



United States
Department of
Agriculture

Forest
Service

White Mountain
National Forest

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File Code: 1950-1

Date: July 20, 2007

Dear Interested Citizen:

You may recall that in 2003 the Forest Service received a proposal from the Maine Department of Transportation (MDOT) for permission to use the herbicide triclopyr (Garlon 4) to control roadside brush behind guardrails along Route 113 in the White Mountain National Forest. At the time of their proposal, they had used the chemical effectively for more than 15 years along roadsides in Maine, including areas adjacent to the national forest, with no adverse effects to the environment, the applicators, or the general public. Given their safety record, the common use of Garlon 4 for brush control, and their desire to increase safety by minimizing the time workers with chainsaws were on the steeper terrain behind guardrails, we agreed to consider their proposal.

We proceeded with the environmental analysis, which included public input such as yours. Forest Service resource specialists worked cooperatively with MDOT to ensure that the details of their proposed activities and the predicted environmental effects were all within the standards set by the White Mountain National Forest Land and Resource Management Plan. MDOT addressed all public input and responded with appropriate specific mitigation measures to ensure public safety and resource protection at all times. New lists of sensitive species, new information brought forth during a separate analysis completed in 2006 – the White Mountain National Forest’s Invasive Species Control Project –along with new standards directed in our revised Forest Plan were all addressed in their recently completed environmental analysis.

I have included the environmental analysis for your information. We are pleased to be able to move forward in this cooperative effort with the State of Maine, and appreciate the time you took to consider the proposal and share your thoughts about the project.

Sincerely,

/s/ Barnie T. Gyant
BARNIE T. GYANT
Deputy Forest Supervisor

cc: Katherine Stuart, Terry Miller, William Dauer



Comments from MDOT Proposal to Use Herbicides to Control Woody Brush along Rte 113
June 2003 – July 2007

Commenter	#	Comment	Response
Sidley, T.	1	Question regarding the cost comparison of cutting to herbicide use. Concern regarding toxicity of Garlon.	The costs quoted for herbicide use are for basal stem applications, which do not require cutting of the treated material. The first year of treatment may require MDOT to cut material and treat the stumps, in these areas there would be no cost savings for the first year. In these areas the saving would come in later years in a reduction in the amount of overall material that would need to be controlled and a reduction in size of the material to be treated. See responses to Comment # 12, 13, and 17 regarding toxicity. Non-target species will be minimally affected, if at all, due to the targeted application methods – cut stump and basal stem applications of targeted plants, and the Spray Drift Control measures to be adhered to.
Peterson, A.	2	Supports proposal	Comment noted
Lavigne, F.	3	Do not allow use of herbicides.	Comment noted
Beij, P.	4	Can MDOT mow in late August? Comment that the proposed action is vaguely stated regarding how herbicide will be applied. Questions how backpack application will not land off target.	The areas that brush is a concern are mostly located behind guardrails and on slopes. Mowing in these areas is not possible with conventional equipment that is why MDOT currently uses chainsaws to cut this material. Mowing and cutting brush causes it to resprout producing multiple stems. While some of these stems may not survive over winter MDOT's experience is that enough stems do survive that the density of the brush increases. This makes the brush more difficult to control by any means. MDOT was stating both methods that may be used to control the brush, cut stump or basal stem. As time progresses the Department will be mostly using basal stem treatments. Basal stem treatments whether with a hand held spray bottle or backpack sprayer use a thin stream of spray to apply the herbicide to the stem of the plant. This is done under low pressure and within a few inches of the stem. There is very little if any herbicide that goes off target.

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Kellogg, C.	5	Supports project, asks for extra care	Comment noted
Ogonowski, A	6	Very good idea	Comment noted
Cavanagh, R.	7	Fully supports	Comment noted
Brown, T.	8	Wrote letter concerning their property on Rte 113 and the loss of lady slippers.	Mr. Robert Moosmann, MDOT Landscape Architect, responded with a letter on 4/30/03. In that letter Mr. Moosmann noted that MDOT records for the last three years indicate that the Department did not apply herbicides on Rte 113 in the town of Gilead. The Browns were informed of the Department's no-spray program and directed how to participate.
Miller, R.	9	Support if it will not harm wildlife.	The herbicide application targets only woody plant species. The herbicide used, Garlon 4 has not been known to harm wildlife. Chemical risk assessments to wildlife and fish which look at the relationship between toxicity and potential exposure show that adverse effects to wildlife under the intended application methods are unlikely (SERA 2003b).
Baird, I.	10	Support if it reduces pollution and a commitment to not broadcast spray. Concerned about width of area to be cleared.	The application of herbicides will lessen the amount of air pollution by eliminating the use of chainsaws to cut brush. Herbicides are applied to target species and not broadcast sprayed. Brush to be treated will be within 10'-12' of the edge of the road and under six feet in height for deciduous material and under three feet in height for evergreens. Existing trees that form a canopy over the road will not be treated.
Macilvain, V.	11	Approves	Comment noted
Richardson, R.	12	Concerned about herbicide use on fish populations in nearby streams.	Garlon 4 is toxic to fish, aquatic plants, and aquatic invertebrates. For this reason, application is tightly controlled to eliminate the risk of the chemical reaching open water. An identified mitigation measure for this project is to adhere to the label instructions regarding wind and buffer zones to avoid drift and runoff concerns. MDOT is very aware of this and does not apply any herbicides to open water. The Garlon 4 is applied at a low pressure to target species. The Garlon 4 is mixed with Hy-grade oil that helps the mixture penetrate the stems of the plant. This coupled with the low volumes used virtually eliminates runoff. This mixture is used in Downeast Maine around salmon waters with no adverse effects. A study

Commenter	#	Comment	Response
			of triclopyr (Garlon 4) in Oregon concluded that neither leaching nor long-distance overland flow contributed large amounts of the chemical reaching a nearby stream. The study concluded that when used correctly, there was little risk for non-target organisms or downstream water users. In addition, the chemical has low toxicity to birds and mammals (summarized by Tu et al., 2001).
Segedy, J.	13	<p>Asking for reference for analysis Forest Service has done or relied upon in determining the chemical's safety to people, breakdown time, and safety to water supplies.</p> <p>Asks about worker injury using mechanical brush control.</p> <p>Ask about amount of pollution caused by mechanical equipment and its injury rate to people and wildlife.</p> <p>Comments about potential loss of jobs by switching control methods.</p>	<p>The Forest Service has asked MDOT to supply data on Garlon 4's safety. The MDOT uses data supplied by Dow Agroscience on their Material Safety Data Sheet and product Label. Information there discloses the potential risks if applicators or others are exposed to the chemical. There is low risk of any adverse human effects when all label directions for application are followed, including mixing, application techniques, use of personal protective equipment, and application under appropriate weather conditions. Application is highly regulated for worker safety. MDOT monitors all employees who apply herbicides for the Department through a Health Monitoring program. In the fifteen years the program has been in place no employee has had an herbicide related health problem. The use of chainsaws is an activity associated with high personal risk. The Department requires all employees who operate a chainsaw to undergo training and wear appropriate safety equipment. Consequently personnel being cut by saws are very rare. But every season the Department cuts brush there are workmen's compensation claims filed for back injuries. MDOT does not have hard data to determine the injury caused to people or wildlife by emissions from chainsaws or other engines.</p> <p>No jobs will be lost by changing control methods. All personnel involved are currently MDOT employees. This activity is just one of many performed throughout the year.</p>
Gable, J.	14	Project appears well thought-out with good planning	Comment Noted
Richardson, R.	15	Who owns the road?	The road is within a 3 rod (49.5') right-of-way owned by the State of Maine.

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Richardson, P.	16	Concerns regarding use of herbicide. What kind of monitoring will be done to be sure material does not get into surface or ground water.	No specific water quality monitoring will be done on this project. MDOT does test wells and water bodies if contamination is suspected. Garlon 4 has never been detected in any wells that have been tested in the past. MDOT can maintain buffers near water bodies and ledge outcrops to reduce exposure to surface and ground water. Monitoring soil stability effects from loss of vegetation will be monitored by MDOT annually.
Seaver, C.	17	Questions concerning toxicity to humans and exposure.	According to the Material Safety Data Sheet for Garlon 4 “Oral toxicity low” “Small amounts swallowed incidental to normal handling operations are not likely to cause injury” “With dilute mix, no allergic skin reaction is expected” The mixture dries quickly after application so the chance of exposure to the general public is very low. Results of the risk assessment studies of the chemical conclude that “there is no route of exposure or exposure scenario suggesting that the general public will be at risk from longer-term exposure...”(SERA 2003b). See also response to comment #13. MDOT cautions everyone not to consume any wild foods collected along the roadside as a general safety precaution.
Parker, L.	18	Has had a change of mind about herbicides and supports.	Comment Noted
Sachau, B.	19	Herbicides are poisoning the earth. Humans carry around 481 toxic chemicals in their bodies.	See responses to # 12, 13, and 17.

References

SERA (Syracuse Environmental Research Associates, Inc.). 2003b. Triclopyr – Human Health and Ecological Risk Assessment; Final Report. Unpublished report prepared for the U.S. Forest Service.

Tu, Mandy, C. Hurd, and J.M. Randall. 2001. Weed Control methods Handbook: Tools and Techniques for Use in Natural Areas. The Nature Conservancy, Wildland Species Team. Version April 2001.