Finding of No Significant Impact
New Chemical Treatment Study within the Worcester, Massachusetts Quarantine Zone
for
the Asian Longhorn Beetle Eradication Program, Environmental Assessment
September 2009

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), has prepared an environmental assessment (EA) for the study of new chemical treatments for potential use in Asian longhorned beetle (ALB) eradication projects. The EA is incorporated into this finding of no significant impact (FONSI) by reference. It is available online at http://www.aphis.usda.gov/plant_health/ea and from—

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The EA analyzed two alternatives: (1) no action by APHIS to explore the use of additional chemicals for use in the program during either spring or fall and, (2) the preferred alternative, for APHIS to actively seek information on the use of other insecticides in either fall or spring basal soil injections or trunk injections. APHIS wants to study three insecticides for potential incorporation into the ALB eradication program, including clothianidin, emamectin benzoate, and dinotefuran.

Under the preferred alternative, APHIS would gather information on the fall and spring applications using a basal soil injection of clothianidin; fall and spring trunk injections of emamectin benzoate; and spring only (per manufacturer's guidance) trunk injections of dinotefuran. Some of the insecticides are not registered for this use in Massachusetts; however, their use is in accordance with the U.S. Environmental Protection Agency's (EPA) Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) implementing regulations, found in 40 CFR § 172.3, that allow for experimental field uses of unregistered and registered products so that data can be generated to support a registration of the product or a new use on the label. No special permit is required for the study because the treatment areas for dinotefuron and emamectin benzoate are very small (a total of approximately 123 trees). The results of these applications will be compared with the residues found after spring and fall soil and trunk injections of imidacloprid, and from residues found in control trees. Residue analysis of pesticides will be from foliage collections made at the end of June (when emergence of first ALB adults is expected) and late August (near end of flight season). The residue levels will indicate if enough insecticide remains in the tree to kill larval and adult ALBs. Sap from the sugar maple trees will be collected in mid-March for pesticide residue analysis. The analytical goal is to determine whether application timing influences residue levels in the canopy and in sugar maple sap. In addition, sampling by USDA's Agricultural Research Service will include the collection of residue data from plant parts (such as flowers, nectar, and pollen) that will help to better understand the potential for impacts to pollinators, such as bees.

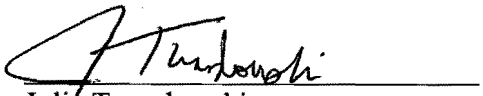
APHIS considered the potential environmental consequences of each alternative in the EA. Human exposure and risk from the use of any of the three pesticides proposed for study are expected to be minimal based on the method of application and available toxicity data. Applications of the study

pesticides, as proposed in this program, are not expected to impact aquatic organisms. Exposure and risk to most terrestrial nontarget organisms is expected to be minimal, the exception being that some insects that feed on treated trees could be impacted. However, based on the method of application, no drift would be expected and impacts would be restricted to those insects that are sensitive to the study chemicals and feed on treated trees. There are less than 500 trees that will be treated. This is an insignificant number of trees relative to the number of trees in the Worcester area. While trees are likely to be clustered in small pockets, there will not be large concentrations of treated trees. The experimental treatment of less than 500 trees is unlikely to result in significant cumulative environmental impacts to the quarantine area. There are no federally listed species within the Federal quarantine area where the proposed action is to take place. Therefore, the proposed action will have no effect on federally listed species.

Bee keepers and others remain concerned about the use of insecticides in the ALB program due to their potential impact on honey bees. APHIS is sensitive to these concerns and wants to ensure that its use of insecticides does not result in harm to pollinators, including bees or bee colonies. Based on available information, APHIS is confident that the use of the proposed insecticides in this study is likely to result in minimal, if any, impact to bee populations. The number of trees to be treated is very small in relation to the number of trees in the eradication area, and it is unlikely that large numbers of bees will gather pollen and nectar only from the treated trees.

On September 24, 2009, APHIS released the EA for public comment. The comment period expired on October 23, 2009; no comments were received.

I have determined that there would be no significant impact on the quality of the human environment from the implementation of the preferred alternative. APHIS' finding of no significant impact from the preferred alternative is based on the expected environmental consequences, as analyzed in the EA. Further, I find the preferred alternative to be consistent with the principles of environmental justice as expressed in Executive Order 12898—implementation of the preferred alternative will not result in any disproportionately high adverse human health or environmental effects on any minority populations or low-income populations. In addition, the preferred alternative is consistent with Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks." There will be no disproportionate effects to the environmental health or safety of children with the implementation of this program. Lastly, because I have not found evidence of significant environmental impacts associated with the proposed program, I further find that an environmental impact statement does not need to be prepared.



10/30/09

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Date

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