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Pesticide Program Dialogue Committee PRIA Process Improvement Workgroup

Minutes of September 14, 2005 Meeting

Attendees:

Workgroup Members:

Sid Abel, Environmental Fate and Effects Division/OPP

Kate Bouve, Information Technology and Resources Management Division/OPP

Ron Derbyshire, Johnson Diversey, Representing the Consumer Specialty Products Association (CSPA) and American Chemistry Council (ACC) Biocides Panel.

Dennis Edwards, Antimicrobial Division/OPP

Kennen Garvey, Special Review and Reregistration Division/OPP

Michael Goodis, Special Review and Reregistration Division/OPP

Ted Head, NuFarm America, Representing the Chemical Producer and Distributors Association (CPDA)

Steve Jarboe, Biological and Economic Analysis Division/OPP/EPA

David Jones, Nice-Pak Products, Representing the International Sanitary Supply Association (ISSA)

Brigid Klein, Consumer Specialty Products Association (CSPA)

James Kunstman, PBI/Gordon, Representing the Chemical Producers and Distributors Association (CPDA)

Elizabeth Leovey, Office of Pesticide Programs, EPA

Ray McAllister, CropLife America (CLA)

Michael Mendelsohn, Biopesticides and Pollution Prevention Division/OPP

Marty Monell, Office of Pesticide Programs (OPP)

Kathy Monk, Registration Division/OPP

Eric Olsen, Natural Resources Defense Council (NRDC)

Amy Roberts, Technology Sciences Group, Representing the Biopesticide Industry Alliance (BPIA)

Julie Schlekau, MGK Company, Representing Responsible Industry for a Sound Environment (RISE)

Julie Spagnoli, Bayer Healthcare, Representing the Pesticide Program Dialogue Committee

Greg Watson, Syngenta Crop Protection, Representing CropLife America (CLA)

Others in Attendance:

Linda Arrington, Registration Division/OPP
David L. Brown, Colgate-Palmolive Company
Susan Casoni, Pesticide.net Insider
Kevin DeBell, Office of Policy, Economics and Innovation/EPA

Russell Dinnage, Pesticide and Toxic Chemical News
James Dowing, Biopesticides and Pollution Prevention Division/OPP
Barbara Mandula, Biopesticides and Pollution Prevention Division/OPP
Eric Mauer, Valent U.S.A
Michael Nieves, Registration Division/OPP
James Roelofs, Field and External Affairs Division/OPP
Jess Rowland, Health Effects Division/OPP
Diane Schute, Chemical Producers and Distributors Association (CPDA)
Robert M. Sielaty, Attorney
Warren Stickle, Chemical Producers and Distributors Association (CPDA)-International Sanitary Supply Association (ISSA)
Pauline Wagner, Registration Division/OPP
Karen Warkentien, Compliance Services International

Agenda

- I. Introductions
- II. Process Improvements Updates
 - Registration Division
 - Antimicrobials Division
 - Biopesticides and Pollution Prevention Division
 - Health Effects Division
 - Environmental Fate and Effects Division
 - Information Technology and Resources Management Division
- III. Cross Program Process Improvements
 - Labeling – OPP Labeling Committee progress report and comments from PPDC Workgroup on priority labeling issues
 - Registration Application Guidance – Update on the Blue Book and AD/Industry Templates and comments from PPDC Workgroup
- IV. Future Activities/Projects
 - Discussion by PPDC Workgroup on its priorities for future improvements
 - Preparation for next PPDC presentation
 - Next Meeting of Workgroup

Minutes

I. Process Improvement Updates

Registration Division

Kathy Monk, Senior Advisor, Registration Division reported the Division's progress on a number of efforts. The RD workplan with target due dates for new chemicals will be on the internet in September at the following web address: <http://www.epa.gov/opprd001/workplan/> while the workplan for new uses is scheduled for November. Draft copies were available to attendees. After clearance for Confidential Business Information, the first three new chemical risk assessments and associated Data Evaluation Records will be posted on the internet as part of RD's goal of greater transparency in the registration process. RD's decision making process has been revised to include immediate interactions with registrants as issues arise to avoid delays in completing actions. Outlines of these processes were distributed and are attached. Ms. Monk encouraged registrants to notify RD branch chiefs when interactions did not occur.

Michael Nieves, Special Assistant to the Director, RD, reported that in October, the Division will release for registrant comment a comparative matrix of Pesticide Registration Notices (PRNs) which lists those superseded or those referenced by others. Draft copies were available to attendees and to workgroup members.

The Registration Division implemented a reorganization. A new branch, the Inerts Assessment Branch (IAB) was formed and the Alternative Risk Integration and Assessment Team (ARIA) was established. The team, located in the Minor Use and Emergency Response Branch conducts quick and simple risk assessments and works closely with the Health Effects Division and the Environmental Fate and Effects Division.

The progress made by the Inerts Assessment Branch in reducing the inerts backlog and in tolerance reassessment was presented by its branch chief, Pauline Wagner. The branch will have assessed 178 tolerance exemptions by the end of FY 05 and decreased the backlog of tolerance petitions from 46 to 23 in FY 05 with the remaining 23 to be assessed in FY06. New petitions are assessed when received. Efficiencies were gained by streaming assessments, grouping chemicals, obtaining contractor support and dedicated staff, resolving issues promptly with registrants, denying petitions with large unspecified chemical groupings, and revoking tolerances exemptions for inerts no longer used in formulations. The first revocation notice closed August 31st for 31 chemicals and 34 tolerance exemptions. A second revocation notice was out for comment and included 33 chemicals and 37 tolerance exemptions. A list of approved inerts will be posted on the internet.

Antimicrobials Division

Dennis Edwards, Chief, Risk Management Branch I announced that a list of Tier 1 data requirements for various antimicrobial use patterns will be posted on the AD web site in late fall or early winter. A submission checklist has been developed to help streamline the administrative review of applications for amendments (A57) and new registrations (A53 and 54) and to increase consistency between AD teams. A list of approved inerts for food contact sanitizer will be published in the Federal Register. At present, 20% of the confidential statements of formulas for registered products have been reviewed in preparing this list.

BioPesticides and Pollution Prevention Division

To meet the challenge of completing actions with timeframes from 3 months to 24 months and for products that range from fast track pheromones to new plant-incorporated protectants that require a meeting of the Scientific Advisory Panel, Janet Andersen, Director, reported that BPPD has organized its processes into five phases: Front end processing, FR Notice (as needed), primary review of studies and data waivers, secondary review and risk assessment, and document development and decision. Each phase has a timeframe. During FY05, the time required to complete all phases is less than the PRIA timeframe allowing some “cushion” in meeting due dates. During FY06, however, some timeframes are reduced, the “cushion” may be eliminated and the Agency will monitor for any impacts.

The majority of BPPD’s actions are handled by its Biochemical Pesticides Branch. The Branch formed five action teams: Fast Tracks, Non-Fast Tracks, New Active Ingredients, Science Reviews, and Expedited Secondary review. Each team has a team captain and Branch staff serve on more than one team concurrently. As a result of this approach, workflow, consistency and attention to due dates have improved within the branch.

BPPD will put its new active ingredient workplan on the web.

Health Effects Division

Jess Rowland, Chief of HED’s Science Information Management Branch presented the results of HED’s review of waivers for repeat dose inhalation toxicity studies requested by the Division’s Hazard Identification Assessment Review Committee (HIARC). In 2002, CropLife America suggested that a process be established for determining when to grant a waiver. Studies for forty six chemicals were requested by HIARC. To date, waivers were granted for 35, denied for 9 (concern for long term exposure), and two are under review. The guidance was provided to all workgroup members and is attached.

Greg Watson on behalf of CLA suggested that HED consider pharmacokinetics as a basis for a waiver. The issue will be taken to HED’s Hazard Science Policy Council.

During the October, 2004 meeting, Mr. Rowland reported that HED formed the “Dose Adequacy Review Team (DART)” to provide guidance on the dose levels selected by registrants in conducting various toxicological studies submitted to the Agency in support of pesticide registration and reregistration. A copy of the guidance was forwarded to all workgroup members and is attached.

Environmental Fate and Effects Division

Sid Abel, Associate Director, presented the Division’s process improvement efforts in three areas; New Chemical Screens, Scheduling, and Models. The Division standardized its new chemical screen, tasked a contractor and reduced the turnaround on a new chemical screen to 10 working days. To improve scheduling and interactions with the Registration Division particularly for problem formulation, the Division notifies RD when it receives an action, when a planning dialogue is needed and when problem formulation discussion should be initiated. Data is currently only entered once for the Division’s latest version of its terrestrial model. Other

models require complete data entry whenever the model is used. Other models, such as the water exposure models will be modified to save the inputs, thereby providing a permanent and reusable record for future analyses. The Division's long-term goal is to develop "smart" systems that will link models and assessment tools to automatically generate risk estimates from an initial set of inputs.

The Division was complemented on its recently released fate database <http://cfpub.epa.gov/pfate/home.cfm>. A concern was raised that the e-mail address for comments did not function. The Division subsequently followed up on this concern and the e-mail box was modified.

Greg Watson requested that the Division reinstitute its Rapid Response Team that provided registrants with protocol guidance. Registrants are encouraged to call the EFED branch chiefs.

In responding to the request for a presentation on the endangered species program, Marty Monell responded that it would be covered during the next meeting of the workgroup if the Federal Register Notice on the Field Implementation of the Endangered Species Program is published before the meeting.

Information Technology and Resources Management Division

Kate Bouve, Chief, Information Services Branch, reported that processing times for fee waivers has decreased from 51 days for a grant and 60 days for a denial in the summer of 2004 to an average of 21 days to grant and 46 days to deny during the last six months. A slight increase in average processing time occurred in the winter, 2005 when applicants had to submit updated packages. The decrease in processing time was attributed to increased experience, resolution of issues and establishment of precedents, and updated and clarified guidance on the PRIA web site. In addition, Agency staff screen applications upon receipt and quickly request any missing documentation. As of the beginning of September, 2004, OPP had received 595 requests for a fee waiver of which 475 were approved or granted, 97 were denied, and 23 withdrawn.

The number of fee waivers per OPP Division was developed.

Percent PRIA Actions w/Waivers 3/24/2004 – 9/16/2005

Division	# Actions	# Waiver Requests	% Actions w/Waivers
AD	442	125	28%
BPPD	247	154	62%
RD	2,046	424	20%
TOTAL	2,735	703	25%

Ms. Bouve confirmed that electronic payment notifications were being sent to e-mail addresses that OPP has on file and assured that the Division will follow-up on any problems that registrants may be experiencing in receiving these e-mails.

II. Cross Program Process Improvements

Labeling Committee

Dennis Edwards, Chief, Risk Management Branch I, AD, presented an overview of OPP's Labeling Committee. The Committee was formed in April, 2005 at the suggestion of the PPDC workgroup. Its purpose is to oversee cross cutting labeling policy issues, resolve them and communicate resolution both internally and externally. Members are senior staff from the Registration Division, Antimicrobial Division, Special Review and Reregistration Division, and the Field and External Affairs Division and two other EPA offices, The Office of Enforcement Compliance and Assurance, and the Office of General Counsel. The Committee has five charges: Revise and maintain currency of the Label Review Manual, serve as a clearinghouse for broad cross cutting label issues, determine cross cutting policy needs, recommend solutions to senior management, and manage a web site devoted to labeling issues. Broad cross cutting issues may involve a type of pesticide, use site such as aquatic uses, indoor uses, etc., a crop, a class of pesticide or all pesticide labels. Items that the Committee will not address include those related to a specific product, enforcement cases, litigation, status of a pending action, and unregistered pesticides.

The Committee has a draft Standard Operating Procedures. It is a dynamic document and will change with time. The latest version will be posted on the Labeling web site projected to be available sometime in October. The web site will contain a link to an e-mail box (OPPlabelingconsistency@epa.gov) that the public may use to obtain answers on broad cross cutting labeling issues. Receipt of e-mail questions will be acknowledged as received and a response can be anticipated in a couple of weeks.

The Labeling Committee formed a Label Review Manual Team to update the Manual. The Team with members of the same divisions as the Labeling Committee has drafted an SOP for its operations.

Issues currently being addressed by the Label Committee are mandatory versus advisory language and warranty statements. Internal training is planned on PR Notice 2000-5 to assure consistency among the registering divisions on the use of mandatory and advisory language. The Agency's Office of General Counsel is updating guidance on warranty statements. Once guidance has been developed, registrants and the public will be notified and internal training will be conducted.

Greg Watson on behalf of the Industry Fee Coalition comprised of the American Chemistry Council's Biocides Panel, Biopesticide Industry Alliance, Chemical Producers and Distributors Association, Consumer Specialties Products Association, CropLife America, International Sanitary Supply Association and RISE, supported the e-mail box and web site for labeling questions and the Label Review Manual Team to update the Manual and make it a "living" document. A priority of the Coalition is to revise Chapter 7 of the Label Review Manual to be consistent with the First Aid PR Notice 2001-1 by incorporating the notice. Clarity is needed on items covered by the "Mandatory versus Advisory". The Committee should develop a process for approving "For Commercial Applicators Only" or "For Professional Use Only". According

to registrants, such language on a label informs the user when a pesticide should be used with greater attention to use directions, but does not meet restricted use criteria. "For" was recently approved for mosquitocides. Indemnificated labeling and indemnification language could be addressed at a later date. Consistency is needed within OPP on warranty statements. Other Industry Fee Coalition suggestions are attached.

The Labeling Committee's recommendations on mandatory versus advisory, warranty statement and policy issues will be discussed in future workgroup meetings.

The Labeling Committee will review the questions and answers in the SLITS database and if any meet the criteria of the questions that the Committee will address, the Committee will post the question and answer on the Labeling Committee web site without identifying the source of the question. Spray Drift label language is not a topic of priority for the Labeling Committee at this time.

Application Guidance

Michael Mendelsohn, Biopesticide and Pollution Prevention Division updated the workgroup on its e-mail box, bppdconsistency@epa.gov. The questions and concerns raised by individuals using the e-mail box are discussed by the Division's senior management and the answer is posted on the web, www.epa.gov/pesticides/biopesticides. Once on this site, the answers are found by accessing Biopesticide Registration Tools, Biopesticide Registration Inconsistency, and Issues. Four issues have been addressed dealing with data waivers and MRID numbers, the need to include an application form with resubmissions, submission of California Department of Pesticide Regulation Data Evaluation Records, and processing Gold Seal requests. An example of a question and response were provided.

AD/Industry PRIA Process Improvement Team

Ron Derbyshire provided an update of an Antimicrobial Division/Industry effort to develop examples of registration packages that applicants could use to develop better and complete applications. These "registration models" would range from Me-too applications to those for a new active ingredient. The models will be populated with "sample" data and posted on the internet. The Division is reviewing the models. AD and industry also hold a workshop every eighteen months with the 2005 workshop hosted by industry and scheduled for November 1 and 2.

Blue Book (General Information on Applying for Registration of Pesticides in the United States)

Linda Arrington, Registration Ombudsmen, Registration Division, presented an update on revisions to the "blue book" to incorporate changes in the application process resulting from FQPA and PRIA. The "blue book" provides basic guidance for submitting pesticide registration applications. The revision will contain examples of applications and is expected to be available in January for review by a "focus" group. During the workgroup meeting, volunteers were requested for the focus group to review the revised blue book and to brainstorm other ways to improve applications. The focus group will meet in Arlington, Virginia in February.

The suggestion was made that the definition of a fast track be consistent among the three registering divisions and that data compensation be discussed. PR Notice 86-5 is currently not being revised.

The PRIA annual report will be available in March and it will provide data on the number of actions received and completed during FY05 and per fee category.

Next Steps:

Future Activities/Projects

Industry will revisit its process improvement priorities and present them during the next meeting of the workgroup. Greg Watson volunteered to present the results of this meeting to the full PPDC workgroup.

Next Meeting of the Workgroup

The next meeting of the workgroup has been tentatively scheduled on January 26 in Room 1126 (Fishbowl). Topics proposed for this meeting include, OPP's information technology and information management improvements over the next three years, an analysis of failures, deficiencies and problems in processing applications, feedback from registrants on future improvement priorities, and issues for discussion from the Labeling Committee. If the Field Implementation of the Endangered Species Program is published, a discussion will be presented.

Attachments

July 30, 2004

Schedule for New Active Ingredient/First Food Use

(Usually Necessary Steps--not always necessary & not always sequential--to be determined by team)

{In what follows there is a lot of discussion about “scoping”--we were asked to provide a definition. Scoping is the process of examining and often re-examining the specific action to determine what specific work is required to complete it. Another aspect of scoping is determining how this work can be completed in the most efficient manner possible and defining a schedule for the action based on this determination. We want to encourage people to use existing alternative processes--ARIA, low tox, etc. where possible *and* to think of new and innovative ways to get work done more efficiently. We also want to support the science division’s scoping efforts, such as HED’s new scoping exercises and use of RARC I and EFED’s problem formulation. RD has a new risk management entity (IRAD) where teams can propose their ideas and get input up-front-- or in-put anywhere along the process, from the risk managers. If you think something can be done more efficiently than it is currently being done-- propose your idea to IRAD. In this way we can direct the majority of time and resources to chemicals/issues with the most risk.

Finally, we have talked about “scoping the schedule”. The idea behind this concept is that as we schedule each action *individually*, we must look for potential problems and bottlenecks in the overall schedule, which includes all actions that must be done, to see if there are going to be obstacles to actually getting this particular action out on schedule. This is a continuing process that must involve management in all of the divisions. What we are asking individual teams to do is immediately identify these problems when they arise so they can be addressed. Under PRIA we can no longer afford the time lost when actions sit in various queues, therefore, we must address resource issues quickly.}

[In most cases, for new AIs, there will be a pre-submission meeting with the registrant prior to their actual submission of an application for registration. The science divisions have requested that invitations for these meetings be sent to the Branch Chiefs. The BCs will determine who should attend these meetings.]

<i>Name of ai:</i>	Process: (e.g. Std, ARIA, Low Tox.)		Last Possible Science Due Date:
			Science Due Date:
RD Branch: Risk Manager:	HED Branch: Risk Assessor:	EFED Branch: Risk Assessor:	BEAD: Phone #:
Phone #:	Phone #:	Phone #:	FEAD: Phone #:

MILESTONE	Scheduled Completion Dates	Actual Completion Dates
Package Sent to Science Divisions	HED:	
	EFED:	
Obtain/Verify Team Members		
<p>Team Meeting 1 (Introductory meeting; risk manager reviews available regulatory background/information and labels; team determines schedule for the completeness check, and reduced risk and NAFTA decisions, if necessary; team discusses how preparations for the second team meeting will happen—e.g. how information on drinking water and mammalian tox data will be shared; what scoping meetings will occur and how they will be organized and determines the schedule up to the point of the second team meeting) [RD, HED, EFED, BEAD]</p>		
Determine if it is a Workshare (or possible Workshare?)		
<p>Up-Front Steps: Publish Notice of Filing (& Public Interest Finding)</p> <p>Publish Notice of Receipt of New AI</p> <p>Open E-Docket [Include BEAD if Public Interest Finding Involved]</p>		
<p>Completeness (Science) Screen (Determine if all guidelines met and that there are no “show-stoppers” in the studies. RD needs write up of results.) [HED, EFED, RD]</p>	HED:	
	EFED:	
Reduced Risk Decision (if necessary) [RD, HED, EFED, BEAD]		
NAFTA Joint Review Candidate Decision (if necessary)		
Studies Sent to Contractor (EFED)	EFED:	
<p>The following three blocks address some of the additional preparatory work that should happen before the second team meeting.</p>		
Available Water Information to HED (for use in RARC and HED Scoping Meeting)		
Available Mammalian Toxicity Information to EFED (for use in RARC and HED Scoping Meeting)		

<p>Scoping/Planning Meetings (in each division) (Risk manager should participate in all relevant scoping meetings; raise issues with management (e.g. IRAD) as necessary) [RD, HED, EFED, BEAD]</p>		
<p>TEAM Meeting 2 (Team reviews/integrates results of each division's initial scoping exercises; reviews results of completeness check and reduced risk and NAFTA decisions, if these were necessary; makes sure that all available information has been shared (on water and mammal toxicity); discusses how initial risk picture looks; finalizes initial scoping as a team; if there are possible ESA concerns risk manager notifies FEAD; prepares for meeting w/ registrant; identifies any issues to raise with RD/OPP management; team determines schedule up to at least Team Meeting 3.) [RD, HED, EFED, BEAD]</p>		
<p>Risk Manager Sends Letter to Registrant: States deficiencies/issues identified in science screen and at second team meeting; results of reduced risk/NAFTA decisions</p>		
<p>Registrant Meeting (Registrant gives briefing on package, potential risk issues including ESA issues, provides input on problem formulation, addresses issues arising from completeness check and risk manager's letter)</p>		
<p>Studies Sent to Contractor (HED)</p>	<p>HED:</p>	
<p>HED Requests Necessary Method Validations from BEAD BEAD Due Date</p>	<p>HED: BEAD:</p>	
<p>EFED Problem Formulation</p>		
<p>RARC 1 [RD, HED, EFED, BEAD]</p>		
<p>Team Meeting 3 (Review results of problem formulation (EFED) and RARC 1 (HED); discuss any remaining questions and issues; provide available degradate information to EFED; finalize the scope of the assessments; define next steps and determine the rest of the detailed schedule as outlined below; identify any issues to raise with RD/OPP management.) [RD, HED, EFED, BEAD]</p>		

<p>NOTE: If it appears that any information a team member provided to the team or to another Division up to this point (and from this point forward) turns out to be incorrect or in any way misleading the team member should <i>immediately</i> inform the team of the change (or the likelihood of a change in that information) <i>as soon as the change is discovered</i>. This may prevent someone from doing a lot of work for no reason—or doing work that will have to be redone. Examples include changes in degradates of concern, drinking water estimates, mammalian toxicity, need for further refinement of data, and need for additional information e.g. from BEAD, FEAD, or the registrant.</p>		
<p>Brief RD Management (Review plan for chemical and detailed schedule; raise any issues that require management input)</p>		
<p>Team Meeting 4 (After secondary review of studies—identify risk issues, plan refinement strategy, if necessary, or prepare for registrant meeting to discuss risk mitigation. Review, confirm, and discuss with registrant, if necessary, any key exposure assumptions (from the label or from use of defaults) that may contribute to risk issues. Reconfirm schedule. Identify issues to raise with RD/OPP management. FEAD informed about whether there may be ESA issues; if there are likely to be ESA issues FEAD invited to meeting and plays integral part in determining refinement strategy.) [RD, HED, EFED, BEAD]</p>	<p>HED:</p>	
	<p>EFED:</p>	
<p><i>Add any necessary steps to reflect due dates for additional information/refinements needed from BEAD (e.g. % crop treated), or FEAD, or HED and EFED (e.g. sharing information on foliar residues for possible refinement of terrestrial eco-risk).</i></p>		
<p>“Problem” DERs Provided to RD (DERs with problems e.g., study issues that need to be addressed by registrant or new study triggered, provided to Risk Manager for resolution and/or possible date extension)</p>	<p>HED:</p>	
	<p>EFED:</p>	
<p>Degradate Information to HED (fate profile that is necessary for metabolism portion of HEXARC meeting)</p>		
<p>HEXARC (Risk Manager attends.)</p>		
<p>Final Water #'s to HED (for use in risk assessment)</p>		
<p>RARC 2 (Risk Manager attends.) [RD, HED, BEAD]</p>		
<p>EFED Internal Peer Review (Risk Manager attends.)</p>		
<p>HED Final Risk Assessment Document and Complete Set of DERS to RD</p>		
<p>EFED Final Risk Assessment Document and Complete Set of DERS to RD</p>		

<p>Team Meeting 5 (If necessary—identify remaining risk issues, plan further refinements, or prepare for registrant meeting to discuss risk mitigation. Reconfirm schedule. Identify issues to raise with RD/OPP management.) [RD, HED, EFED, BEAD; FEAD—if necessary]</p>		
<p>Risk Management Completed: Brief Management</p> <p>Documentation Completed (FR Notice for tolerance; label review; decision document package; registration notice prepared; FR for registration notice)</p>		
<p>Risk Assessment/DERs (whole record) Placed in Docket</p>		

Schedule for New Use (Not First Food Use)

(Usually Necessary Steps—not always necessary & not always sequential—to be determined by team)

{In what follows there is a lot of discussion about “scoping”—we were asked to provide a definition. Scoping is the process of examining and often re-examining the specific action to determine what specific work is required to complete it. Another aspect of scoping is determining how this work can be completed in the most efficient manner possible and defining a schedule for the action based on this determination. We want to encourage people to use existing alternative processes—ARIA, low tox, etc. where possible *and* to think of new and innovative ways to get work done more efficiently. We also want to support the science division’s scoping efforts, such as HED’s new scoping exercises and use of RARC I and EFED’s problem formulation. RD has a new risk management entity (IRAD) where teams can propose their ideas and get input up-front-- or in-put anywhere along the process, from the risk managers. If you think something can be done more efficiently than it is currently being done—propose your idea to IRAD. In this way we can direct the majority of time and resources to chemicals/issues with the most risk.

Finally, we have talked about “scoping the schedule”. The idea behind this concept is that as we schedule each action *individually*, we must look for potential problems and bottlenecks in the overall schedule, which includes all actions that must be done, to see if there are going to be obstacles to actually getting this particular action out on schedule. This is a continuing process that must involve management in all of the divisions. What we are asking individual teams to do is immediately identify these problems when they arise so they can be addressed. Under PRIA we can no longer afford the time lost when actions sit in various queues, therefore, we must address resource issues quickly.}

<i>Name of ai:</i>	Process: (e.g. Std, ARIA, Low Tox.)		Last Possible Science Due Date:	
			Science Due Date:	
RD Branch: Risk Manager:	HED Branch: Risk Assessor:	EFED Branch: Risk Assessor:	BEAD: Phone #:	
Phone #:	Phone #:	Phone #:	FEAD: Phone #:	
MILESTONE			Scheduled Completion Date	Actual Completion Date
Package Sent to Science Divisions			HED:	

	HED:	
Obtain/Verify Team Members		
Team Meeting 1 (Introductory meeting; risk manager reviews available regulatory background/information and labels, team determines schedule for completeness check, and reduced risk and NAFTA decisions, if necessary; team discusses how preparations for the second team meeting will happen—e.g. how information on drinking water and mammalian tox data will be shared; what scoping meetings will occur and how they will be organized and determines the schedule up to the point of the second team meeting) [RD, HED, EFED, BEAD]		
Determine if it is a Workshare (or possible Workshare?)		
Up-Front Steps: Publish Notice of Filing (& Public Interest Finding)		
Publish Notice of Receipt of New AI		
Open E-Docket [Include BEAD if Public Interest Finding Involved]		
Completeness (Science) Screen (Determine if all guidelines met and that there are no “show-stoppers” in the studies. RD needs write up of results) [HED, EFED, RD]	HED:	
	EFED:	
Reduced Risk Decision (if necessary) [RD, HED, EFED, BEAD]		
NAFTA Joint Review Candidate Decision (if necessary)		
Studies Sent to Contractor (EFED)	EFED:	
The following three blocks address some of the additional preparatory work that should happen before the second team meeting.		
Determine if New Water Assessment is Required (for use in RARC and HED Scoping Meeting—a new assessment would be required if, for example, the rates are different or the use includes a new type of geographic area with different run-off or leaching potential or if the risk cup is getting full and HED needs a more refined assessment than previously done)		
Determine if Any New Mammalian Toxicity Information Should be Sent to EFED (for use in RARC and HED Scoping Meeting)		

<p>Scoping/Planning– EXTREMELY IMPORTANT FOR NEW USES (Risk manager should participate in all relevant scoping meetings; raise issues with management (e.g. IRAD) as necessary–Must determine if a previous assessment covers the new use or if a new assessment is needed (EFED); for EFED and HED must determine what the differences in a new assessment would be and decide the format in which to present them, e.g. if only residue data review is needed you might attach new tables X, Y, and Z to a previous assessment along with a short explanation of the new tolerance). This scoping step may eliminate the need for some of the following steps. [RD, HED, EFED, BEAD]</p>		
<p>TEAM Meeting 2 (Team reviews/integrates results of each division’s initial scoping exercises; reviews results of completeness check and reduced risk and NAFTA decisions, if these were necessary; makes sure that all available information has been shared (on water and mammalian toxicity); discusses how initial risk picture looks; finalizes initial scoping as a team; if there are possible ESA concerns risk manager notifies FEAD; prepare for meeting w/ registrant; identify any issues to raise with RD/OPP management; team determines schedule up to at least Team Meeting 3.) [RD, HED, EFED, BEAD]</p>		
<p>Risk Manager Sends Letter to Registrant: States deficiencies/issues identified in science screen and at second team meeting; results of reduced risk/NAFTA decisions.</p>		
<p>Registrant Meeting (Registrant gives briefing on package, potential risk issues including ESA issues, provides input on problem formulation, addresses issues arising from completeness check and risk manager’s letter; team reviews plan for the chemical and solicits up-front input, e.g. verify current use and usage information and verifies identified target pests.)</p>		
<p>Studies Sent to Contractor (HED)</p>	<p>HED:</p>	
<p>HED Requests Necessary Method Validations from BEAD BEAD Due Date</p>	<p>HED: BEAD:</p>	
<p>EFED Problem Formulation</p>		
<p>RARC 1 [RD, HED, EFED, BEAD]</p>		

<p>Team Meeting 3 (Review results of problem formulation (EFED) and RARC 1 HED; discuss any remaining questions and issues; provide available degradate information to EFED; finalize the scope of the assessments; define next steps and determine the rest of the detailed schedule as outlined below; prepare for meeting with registrant/stakeholders; identify any issues to raise with RD/OPP management.)</p>		
<p>NOTE: If it appears that any information a team member provided to the team or to another Division up to this point (and from this point forward) turns out to be incorrect or in any way misleading the team members should <i>immediately</i> inform the team of the change (or the likelihood of a change in that information) <i>as soon as the change is discovered</i>. This may prevent someone from doing a lot of work for no reason—or doing work that will have to be redone. Examples include changes in degradates of concern, drinking water estimates, mammalian toxicity, need for further refinement of data, and need for additional information e.g., from BEAD, FEAD, or the registrant.</p>		
<p>Brief RD Management (Review plan for chemical and detailed schedule; raise any issues that require management input)</p>		
<p>Team Meeting 4 (After secondary review of studies—identify risk issues, plan refinement strategy, if necessary, or prepare for registrant meeting to discuss risk mitigation. Review, confirm, and discuss with registrant, if necessary, any key exposure assumptions (from the label or from use of defaults) that may contribute to risk issues. Reconfirm schedule. Identify issues to raise with RD/OPP management. FEAD informed about whether there may be ESA issues; if there are likely to be ESA issues FEAD invited to meeting and plays integral part in determining refinement strategy.) [RD, HED, EFED, BEAD]</p>	<p>HED:</p>	
	<p>EFED:</p>	
<p><i>Add any necessary steps to reflect due dates for additional information/refinements needed from BEAD (e.g. % crop treated), or FEAD, or HED and EFED (e.g. sharing information on foliar residues for possible refinement of terrestrial eco-risk).</i></p>		
<p>“Problem” DERs Provided to RD (DERs with problems e.g., study issues that need to be addressed by registrant or new study triggered, provided to Risk Manager for resolution and/or possible date extension)</p>	<p>HED:</p>	
	<p>EFED:</p>	
<p>Degradate Information to HED (fate profile that is necessary for metabolism portion of HEXARC meeting)</p>		
<p>HEXARC (Risk Manager attends.)</p>		
<p>Final Water #'s to HED (for use in risk assessment)</p>		
<p>RARC 2 (Risk Manager attends.) [RD, HED, BEAD]</p>		

EFED Internal Peer Review (Risk Manager attends.)		
HED Final Risk Assessment Document and Complete Set of DERS to RD		
EFED Final Risk Assessment Document and Complete Set of DERS to RD		
Team Meeting 5 (If necessary–identify remaining risk issues, plan further refinements, or prepare for registrant meeting to discuss risk mitigation. Reconfirm schedule. Identify issues to raise with RD/OPP management.) [RD, HED, EFED, BEAD; FEAD–if necessary]		
Risk Management Completed: Brief Management Documentation Completed (FR Notice for tolerance; label review; decision document package; registration notice prepared; FR for registration notice)		
Risk Assessment/DERs (whole record) Placed in Docket		

Schedule for Non-Fast Tracks

(All steps not always necessary & not always sequential—to be determined by team)

{In what follows there is a lot of discussion about “scoping”—we were asked to provide a definition. Scoping is the process of examining and often re-examining the specific action to determine what specific work is required to complete it. Another aspect of scoping is determining how this work can be completed in the most efficient manner possible and defining a schedule for the action based on this determination. We want to encourage people to use existing alternative processes—ARIA, low tox, etc. where possible *and* to think of new and innovative ways to get work done more efficiently. We also want to support the science division’s scoping efforts, such as HED’s new scoping exercises and use of RARC I and EFED’s problem formulation. RD has a new risk management entity (IRAD) where teams can propose their ideas and get input up-front-- or in-put anywhere along the process, from the risk managers. If you think something can be done more efficiently than it is currently being done—propose your idea to IRAD. In this way we can direct the majority of time and resources to chemicals/issues with the most risk.

Finally, we have talked about “scoping the schedule”. The idea behind this concept is that as we schedule each action *individually*, we must look for potential problems and bottlenecks in the overall schedule, which includes all actions that must be done, to see if there are going to be obstacles to actually getting this particular action out on schedule. This is a continuing process that must involve management in all of the divisions. What we are asking individual teams to do is immediately identify these problems when they arise so they can be addressed. Under PRIA we can no longer afford the time lost when actions sit in various queues, therefore, we must address resource issues quickly.}

Name of ai:	Process: (e.g. Std, ARIA, Low Tox.)		Last Possible Science Due Date:	
			Science Due Date:	
RD Branch: RM:	HED Branch: Risk Assessor:	EFED Branch: Risk Assessor:	BEAD: Phone #:	
Phone #:	Phone #:	Phone #:	Phone #: FEAD: Phone #:	
MILESTONE			Scheduled Completion Dates	Actual Completion Dates
Package Sent to Science Divisions:			HED:	

	EFED:	
RD Scoping (Clarifies with registrant what the action is and specifically what the registrant wants.)		
Obtain/Verify Team Members (only team members that are necessary–e.g. if it is only a PPE change, may only need an ORE person)		
TEAM Meeting 1 (Team Scoping: discuss action, confirm what work is required or if additional information is needed.) [RD, HED, EFED, BEAD–as necessary]		
Registrant Meeting (If necessary team meets with registrant to clarify/discuss action and resolve any issues.)		
<i>For Simpler Actions--</i>		
A. For actions without data that are resolved in the team and/or registrant meeting-- decision and rationale written up by risk manager, signed by team, and approved by IRAD.		
B. For actions with data that require some, but not lengthy analysis, relevant team member does analysis and provides write-up to risk manager; risk manager writes up decision and rationale, signed by team, and approved by IRAD.		
<i>For More Complicated Actions--</i> If the action is more complicated follow a modified new use process, using the steps outlined below as necessary.		
Studies Sent to Contractor	EFED:	
Determine what information EFED and HED need from each other and when it will be delivered (i.e. water information for HED and mammalian toxicity information for EFED).	HED:	
	EFED:	
Scoping/Planning (in each division if necessary) (Risk manager should participate in all relevant scoping meetings; raise issues with management (e.g. IRAD) as necessary.) [RD, HED, EFED, BEAD–as necessary]		

<p>Team Meeting 2 (if necessary) (Team reviews/integrates results of each divisions’s scoping exercises; makes sure that all available information has been shared (on water and mammal toxicity); discusses how initial risk picture looks; finalizes initial scoping as a team; if there are possible ESA concerns risk manager notifies FEAD; prepares for meeting w/ registrant if necessary; identify any issues to raise with RD/OPP management; team determines schedule up to at least Team Meeting 3.) [RD, HED, EFED, BEAD–as necessary]</p>		
<p>Brief RD Management if Necessary (Review plan for the action)</p>		
<p>PM Sends Letter to Registrant if Necessary: States issues identified at second team meeting.</p>		
<p>Meeting with Registrant if Necessary (Review plan for the chemical and solicit any necessary information; any input on problem formulation.) [RD, HED, EFED, BEAD–as necessary]</p>		
<p>Studies Sent to Contractor</p>	<p>HED:</p>	
<p>EFED Problem Formulation</p>		
<p>RARC 1 [RD, HED, EFED, BEAD–as necessary]</p>		
<p>Team Meeting 3: Review results of problem formulation (EFED) and RARC 1 (HED); discuss any remaining questions and issues; provide available degradate information to EFED; finalize the scope of the assessments; define next steps and determine the rest of the detailed schedule as outlined below; identify any issues to raise with RD/OPP management. [RD, HED, EFED, BEAD–as necessary]</p>		
<p>NOTE: If it appears that any information a team member provided to the team or to another Division up to this point (and from this point forward) turns out to be incorrect or in any way misleading the team member should <i>immediately</i> inform the team of the change (or the likelihood of a change in that information) <i>as soon as the change is discovered</i>. This may prevent someone from doing a lot of work for no reason-or doing work that will have to be redone. Examples include changes in degradates of concern, drinking water estimates, mammalian toxicity, need for further refinement of data, and need for additional information e.g. from BEAD, FEAD, or the registrant.</p>		
<p>Brief RD Management if Necessary (Review plan for the action; raise any issues that require management input)</p>		
<p>Team Meeting 4 (After secondary review of studies–</p>	<p>HED:</p>	

<p>identify risk issues, plan refinement strategy, if necessary, or prepare for registrant meeting to discuss risk mitigation. Review, confirm and discuss with registrant, if necessary, any key exposure assumptions (from the label or from use of defaults) that may contribute to risk issues. Reconfirm schedule. Identify issues to raise with RD/OPP management. FEAD informed about whether there are ESA issues; if there are FEAD invited to meeting and plays integral part in determining refinement strategy.) [RD, HED, EFED, BEAD—as necessary]</p>	EFED:	
<p><i>Add any necessary steps to reflect due dates for additional information/refinements needed from BEAD (e.g. % crop treated, or FEAD, or HED and EFED e.g. sharing information on foliar residues for possible refinement of terrestrial eco-risk).</i></p>		
<p>“Problem” DERs Provided to RD (DERs with problems e.g., study issues that need to be addressed by registrant or new study triggered, provided to Risk Manager for resolution and/or possible date extension)</p>	HED:	
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<p>Degradate Information to HED (fate profile that is necessary for metabolism portion of HEXARC meeting)</p>		
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<p>Final Water #'s to HED (for use in risk assessment)</p>		
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<p>EFED Internal Peer Review (Risk Manager attends.)</p>		
<p>HED Final Risk Assessment Document and Complete Set of DERs to RD</p>		
<p>EFED Final Risk Assessment Document and Complete Set of DERs to RD</p>		
<p>Team Meeting 5 (If necessary—identify remaining risk issues, plan further refinements, or prepare for registrant meeting to discuss risk mitigation. Reconfirm schedule. Identify issues to raise with RD/OPP management.) [RD, HED, EFED, BEAD—as necessary]</p>	HED:	
	EFED:	
<p>Documentation Completed (label review; decision document package)</p>		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

MEMORANDUM

Date: August 15, 2002

Subject: **Guidance: Waiver Criteria for Multiple-Exposure Inhalation Toxicity Studies.**

From: Margaret J. Stasikowski, Director
Health Effects Division (7509C)

To: Health Effects Division Staff

Attached is SOP 2002.01 - "HED Standard Operating Procedure: "Guidance: Waiver Criteria for Multiple-Exposure Inhalation Toxicity Studies".

SOP provides guidance to HED staff members for determining when to grant waivers for multiple exposure inhalation toxicity studies.

If you have any questions, please contact John Whalan (305-6511) or Jess Rowland (308-2719).

GUIDANCE: WAIVER CRITERIA FOR MULTIPLE-EXPOSURE INHALATION TOXICITY STUDIES

A. BACKGROUND

The only reliable way to characterize inhalation toxicity and to quantify inhalation risk is through the use of inhalation toxicity studies. Chemicals tend to be more toxic by the inhalation route than by the oral route due to rapid absorption and distribution, bypassing of the liver's metabolic protection (portal circulation), and potentially serious portal-of-entry effects, such as irritation, edema, cellular transformation, degeneration, and necrosis. An inhalation risk assessment that is based on oral data generally underestimates the inhalation risk because it cannot account for these factors.

There are occasions when the requirement for inhalation toxicity studies should be waived for ethical or scientific reasons. The purpose of this document is to provide guidance for for waiving inhalation toxicity studies when a pesticide active ingredient has a very low potential for human inhalation hazard during handling or application. This guidance is based upon the following three waiver guidance documents, but has been updated to reflect current regulatory concerns:

1. Penelope A. Fenner-Crisp. *Policy on Acute Inhalation Toxicity Data Waivers*. Health Effects Division Memorandum to Anne E. Lindsay. December 8, 1991.
2. Thomas C. Ellwanger. *Acute Toxicity Waiver Guidance Document*. Registration Division Memorandum. August 24, 1993.
3. John Whalan, Donald Cooper, Dennis Gibbons, John Ross, James Sanborn. *Inhalation Exposure Waivers for Pesticides (A Guidance Document for Pesticide Registrants)*. Draft Joint NAFTA document. 1998.

The following scientists from the various Divisions of the Office of Pesticide Program contributed to the preparation of this guidance. Ayaad Assaad, Edwin Budd, William Burnam Jeff Evans, Timothy Leighton, Jess Rowland, Steven Weiss, John Whalan, Karen Whibty (HED), Karen Hicks (AD), Roger Gardner (BPPD), John Redden (RD), Mark Perry (SRRD)

GUIDANCE: WAIVER CRITERIA FOR MULTIPLE-EXPOSURE INHALATION TOXICITY STUDIES

B. INTRODUCTION

This document provides guidance for determining when to grant waivers for multiple exposure inhalation toxicity studies. All waiver requests are considered on a case-by-case basis, and the burden of proof lies entirely with the registrant. The process for granting waivers will include consideration by a toxicologist, an exposure specialist, and the Exposure Science Advisory Council for Exposure (ExpoSAC). If no significant inhalation hazard is identified during risk characterization and risk assessment, HED may also initiate a waiver. The following four criteria may be used to justify a waiver:

- ▶ Severe irritation and corrosivity
- ▶ Low volatility
- ▶ Large particle size
- ▶ Inhalation Toxicity Category IV and an extrapolated Margin-of-Exposure (MOE)

Engineering solutions, such as closed systems and enclosed cabs are not included in this guidance because it is difficult to verify the accuracy of claims. Any waiver request based on an engineering solution must be definitively substantiated.

Waiver Criteria 1 and 3 (below) must be applied on a chemical-by-chemical basis. Any significant change in application methodology, including recommended equipment, will require additional waiver requests and data submission.

C. WAIVER CRITERIA**Criteria 1 - Severe Irritation and Corrosivity**

An active ingredient which causes severe irritation or corrosion of the skin or eye will also damage the sensitive respiratory mucosa if inhaled. Waivers should be granted for active ingredients which are corrosive (pH <2 or >11.5) or severely irritating.

Waivers should not be granted for active ingredients which are slight to moderate irritants. Inhalation toxicity studies of irritants can quantify the sensitivity of this route and characterize portal-of-entry effects. This information is essential in an inhalation risk assessment.

GUIDANCE: WAIVER CRITERIA FOR MULTIPLE-EXPOSURE INHALATION TOXICITY STUDIES

Criteria 2 - Low Volatility

Waivers will be considered for non-volatile active ingredients which are not aerosolized (i.e. generated as mists, fogs, dust, smoke, fumes), heated, evaporated, or otherwise made inhalable as a gas or vapor. Non-volatile active ingredients are defined as having vapor pressures $<1 \times 10^{-5}$ kPa (7.5×10^{-5} mmHg) for indoor uses, and $<1 \times 10^{-4}$ kPa (7.5×10^{-4} mmHg) for outdoor uses at 20-30°C. Waiver candidates based on volatility may include, but are not limited to: Viscous liquids (under conditions of use), waxes, resins, lotions, and caulks. Waivers for formulated products such as animal dips, shampoos, pour-ons, slow release collars, ear tags, and tree injections will be considered by the appropriate division.

Criteria 3 - Large Aerosol Particle Size

An **inhalable particle** is capable of entering the respiratory tract via the nose and/or mouth. A **respirable particle** evades capture in the upper respiratory tract and reaches the lungs. The larger the particle, the less likely it is to be inhalable or respirable. Waivers will be considered for active ingredients that do not pose a significant inhalation hazard because the particles are too large to be inhaled.

Large particles have the potential to do considerable local damage if they are absorbed because of the volume of material they contain. Table 1 demonstrates that with each 10-fold increase in particle diameter, there is a 1000-fold increase in particle volume. Compared to a 0.1 μm particle, a 100 μm particle has 1000-times the diameter and a billion-times the volume.

Table 1. A Comparison of Aerosol Particle Diameters and Volumes

Particle Diameter (μm)	Diameter Δ	Particle Volume (μm^3) ^a	Volume Δ
0.1	–	0.000524	–
1.0	10	0.524	1000
10	100	524	1,000,000
100	1000	523,599	1,000,000,000

^a Volume of a sphere: $\frac{4}{3}\pi r^3$

GUIDANCE: WAIVER CRITERIA FOR MULTIPLE-EXPOSURE INHALATION TOXICITY STUDIES

An aerosol for a product formulation or application method can be considered essentially non-inhalable provided $\geq 99\%$ of the particles are $>100 \mu\text{m}$ in diameter. Although aerosols that meet this criteria are candidates for waivers, it is the responsibility of the registrant to provide data on aerosol size distribution. Waiver candidates based on large particle size include, but are not limited to:

1. Microencapsulated formulations which are not readily fractured, dissolved, time-released, leaky, or small enough to be respirable during mixing/loading or application. Evidence of capsule durability must be provided.
2. Granular products placed in or on the soil, and baits applied by hand or during seed planting. Although granular products are inherently non-inhalable, they may pose a significant inhalation hazard if attrition occurs. **Attrition** is the breaking down of a material into smaller particles as can occur during shipping, handling, pouring, and application. A product susceptible to attrition is said to be **friable**. A friable product may pose a significant inhalation hazard if it produces a measurable quantity of dust when poured or scattered.

A registrant requesting a waiver on the basis of particle size must demonstrate that their product contains large, non-inhalable particles which are resistant to attrition. This can be accomplished by using the latest version of the American Society of Testing Materials (ASTM) *Test Method 35.22–Pesticide Formulations and Application Systems Method for the Determination of Inhalable Particles of Granular Products*. This test method is not available from the EPA, but can be purchased from ASTM (100 Barr Harbor Drive, West Conshohocken, Pennsylvania, USA 19428-2959; or <http://www.astm.org/>).

Criteria 4 - Toxicity Category IV and An Extrapolated MOE

Inhalation waivers are not granted for active ingredients based solely on low oral toxicity because:

- ▶ Toxicity via the inhalation route tends to be more severe than by other routes.
- ▶ Inhaled chemicals by-pass the metabolic protection of the liver (portal circulation).
- ▶ Oral data cannot be used to predict respiratory portal-of-entry effects (e.g. irritation, edema, cellular transformation, degeneration, and necrosis).
- ▶ The use of route extrapolation in a risk assessment minimizes the true inhalation risk (see **example below**).
- ▶ The application rate is usually higher for pesticides with low oral toxicity, so there is a potential for high inhalation exposure.

GUIDANCE: WAIVER CRITERIA FOR MULTIPLE-EXPOSURE INHALATION TOXICITY STUDIES

Nevertheless, a waiver may be granted for an active ingredient that is Toxicity Category IV for inhalation provided an extrapolated inhalation MOE (based on an oral NOAEL) exceeds a target MOE of 1000 or greater. The target MOE may include the conventional UF of 100; an additional UF of 10-100 to account for unknown pharmacokinetic and pharmacodynamic differences between the oral and inhalation routes in animals and humans, and respiratory portal-of-entry effects; and any other additional assigned UF (e.g. for use of a LOAEL).

Example: Route-Specific MOE v Route-Extrapolated MOE

When calculating inhalation risk, a route-extrapolated MOE will be 6-fold greater than a route-specific MOE when based on rat data. Thus, route extrapolation makes a chemical appear 600% “safer” than it really is. This is because HED’s route extrapolation method includes only one pharmacokinetic adjustment—respiratory volume—which is 6-fold greater in rats than in humans (relative to body weight). Missing from HED’s route extrapolations are adjustments for other pharmacokinetic differences between rats and humans, such as distribution, metabolism, and excretion.

Rat:

Inhalation NOAEL = 0.02 mg/m³/day

Extrapolated inhalation NOAEL ≈ 0.0052 mg/kg/day

Human:

Inhalation exposure = 0.3 mg/m³/day

Extrapolated inhalation exposure ≈ 0.013 mg/kg/day

Route-Specific MOE:

$$RS\ MOE_I = \frac{0.02\ mg/m^3/day\ (NOAEL)\ x\ 6\ h}{0.3\ mg/m^3/day\ (Human\ Exposure)\ x\ 6\ h\ x\ (1)} = 0.067$$

Route-Extrapolated MOE:

$$R\rightarrow R\ MOE_I = \frac{0.0052\ mg/kg/day\ (NOAEL)\ x\ 6\ h}{0.013\ mg/kg/day\ (Human\ Exposure)\ x\ 6\ h\ x\ (1)} = 0.4$$

Comparison: Route-Extrapolated MOE v Route-Specific MOE:

$$\frac{0.4\ (Route\text{-}Extrapolated\ MOE)}{0.067\ (Route\text{-}Specific\ MOE)} = 6$$

If the extrapolated inhalation MOE had been based on an oral endpoint instead of an inhalation

GUIDANCE: WAIVER CRITERIA FOR MULTIPLE-EXPOSURE INHALATION TOXICITY STUDIES

endpoint, the true inhalation risk would probably be under-stated by more than 600%. This is because the oral endpoint would neither reflect the impact of an inhaled chemical by-passing the metabolic protection of the liver, nor consider the extent of respiratory portal-of entry effects.



July 19, 2002

MEMORANDUM

Subject: Dose Adequacy Review Team Process

From: Jess Rowland, Chief
Science Information Management Branch
Health Effects Division

Through: Margaret Stasikowski, Director
Health Effects Division

To: Deborah Edwards, Acting Director
Registration Division

Lois Rossi, Director
Reregistration Division

CropLife America, a group representing developers, manufacturers, formulators, and distributors of agricultural pesticides in the United States, has requested that the Health Effects Division (HED) develop a process to review and provide guidance on the dose levels selected by the Registrant for various toxicology studies submitted to the Agency in support of pesticide registration and reregistration. The review process would primarily be used for, but would not be limited to, chronic toxicity and carcinogenicity studies.

In response to this request, HED has formed the Dose Adequacy Review Team (DART) which is comprised of the following expert HED toxicologists: Karl Baetcke, William Burnam, Marion Copley, Jessica Kidwell, Jess Rowland, Clark Swentzel, and Yung Yang. The team developed the following process to ensure the timely review of this type of submission and to provide a clear response which is appropriately documented and archived for future reference according to OPP/HED practice. It is the responsibility of the requesting Division to provide a PC Code for the chemical in review to ensure proper document processing procedures.

1. Dose Adequacy Review Team Process for Response to Registrant Submissions

- The HED Review Toxicologist will contact Jessica Kidwell, Executive Secretary, Cancer Assessment Review Committee, to schedule a DART meeting.
- One week prior to the DART Meeting, the HED Review Toxicologist will submit the Registrant's request along with the appropriate background data (consult Jessica Kidwell) to SIMB (Josephine Brooks) for distribution to DART members.
- The HED Review Toxicologist will present the Registrant's rationale for dose level selection to the DART.
- To ensure consistency, Jessica Kidwell will prepare a memorandum describing the views of the DART on the adequacy of the dose levels selected by the Registrant and the rationale the team used to reach its conclusions.
- The DART will provide guidance, however, it should be noted that the definitive dose selections are the responsibility of the Registrant.
- The DART memorandum should be addressed to the HED Risk Assessor or the Branch Chief.
- The DART memorandum should be finalized using the standard HED document processing procedures (Plum Folder) and the electronic nomenclature, PCCodeDT.001.wpd and will be placed on the T:Drive under Toxicology and as a "Cover Memo Correspondence" in IHAD with a TXR.No. Jo Brooks of SIMB will act as the "Gatekeeper" for the document processing procedures.

2. Often the issue of appropriate dose level selection for a particular study is brought to a pre-registration meeting with the Registrant. It is left to the discretion of the HED Branch Chief and/or Team Leader to invite DART members to these meetings. In this case, the DART process is slightly altered whereby the Registrant will provide a submission based on the discussion in the pre-registration meeting which states the dose levels to be tested in the study.

The Registrants are required to submit a request for the DART review with a meeting agenda and all necessary background materials at least 1-week prior to the meeting or 1-month prior to the initiation of the study. This submission will then follow the process described above.

CLA Suggested Priorities for OPP Label Team

Priority

1) Establishment of the mail box / web site

EPA intends to establish an e-mail box on the EPA web site where labeling questions can be submitted. We understand that the intention of EPA is that not every question forwarded to the web site will be answered but those worthy of further consideration & response would be answered by the appropriate personnel in OPP. The questions & answers would then either be posted on the EPA web site or provided to the OPP Label Review Manual team for incorporation into the Manual. We support the establishment of this website and we are committed to work with EPA to fine tune the operation of this concept as it is implemented.

Within this topic, the OPP Label Team should consider the incorporation of appropriate decisions that are included in the SLITS database.

2) Label Review Manual Subteam

The OPP Label Team has established a subteam to work toward making the Label Review Manual a living document. We support the establishment of this subteam.

3) Chapter 7 – Precautionary Labeling

The complete First Aid PR Notice 2001-1 should be incorporated into the LRM. The LRM discussion is not completely consistent with the PR Notice.

4) 'Mandatory vs. Advisory' & 'For sale to / Use by'

We believe that there needs to be more clarity on the types of items that would be included on the work of 'Mandatory vs. Advisory' category of items before moving forward with this as a topic within the OPP Label Team.

EPA has stated that a potential topic for consideration by the OPP Label Team is to update EPA guidance on what is considered a mandatory statement versus an advisory statement; further, there is a proposal to react to concerns of some states regarding language stating 'For Commercial Applicators Only' or 'For Professional Use Only'. We supports including this topic as a top priority for the OPP Label Team as these statements are important to product stewardship as practiced. Further, we feel strongly that registrants need to be able to continue to use these types of distinctions as clarification to separate Consumer products from Commercial or Agricultural use products. Registrants use these distinctions to limit access to certain products by persons who, for example, may not have ready access to the required safety equipment or the commercial delivery systems that limit exposures. One potential compromise proposal could be that such statements be turned toward use patterns already defined by EPA (i.e., 'Not for Application on Residential Use sites').

Indemnified labeling and indemnification language could also be added to this topic; however, we do not support doing this as a first priority for the OPP Label Team.

5) Warranty Statements.

Per the Label Review Manual (Page 3-11), the inclusion of a Warranty or Disclaimer statement is voluntary. If such a statement is included, the Agency can evaluate it to the extent the statement impacts FIFRA label standards. The Label Review Manual (page 12-6) outlines four types of warranty statement language that it has found to be unacceptable.

Some BPPD reviewers routinely require that a Warranty or Disclaimer statement be found on a label prior to EPA approval, and have not allowed registrants to exclude it voluntarily. Further, BPPD will require revisions to the Warranty or Disclaimer that are not in keeping with commonly accepted and used warranty

language. For example, inclusion of the phrase “To the fullest extent permitted by state law,” is a typical requirement, where many warranties have traditionally not included that statement.

EPA has stated that establishment of a policy / standard language as a potential priority for the OPP Label Team. We believe that this effort should not be within the scope of the OPP Label Team but directed elsewhere within EPA.

Quick Fix Ideas

Tracking Changes

It would be useful for the on-line version of the Manual to have a “cover page or index” with dates and specific changes to the Manual. It should be in chronological order and draw the user’s attention to the changes that may have taken place since they last referenced the Manual.

Alternate Brand Names

Addition of alternate brand names should be allowed either as a separate Notification, or as part of another submission, such as a new registration or as part of an amendment for other changes.

Chapter 3 – General Labeling Requirements

Page 3-2: Collateral labeling (bulletins, leaflets, circulars, brochures, data sheets, flyers, other printed matter referred to on the label or which accompanies the product) must be submitted with application and accepted before distribution. This definition of collateral labeling is consistent with the 2nd edition of the Manual; however, review of collateral labeling is not specifically required in the 2nd edition.

Since EPA can already enforce that collateral labeling can not be inconsistent with the EPA-approved product label and is a sub-set of the approved label, EPA should not require this information be submitted and reviewed.

Chapter 5 – Ingredient Statement

Reviewers have been inconsistent in requiring the use of the word “Total” and/or “100%” in the ingredient statement. Some Reviewers require the word “Total”, while others do not. There have been times when neither has been required by the reviewer, and other Reviewers require both terms.

Proposed Text:

<u> </u>	<u> </u>
Total	100%

Chapter 11 & 12 – Directions for Use & Labeling Claims – [Please note that we have listed this topic in our priority list so it may not be appropriate to consider this topic a ‘Quick Fix’](#)

Page 11-9 and pages 12-1 thru 12-7: According to these sections, statements such as For Professional Use Only, For Commercial Use Only or Not Intended for Consumer Use are not allowed on non-restricted use products. While EPA may feel this is an implication of extra strength not allowed by the regulations, Registrants need to use these types of distinctions as clarification to separate Consumer products from Commercial/Institutional products. Registrants use these distinctions to limit access to certain products by persons who may not have ready access to the required safety equipment or the commercial/institutional delivery systems that limit exposures. EPA should be cognizant of the fact that commercial/institutional users are covered by the occupation health and safety regulations administered by, OSHA, along with mandatory training and reporting requirements of incidents or injuries in the workplace. Registrants must be able to limit the distribution of products requiring certain safety equipment only to qualified users that are covered by workplace rules.

Chapter 15 – Company Name and Address

40 CFR 156.10(c) and the LRM state that an unqualified name and address on the label shall be considered as the name and address of the producer. If the producer and the Registrant are the same, then the Registrant should be allowed to use “Manufactured by” with their address on the label. This policy should be communicated in the LRM to avoid confusion in the marketplace and with EPA Reviewers.

Chapter 16 – Graphics & Symbols on Labels

Page 16-2: Pictures that depict the fragrance of the products is listed under the heading Unacceptable Graphics & Symbols. The Agency has acknowledged that this change is an error – AD issued a letter from to CSPA detailing the criteria for use of fruit or floral graphics to depict the fragrance of a product. Suggest developing procedure for approving logos from third party certifiers such as American Rose Society, etc.

Hotline Numbers.

Clarify, per PR Notice 2001-1, that inclusion of a hotline number in the First Aid box is optional. Also note that Non-emergency company telephone numbers are option.

Some reviewers routinely require the listing of a Hotline Number and do not allow the registrant to include it on an optional basis. A Hotline Number is not always appropriate for certain types of products, such as technicals or products that have no toxicity issues (all Tox Category IV).

Net Contents.

Per the Label Review Manual (Chapter 17), the phrase “net contents” or “net weight” should be located on a draft pesticide label to identify where that information will be on the final printed label. Identification of the actual net contents/net weight does not have to be on the draft label and frequently is not as package sizes are subject to change and often not established until after registration.

Some reviewers routinely requiring the registrant to identify on the draft label actual net contents so that the reviewer can ensure the application rates in the Directions for Use do not exceed actual package sizes. Expected net contents is typically found on the Application Form (8570-1) for any product application, and that information should be utilized, rather than requiring registrants to list net contents on the master label.

Master Label

Inconsistent definitions or interpretations of “Master Label,” “sub label,” and “supplemental label.”. Add that sub-label (aka Marketing label) and supplemental labeling are subsets of the master label, with sections or whole sentences dropped that are not specific to the final product. Individual words can not be dropped from sentences.

Division Specific

AD

Chapter 5 – Ingredient Statement

Regarding the active ingredient alkyl quaternary ammonium chloride, some Reviewers require “n-Alkyl...” while others require “Alkyl...” for the same active ingredient. There must be consistency in such requirements – possibly pointing out where the official chemical names are listed in EPA websites.

Chapter 7 – Precautionary Labeling

Page 7-6 thru 7-10: The LRM discussion of minor modifications to hazard statements, for example, adding phrases such as “and before eating, drinking, chewing gum or using tobacco” and creating a placeholder for protective clothing /eyewear statements, is largely geared to other requirements such as the Worker Protection Standard, which is directed to standard handling practices for agricultural workers. It may be appropriate to clearly indicate that antimicrobial products are exempt from WPS.

Chapter 11 & 12 – Directions for Use & Labeling Claims

Add to Label Manual acceptable variations on the phrase “hard, non-porous environmental surfaces”. A multitude of variations on the phrase have been approved in the past, but can be confusing to both EPA Reviewers and Registrants. Previously approved variations include: 1. non-porous environmental surfaces, 2. hard, non-porous inanimate surfaces hard, and 3. hard surfaces.

Standardize when review of non-pesticide uses such as cleaning and deodorizing directions are required, and where non-pesticidal directions for use should be located in relationship to pesticidal use directions on the label. We suggest: 1. non-pesticidal directions can be either included in pesticidal directions if they are exactly the same or separate within the Directions for Use Section of the label and 2. non-pesticidal use directions only be reviewed to assure inadvertent pesticidal claims are not made only.

Identify acceptable use and location on label of non-pesticidal phrases requested by end users or states:

Examples: “Contains no phosphate” and “Will not harm plastic surfaces”.

Reviewers are inconsistent in the level of specificity they require in listing various use sites on antimicrobial labels. Use site listings need to be somewhat generic in terms of specificity, with specific use sites used as examples. Otherwise, specific use site listings will be lengthy, take up valuable label space, and discourage users from reading labels. Moreover, a high degree of specificity will lead to frequent label amendments because users and registrants will be uncertain whether very similar uses are actually covered by the specific sites on the label.

We propose that the following statement be added to the label review manual with regard to antimicrobial product labels: Many antimicrobial products can be used on a wide range of use sites within a particular use area. Examples include the types of surfaces or articles to which disinfectants can be applied, the types of water systems to which water treatments can be added, or the articles in which preservatives may be incorporated. Use areas should be described in clearly understood terms, accompanied by several specific use sites as examples.

Following are examples of acceptable language: Disinfectant for use on bathroom surfaces, other no-food contact, household surfaces, such as floors, walls, woodwork, etc.

Other than the AIDS/HIV claim, there is a lack of guidance for specific claims. For example, virucidal claims require clarifying statements. Reviewer comments for formatting and clarifying the claims are inconsistent from reviewer to the next. To further complicate matters, California DPR does not accept certain claim formats. For example, CDPR generally will reject labels that claim the product kills “many common bacteria” preferring instead the phrase “common bacteria.” AD should issue guidance through the LRM on such claims to ensure internal consistency, and review its policy with state agencies like California and New York to ensure acceptance of such label claims.

BPPD

Mandatory and Advisory Labeling Statements. Per PR Notice 2000-5, pesticide labels should clearly identify what is required of the user to handle and apply a pesticide safely. Within BPPD, this PR Notice is interpreted to mean that the specific words “should,” “could,” “would,” “may,” “suggest,” or “recommend” can not be found anywhere in the Directions for Use or in any optional label claims on pesticide labels. The intent of the PR Notice is to improve mandatory and advisory statements, and the PR Notice recognizes that there are times where it is necessary and appropriate to use “should,” “may,” “recommend” or similar advisory words. BPPD Regulatory Action Leaders (RALs) tend not to review statements that include advisory words for content (is the use of the advisory word appropriate?), but rather conduct a simple word search and require registrants to revise and remove the advisory word in every instance.

RD

Words deemed unacceptable by the Agency in previous label reviews:

- a. Weed Resistance
- b. Selective herbicide
- c. Integrated Pest Management
- d. Other sites, other non-industrial sites, similar sites, similar non-industrial sites.
- e. Incorrect interpretation of wording about use on government properties (such as municipal grounds, airports, etc.) as a recommendation by a governmental authority.

Spray drift guidelines being added for a granular product that has no aerial application.

Policy Issues

Any referenced material that EPA uses (such as letters from the Agency and other Agency related documents and sections of information from other sources such as various draft versions of Subdivision H) should be electronically available and linked to the specific area of the manual to which it applies. Registrants need to understand the source of labeling policy to avoid unnecessary denials and re-submissions.

As labeling policies are developed, they should promptly become a part of the Manual so that the Manual becomes a dynamic document that reflects current policy. Registrants should be notified of the adoption of final policies via website postings.

Further, the development of labeling policies should be an open process. There have been situations where policies have been developed based on incorrect assumptions or that otherwise are inappropriate. It would be useful to involve stakeholders (i.e., both registrants and users) and obtain their input before policies are finalized.

Labels being rejected for grammar errors and typographical errors. These could be accepted with comment, if warranted.