

National Retardant NEPA NMFS Reasonable and Prudent Alternative (RPA) Tracking Sheet

RPA Sub-Element Text	RPA Due Date	Assigned Lead	Accomplishments/Progress
<p>1. Provide evaluations on the two fire retardant formulations, LC 95-A and 259R, for which acute toxicity tests have not been conducted, using standard testing protocols. Although direct fish toxicity tests have not been conducted on three additional formulations, G75-W, G75-F, LV-R, studies are not warranted in light of the fact the USFS intends to phase out their use of these formulations by 2010. All formulations expected to be in use beyond 2010 shall be evaluated using, at a minimum, the established protocols to assess acute mortality to fish. Evaluations must be completed and presented to NMFS no later than two years from the date of this Opinion. Depending on the outcome of these evaluations and after conferring with NMFS, the USFS must make appropriate modifications to the program that would minimize the effects on NMFS' listed resources (e.g., whether a retardant(s) should be withdrawn from use and replaced with an alternative retardant(s)).</p>	<p>1/1/2009</p>	<p>Karyn Wood, Assistant Director for Fire Operations (with assistance from USGS-FS)</p>	<p>USGS completed the acute toxicity testing on LC 95-A and 259R. Results were shared with NMFS and USFWS at the May 29, 2008 joint meeting. No issues or concerns were raised. The test results were posted to the Wildland Fire Chemical Systems web site.</p> <p>The revised USDA Forest Service Specification 5100-304c for Long-Term Retardant, Wildland Firefighting, June 1, 2007 includes the Acute Fish Toxicity testing requirements and established protocols. The process we use was explained to NMFS and accepted. The timing of a company submitting a product for evaluation against this specification varies, therefore the information provided to NMFS will be dependent upon that timeline which may be later than the two year's from accepting the Biological Opinion. NMFS recognizes this, as well as we do not utilize any product prior to it meeting the requirements of the</p>

			specification.
<p>2. Engage in toxicological studies on long-term fire retardants approved for current use in fighting fires, to evaluate acute and sublethal effects of the formulations on NMFS' listed resources. The toxicological studies will be developed and approved by both the USFS and NMFS. The studies should be designed to explore the effects of fire retardant use on: unique life stages of anadromous fish such as smolts and buried embryo/alevin life stages ranging in development from spawning to yolk sac absorption and the onset of exogenous feeding (approximately 30 days post-hatch); and anadromous fish exposed to fire retardants under multiple stressor conditions expected during wildfires, such as elevated temperature and low DO. Within 12 months of accepting the terms of this Opinion, USFS provide NMFS with a draft research plan to conduct additional toxicological studies on the acute and sublethal effects of the fire retardant formulations. Depending on the outcome of these studies described per the research plan and after conferring with NMFS, the USFS must make appropriate modifications to the program that would minimize the effects on NMFS' listed resources (e.g., whether a retardant(s) should be withdrawn from use and replaced with an alternative retardant(s)).</p>	10/11/2008	Karyn Wood, Assistant Director for Fire Operations, (with assistance from USGS, NMFS)	<p>Met with NMFS, USFWS, and USGS on May 29, 2008. Identified key elements for developing a toxicological study. Received proposed investigations of the toxicity of long-term retardants on the survival and health of smolting salmonid from NMFS and USGS. Accepted the proposal and have established an interagency agreement with NMFS to proceed. Testing will begin in March 2009.</p>
<p>3. Develop guidance that directs the US Forest Service to conduct an assessment of site conditions following wildfire where fire retardants have entered waterways, to evaluate the changes to on site water quality and changes in the structure of the biological community. The field guidance shall require monitoring of such parameters as macro-invertebrate communities, soil and water chemistry, or other possible surrogates for examining the direct and indirect effects of fire retardants on the biological community within</p>	None. (internal development of guidance to be completed by 12/31/08)	Karyn Wood, Assistant Director for Fire Operations, (with assistance from Watershed, Fish and Wildlife Staff)	<p>Received proposal from USGS for assessment of site conditions. Reviewed at the May 29th meeting with USFWS and NMFS. Next step is to review and establish thresholds for when to initiate assessment. The field guidance will be completed and implemented during the 2009 fire season.</p>

<p>and downstream of the retardant drop area as supplemental to observations for signs of dead or dying fish. The guidance may establish variable protocols based upon the volume of retardants expected to have entered the waterway, but must require site evaluations commensurate with the volume of fire retardants that entered the waterway.</p>			
<p>4. Provide policy and guidance to ensure that USFS local unit resource specialist staff provide the local NMFS Regional Office responsible for section 7 consultations with a summary report of the site assessment that identifies: (a) the retardant that entered the waterway, (b) an estimate of the area affected by the retardant, (c) a description of whether the retardant was accidentally dropped into the waterway or whether an exception to the 2000 Guidelines was invoked and the reasons for the accident or exception, (d) an assessment of the direct and indirect impacts of the fire retardant drop, (e) the nature and results of the field evaluation that was conducted following control and abatement of the fire, and any on site actions that may have been taken to minimize the effects of the retardant on aquatic communities.</p>	<p>None. (internal development of guidance to be completed by 12/31/08)</p>	<p>Karyn Wood, Assistant Director for Fire Operations, (with assistance from Watershed, Fish and Wildlife Staff)</p>	<p>The Environmental Assessment, Decision notice, and the Biological Opinions from the USFWS and NMFS were posted to the Forest Service web site in February 2008. An initial memo transmitting the decision and the requirement to begin implementing the RPA's was sent to the field March 28, 2008. A memo to Regional Foresters was sent on June 2, 2008 providing direction for reporting requirements for retardant and foam received waterways and T&E species habitats. A form was included with the direction for reporting requirements. This information was posted to the Forest Service web site. Reports were submitted as directed and a summary table has been created.</p>
<p>5. Provide NMFS Headquarter's Office of Protected Resources with a biannual summary (every two years) that evaluates the cumulative impacts (as the Council on Environmental Quality has defined that term pursuant to the National Environmental Policy Act of 1969) of their continued</p>	<p>2/1/2010 Recommend this date in order to</p>	<p>Karyn Wood, Assistant Director for Fire Operations, (with assistance from Watershed,</p>	<p>Will complete this requirement in 2010, however we will be summarizing the reports received from 2008 and provide the information to NMFS for</p>

<p>use of long-term fire retardants including: (a) the number of observed retardant drops entering a waterway, in any subwatershed and watershed, (b) whether the observed drops occurred in a watershed inhabited by NMFS' listed resources, (c) an assessment as to whether listed resources were affected by the misapplication of fire retardants within the waterway, and (d) the USFS' assessment of cumulative impacts of the fire retardant drops within the subwatershed and watershed and the consequences of those effects on NMFS' listed 139 resources. The evidence the USFS shall use for this evaluation would include, but is not limited to: (i) the results of consultation with NMFS' Regional Offices and the outcome of the site assessment described in detail in the previous element of this RPA (Element 4) and (ii) the results of new fish toxicity studies identified within Element 2; and (d) any actions the USFS took or intends to take to supplement the 2000 Guidelines to minimize the exposure of listed fish species to fire retardants, and reduce the severity of their exposure.</p>	<p>close-out a fire season (calendar year) and have time to pull together the records.</p>	<p>Fish and Wildlife Staff)</p>	<p>adjusting the reporting form if necessary prior to 2009 fire season.</p>
--	--	---------------------------------	---