rapid detection of exotic pests.

Through cross-functional networks, SDI is equipped to provide PPQ and cooperators with timely detection and survey plans designed to assist responders in delimiting the distribution of the pest or disease. In addition to providing the overall strategy, the survey plan encompasses a description of survey methods (random, targeted, etc.) and appropriate tools (trap and pheromone types, scouting, netting, etc.), geographical area and host range to be surveyed.

Technical Working Group

APHIS–PPQ

PPQ–CPHST

Plant Protection and Quarantine (PPQ) and cooperators are often confronted with questions on how best to respond to invasive plant pests and diseases that are introduced and present unanticipated challenges for the first time in the United States. This may require the assembly of a Technical Working Group (TWG), an ad hoc group of subject matter experts, to provide PPQ with timely technical information about the particular pest or disease to which the response is being mounted.

Plant Protection and Quarantine's CPHST (PPQ–CPHST) establishes a TWG upon request from PPQ–EDP or PPQ–PHP, once the need is identified. PPQ–CPHST coordinates the assembling of the TWG. A TWG's charge is to respond to technical questions that PPQ and cooperators pose. Its membership, which may be as many as 25 to 30 individuals, consists of scientific experts from Federal and State agencies, universities, the private sector, and international organizations who write science-based answers.

Ideally, the core members of the TWG are identified and consulted at the outset of the emergency to address technical questions in support of the emergency

response. The Incident Command System (ICS) Science Advisor provides on-the-ground technical support, while the TWG provides over arching technical support. The TWG can convene meetings and teleconferences as often as necessary to provide timely technical information in support of the emergency.

Identification and Diagnostics

APHIS–PPQ

Timely and accurate pest identification is fundamental to the success of an emergency response.

RIPP–NIS

The PPQ National Identification Service (RIPP–NIS) staff has the role of coordinating the identification of plant pests in support of USDA's regulatory programs. Accurate and timely identifications provide the foundation for quarantine action decisions and are essential in the effort to safeguard the Nation's agricultural and natural resources. RIPP–NIS is responsible for domestic diagnostics, including initial identifications and final confirmations.

The diagnostic system coordinated by RIPP–NIS consists of port identifiers, RIPP–NIS specialists, the RIPP–NIS Molecular Diagnostics Laboratory (MDL), State and university specialists, and cooperating laboratories such as the National Plant Diagnostic Network (NPDN), Systematic Entomology Laboratory (SEL) at the Smithsonian, Systematic Nematology Laboratory (SNL), and Systematic Botany and Mycology Laboratory (SBML). RIPP–NIS acts as a clearinghouse for pest identification by routing specimens to the appropriate laboratories for timely identification.

The RIPP–NIS collaborates with scientists who specialize in various plant pest groups, including weeds, insects, mites, snails, and plant diseases. These scientists are stationed at a variety of institutions around the country, including Federal research laboratories, plant inspection stations, land-grant universities, and natural history museums. For further information, refer to the Web site of the National Identification Services.

PPQ–National Identification Services
http://www.aphis.usda.gov/plant_health/identification/index.shtml

Emergency Funding

APHIS–PPQ

PPQ–RMPS

The success of plant health emergency response is often dependent upon obtaining additional resources. Funding needs for plant health emergency response are identified through coordination between PPQ–EDP, the Eastern and Western Regions, PPQ-Resource Management and Planning Services (PPQ–RMPS), and impacted States. There are several funding options that potentially are available for emergency events, including the following:

- Congressional supplemental funding
- APHIS contingency funds
- Commodity Credit Corporation funding
- Reprogramming
- State funding
- IPPC
- Pest Control Compact
- Other Federal agencies

Congressional Supplemental Funding

Congressional supplemental funds are in addition to regular appropriated funding and address unanticipated national circumstances such as avian influenza. APHIS is invited by USDA to submit a proposal for the funds. These funds have restricted use and are available for a limited time.

APHIS Contingency Funds

The Animal and Plant Health Inspection Service's (APHIS) contingency funds consist of no-year money that is appropriated through Congress annually. This money reverts back to APHIS if it is not used. The approval process for these funds is straightforward, requiring review by APHIS' Policy and Program Development (APHIS–PPD), the approval of the Administrator and the Under Secretary of Marketing and Regulatory Programs, and final review by USDA's Office of Budget and Program Analysis (OBPA). The process requires approximately two months for completion once PPQ submits a budget request to APHIS–PPD. The level of funding is approximately $4 million each year.

Commodity Credit Corporation Funding

Authority is delegated to the Secretary of Agriculture to declare an agricultural emergency. A request is made based on a compilation of regional and individual program needs. It is reviewed by APHIS–PPD and the USDA–

OBPA and then sent to the U.S. Office of Management and Budget (OMB) for final approval. The process takes from two to six months, and the funding is no-year, meaning it can be carried over and will remain in the program.

Reprogramming

Reprogramming refers to funding already available within APHIS programs. Amounts above $500,000 require Congressional approval and first must be recognized as available from the program to which they were appropriated by Congress. Once management in PPQ and APHIS agrees to this course of action, a formal reprogramming letter is prepared by Policy and Program Development (APHIS–PPD). The letter then moves to USDA–OBPA, OMB, and finally Congress for a decision. Congress usually renders a decision within 15 days of receipt of the request.

All emergency funding requests are coordinated through the PPQ-Resource Management and Planning Services (PPQ–RMS) Financial Management section located in Riverdale, Maryland.

There are also discretionary funds at the regional and headquarters level for an initial emergency response. The expectation is that each region of PPQ has the authority to spend within its discretion up to $50,000, to start spending from available resources for quick action in response to an emergency event. This funding is from existing allocations, and not new money.

State Funding

Often States contribute their own resources to add to the Federal funds provided. The mechanism to provide these funds at the State level vary from State to State so the amount provided will also vary.

Interstate Pest Control Compact

This fund is administered through the National Association of State Departments of Agriculture (NASDA). The affected State cannot request funds directly. Neighboring States must file a petition on behalf of the affected State to release funds to address the pest situation.

Mobilization

APHIS–PPQ

PPQ–EM

Mobilization refers to the processes and procedures used by PPQ and cooperators for activating, assembling, and transporting the resources necessary for successful emergency response. This includes both equipment and personnel.

SPHD

Depending on the size and scope of the plant health emergency, the State and PPQ local resources may be sufficient to adequately respond to the emergency. The SPRO and SPHD or their designees would form a Unified Command structure to manage the response, including coordinating the mobilization of resources.

If the emergency requires resources beyond what is available within the State in which the emergency has occurred, the Incident Commanders in a Unified Command structure would request additional resources from the respective PPQ regional Emergency Program Coordinator (EPC). The EPC would request and coordinate the mobilization of additional resources to the emergency site.

If the required resources surpass those available within the PPQ region in which the emergency has occurred, then regional EPC would coordinate with their counterpart in the other PPQ region to mobilize resources across regions.

If the required resources surpass those available across PPQ regions, then the national Emergency Response Coordinator (EPC) would pursue securing additional resources from other APHIS programs, Customs and Border Protection (DHS–CBP), or other Federal agencies such as Agricultural Marketing Service (AMS), Agricultural Research Service (ARS), Cooperative State Research, Education, and Extension Service (CSREES), National Institute for Food and Agriculture (NIFA), Cooperative State Research, Education, and Extension Service (CSREES), Department of Defense (DOD), or others.

For large complex emergencies, the Incident Commanders in a Unified Command structure may request the assistance of a PPQ Incident Management Team (IMT). The regional EPC works with the Incident Commanders of the IMT on call to decide whether the entire team should be deployed. IMT members are available to respond to emergencies within 24 hours of

notification. For further information, refer to the Emergency Preparedness and Response Web site.

PPQ-Emergency Preparedness and Response
http://www.aphis.usda.gov/emergency_response/

Emergency Management and Coordination

APHIS–PPQ

SPHD

REM

PPQ–EDP

Plant Protection and Quarantine (PPQ) works with Federal agencies, State, Tribes, and local governments, and industries to implement coordinated actions designed to contain, control, and eradicate plant pests and diseases. Under the Incident Command System, command may be single (Incident Commander), or unified (Incident Commanders) with command personnel from different agencies or jurisdictions who share authority for the incident. The SPHD and SPRO provide the leadership and local coordination for plant heath emergencies through the Unified Command structure.

Incident Command

APHIS–PPQ

REM

Plant Protection and Quarantine (PPQ) and State cooperators have historically demonstrated a consistent, innate ability to respond quickly to plant health emergencies.

The ability to conduct coordinated responses to large emergencies has taken on a new importance as reflected in the Homeland Security Presidential Directive 5 (HSPD-5) issued February 28, 2003. This directive requires that all Federal departments and agencies adopt National Incident Management System (NIMS) in their domestic emergency management.

The National Incident Management System is designed to provide a consistent nationwide approach to Federal, State, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity.

At the center of NIMS is the Incident Command System (ICS), a structural type of management system designed to bring multiple responding Federal, State, and local jurisdictions together under a single overall command structure when an incident occurs.

The ICS offers a scalable response to an emergency (incident) of any magnitude, and provides a common framework within which people can work together. The system is designed to grow and shrink along with the incident, allowing more resources to be smoothly added into the system when needed and released when no longer needed.

In keeping with ICS operating principles, PPQ's response to any emergency is focused on supporting the local needs of the SPHD and SPRO, together as the Incident Commanders working in the Unified Command structure. When the local jurisdiction requests additional assistance, PPQ works cooperatively with its local, State and Federal cooperators, and private entities to develop and implement a joint Incident Action Plan, under the Unified Command structure.

The Incident Commanders may request the assistance of an Incident Management Team (IMT) for large or complex emergencies. The regional EPC works with the Incident Commanders of the IMT on call to decide whether the entire team should be deployed. There are four IMT's whose members are available to respond to emergencies within 48 hours of notification.

For further information, refer to the APHIS Mobilization Guide and PPQ Emergency Programs Manual.

PPQ Emergency Programs Manual
http://www.aphis.usda.gov/import_export/plants/manuals/emergency/downloads/epm.pdf

Unified Command

The Incident Commanders in the Unified Command structure are responsible for the overall management of the plant health emergency at the local or State level; the development and implementation of the daily incident objectives and strategy; and for approving the ordering and release of resources. In keeping with Incident Command System (ICS) operating principles, PPQ's response to any emergency is focused on supporting the local needs of the SPHD and SPRO working together as the Unified Command.

When the local jurisdiction requests additional assistance, PPQ works cooperatively with its local, State and Federal cooperators, and private entities to develop and implement a joint Incident Action Plan, under the Unified Command structure.

The Unified Command is comprised of more than one State or Federal agency. The Incident Commanders in a Unified Command structure will report back to their respective agencies. Depending on the situation, the Incident Commanders could report to the Area Command, the region, the State department of agriculture, and the respective participating agencies.

Typically, Incident Commanders in a Unified Command structure report to the Area Command. The Command Staff (information, liaison, safety, intelligence officers) and General Staff (operations, planning, logistics, and finance/ administration chiefs) report to the Incident Commanders in a Unified Command structure.

Direct tactical and operational responsibility for the conduct of incident management activities rests with the on-scene Incident Commanders. For further information, refer to the PPQ Emergency Programs Manual.

PPQ Emergency Programs Manual
http://www.aphis.usda.gov/import_export/plants/manuals/emergency/downloads/epm.pdf

Area Command

The purpose of an Area Command is to oversee the management of a large or complex regional incident and coordinate the allocation of resources in support of the incident and the Unified Command. Typically, Incident Commanders in a Unified Command structure (Federal and State) report to the Area Command. If an Area Command is absent, then they report to the region and the affected SPRO and SPHD of that State.

Plant Protection and Quarantine's Western Region in Fort Collins, CO, provides Area Command support for the States listed in *Table 5-1*.

Table 5-1 States and Possessions Supported by PPQ Western Region, Fort Collins, Colorado

Alaska	Arkansas	Arizona
California	Colorado	Hawaii
Idaho	Guam	American Somoa
Kansas		
Louisiana	Missouri	Montana
Nevada	Oklahoma	Oregon
North Dakota	Nebraska	New Mexico
South Dakota	Texas	Utah
Washington	Wyoming	Iowa

Plant Protection and Quarantine's Eastern Region in Raleigh, NC provides Area Command support for the States listed in *Table 5-2*.

Table 5-2 States and Possessions Supported by PPQ Eastern Region, Raleigh, North Carolina

Alabama	Connecticut	District of Columbia
Delaware	Florida	Georgia
Illinois	Indiana	Kentucky
Massachusetts	Maryland	Maine
Michigan	Minnesota	Mississippi
North Carolina	New Hampshire	New Jersey
New York	Ohio	Pennsylvania
Puerto Rico	Rhode Island	South Carolina
Tennessee	Virginia	Vermont
Wisconsin	West Virginia	Virgin Islands

Multiagency Coordination

Multiagency Coordination (MAC) is an agency coordination at the State, regional or national level. The purpose of MAC is to oversee and coordinate the management of plant health emergencies of national significance. Typically, MAC consists of Federal, State, and principals from other organizations with direct incident management responsibilities or with significant incident management support or resource responsibilities. These entities may be used to facilitate incident management and policy coordination.

Plant Protection and Quarantine's Emergency and Domestic Programs (PPQ–EDP) provides national leadership and coordination to the MAC for plant health emergencies of national significance, including the following:

- Ensuring that each involved agency is providing situation and resource status
- Establishing priorities between incidents and Area Commands in concert with the Single Incident Command or Unified Command structures
- Acquiring and allocating resources required by incident management personnel
- Coordinating and identifying future resource requirements
- Coordinating and resolving policy issues
- Providing strategic coordination

Data Management

APHIS–PPQ

REM

PPQ–EDP

The response to a plant health emergency involves the collection of detection, survey, control, treatment, and regulatory information in the affected area; adequate and timely identification of the plant pest or disease; and coordination of the appropriate emergency response to contain, control, and eradicate the pest or disease. Central to successful emergency management is the timely communication of information to responders and stakeholders throughout the process.

Accurate data collection, data analysis, and timely access to information are the foundation of the decision support processes used to manage plant health emergencies. A data management system that is designed to provide timely data collection, storage, integration, analysis and reporting is also fundamental in managing plant health emergencies.

Integrated Plant Health Information System

Plant Protection and Quarantine (PPQ) is developing the Integrated Plant Health Information System (IPHIS), a single data management system that will optimize the ability of PPQ and cooperators' ability in responding to plant health emergencies. The IPHIS is designed to provide a secure, Web-based portal application for all plant health related events. For further information, refer to the IPHIS Web site.

In addition to incorporating state-of-the-art technologies, such as geographic information systems, mobile devices, and databases, IPHIS is designed to use the following Internet applications:

- Pest Identification System (PestID), a system maintained by PPQ Headquarters in Riverdale, MD to provide identification and diagnostic results related to plant health
- Emergency Action Notification (EAN), a PPQ system maintained by PPQ Headquarters to provide regulatory documentation in support of plant health
- Compliance Agreement System

Integrated Plant Health Information System
http://www.aphis.usda.gov/plant_health/plant_pest_info/phis/index.shtml

Data Management Teams

In addition to IPHIS, PPQ has also begun establishing Data Management Teams (DMT) with responsibility for providing on-site data management support during plant health emergencies. The DMT becomes an integral part of the Incident Command leadership at the outset and the early planning phase. Depending on the size and scope of the emergency, the DMT may be scaled to provide what is needed for a successful response. DRT members may include specialists in data management, Internet information technology, and geographic information systems (GIS).

Data management specialists provide the following:

- On-site coordination and support of data management for the emergency
- Identification of data requirements (elements, collection, integration, analysis, evaluation, and reporting) necessary for an effective response to the plant health emergency

Internet Technology Specialists provide the on-site assembly of the hardware, software, connectivity, and network necessary to support the overall data management function. GIS Specialists provide the on-site support for GIS data integration and geospatial analysis of the data associated with the emergency response.

Incident Situation Reports

APHIS–PPQ

SPHD

REM

PPQ–EDP

Central to successful emergency management is timely communication of information to responding agencies, other Federal and State cooperators, stakeholders, and trading partners. Four types of reports are generated:

- Daily Incident Action Plan
- Daily Status
- Daily Situation
- Weekly Situation
- Monthly Summary

Daily Incident Action Plan

The Incident Commanders in the Unified Command generate a Daily Incident Action Plan as soon as response activities begin. The plan includes information on survey and diagnostics results, traceback and trace-forward information, treatment information, regulatory activities, communication and outreach, and current and needed resources, including personnel, equipment, supplies, and facilities. The plan is distributed to individuals with direct involvement with the emergency, including the Command and General Staff, and regional and national Emergency Response Coordinators.

Daily Situation Report

The Plant Protection and Quarantine national Emergency Response Coordinator generates the Daily Situation Report. In addition to information provided in the daily Incident Action Plan, including survey and diagnostics, traceback and trace-forward information, treatment information, and regulatory activities, this report also includes information of national significance such as trade, communication and outreach, technical, economic, and other biological and ecological information about the pest or disease. The report is distributed to USDA, participating local, State, and Federal, SPROs and SPHDs, NPB, NASDA, trading partners, and stakeholders.

Weekly Situation Report

The national Emergency Response Coordinator (ERC) or regional Emergency Management Coordinator (EMC) generates the Weekly Situation Report. This report replaces the Daily Situation Report as information becomes less fluid and as determined by the MAC, Area Command, and Unified Command, that timely information can be provided on a weekly basis. The weekly report includes summary information about the pest status, regulatory activities, and results associated with the response.

Monthly Summary Report

The national Emergency Response Coordinator (ERC) or regional Emergency Program Coordinator (EPC) generates the Monthly Summary Report. This report replaces the Daily and Weekly Situation Reports as program activities become routine and as determined by the MAC, Area Command, and Unified Command, that updates can be provided on a monthly basis. The monthly report includes summary information about the pest status, regulatory activities, and long-term results associated with the response.

PPQ Emergency Programs Manual
http://www.aphis.usda.gov/import_export/plants/manuals/emergency/downloads/epm.pdf

Regulatory Framework

APHIS–PPQ

PPQ–PHP

PPQ–PARC

The United States Department of Agriculture (USDA) has the responsibility for protecting plants and for safeguarding American agriculture. The Plant Protection Act of 2000 (PPA) provides USDA with the authority to regulate the movement into or within the United States of organisms that may pose a threat to agriculture. The PPA also provides USDA with the authority to prevent the introduction, dissemination, or establishment of such organisms. APHIS–PPQ is the lead Federal agency providing safeguards against exotic plant pests threatening agriculture and natural systems.

The Animal and Plant Health Inspection Service (APHIS) can regulate interstate commerce, but it may only regulate intrastate commerce with a Declaration of Extraordinary Emergency.

The regulatory framework is developed in collaboration with the affected State plant regulatory agencies. When regulating less than the whole of the State the quarantine must be in parallel with the State's quarantine.

PPQ can exercise one or more of the following regulatory options in an effort to prevent the spread of plant pests and diseases of regulatory significance:

- Emergency Action Notification
- Federal Quarantine Order
- Interim rules
- Proposed and final rules

Emergency Action Notification

The Emergency Action Notification (EAN) is a document issued by a PPQ inspector to notify an owner or agent of carrier, premises, and/or articles, to apply specific remedial measures to prevent the potential spread of a plant pest or disease. This can be used when dealing with a relatively small number of regulated entities.

Federal Quarantine Order

The Federal Quarantine Order (FQO) is issued by PPQ with the approval of USDA's Office of General Counsel (OGC). A FQO is used to stop or regulate the movement of articles from a defined geographical area to prevent the spread of plant pests and diseases. It can also be used to announce that a host will be regulated, expand existing quarantine regulations, or add to host lists in existing quarantine regulations. SPRO letters are used to transmit information about FQO's, program and regulatory updates, and the detection of new pests, in addition to providing program and regulatory updates, and the detection of new pests.

Interim Rules

The interim rules are used to establish a new quarantine in the Code of Federal Regulations on an emergency basis or when prior public comment is not in the best interest of the public. Interim rules are issued by APHIS with Office of General Counsel (OGC), departmental, and Office of Management and Budget (OMB) review.

Proposed and Final Rules

These rules are used for the long-term regulatory requirements or maintenance of on-going programs. These rules can also be used to approve new treatments or protocols for interstate movement of regulated articles in existing regulations.

Proposed and final rules are issued by APHIS with the Office of General Counsel (OGC), USDA, and Office of Management and Budget (OMB) review or clearance. PPQ–PHP-Regulations, Permits, and Manuals (PHP–RPM) provides support and guidance to PPQ Program Managers in selecting

the most appropriate regulatory option to engage in based upon the circumstances of the pest outbreak.

Plant Protection and Quarantine's PHP–RPM staff interfaces with the regulations writers in APHIS–PPD, USDA–OGC, OMB, and others involved in regulatory decisionmaking to facilitate the development and codification of regulatory initiatives.

Protection of Human Health and the Environment

APHIS

APHIS–PPD

EDP–ES

APHIS–PPQ

EDP–EC

A response to a plant health emergency situation may require the use of chemical control or some other eradication tools. Whenever such control techniques are proposed, several Federal laws must be considered prior to the initiation of the activity:

- Federal Insecticide, Fungicide, and Rodenticide Act
- Endangered Species Act
- National Environmental Policy Act

Federal Insecticide, Fungicide, and Rodenticide Act

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requires that chemicals used for control have approved labels and that all label requirements are followed. These requirements can include applicable uses, maximum application rates, handling instructions, and personal protective equipment. If no label is available for the emergency in question (i.e. the pest of concern is not listed as one for which the chemical may be used), it is possible to obtain a new label or a label exemption.

Endangered Species Act

The Endangered Species Act (ESA) requires that all Federal actions, including emergency responses, do not harm federally protected, threatened, or endangered species. Before an action can begin, it must be determined if protected species are in the project area and if so, measures must be put in place to protect them from adverse effects of the action. Such work requires coordination with the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service.

Several methods are available to ensure compliance with ESA, but the exact one chosen is dictated by the nature of the emergency, proposed response, and the location. As soon as possible in the early stages of the response, Policy and Program Development's Environmental and Risk Analysis Services (PPD–ERAS) and EDP's Environmental Compliance (EDP–EC) play critical roles in

providing the necessary guidance and in conducting the necessary analyses and developing the required documentation.

National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires that Federal agencies consider in writing the potential adverse effects of their actions, which often requires public input. The exact nature of the documentation and public involvement is dictated by the potential for adverse effects and the significance of those effects.

Most emergency responses will include actions that need up to 30 days of public comment prior to initiation of the action. As a result, it is imperative to involve EDP's Environmental Services and EDP's Environmental Compliance (EDP–EC) early in the planning process of a response so that the required public involvement can be put into place and not hinder the speed of the response.

The first step is the Environemental Assessment (EA) which could be completed in a few weeks and leads to a Finding of No Significant Impact (FONSI). If a FONSI results, then the NEPA requirements have been met. If the initial assessment determines there is a significant impact on the environment or human health, then an Environmental Impact Statement (EIS) must be completed. The EIS can several years to complete.

State and Local Environment Laws

The State plant health regulatory agency in the affected State is responsible for contacting the State and local agencies that have jurisdiction over environmental and human health to determine the applicable laws.

All Hazards Emergency Support Function

APHIS

APHIS–PPQ

The Federal Emergency Management Agency (FEMA) is the Federal agency responsible for the overall response coordination to all hazard emergencies, which include natural catastrophes such as hurricanes, tornados, tsunamis, earthquakes, and volcanic eruptions.

The National Response Framework (NRF) is an all-discipline, all-hazards plan that establishes a single, comprehensive framework for the management of domestic incidents. It provides the structure and mechanisms for the coordination of Federal support to State, local, and Tribal incident managers and for exercising direct Federal authorities and responsibilities.

The NRF applies to all Federal departments and agencies that may be requested to provide assistance or conduct operations in actual or potential incidents of national significance. These incidents require a coordinated response by an appropriate combination of Federal, State, local, Tribal, private-sector, and non-governmental entities.

The NRF may be activated in response to one or more of the following:

- A Federal department or agency acting under its own authority has requested the assistance of the Secretary of Homeland Security
- The resources of State and local authorities are overwhelmed and Federal assistance has been requested by the appropriate State and local authorities responding to a major disaster or an emergency as defined under the Stafford Act or a catastrophic incident
- More than one Federal department or agency has become substantially involved in responding to an incident
- The Secretary of Homeland Security has been directed to assume responsibility for managing a domestic incident by the President

The Federal Emergency Management Agency is responsible for the overall coordination of implementing the NRP through established structure, including the National Response Coordination Center (NRCC), Regional Response Coordination Center (RRCC), Joint Field Operation (JFO), and Incident Command Post (ICP) as required by the situation at hand. Federal agencies are assigned support functions on the basis of authorities, resources, and capabilities.

There are 15 numbered Emergency Support Functions (ESF) assigned to Federal agencies, including the following:

1. Transportation
2. Communications
3. Public Works and Engineering
4. Fire Fighting
5. Emergency Management
6. Mass Care, Housing, and Human Services
7. Resource Support
8. Public Health and Medical Services
9. Urban Search and Rescue
10. Oil and Hazardous Materials Response

11. Agriculture and Natural Resources
12. Energy
13. Public Safety and Security
14. Long-Term Community Recovery and Mitigation
15. External Affairs

The Animal and Plant Health Inspection Service (APHIS) has the responsibility to address and coordinate the animal and plant disease and pest response under the ESF 11. PPQ has the responsibility to coordinate the response to exotic plant diseases or plant pests of quarantine importance.

In response, APHIS has established an ESF 11 structure at the national, regional, and field levels designed to work with FEMA when the ESF 11 is activated to address animal or plant health issues.

APHIS' Emergency Management Leadership Council (EMLC), which is made up of executive level emergency managers representing each of the Agency's program areas from the national and regional levels, is charged with coordinating the Agency's overall response and contribution of resources during an ESF 11 activation to an all hazards emergency.

FEMA National Incident Management
http://www.fema.gov/emergency/nims/AboutNIMS.shtm

All Hazards Emergency Support Function 11 (ESF 11)
http://www.aphis.usda.gov/emergency_response/esf_11/esf11.shtml

Chapter

6

Recovery

Contents

Introduction

After an emergency response is complete, Plant Protection and Quarantine (PPQ) works with Federal agencies; State, Tribal, and local governments; and the private sector to develop and implement systems designed to provide long-term stability and protection from the pest or disease that caused the emergency. Recovery includes plant health regulations, eradication, best management practices, and restoration plans.

Plant Protection and Quarantine's recovery activities include the following:

- Long-term protection plan
- Demobilization
- National Plant Disease Recovery System
- Science-based methods and technology
- Outreach

Long-Term Protection Plan

APHIS–PPQ

PPQ–EDP

Plant Protection and Quarantine (PPQ) works with State, Federal, and Tribal agencies, industry, and stakeholders in developing and implementing long-term plans designed to prevent further domestic plant health emergencies from occurring. The long-term plan could include one or more of the following strategies:

Eradication

Eradication programs are designed to eliminate the pest and the risks associated with its spread to other areas or States. Eradication is the preferred objective, provided the tools are available. Examples of eradication programs include programs for fruit flies, plum pox virus, Asian longhorned beetle, potato cyst nematode, golden nematode, boll weevil, and pink boll worm.

Pest Mitigation

The following management practices were developed:

- Voluntary or non-voluntary
- Critical control points

A systems approach was developed for *Ralstonia.* Biological controls and sterile insect techniques were developed.

Integrated Pest Management

Integrated Pest Management (IPM) plans are designed to suppress the pest population below economic levels utilizing various tools and strategies. Many of the tools may be developed by PPQ and Federal and State cooperators and transferred to producers for implementation. Examples of IPM plans include the programs for soybean rust, white fly, and sugarcane rust.

Regulations

Controlling the movement of restricted commodities or treating the commodity to reduce pest populations on the commodity to move. Plow-down dates for crop destruction to disrupt the life cycle of the pest in question.

Cooperative Agreements

Cooperative agreements are established with the States and other entities to support recovery strategies.

Regulatory Framework

The regulatory framework supports both eradication and pest mitigation and can include interim rules, proposed and final rules, or State regulatory authorities:

Interim Rules—These rules are used to establish a new quarantine in the Code of Federal Regulations on an emergency basis or when prior public comment is not in the best interest of the public.

Proposed and Final Rules—These rules are used for the long-term regulatory requirements or maintenance of on-going programs. These rules can also be used to approve new treatments or protocols for interstate movement of regulated articles in existing regulations. These rules are issued by APHIS with USDA-Office of General Counsel, USDA, and U.S. Office of Management and Budget review or clearance.

Compliance Agreements—Compliance agreements are established with industry to ensure compliance with the regulations established to support the recovery.

State Regulatory Authority—Repealing emergency plant health rules and laws enacting applicable regulations compatible with recovery strategies. The States usually take the lead and the Federals catch up.

Demobilization

APHIS–PPQ

REM

SPHD

Demobilization refers to the process and procedures used by PPQ and cooperators to ensure orderly, safe and efficient return of an incident resource to its original location and status. Two criteria must be satisfied:

- All personnel are debriefed following demobilization and supervisor is notified of return to routine job duties
- Equipment and non-consumable materials are released and returned to controlling agencies

Although demobilization of certain resources takes place throughout the life of the incident, most the demobilization activities occur upon completion of the emergency response.

APHIS Mobilization Guide
http://www.aphis.usda.gov/emergency_response/downloads/APHIS%20Emergency%20Mobilization%20Guide.pdf

National Plant Disease Recovery System

ARS

The National Plant Disease Recovery System (NPDRS) is called for in the Homeland Security Presidential Directive Number 9 (HSPD-9). The purpose of the NPDRS is to insure that the tools, infrastructure, communication networks, and capacity required for mitigating the impact of high consequence plant disease outbreaks are such that a reasonable level of crop production is maintained.

Each disease-specific plan is intended to provide a brief primer on the disease, assess the status of critical recovery components, and identify disease management research, extension, and education needs. These documents are not intended to be stand-alone documents that address all of the aspects of plant disease outbreak and all of the decisions that must be made and actions taken to achieve effective response and recovery. They are, however, documents that will help USDA and others guide further efforts directed toward plant disease recovery. The plans are a cooperative effort of university, industry, and government scientists sponsored by the American Phytopathological Society and the United States Department of Agriculture.

Plant Protection and Quarantine has been instrumental in assuring that the NPDRS has engaged not only Federal but State partners in the development of strategies for recovery from plant health emergencies.

USDA-Agricultural Research Service-Office of Pest Management-National Plant Disease Recovery System
http://www.ars.usda.gov/research/docs.htm?docid=14271

Science-Based Methods and Technologies

Science-based methods and technologies need to have a scientific assessment that supports recovery strategies. The methods and technologies ensure the tools and methods are provided to achieve pest mitigation goals and strategies.

Outreach

Ongoing outreach to stakeholders and other interested parties on the recovery strategies. What is being proposed and kept apprised of ongoing progress. Public and Industry Meetings. To and through the National Plant Board and

National Association of State Departments of Agriculture. Press Releases, SPROS. Recognition activities for end of program (e.g., ALB in Chicago, PPV in PA).

Chapter

7

Roles and Responsibilities

Contents

Introduction

Program Managers at the headquarters, regional, and State levels in Plant Protection and Quarantine (PPQ) and PPQ–CPHST involved in a plant health emergency response have specific roles and responsibilities. While personnel at all three levels are expected to work together, the ultimate authority lies with the National Program Manager based on input, communication and coordination with the regional personnel and State Plant Health Directors. While PPQ–CPHST provides technical and scientific information and guidance, the national and regional Program Managers are the ultimate decisionmakers regarding the regulatory and operational strategies to be pursued.

For the purposes of this document, Emergency Programs are those programs that involve one or more of the following:

- Identifying and delimiting new outbreaks of an actionable or reportable quarantine pest
- Coordinating with industry, Federal agencies, and State, Tribal, and local governments to organize and implement coordinated actions designed to contain, control, or eradicate an actionable or reportable quarantine pest
- Coordinating the development of a regulatory framework that quarantines the pest while facilitating interstate commerce of regulated articles that pose plant health risk
- Formulating and perusing funding on an emergency basis

PPQ Headquarters

Primary Role

To provide leadership, overall direction, and guidance from the national perspective as follows:

1. Executive Decisionmaking Support

   Coordinates with the Plant Protection and Quarantine (PPQ) New Pest Advisory Group (NPAG) and others to gather the critical information needed for the PPQ executive team to make the decision regarding the nature and goals of the emergency response when a quarantine pest has been detected. Ensures the States and critical stakeholders affected by emergency response have had the opportunity to provide their perspective and input for the executive team's consideration.

2. Policy

   A. Drafts program policy for Agency consideration

   B. Initiates and coordinates the development of program policy in alignment with the PPQ-New Pest Advisory Group recommendation and PPQ executive team decision regarding the nature and goals of the emergency response

   C. Initiates and coordinates consultation with Federal agencies, and public and private organizations concerned with the emergency and response actions under consideration

   D. Participates in consultations with State, local, and Tribal governments

   E. Stays abreast of and informed of program status or critical issues

   F. Performs timely program reviews to ensure objectives are met and activities are cost-effective

   G. Provides support to the Deputy Administrator on specific program issues as needed

3. Budget

   Develops budget for the program in consultation with the regions and the States:

   A. Initiates and facilitates the development of the budget for the emergency response and associated performance measures

B. Works with the Deputy Administrator's office through PPQ Resource Management and Planning Services (PPQ–RMS) to secure funding

C. Works with the APHIS budget staff to complete the program assessment rating process, including the development of the performance measures to be reported to U.S. Office of Management and Budget

4. Project Management and Coordination

Project management and coordination provides the overall program coordination:

A. With PPQ–CPHST to:

i. Mobilize the PPQ-New Pest Advisory Group (NPAG)

ii. Develop New Pest Response Guidelines

iii. Assemble and convene Technical Working Groups (TWG) that provide response and treatment recommendations

iv. Ensure PPQ–CPHST is charged with the science and technical projects including identifying the priorities among the projects for the emergency response

B. In consultation with the regions, SPHDs, and other to ensure national consistency occurs on the following program operations:

i. With Federal agencies; State, Tribal, and local governments; industry; and public and private organizations concerned with the emergency and response actions under consideration

ii. With the APHIS ESF-11 national Coordinator, and the PPQ national and regional ESF-11 Coordinators when an All Hazards impacts an emergency response program

5. Resource Management

Available for consultation regarding program resource needs.

6. Mobilization of Resources

Available for consultation.

7. Liaison with Other Resources

Ensures overall coordination occurs within PPQ and with other Federal agencies; State, local, and Tribal governments; industry; and public and private organizations involved in the emergency response. Coordinates with PPQ's Plant Health Programs and APHIS' International Services (APHIS–IS) on programs that involve international activity.

8. Communication and Collaboration

Develops and maintains communication plans with APHIS–LPA and the PPQ Deputy Administrator's office as follows:

A. Prepares information for APHIS and USDA executive leadership

B. Works with APHIS–LPA to issue press releases, pest alerts, and program brochures

C. Develops communications outlets using social media and Web

D. Ensures appropriate public meetings are held in consultation with APHIS–LPA, the regions, and stakeholders

E. Prepares and sends out SPRO letters

F. Convenes conference calls with National Plant Board, regions, SPHDs, and SPROs

G. Coordinates with SPHDs and regions in communicating with affected State, local, and Tribal agencies, industry, and stakeholders

H. Coordinates with the regions, SPHD, and cooperators to engage the public to ensure a robust range of alternative actions are considered in response to the emergency

I. Generates the Daily Situation Reports and pest alerts

J. Establishes and maintains the public Web page

K. Ensures all appropriate personnel at all levels of the organization are kept informed

L. Ensures a consistent message is communicated by all levels of the organization with Federal Emergency Management Agency and other external entities regarding the coordination of the emergency response program with ESF-11, All Hazards Response

M. Manages and coordinates the relationships and communications with affected industry representatives at the national level

N. Coordinates with regional Program Managers to develop a consistent message to be communicated with industry and other stakeholders at the local level

O. Coordinates with regions, the States and APHIS–LPA in the development of an outreach plan and with the media at the national level

P. Communicates any local political issues to the regions and larger political issues to the Deputy Administrator's office

Q. Represents the agency's official position on program issues

9. Data Management

Ensures national-level deployment, integration, and coordination of data management teams in the emergency response.

10. Regulatory Framework

- **A.** Works with PPQ–PHP-Regulatory Coordination and Compliance (RCC) to develop the regulatory framework governing the emergency response
- **B.** Determines which regulatory tool is most appropriate
- **C.** Works with the regions and SPHDs to ensure Federal quarantines match actual pest distribution or the quarantines established and maintained by the States
- **D.** Verifies parallel State regulations are in place as required
- **E.** Facilitates development of Federal Domestic Quarantine Orders

11. Environmental Compliance

- **A.** Works with regional Program Managers to address environmental issues
- **B.** Works with PPQ Environmental Compliance unit to address environmental issues
  - **i.** Works with PPD Environmental Services to conduct the appropriate National Environmental Policy Act and Endangered Species Act analyses (Environmental Assessments, Environmental Impact Statements, etc.) to ensure proposed actions will not adversely effect the quality of the human environment or threaten endangered species.
  - **ii.** Develops and coordinates environmental monitoring plans for program.

12. Issues Management

- **A.** Engages Plant Health Program's Phytosanitary Issues Management (PHP–PIM) staff to address trade issues
- **B.** Manages the larger political and legal issues, coordinating with the PPQ Deputy Administrator, APHIS Administrator, and Under Secretary for Marketing and Regulatory Programs

13. PPQ–CPHST Coordination

- **A.** Coordinates the work of the PPQ–CPHST Technical Working Group with regional Program Managers and SPHDs, ensuring it meets the technical needs of emergency response operations

B. In cooperation with the regional Program Managers and SPHDs, provide input to PPQ–CPHST regarding the emergency response program's science and technical needs and establishes the priorities among all project requests and monitors progress

C. Initiates and coordinates routine communication with regional Program Managers and PPQ–CPHST scientists working on the program

Regions

Primary Role

This role can be executed by a Regional Director, Assistant Regional Director, the Regional Emergency Program Coordinator, and other relevant regional Program Managers as needed to direct and coordinate operations among States as follows:

1. Implements Agency Policy

Participates in the development of and is responsible for the implementation of the Agency's policy and provides feedback to Plant Protection and Quarantine (PPQ) Headquarters regarding the effectiveness of the policy.

2. Budget

A. Works with the National Program Manager, senior Regional Program Managers, and Regional Director and Regional Budget Analyst to develop the national and regional program budgets

B. Participates in the development of performance measures and provides documentation on program activities and performance measure information to the National Program Manager to monitor progress and provide reports to U.S. Office of Management and Budget via APHIS' Policy and Program Development

C. Provides status of funds information to the National Program Manager

3. Project Management and Program Coordination

Provides overall coordination at the regional level and regional perspective in development of the overall:

A. Emergency Response Plan

B. Budget (Resource Management)

C. Communication plan

D. Regulatory framework

E. ESF-11 activities involving a plant health emergency program

F. Regional consistency within and among States and across region

4. Resource Management

A. Develops the regional level budget

B. Identifies and ensures that the impacted States receive the needed resources to effectively respond to the emergency

C. Recruits additional personnel

D. Establishes and manages cooperative agreements in affected States

E. Facilitates the procurement of equipment, supplies, vehicles, etc.

5. Regional Mobilization of Resources

Coordinates the deployment and management of resources (people, equipment, supplies, etc.) for the emergency response program and an associated ESF-11 response when needed.

6. Deploys and Coordinates Incident Management Teams (PPQ–IMT's)

Provides regional and Area Command for the emergency response.

7. Communication

A. Communicates with SPHDs and SPROs on program issues and keeps ARDs, regional Program Managers, and National Program Managers, as well as the PPQ–EDP Executive Director and Deputy Administrators office informed

B. Provides input on the daily situation report

C. Ensures the Incident Commander provides the daily status report

D. Participates in all policy and response coordination discussions

E. Represents PPQ at regional stakeholder meetings

F. Advertises legal notice of the availability for comment of National Environmental Policy Act documents

G. Communicates and coordinates with regional emergency preparedness PHP–RPM to facilitate and support an effective Incident Command System response

H. Represents the agency's official position on program issues

8. Data Management

A. Ensures deployment, integration and coordination of data management teams, as needed, in the emergency response

B. Uses Smuggling Interdiction and Trade Compliance and APHIS-Investigative and Enforcement Services expertise to support the emergency response, as needed (e.g., tracebacks, trace-forwards) to discover pathways and to identify any regulatory compliance issues associated with new pest introduction or to conduct investigations

9. Regulatory Framework

Works with PPQ–PHP-Regulatory Coordination and Compliance (RCC) unit to develop the regulatory framework governing the program. Works with the regions and SPHDs to ensure Federal quarantines match actual pest distribution or the quarantines established and maintained by the States.

10. Environmental Compliance

Works with regional Program Managers to address environmental issues. Works with PPQ's Environmental Compliance unit and APHIS-Environmental Services to develop appropriate environmental documentation (Environmental Assessments, Environmental Impact Statements, etc.) as needed.

11. Issue Management

Manages stakeholder concern, political, and legal issues that rise to the attention of agency national leadership.

A. Engages PPQ–PHP and PHP–PIM staff to address trade issues

B. Engages PPQ–PHP and QPAS to address overseas monitoring of domestically regulated pests (e.g., Gypsy Moth Program)

C. Manages over arching issues that emerge

State Plant Health Directors

The primary role is to coordinate the Federal emergency response with the appropriate State, local, and Tribal officials.

1. Unified Command and Incident Management

Serves as first responder and co-leads with the appropriate State official in the Unified Command structure. The SPHD coordinates the implementation of the emergency response plan (survey, control, regulatory framework) at the field level. Participates with the national and regional Program Managers to develop the following:

A. Emergency response plan

B. Budget

C. Communications plan

D. Regulatory framework

2. Resource Management

Deploys resources and ensures efficient and effective use of resources in the field.

3. Communication

A. Generates and communicates daily status reports following the communication protocols established by the Incident Commanders as specified by the Plant Health Emergency Framework

B. Initiates any consultations with State, local, and Tribal governments

C. Participates in all policy and response coordination discussions

D. Ensures all field personnel are kept informed of changes in direction of policy

E. Advertises legal notice of the availability for comment of National Environmental Protection Act documents

F. Provides feedback to the Regional and National Program Managers on the effectiveness of program policy and operations

G. Communicates with the affected constituencies within the State

H. Represents the agency's official position on program issues

I. Conducts Tribal consultations

4. Data Management

Ensures quality data is collected and entered into the system on a daily basis to keep the Incident Commanders informed of progress being made in the field and to support daily operational planning decisions.

5. Issues Management

Addresses local political and public issues and keeps the Regional and National Program Managers informed. Elevates issues with broader implications to the regional or national level.

Center for Plant Health, Science and Technology

Primary Role

To provide technical and scientific support to program officials making regulatory and operations decisions and develops new tools and technologies for operational use.

1. Risk Assessments
   - **A.** Conducts a preliminary risk assessment to:
     - **i.** Identifies the host range of the pest
     - **ii.** Identifies the potential pathways for pest introduction
   - **B.** Provides information to regions or the National Program Manager regarding traceforwards or trace-backs if needed to determine if stop sale or recalls are needed
   - **C.** Identifies currently available survey and control tools
2. Coordinates with RIPP–NIS to identify or confirm identification of exotic pests and provides lab services, as needed
3. Coordinates the PPQ-New Pest Advisory Group (NPAG) to determine the most appropriate response to a detection of a pest of regulatory significance
4. Assembles and provides leadership for a Technical Working Group
   - **A.** PPQ–CPHST acts as liaison with USDA-Agricultural Research Service, universities, and other Federal agencies and research organizations and their involvement in a TWG
   - **B.** Provides guidance and develops strategy and tools to detect and identify the pest, and to conduct delimiting surveys
   - **C.** Provides recommendation on the size of quarantine areas based on the biological and ecological parameters of the pest
   - **D.** Provides recommendation on effective tools designed to contain, control or eradicate the pest
   - **E.** Provides recommendations on scientific and technical issues
5. New Pest Response Guidelines

   Provides the technical and scientific support in the development of the New Pest Response Guidelines to support the emergency response operations.

6. Liaison Role

   Coordinates with other entities to obtain needed scientific and technical resources. Coordinates with National Plant Diagnostic Network to identify their labs' capacity to assist and respond to an emergency program; where needed, provide the technical assistance to facilitate their ability to support the program needs, including training personnel as necessary.

7. Provides Technical Transfer Training

   Provides training to the field staff on the survey and methods developed to ensure the technical tools are applied appropriately. Develops and produces technical manuals to support the ongoing application of the technical tools provided.

8. Project Management

   Works with the Program Managers to develop and prioritize the project slate to support the emergency response.

9. Communication

   Provides information to the Program Managers regarding the ongoing status of science and technical projects PPQ–CPHST is charged to deliver.

Chapter

8

State Plant Protection Resources

Contents

Introduction

Within the United States, the 50 States and associated U.S. Territories and Possessions have departments of agriculture that are responsible for agricultural protection and enhancement in their respective geographic jurisdictions. Further, each State, Territory, or Possession department of agriculture has some level of Plant Protection and Quarantine (PPQ) resources and regulatory duties and responsibilities depending on their size and scope that includes plant health emergency response.

State departments of agriculture, Territories and Possessions are members of the National Association of State Departments of Agriculture (NASDA). The mission of NASDA is to represent the State departments of agriculture in the development, implementation, and communication of sound public policy and programs which support and promote the U.S. agricultural industry, while protecting consumers and the environment. NASDA works closely with APHIS and the plant protection branches of the States via a standing committee dedicated to plant health issues. NASDA maintains a Web site that contains information on each member State. For further information, refer to the NASDA Web site.

The Plant Protection and Quarantine subdivisions within the departments of agriculture or other relevant subdivisions—such as the Departments of Natural Resources or Entomology at land grant universities—are members of the National Plant Board (NPB), a national organization of State and Territory plant protection resources that work regionally as well as nationally with the United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA–APHIS) to coordinate and carry out plant protection programs. The NPB also maintains a Web site that contains contact

information on each member State and Territory, as well as up-to-date information on laws, rules, and programs. For further information, refer to the Web site of the NPB.

National Association of State Departments of Agriculture (NASDA)
http://www.nasda.org/

National Plant Board (NPB)
www.nationalplantboard.org

State Authorities

State Plant Protection and Quarantine (PPQ) authorities are generally designed to address regulatory issues within the State's jurisdiction. The regulatory issues include the intrastate movement of plants and plant products, and the interstate movement of plants and plant products in the absence of APHIS regulation for pests of limited distribution. Intrastate regulations generally conform to the model Nursery Stock Certification Standards and the Principles of Plant Quarantine that have been adopted by the National Plant Board (NPB). When APHIS interstate regulations are in place, the State, Territory, or Possession internal or intrastate requirements must be parallel with the Federal regulatory measures.

While State, Territory, or Possession plant protection laws and rules vary somewhat depending upon the regulatory needs of the stakeholders, in most cases they include a Plant Health Emergency Authority to respond to new plant pests of economic importance when detected. Additional related authorities at the State level provide the authority to enter onto private properties for inspection purposes, the ability to stop the intrastate movement of regulated articles that are at risk of moving plant pest or disease that many times compliment APHIS' authorities under the Plant Protection Act of 2000 that govern interstate movement requirements.

States can require regulated entities to keep records or can subpoena records of regulated entities. The States can also conduct control activities and operations.

Refer to the Web sites of the National Plant Board (NPB) and the National Association of State Departments of Agriculture (NASDA) for further information concerning State, Territorial, and other Possessions.

National Association of State Departments of Agriculture (NASDA)
http://www.nasda.org/

National Plant Board (NPB)
www.nationalplantboard.org

State, Territory, and Possession Protection Duties and Responsibilities

State departments of agriculture, Territories and Possessions through their plant protection divisions have the responsibility to carry out general pest detection activities, and have the authority and ability to respond to new plant pests or disease incursions. The level of response is variable depending upon the resources available in the State, Territory or Possession.

Generally, when a new pest or disease is detected and identified as being of economic importance or that may require a prescribed response, an agricultural Plant Health Emergency is declared by the appropriate State official. This allows for the release of plant health emergency response resources to apply to the specific plant pest issue.

Plant health emergency response is usually in the form of a Plant Health Emergency Program which involves survey, regulatory, control, public relations, and administrative sections. The current structure used in most Plant Health Emergency Response programs is the Incident Command System (ICS). There are many advantages to using ICS including standardization and coordination of response functions that can allow for a multistate and joint Federal response (Unified Command) using a standardized framework. Refer to *Incident Command System* on page 4-9 for further information.

Refer to the Web sites of the National Plant Board (NPB) and the National Association of State Departments of Agriculture (NASDA) for further information concerning State, Territory, and Possession plant protection resources and responsibilities.

National Association of State Departments of Agriculture (NASDA)
http://www.nasda.org/

National Plant Board (NPB)
www.nationalplantboard.org

State and Federal Cooperative Agreement Program

A combined State and Federal coordinated response is the best approach to effectively address the duties and responsibilities required to safeguard U.S. plant health. The process for State and Federal partnership programs is carried out through the cooperative agreement process, or less frequently through grants.

The cooperative agreement process is initiated at the State level between the lead plant protection officials from USDA and the State departments of agriculture. The officials include the State Plant Health Directors (SPHD) and the State Plant Regulatory Officials (SPRO). A cooperative agreement is comprised of the agreement document, work plan, and a financial plan.

The work plan and financial plans are importance because they describe the scope of the work, division of labor, and the financial obligations or budget. Cooperative agreements are an important part of the Plant Health Emergency Response Framework. The agreements are developed by the appropriate State and Federal Plant Health Emergency Program managers and fiscal officers with knowledge of the program being developed and the cooperative agreement process.

Refer to the Web site of the Agreements Services Center (ASC) for further information on the cooperative agreement process.

Financial Management Division (FMD), Financial Services Branch, Agreements Services Center (ASC)
http://www.aphis.usda.gov/mrpbs/fmd/agreements_service_center.shtml

Interstate Pest Control Compact Insurance Fund

The Interstate Pest Control Compact (IPCC) was formed in 1968 with assistance from the Council of State Governments. The IPCC works to remedy funding restraints; bridge the jurisdictional gaps that exist among Federal and State governments; and more adequately address the realities of dynamic and challenging exotic plant pest incursions. Through contractual agreements, the Compact allows individual States to contribute to and draw funds from the IPCC, for plant pest control suppression or for eradication programs within as well as beyond individual State boundaries.

Currently there are 38 member State parties to the Compact. Member States may petition the Compact for support to address exotic plant pest incursions that are of appropriate scope to be addressed with the resources of the insurance fund. For further information, refer to the Web site of the IPCC.

Interstate Pest Control Compact (IPCC)
http://www.aphis.usda.gov/mrpbs/fmd/agreements_service_center.shtml

State Plant Health Emergency Response Plans

In December 2003, USDA–APHIS developed and distributed the document titled *Standard for Plant Health Emergency Management and Response*. The purpose of the document is to assist State and Federal plant health officials and plant health emergency managers at the State level to proactively determine their needs to mount a successful response to a plant health emergency. Refer to the Web site of the Standards for Plant Health Emergency Management Systems for further information.

States have also used the enhanced Plant Health Template for Plant Health Emergency Response plans that was prepared for the Multistate Partnership for Security in Agriculture. Refer to the Web site of the Multistate Partnership for Security in Agriculture for further information.

1. Every State should have a plan for responding to plant health emergencies, especially the initial local response, as a written part of the State Plant Health Emergency Management Plan. The plan should include information detailing the following:
   - **A.** Plant health surveillance and detection systems
   - **B.** Procedures for the initial response designed to contain, control or eradicate (should include both State and Federal resources, as well as other available resources within the State)

C. Level of involvement of State and Federal Plant Health Emergency responding to a plant health emergency

D. Collaboration between the Plant Health Emergency Response within the State and APHIS–PPQ

E. Communication among key partners (State, Federal, local, and industry) in a plant health emergency (Standard Plant Health Emergency Communication)

F. Level of involvement of State and Federal plant health officials responding to natural disasters

2. The plan should list all participants and their roles and responsibilities.

3. The plan should be periodically evaluated to:

A. Review risks based on current information

B. Compare implementation results with the planned actions after key plant health incidents

C. Compare test exercise outcomes with planned roles, responsibilities, and actions

Standards for Plant Health Emergency Management Systems
http://www.aphis.usda.gov/plant_health/plant_pest_info/ics/downloads/phers.pdf

Multistate Partnership for Security in Agriculture
http://www.multistatepartnership.org/about.cfm

Emergency Management

Glossary

Use this glossary to find the meaning of specialized words, abbreviations, acronyms, and terms used by PPQ–EDP. To locate where in the manual a given definition, term, or abbreviation is mentioned, refer to the Index.

Definitions, Terms, and Abbreviations

AAR. After Action Report
AC. Area Command
APHIS. USDA–Animal and Plant Health Inspection Service
AQAS. Agricultural Quarantine Activity System, a Web database
AQIPT. USDA–PPQ–CPHST-Agricultural Quarantine Inspection and Port Technology
APA. American Phytopathological Society
APTL. DHS–CBP-Agriculture Programs and Trade Liaison
ARS. USDA–Agricultural Research Service
ASC. Agreements Services Center
CAPS. Cooperative Agricultural Pest Survey Program
CPB. U.S. Department of Homeland Security-Customs and Border Protection
CCC. Commodity Credit Corporation
CPHST. PPQ-Center for Plant Health Science and Technology
DHS. U.S. Department of Homeland Security; *also U.S. Department of Health and Human Services*
DEE. Declaration of Extraordinary Emergency
DFO. Director of Field Operations
DMT. Data Management Team
DOJ. U.S. Department of Justice
EC. EDP-Environmental Compliance
EDP. PPQ-Emergency and Domestic Programs
EM. PPQ-Emergency Management
EP. EDP-Emergency Planning
EPC. Emergency Program Coordinator
ERC. Emergency Response Coordinator
ERAS. APHIS–PPD-Environmental and Risk Analysis Services
ES. EDP-Environmental Services
FEMA. Federal Emergency Management Agency
FMD. Financial Management Division
FS. United States Forest Service
HHS. U.S. Department of Health and Human Services
HSEEP. Homeland Security Exercise and Evaluation Program
HSPD. Homeland Security Presidential Directives

hot zone. area in which to concentrate surveys based on known pathway information
ICS. Incident Command System
IES. APHIS-Investigative and Enforcement Services
IMSD. NIMS-Incident Management Systems Division
IMT. Incident Management Team
IPCC. Interstate Pest Control Compact
LPA. Legislative and Public Affairs
MAC. Multiagency Coordination
MDB. CPHST-Molecular Diagnostics and Biology
MRPBS. APHIS-Marketing and Regulatory Programs Business Services
NAPPO. North American Plant Protection Organization
NASDA. National Association of State Departments of Agriculture
NEPA. National Environmental Policy Act
NIMS. National Incident Management System
NIS. PPQ-National Identification Service
NPAG. PPQ-New Pest Advisory Group
no-year funding. funding that can be carried over and will remain in the program
NPDN. National Plant Diagnostic Network
NPDRS. National Plant Disease Recovery System
NPPO. National Plant Protection Organization
NPRG. New Pest Response Guidelines
NRF. National Response Framework
OBPA. USDA-Office of Budget and Program Analysis
OGC. USDA-Office of General Counsel
OMB. U.S. Office of Management and Budget
OPIS. Offshore Pest Information System
OPIP. RIPPS-Offshore Pest Information Program
PARC. PPQ-Planning, Analysis, and Regulatory Coordination
PDP. EDP-Pest Detection Program
PERAL. CPHST-Plant Epidemiology and Risk Analysis Laboratory
pest. includes insects and other arthropods, weeds, plant disease agents, and microorganisms
pest exclusion. pest prevention
PestID. database containing all the information recorded from the PPQ Form 309 Pest Interception Record
PHP. PPQ-Plant Health Programs
PIS. plant inspection station
POP. PHP-Preclearance and Offshore Programs
PPA. Plant Protection Act of 2000
PPD. APHIS-Policy and Program Development
PPQ. APHIS-Plant Protection and Quarantine
QPAS. Quarantine Policy Analysis and Support

RMPS. PPQ-Resource Management and Planning Services
REM. Regional Emergency Management
RIPPS. PHP-Registration, Identification, Permits and Plant Safeguarding
select agents. pathogens that have been deemed a severe threat to the public, animal or plant health, or animal or plant products
SDI. Survey Detection and Identification
SEL. USDA–ARS-Systematic Entomology Laboratory
SRA. Security Risk Assessment
SPHD. State Plant Health Director
SPRO. State Plant Regulatory Official
targeted detection. hot zone survey
TED. APHIS-Marketing and Regulatory Programs Business Services-Human Resources Division-Training and Employee Development
TWG. Technical Working Group
UC. Unified Command
USDA. United States Department of Agriculture
weather events. state of the atmosphere with respect to wind, temperature, cloudiness, moisture, pressure

Emergency Management

Index

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