EXHIBIT 6

DRAFT

Arthur-Jean Williams, Chief
Field and External Affairs Division
Office of Prevention, Pesticides and Toxics Substances
U.S. Environmental Protection Agency
Washington, D.C. 20462

April , 2004

Re: Endangered Species Act Section 7 Informal Consultation for 28 Pesticide Registrations*

Dear Ms. Williams:

This correspondence is in response to the U.S. Environmental Protection Agency's (EPA) requests for informal consultation under the Endangered Species Act (ESA) of the registration or re-registration of 28 pesticides under the Federal Insecticide, Fungicide, and Rodenticde Act (7 U.S.C. 136a, FIFRA) . The National Marine Fisheries Service (NOAA Fisheries) has reviewed the draft biological evaluations (BE) and requests for concurrence with the determinations of "may affect, not likely to adversely affect" for chinook salmon (*Oncorhynus tshawytscha*) (Upper Columbia, Snake River spring/summer run, Snake River fall run, Upper Willamette, Lower Columbia, Puget Sound, California Coastal, Central Valley spring run, Sacramento River winter run); coho salmon (*O. kitsch*) (Southern Oregon/Northern California, Central California); chum salmon (*O. keta*) (Hood Canal summer run, Columbia River); sockeye salmon (*O. nerka*) (Ozett Lake, Snake River); steelhead (*O. mykiss*) (Snake River basin, Upper Columbia River, Middle Columbia River, Lower Columbia River, Upper Willamette River, Northern California, Central California coast, South-central California coast, Southern California, Central Valley California) for the above referenced 28 pesticide registrations.

The majority of initiation packages contain a similar suite of information. That information usually includes documents which assess the risks to threatened and endangered salmonids and their habitat, interim or final registration decision documents, memoranda specifically addressing EPA's summaries of environmental fate and effects of the pesticides, national and regional pesticide use information, and some pesticide labels. The degree of detail that each package provides varies relative to the date of package (submittals began in July 2002), as well as quantity of information available about the particular pesticide.

After review of the submitted information, NOAA Fisheries does not concur with EPA's effects determinations. NOAA Fisheries believes the proposed action, which includes registration of the active ingredient, formulated products, degradation products such as metabolites and degradates, and mixtures (formulated products and tank mixes), may have greater than discountable or insignificant effects on listed species. NOAA Fisheries has determined that the proposed action

is "likely to adversely affect" the 26 ESUs and thus, requires formal consultation. Our comments are provided in accordance with section 7(a)(2) of the ESA, and its implementing regulations, 50 C.F.R. Part 402.

Information and/or Analysis Gaps

Lack of best commercial and scientific data available. Consultation regulations state that "The Federal agency requesting formal consultation shall provide the Service with the best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat" (50 C.F.R. 402.14(d)). In the context of pesticide effects, NOAA Fisheries believes that the best available science includes the primary, peer-reviewed scientific literature. It also includes the "grey literature" such as agency technical reports and data submitted to the EPA by pesticide producers during the registration process.

For a risk determination in the context of the ESA, NOAA Fisheries believes that the RED does not by itself constitute the best available scientific and commercial data. An initiation package/ biological assessment must consider the peer-reviewed scientific literature and other relevant sources of technical information. While this requirement, as written, pertains to formal consultations, NOAA Fisheries has conducted data searches for two of the 28 pesticides under informal consultation and obtained between 700-800 peer-reviewed citations which were not included in the initiation packages. Those findings cause us concern that EPA's effects analyses may not be conducted using the "best scientific and commercial data available", and that the ecological risk assessment may be biased toward concluding that a pesticide does not pose an ecological risk to listed resources, when in fact, it does (a "Type II error").

Insufficient description of the action proposed for consultation. NOAA Fisheries is required, during section 7 consultation, to clearly identify the action upon which we will consult. For example, we will need to determine if these consultations will encompass the effects of re-registering products containing the active ingredients only (as compared with the various formulations that contain the active ingredient, as well as degradates, mixtures, surfactants, adjuvants, inert (other) ingredients, and tank mixes), the uses of those products, or some combination of the two. In addition, NOAA Fisheries needs to understand whether use of the pesticides under other FIFRA section (e.g., 18 and/or 24(c))) should be analyzed in this consultation. Lacking clarity about the action can either over- or under-estimate the identified effects.

Lack of salmonid spatial and temporal status and environmental baseline relative to pesticide uses. In order for NOAA Fisheries to assess the risks of the pesticide registration action on the listed species, analysis of temporal and spatial structure and abundance is necessary. The risk analyses begin with the species, populations, life stages, and habitat that would be exposed, combined with information on their probable responses upon exposure. As part of this step, we examine the information available on each species' status, both spatially and temporally, the

impact of activities that we include in the environmental baseline for the consultation, and cumulative effects. To support any inferences that might be necessary about these various effects on listed species, we use demographic models to estimate the probable consequences on the species' likelihood of surviving and recovering in the wild (estimated using measures such as probability of persistence over 20, 50, or 100 years based on population growth rate (lambda) or median time to extinction derived from cumulative distribution functions).

Lack of exposure from all potential compounds and uses at spatial and temporal scales. Most of the initiation packages speak to a method to assess potential exposure from residential uses of many of the pesticides. However, those uses are not taken into consideration in the final risk analyses. The analyses should evaluate all available evidence of fate, transport, and persistence to determine the likelihood of listed species or critical habitat ("listed resources") being exposed to various environmental concentrations of the active ingredients, degradates, or metabolites (or the broader components of the formulated products), which includes estimating the intensity, duration, and frequency of exposure for all potential uses. These analyses will assume that the potential direct effects of the re-registration of each pesticide on listed resources will be a function of the intensity (measured in terms of estimated environmental concentrations), duration, and frequency of the exposure (although we recognize that some biologically significant effects are likely to result from low levels of exposure). Our exposure analyses will also try to estimate (a) the species, populations, and life stages that would be exposed to the direct and indirect effects of active ingredient, formulated product, tank mixes, if appropriate, degradates, or metabolites; (b) the conditions of that exposure (in space and over time); (c) the portions of critical habitat that would be exposed, including any constituent elements; and (d) the conditions of that exposure.

Lack of incorporation of direct sublethal effects beyond growth and reproduction. NOAA Fisheries must evaluate the available evidence to identify the probable acute or chronic responses from probable exposure, which would include death or injury; trophic effects; and behavioral responses that would have longer-term, chronic effects on the viability of populations of listed species. For example, this step of our analyses will try to develop and examine "stressor-response" relationships (relationships between various acute and chronic endpoints and estimated environmental concentrations of compounds) to characterize the likelihood of responses by listed resources and their ecosystems from exposure to the active ingredient, degradates, or metabolites (or the broader components of the formulated products). The lack of information on chronic sublethal effects, or effects posed by degradates, mixtures, surfactants, adjuvants and inert (other) ingredients, can very quickly lead to the conclusions of false negatives (concluding that an effect does not pose an ecological risk to listed resources when, in fact, it does) or Type II errors. Type II errors for listed resources are very significant in a section 7 analysis as NOAA Fisheries must assure that these errors are minimized.

Without the analyses of the above-identified issues, NOAA Fisheries can not be certain that the registration of the 28 pesticides do not pose risks to and adversely affect listed fish or the ecosystems upon which they depend. Formal ESA section 7 consultation will afford the

opportunity to address these issues, as well as evaluate levels of incidental take that may be appropriate for authorization. As EPA is aware, section 7(a)(2) of the ESA requires that each Federal agency shall insure that any action authorized, funded, or carried out by such action agency is not likely to jeopardize the continued existence of any endangered or threatened species (or result in the destruction of adverse modification of critical habitat, where designated). Given these concerns, NOAA Fisheries recommends that EPA not make irreversible or irretrievable commitments of resources which would have the effect of foreclosing the formulation or implementation of any reasonable and prudent alternatives that would avoid violating section 7(a)(2). If EPA determines that the requirements of 7(d) are satisfied then NOAA Fisheries requests written confirmation of the actions that will proceed during consultation.

NOAA Fisheries will be meeting with EPA on April 29, 2004 to discuss other components of these consultations. Perhaps at that time we can discuss these issues and identify a compatible approach to their resolution. We look forward to working with you on these consultations in a cooperative and transparent manner. Please contact Rachel Friedman (360-753-4063, rachel.friedman@noaa.gov), of my staff, to set up the proposed meeting.

Sincerely,

Steve W. Landino
Washington State Director

cc: Bridget Moran, Washington Department of Agriculture

*Trifluralin, Methyl Parathion, Methidathion, Methamidophos, Linuron, Naled, Molinate, Propargite, Metolachlor, Fenbutatin Oxide, Diazinon, Bensulide, Imazapyr, Sulfometuron-methyl, Thiobencarb, Carbaryl, Chlorpyrifos, Oryzalin, Acrolein, Diuron, Phorate, Bromacil/Lithium Bromide, Phosmet, Fenamifos, Ethoprop, Disulfoton, Chlorothalonil, Captan