APPENDIX 1:

APHIS Rangeland Grasshopper and Mormon Cricket Suppression Program FY-2008 Treatment Guidelines

The goals of the APHIS Rangeland Grasshopper and Mormon Cricket Suppression Program are to 1) conduct surveys in 17 Western States; 2) provide technical assistance to land managers; and 3) when funds permit, suppress grasshopper and Mormon cricket outbreaks on federal, tribal, state, and/or private rangeland. The Plant Protection Act of 2000 provides APHIS the authority to take these actions. The following guidelines should be used when a pesticide treatment is necessary to reduce a grasshopper or Mormon cricket outbreak to below outbreak levels. The final determination of whether a cooperative suppression treatment program on federal rangeland is warranted and/or feasible will be made by PPQ, based on the land manager's written request and the best available information.

General Guidelines for Grasshopper / Mormon Cricket Treatments

- 1. All treatments must be conducted in accordance with the Plant Protection Act of 2000 and relevant APHIS policies.
- 2. Treatments must adhere to federal environmental laws and statutes including the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).
 - a. NEPA compliance will consist of:
 - i. the 2002 Environmental Impact Statement, and;
 - ii. site-specific environmental assessments (EAs). EAs will be in accordance with national and/or local Memorandums of Understanding between PPQ and the federal land management agency (or agencies) and/or tribal authorities. Upon completion of an EA, the PPQ State Plant Health Director or his/her designee will, if appropriate, sign a "Finding of No Significant Impact", after which planning for a treatment can continue.
 - Compliance with the Endangered Species Act will be assured by consulting with local U.S. Fish & Wildlife Service and/or National Oceanic and Atmospheric Administration offices in situations where:
 - i. threatened or endangered species occur in the area;
 - ii. pesticides or application procedures to be utilized have not been addressed in the Programmatic Biological Opinion of 1995.
 - c. FIFRA compliance will be assured by following the product label.
- 3. One of the following pesticides that are labeled for rangeland use may be used for a treatment of grasshoppers and Mormon crickets:
 - a. Sevin XLR plus
 - b. 2% or 5% Carbaryl bait

- c. Dimilin 2L
- d. Malathion ULV
- 4. The federal government will bear the cost of treatment up to 100 percent on federal, tribal, and Trust land, 50 percent of the cost on state land, and 33 percent of cost on private land. The federal government's participation in the cost share is contingent on allocation and availability of funds. Funding sources for suppression treatment programs may include appropriated funds, contingency funds, commodity credit corporation funds, land management agency funds, and/or other funding resources. PPQ will conduct or fund surveys from the congressional appropriation, then may conduct suppression treatments if funds remain.
- 5. In the absence of available funding or in the place of PPQ funding, the federal land management agency, tribal authority or other party may opt to reimburse PPQ for suppression treatments. Interagency agreements or reimbursement agreements must be completed prior to the start of treatments which will be charged thereto.
- 6. Land managers are responsible for the overall management of rangeland under their control to prevent or reduce the severity of grasshopper and Mormon cricket outbreaks. Land managers are encouraged to have implemented Integrated Pest Management Systems prior to requesting a treatment. PPQ and/or its designated cooperator may conduct suppression treatments on federal/tribal lands only if requested in writing by the federal land manager and/or tribal authority for Trust lands.
- 7. In some cases, rangeland treatments may be conducted by other federal agencies (e.g., Forest Service, Bureau of Land Management, or Bureau of Indian Affairs) or by non-federal entities (e.g., Grazing Association or County Pest District). PPQ may choose to assist these groups in a variety of ways, such as:
 - a. loaning equipment;
 - b. providing materials and pesticides
 - c. contributing in-kind services such as surveys to determine insect species, instars, and infestation levels;
 - d. monitoring for effectiveness of the treatment

A cooperative agreement is needed when the assistance by PPQ represents significant monetary value (e.g., providing pesticides or loaning equipment).

- 8. Prior to initiating treatments funded by or through PPQ, the following must be prepared by the State Plant Health Director's office and approved by the Western Regional Office:
 - a. Project Planning and Reporting Worksheet
 - i. Part A: The Detailed Work Plan
 - 1. Work Checklist (including a map)
 - ii. Part B: Aerial Contract Site Specific Description

- 1. Complete and send copies to the contracting officer and the Western Regional Office.
- 9. State-registered beekeepers shall be notified in advance of proposed rangeland treatments.
 - Observation aircraft may be used to check for bee yards in the proposed area. Non-treated buffer zones should be established for pollinators (e.g., alkali, leafcutter or honey bees) if stipulated in the EA and required by the pesticide label.
- 10. Aerial treatment contracts will adhere to the 2008 Statement of Work formerly known as the Prospectus.
- 11. The PPQ state office will provide a weekly update to the Western Regional Office on acres treated and pesticides used; this information will be entered into the Western Region Treatment Database. http://ppqwr.aphis.usda.gov/westernregion/Default.aspx?alias=ppqwr.aphis.usda.gov/westernregion/grasshopper
- 12. Upon completion of each grasshopper or Mormon cricket suppression program, the PPQ state office will submit Part C: Post Treatment Report of the Project Planning and Reporting Worksheet. Part C will be submitted to the Western Regional Office within 30 days of completion of project. Treatment costs information will be entered into the treatment database also within 30 days of completions. The Western Regional Office will be contacted if additional time is needed.

2008 Operational Procedures

GENERAL PROCEDURES FOR ALL AERIAL AND GROUND APPLICATIONS

- 1. Follow all applicable federal, state, tribal and local laws and regulations in conducting grasshopper and Mormon cricket suppression treatments.
- 2. Conduct scoping programs to allow public participation in the decision making process.
- 3. Notify federal, state and tribal land managers and private cooperators of grasshopper and Mormon cricket outbreaks on their lands. Describe estimated boundaries, severity of the infestation, and treatment options. Request the land manager to advise PPQ of any sensitive sites that may exist in the proposed treatment areas.
- 4. Obtain request(s), in writing, from land managers or landowners for suppression treatments to be undertaken on their land.

- 5. Notify residents within treatment areas, or their designated representatives, prior to proposed operations. Advise them of control method to be used, proposed method of application, and precautions to be taken.
- 6. Avoid residences and other premises whose occupants are opposed to insecticide treatments. In cases when state law requires treatment, but landowners or occupants are opposed to the treatments, PPQ will cooperate to the extent possible and as authorized by federal and state laws.
- 7. Instruct program personnel in the use of equipment, materials and procedures; supervise to ensure procedures are properly followed and safety is first.
- 8. All entry- and journeyman-level employees in a professional series, or employees identified by members of the PPQET (or their designee), who in the performance of official duties, directly supervise, use, or monitor the use of any pesticide whether classified for general or restricted use, must complete Pesticide Certification Training (PCT).
 - Temporary, part time, summer hires, letter of authorities (LA's), or other intermittent PPQ employees normally receive close supervision from a certified applicator. They are not required to complete PCT unless a member of the PPQET (or their designee) or local jurisdictions require such certification.
- Do not apply insecticides directly to water bodies (defined herein as reservoirs, lakes, ponds, pools left by seasonal streams, springs, wetlands, and perennial streams and rivers).

Furthermore, provide the following buffers for water bodies:

- 500-foot buffer with aerial liquid insecticides
- 200-foot buffer with aerial bait
- 50-foot buffer with ground bait.
- 10. Use one of the following disposal methods (in order of preference) for pesticide containers:
 - a) Use full service contracts and require the contractor to properly store and dispose of pesticide containers.
 - b) Require chemical companies, distributors, or suppliers to accept the triplerinsed containers.
 - c) Crush and/or puncture the empty triple-rinsed containers and dispose of the scrap metal. Report the destruction on Form AD-112 to Property Services, Field Servicing Office, Minneapolis, MN.

- d) Other suitable methods, as approved locally in concurrence with Safety, Health and Environmental Security (Lori Miller, 301-734-0626).
- 11. Conduct mixing, loading, and unloading in an approved area where an accidental spill would not contaminate a water body. In the event of an accidental spill, follow the procedures set forth in PPQ Guidelines for Managing Pesticide Spills (USDA APHIS, *Treatment Manual*) and the 2007 Aerial Application Manual.
- 12. All APHIS project personnel will have baseline cholinesterase tests before the first application of AChe inhibiting insecticides, such as organophosphates or carbamates (i.e., no testing required for dimilin usage), and on a routine basis as advised by Federal Occupational Health.
- 13. PPQ will assess and monitor rangeland programs for the efficacy of the treatment, to verify that a control program has properly been implemented and treatments fall within our guidelines and control levels.

SPECIFIC PROCEDURES FOR AERIAL APPLICATIONS

- 1. Pre-spray reconnaissance flights or ground orientation trips may be conducted to ensure that pilots are familiar with program area boundaries, buffers, and areas that are not to be treated.
- 2. Make the following available to relevant personnel in advance of any treatment: stock safety kits, pesticide spill kits, thermometers, flagging material, wind gauges, spray-deposit samplers, and daily aircraft records.
- 3. Whenever possible, plan aerial ferrying and turnaround routes to avoid flights over congested areas, water bodies, and other sensitive areas that are not to be treated.
- 4. Do not apply while school buses are operating in the treatment area. Do not apply within 500 feet of schools or recreational facilities.

SPECIFIC PROCEDURES FOR GROUND APPLICATIONS

- 1. All PPQ personnel performing treatments with all terrain vehicles and/or ground application equipment will have the proper training and safety training to operate all terrain vehicles and/or ground application equipment prior to actual treatment operation.
- 2. All PPQ personnel performing treatments with all terrain vehicles will be required to wear prescribed safety equipment while performing treatment operation.