United States Department of Agriculture

Marketing and Regulatory Programs

Animal and Plant Health Inspection Service

Citrus Longhorned Beetle Program

King County, Washington

Environmental Assessment
April 2002

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A. Introduction

In August 2001, imported maple trees being held in quarantine at a plant nursery in Tukwila, Washington were found to be infested with citrus longhorned beetles (CLHB). This beetle is native to parts of Asia and is not known to occur in the United States. Close inspection of the imported trees revealed the presence of several adult beetles including a mated female which was caught. At least one citrus longhorned beetle of unknown gender avoided capture and was observed to fly from the nursery across the road to nearby trees. Based upon examination of damage to the imported maple trees, it is suspected that as many as five of these beetles may have dispersed from the nursery premises to the surrounding environment. Statistically, it is very likely that at least one of the five beetles suspected of dispersal from the nursery is a female that mated successfully. Shortly after discovery of the infested maple trees at the nursery, any additional potential pest risks were eliminated by cutting the maple trees, chipping up the wood, and treating the wood chips. The Washington State Department of Agriculture (WSDA) placed a quarantine on all properties within an approximately ½ mile radius in all directions from the point of introduction on November 27.

CLHB bore into and kill a variety of tree species. Unlike most native wood borers that are known to attack primarily dead and damaged trees, this beetle is known to frequently start infestations by boring directly into healthy trees. The known host plants of CLHB include representatives of 26 different families of plants. The host plants include some forest trees found commonly in Washington State including alder, maple, oak, poplar, and willow. The host plants also include fruit trees such as apple and citrus. If established, this nonnative pest has the potential to spread throughout Washington State and to other parts of the United States. A dispersion of this magnitude would result in extensive losses to many ornamental and commercial tree species. CLHB has been successfully eliminated before dispersion of adult beetles from shipments at locations in Georgia and Wisconsin. CLHB is closely related (same genus) to the Asian longhorned beetle, another wood boring beetle which has caused considerable damage to shade trees in the New York and Chicago metropolitan areas over the last decade. Pest risk issues and effective control strategies related to the CLHB introduction associated with this proposed program are expected to be similar to those for Asian longhorned beetle.

North America has abundant forest resources. Increased trade has resulted in more frequent and larger shipments of wood (logs, lumber, and solid wood packing materials) and woody plants entering the United States from other parts of the world. Various plant pests, such as citrus longhorned beetle, can occur on or in these unfinished wood products and nursery stock. Protection of the forest resources of the United States from damage by foreign pest species is part of the mission of the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS). Exclusion of those pest species is the preferred and most effective method of preventing the losses associated with new pest infestations. Control measures are applied in those situations where the consequences of potential damage and pest risk require further action to prevent dissemination of destructive pests and to protect our forest resources.

B. Purpose and Need

USDA APHIS, in cooperation with WSDA, is proposing a program for the control of the citrus longhorned beetle, *Anoplophora chinensis* (Forster) in Tukwila, Washington. The purpose of this program is to eradicate any potential progeny of adult beetles that dispersed from the incipient infestation found in the imported maple trees at a local plant nursery there. This program is necessary to reduce the potential for damage from this major pest of trees. The potential annual losses resulting from establishment of this beetle in Washington State alone could exceed a billion dollars to the pome fruit industry and the hardwood product industry.

APHIS authority for cooperation in this proposed program is based upon the Plant Protection Act (Title 4 of the Agricultural Risk Protection Act of 2000), which authorizes the Secretary of Agriculture to use emergency measures to prevent dissemination of plant pests new to or not widely distributed throughout the United States. Under APHIS' National Environmental Policy Act Implementing Procedures, 7 CFR Part 372, the proposed action is a class of action for which an environmental assessment (EA) is normally prepared. This EA has been prepared in compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4327 (NEPA)) and its implementing regulations. The environmental documentation prepared for this program considers the potential effects of the an integrated eradication program (proposed action) and the no action alternative on the human environment.

II. Alternatives

A. No Action

Under the no action alternative, APHIS would take no new action of any kind. The only functions performed by APHIS would be in the areas of advisory and technical assistance. The ongoing quarantine and exclusion activities to prevent CLHB introductions at ports of entry would continue. Some control actions could be taken by other Federal or non-Federal authorities; those actions would not be under APHIS' control and would not be funded by APHIS. Local grower groups and residents could attempt to control damage from beetle infestation of trees in their yards and some individuals might remove infested wood from their properties. This removal could contribute to the spread of CLHB from the site of introduction. In the absence of effective measures to control and prevent dispersal of beetles, the CLHB population could increase its numbers and expand its distribution to establish a permanent infestation in Washington State with potential for increased damage to host plants commensurate with the dispersion. Pest risk is the primary issue of environmental concern related to the no action alternative.

B. Integrated Eradication Program

Under the integrated eradication program alternative, APHIS would work cooperatively with WSDA to prevent establishment of a CLHB population in the Tukwila area of King County, Washington. The program would consist of work activities on survey, tree removal, systemic injection treatments, and regulatory actions. The survey and quarantine activities of this program would be expected to last for a minimum of five years. The length of other ongoing program actions would depend upon the extent to which CLHB is effectively eliminated from potential host plants within the program area. Ideally, most program actions under this alternative would be completed within the first year. Each of the program actions would be extended in length and in geographical scope if clear evidence of CLHB is found in host trees within the quarantine area or outside present quarantine boundaries.

This program would include support for the regulatory quarantine of all properties within an approximately ½ mile radius in all directions from the point of introduction as established by WSDA. Restrictions on the movement of any regulated wood and wood commodities from the quarantine area and required treatments of those regulated materials would be enforced to ensure that no spread of CLHB would be facilitated by any human activities within the

potentially infested quarantine area. Any infested or potentially hazardous trees and wood located within this area and determined to pose unacceptable pest risk would be subject to removal or treatment. This quarantine area would be subject to ongoing surveillance to ensure that viable populations of CLHB are not present and to provide rapid recognition of any infested host trees for their timely removal.

The initial tree removal activities would be concentrated in the areas closest to the point of introduction to ensure removal of any potentially infested host plants. The point of introduction is at a nursery located at the intersection of Macadam Road S. and S. 144th Street in Tukwila. The initial tree removal includes all susceptible host plants within 200 meters (1/8 mile) of the point of introduction. In addition, cooperative removal of any susceptible host plants along Interstate Highway 5 would be done with the assistance of the Washington State Department of Transportation.

The initial injection treatments would be applied to all susceptible host trees within 400 meters (1/4 mile) of the point of introduction, but outside the tree removal zones described above. Those host trees with roots blocked in by paved surfaces and those host trees located in wet areas would be subject to trunk injection treatments. Soil under any trees on dry ground and not restricted by paved surfaces would be subject to soil injection treatments. All host plants within this area that have less than a 2-inch diameter at breast height (dbh) could not be effectively treated and would, therefore, be subject to cutting and removal. The proposed injection treatments in this program use imidacloprid in the same manner as the treatments prescribed for the Asian Longhorned Beetle Program based upon the similar biology and pest characteristics of CLHB. Detailed descriptions of the treatment methods are provided in the environmental assessment for that program and will not be repeated here.

Detection of any newly infested host plants would result in additional site-specific removal of or injection treatments of all host plants within a 200-meter (1/8 mile) radius of each infested plant. The initial host removal and injection treatments are designed to preclude the need for further program actions based upon our limited current knowledge of CLHB and its ability to infest susceptible host plants. Should the ability of CLHB to spread be found to differ markedly from the ability of Asian longhorned beetle, adjustments in the size of host removal areas and treatment areas will be made accordingly. This environmental assessment analyzes the initial program conditions, making allowance for minor program modifications. If future actions should require substantial modification of program actions, an updated environmental

assessment of the program will be completed to accurately portray those changes.

The primary environmental issues of this alternative relate to the CLHB pest risks and the consequences of program actions to contain and eliminate those pest risks. Our understanding of the biology and pest risks from CLHB is limited and therefore, efforts to ensure eradication are based primarily upon our knowledge of Asian longhorned beetles and other related species. The initial removal of host plants is planned for a relatively small area (200-meter radius), but those species dependant upon those plants for survival within this area would be clearly affected. The contained nature of the injection treatments and the limited initial treatment area ensure that only sensitive invertebrates would be directly impacted. Should the initial eradication effort be ineffective, the area of host plant removal and injection treatments is likely to expand. Such expansion could raise additional environmental concerns, particularly if the expansion were to approach the habitats of any endangered or threatened species.

III. Environmental Impacts of Proposed Action and Alternatives

There are potential impacts from each of the alternatives being considered. The pest risk from CLHB is an important consideration for both alternatives. Potential program impacts arise from host removal and injection treatments, but the environmental consequences from the initial program actions are not expected to be substantial. Any substantial future expansion of this program will require further assessment of the potential impacts. Exposure to humans and potential effects to human health from injection treatments of host plants are primary considerations addressed for program actions in the residential and public access areas of the program.

A. No Action

Environmental impacts that could result from APHIS' implementation of the no action alternative relate primarily to pest risk effects if the destruction of the imported maples infested with CLHB did not eliminate the pest risk. Although we are aware of at least one beetle dispersing to the canopy of adjacent susceptible host trees, it is unclear whether that beetle or the other four beetles suspected of dispersal include a mated female that could establish a local population of CLHB. It is, however, clear that any damage from CLHB to local host plants would be substantial if a viable pest population were to become

established. If established, the invasive nature of CLHB would be anticipated to result in rapid spread. There are many susceptible host plants present near the site of introduction. Any host plant damage from the anticipated spread would soon be much greater than any impacts from the initial host plant removal contemplated under an integrated eradication program. The wide host range of the CLHB includes representatives of 26 different families of plants and many habitats of North America have susceptible hosts. Establishment of a local population of CLHB would, therefore, be expected to pose ongoing pest risk problems for plants at numerous locations throughout the country. Movement of wood or infested host plants from the present quarantine area could increase the rate of spread of CLHB and this man-facilitated spread of CLHB would contribute readily to increases in damage from CLHB.

Although WSDA could maintain the quarantine area, remove some host plants, and do some injection treatments independent of USDA assistance, a cooperative effort provides the necessary resources to ensure that potential pest risks are eliminated in a timely manner. Delays in host removal and injection treatments could provide CLHB with a window of time to spread before adequate control actions are completed. Other than through transport of infested wood and host plants, the spread of CLHB could occur through flight of adult beetles. The likely time of emergence of adult beetles from infested host plants in Washington State is unknown, but would certainly occur by mid-summer. Any treatment or elimination of infested host plants would have to occur prior to this emergence to effectively eliminate pest risk.

Lack of any governmental efforts to control CLHB damage would likely result in efforts by growers and residents. Most actions of these groups would be uncoordinated and spread of CLHB is likely if an established population were not cooperatively managed. The damage and losses to residential shade and ornamental plants from CLHB could result in reductions in private property values. The damage and losses to commercial trees would lower the value and production of timber and tree products. This would include reduced fruit production to apples and other pome fruit host plants. It could also include reduced sap production for products like maple syrup. Individual efforts to limit plant damage would be expected to involve use of pesticides with increasing frequency and with increasing adverse impacts to the physical environment, human health, and nontarget species. The likely changes in the composition and age structure of forests resulting from no action could have long-term effects on the ecological relationships in the forested areas. There could be losses in recreational use and revenue to some areas from diminished scenic appeal. A permanent infestation could lead to some regulatory quarantine restrictions on

the export of logs and nursery stock. The primary environmental consequences of this alternative relative to an integrated eradication program are increased risk of damage from pest spread and elevated environmental risks from uncoordinated application of pesticides to limit damage from CLHB. If a viable population of CLHB has dispersed from the point of introduction, the potential adverse impacts from selection of this alternative are considerably greater than those anticipated for an integrated eradication program.

B. Integrated Eradication Program

The environmental consequences of this alternative relate primarily to the potential for pest risk reduction, and to the potential environmental effects from host plant removal and injection treatment of host plants. The primary pest risk issues related to establishment of CLHB are described in the no action alternative and will not be repeated here.

1. Susceptible Host Removal

The ability of this program to successfully eradicate CLHB is contingent upon adequate knowledge of the pest and effective control measures to eliminate the pest and prevent access of the pest to susceptible host plants. The determination of locations for host plant removal and injection treatments are based upon known dispersal patterns and flight distances of the adult beetles. Although it is certain that removal of all host plants ensures eradication, it is less clear how far individual beetles, particularly mated female beetles, are likely to disperse to spread eggs to susceptible host plants. The presence of many susceptible host plants near the point of introduction in this program makes it likely that any adult female beetles would place all eggs on susceptible host plants close to this location. The selection of an initial removal of all host plants within a 200-meter radius of the point of introduction was based upon site conditions and likely dispersion for the beetles. The presence of Interstate Highway 5 adjacent to the site of introduction could contribute to increased potential dispersion of beetles both north and south. A cooperative effort with Washington State Department of Transportation to remove host plants along the highway is designed to eliminate potential pest risk from any beetle that was dispersed further along the highway greenbelts within the quarantine area.

The removal of susceptible host plants may have adverse effects on local wildlife that depend upon this vegetation for food, cover, and related needs. This is particularly true for some invertebrates and sessile animals that are not mobile. The primary issue to humans from loss of plants is aesthetic, but any potential removal of fruit trees could involve loss of fresh produce to those residents. The

impacts on environmental quality from removal of trees are expected to be negligible. Although there could be some limited erosion at the site of tree removal, most locations have other forms of groundcover and new plant growth on these sites is anticipated shortly after removal of susceptible species.

2. Injection Treatment

Effective operational implementation of the prophylactic injection applications by the program could help to protect susceptible host plants and assist in the efforts to contain and eradicate CLHB. This would alleviate concerns that the current eradication program plan may not remove all host plants infested by any beetles that dispersed from the point of introduction. Although injection treatments have not been demonstrated to kill all beetles in infested trees, their utility in prophylactic treatments to protect trees from ongoing infestations has been shown in Asian longhorned beetle programs. This approach could prevent the damage to and loss of many valuable ornamental and commercial trees, loss of associated forest products (e.g., maple syrup and fruit), and the private or uncoordinated use of pesticides to control CLHB damage with associated adverse impacts to the environment (the physical environment, human environment, and nontarget species).

Effective injection applications provide an alternate means of protection for trees to the practice of removing and destroying newly infested trees. The insecticide proposed for application against beetles is imidacloprid. Determination of the potential environmental impacts from this alternative requires analysis of toxicity, environmental fate, exposure, and associated risks from imidacloprid injections.

a. Toxicity

Imidacloprid is a systemic, chloronicotinyl insecticide. The mode of toxic action is unique and involves direct binding to the acetylcholine receptors. This binding causes a nerve impulse to be sent, but acetylcholinesterase is incapable of removing imidacloprid from the site. The receptor site becomes overstimulated and is eventually blocked. The nicotinergic site of action is more prevalent in insects than in higher organisms, so the toxicity is selectively more toxic to insects.

The acute toxicity to mammals is moderate. The acute oral median lethal dose of imidacloprid to rats is 450 milligrams per kilogram (mg/kg) body weight. The acute dermal median lethal dose to rats of imidacloprid is greater than 5,000 mg/kg. Imidacloprid is not irritating to eyes or skin and is not a skin sensitizer. Signs and symptoms of intoxication include fatigue, twitching, cramps, and muscle weakness including the muscles for breathing.

Chronic toxicity from imidacloprid is low. The systemic No Observed Effect Level (NOEL) for a 2-year feeding study of male rats was 5.7 mg/kg based on increased thyroid lesions observed at the next higher dose, 17.1 mg/kg. The reproductive NOEL determined from a three generation reproduction study of rats was 8 mg/kg based upon decreased pup body weight at 20 mg/kg. Imidacloprid may be weakly mutagenic. Test results were negative for mutagenicity in all but two of the 23 laboratory mutagenicity assays conducted. The positive assays were for genotoxicity in Chinese hamster ovary cells and changes in chromosomes in human lymphocytes. The U.S Environmental Protection Agency (EPA) has classified imidacloprid in "Group E" in regards to carcinogenic potential. This indicates that the submitted studies provide evidence of noncarcinogenicity for humans.

Toxicity to other wildlife varies considerably. Imidacloprid is moderately to severely toxic to birds, but the repellant nature of imidacloprid to birds makes hazardous exposures unlikely. It is severely toxic to bees, but it is not considered a hazard to bees when used as a seed treatment. Imidacloprid is practically nontoxic to fish and slightly toxic to daphnia.

b. Environmental Fate and Exposure

Imidacloprid residues from injection applications are not expected to persist in the environment. The vapor pressure of imidacloprid is low and little volatilization to the atmosphere is expected. Imidacloprid is moderately soluble in water and the half-life in water exceeds 31 days at pH 5, 7, and 9. Soil injection applications and trunk injections are not expected to result in any transport of imidacloprid to groundwater or surface water. Imidacloprid adsorbs to soil particles and is expected to have low mobility in the dry soils within the treatment area. The half-life in soil varies from 48 to 190 days depending upon the organic matter, ground cover, and plant uptake. The systemic action of Imidacloprid from trunk injections would be expected to carry the residues to other locations within the plant. The insecticidal activity of imidacloprid within trees has been shown to remain effective for up to 2 years, but the distribution within treated trees is limited to those portions that are actively transporting fluids and nutrients. There is no systemic movement into heartwood. Imidacloprid from soil injection treatments could be taken up systemically by non-host plants such as blackberries. The program treatments using soil injection applications would only be at locations where the primary uptake of imidacloprid is by a susceptible host plant. Trunk injection would be made at locations where other plants could compete for uptake of the imidacloprid residues. This approach precludes potential adverse effects to

nontarget species and ensures that the applications protect only susceptible host plants of CLHB.

Adherence to the pesticide label and standard operating procedures ensures that exposures are minimal. The injections would not be expected to routinely result in any exposure to humans except the program applicators. The required protective gear and safety precautions minimize applicator exposure. The applicators ensure that the Mauget® injection dispensers are not disturbed during injection and the dispensers are removed from the drill holes when the application is complete to prevent exposure to the public. The only route for potential exposure of the public to imidacloprid is from the accidental scenario of a person digging in the treated soil following soil injection applications. Much of the compound would have adsorbed to soil particles or been taken up by the host plant and the actual exposure to imidacloprid would be minimal. The injection applications avoid exposure to most species of wildlife. The only species likely to be directly exposed by these injections are those nontarget invertebrates present in the treated soil or in the wood of the treated tree. Some insectivores and scavengers could also be exposed to residues during foraging activities in the soil below or in the bark of treated trees. The exposures of these species to imidacloprid are expected to be light. Insectivorous birds are repelled by imidacloprid residues and would avoid locations where exposure was possible.

c. Risk Assessment

The risk of adverse effects to environmental quality are minimal. The imidacloprid from soil injections and trunk injections is not expected to volatilize to the atmosphere, is not expected to be leached to groundwater, and is not expected to be carried to surface water except from heavy rainstorms. The soil and plant residues are expected to remain active for up to two years to protect the trees from infestation by CLHB. Injection treatments are directed to protect susceptible host plants and minimize potential uptake by other plants nearby.

The risks to human health are minimal. The required protective gear and safety precautions for applicators result in potential exposures much lower than any that could result in adverse effects. The anticipated margins of safety from the accidental exposure scenario where a person digs up the soil from the treated area under a tree are less than for the applicators, but no adverse effects are anticipated for those individuals either.

Mortality from exposure would be expected for some invertebrates. The populations of insects directly exposed to imidacloprid would be expected to decrease temporarily in the treatment area until the residues decrease and recolonization occurs from surrounding areas. This recovery would be expected to occur more rapidly in the soil because the compound would be readily taken up by the tree roots and residues would not persist in the soil. The insects exposed to residues in the trees would require longer periods of time for recolonization. Although the prey for some insectivores would decrease in treated areas, the additional forage effort by these species is not expected to be increased greatly. Insect populations would remain unaffected in the untreated plants. The low exposures to birds and insectivores foraging in the soil and tree bark are not expected to result in any adverse effects to those species.

3. Other Issues

An effort was made by APHIS to determine what if any measures would be required for program compliance with the Endangered Species Act of 1973. The potential for exposure and any adverse effects was analyzed for those endangered and threatened species and their habitats within the proposed program area. The present quarantine area proposed for the program is not critical habitat to any endangered or threatened species. Based upon the findings of that analysis, it was determined that the proposed program applications would have no effect on any endangered or threatened species or their habitats. However, this issue will have to be reviewed if future actions should involve any expansion of the host removal, injection treatment, or quarantine areas. There are nearby creeks which serve as habitat for endangered fish species including salmon. The program actions in this year have no adverse effects on water quality, but future removal of any host plants closer to the habitat of the fish could contribute to unacceptable erosion effects that would have to be considered.

Consistent with Executive Order No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," APHIS considered the potential for disproportionately high and adverse human health or environmental effects on any minority populations and low-income populations. The environmental and human health effects from the proposed applications are minimal and are not expected to have disproportionate adverse effects to any minority or low income populations. The primary human concerns relate to the adverse aesthetic effects from loss of host plants.

Consistent with Executive Order No. 13045, "Protection of Children From Environmental Health Risks and Safety Risks," APHIS considered the potential for disproportionately high and adverse environmental health and safety risks to

children. The program applications are made to trees and soil below trees in urban parks and residential areas where children would be expected to play and climb trees. The program applicators ensure that the general public is not in or around areas being treated, so no exposure will occur for Mauget® injection applications and the only possible exposure could occur from a child playing in the treated soil under a tree. This accidental exposure scenario was analyzed and it was determined that no adverse human health effects would result to the child. Therefore, it was determined that no disproportionate effects on children are anticipated as a consequence of implementing the preferred alternative.

IV. Agencies, Organizations, and Individuals Consulted

Government Agencies

U.S. Department of Agriculture
Animal and Plant Health Inspection Service
Plant Protection and Quarantine
Surveillance and Emergency Program
Planning and Coordination
4700 River Road, Unit 134
Riverdale, MD 20737-1236

U.S. Department of Agriculture
Animal and Plant Health Inspection Service
Plant Protection and Quarantine
Insecticide and Application Technology Section
Building 1398
Otis ANG Base, MA 02542

U.S. Department of Agriculture
Animal and Plant Health Inspection Service
Policy and Program Development
Environmental Services
4700 River Road, Unit 149
Riverdale, MD 20737-1238

Washington State Department of Agriculture
Laboratory Services Division
3939 Cleveland Avenue SE
Olympia, WA 98501

Finding of No Significant Impact
for
Citrus Longhorned Beetle Program
King County, Washington
Environmental Assessment
April 2002

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), in cooperation with Washington State Department of Agriculture (WSDA), is proposing to conduct a program to eradicate any potential progeny of adult citrus longhorned beetle, *Anoplophora chinensis* (Foster), that dispersed from an incipient infestation of maple trees at a plant nursury. The citrus longhorned beetle is a serious exotic pest of many trees including maple, alder, apple, poplar, oak, willow, and elm. The proposed program is needed to eliminate the pest risk from the introduction and dispersal from the nursery in Tukwila, King County, Washington, where it has been detected and to prevent the spread of citrus longhorned beetle to other areas of the United States. APHIS prepared an environmental assessment (EA) to analyze potential environmental consequences from program actions being considered. The EA, incorporated by reference in this document, is available from the following offices:

U.S. Department of Agriculture
Animal and Plant Health Inspection Service
Plant Protection and Quarantine
Surveillance and Emergency Program
Planning and Coordination
4700 River Road, Unit 140
Riverdale, MD 20737-1236

or

U.S. Department of Agriculture
Animal and Plant Health Inspection Service
Plant Protection and Quarantine
22000 Marine View Drive, S. #201
Des Moines, WA 98198

The EA analyzed two alternatives - no action and an integrated eradication program. Based on the analysis of the environmental impacts, APHIS has determined that there would be no significant impact on the quality of the human environment from the implementation of the integrated eradication program alternative. APHIS' finding of no significant impact for this program action is based upon the application of standard operating procedures for the applications and their expected environmental consequences, as analyzed within the EA. APHIS will consult, where appropriate, with the U.S. Fish and Wildlife Service and National Marine Fisheries Service to ensure that this program will have no adverse effects on endangered and threatened species.

In addition, I find that the environmental process undertaken for this program is entirely consistent with the principles expressed in Executive Order No. 12898 (Environmental Justice) and Executive Order No. 13045 (Protection of Children from Environmental Risks) and that implementation of the control measures will not result in disproportionately high and adverse human health or environmental effects to any minority populations, low income populations, or children. Lastly, because I have not found evidence of significant environmental impact associated with the proposed program, I further find that an environmental impact statement does not need to be prepared and that the program may proceed.

/s/ Barbara Chambers
Barbara Chambers
Washington State Plant Health Director
Plant Protection and Quarantine
Animal and Plant Health Inspection Service

4/8/02
Date