United States Environmental Protection Agency
Prevention, Pesticides and Toxic Substances
738-R-94-001
January 1994

EPA

Pesticide Reregistration Progress Report

Contents

INTRODUCTION 1

I. PESTICIDE REREGISTRATION 2

A. Reregistration Process Background 2
B. Current Status of Reregistration 3

II. REREGISTRATION PROGRESS 4

A. REDs Completed This Quarter 4
B. RED Candidates for Fiscal Year 1994 7
C. Suspended Chemical Cases 8
D. Data Submitted for Reregistration 8

III. OTHER MEASURES OF PROGRESS 11

A. Minor Uses 11
B. Rejection Rate Analysis 15
C. Product Reregistration Status 16

IV. TOPICS OF THE QUARTER 17

A. Toxics Release Inventory 17
B. Reregistration Status Report Card 17

V. SPECIAL REVIEW DECISIONS 18

VI. CHEMICALS IN SPECIAL REVIEW 20

VII. CALENDAR OF EVENTS (FY 1994) 21

Appendix A. Cumulative Summary of Reregistration Actions 22
Appendix B. Other Sources of Information 25

INTRODUCTION

The Pesticide Reregistration Progress Report is produced quarterly by the Special Review and Reregistration Division (SRRD), Office of Pesticide Programs (OPP), U.S. Environmental Protection Agency (EPA), to provide information on progress towards pesticide reregistration as mandated under the 1988 amendments to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Progress is reported both for the current quarter of the fiscal year[1] and cumulatively.

This issue of the Progress Report describes the status of reregistration through the first quarter 1994 fiscal year (FY 94). Cumulative information is provided in Appendix A, entitled Cumulative Summary of Reregistration Actions.

To promote better understanding of the scope of the reregistration process, we report not only on the number of reregistration "cases" reviewed, but also on numbers of active ingredients, products, and studies, where possible. To make the reregistration process more manageable, in 1989 the Agency grouped the active ingredients undergoing reregistration into chemical "cases." Each case consists of one or more related active ingredients. A Reregistration Eligibility Decision (RED) ultimately is issued for each chemical case. However, reporting only the number of REDs issued would not present the most complete picture of the current status of reregistration. For example, the 53 REDs completed since 1991 represent a total of 88 chemicals/active ingredients (AIs), 2,989 products, and 198 tolerances.

It is important to note that the numbers included in each Progress Report are reported as accurately as possible, but they are estimates which can change frequently as the reregistration process continues. Please note, too, that percentage discrepancies may result from rounding.

[1] The fiscal year runs from October through September, and is divided into four quarters: the first quarter consists of October, November, December; the second quarter consists of January, February, March; the third quarter consists of April, May, June; and the fourth quarter consists of July, August, September.

I. PESTICIDE REREGISTRATION

A. Reregistration Process Background

EPA is required by law to reregister existing pesticides that originally were registered years ago when the standards for government approval were less stringent than they are today. This comprehensive reevaluation of pesticide safety is critical to protecting human health and the environment. In 1988, Congress amended the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to strengthen and accelerate EPA's reregistration program. The nine-year reregistration scheme mandated by "FIFRA'88" applies to each registered pesticide product containing an active ingredient initially registered before November 1, 1984.

In 1988, approximately 600 groups of related pesticide active ingredients, or "cases," representing 1,150 active ingredients in 45,000 formulated products, required reevaluation. As FIFRA '88 directed, EPA divided these 600 cases into four lists: List A, B, C, and D.

List A - List A consisted of the 194 chemical cases (or 350 individual active ingredients) for which EPA had issued Registration Standards prior to the effective date of FIFRA '88. Most pesticides with food-related uses are on List A.

List B, C, and D - The remaining pesticides were divided into three lists based upon their potential for exposure and other factors, with List B being of highest concern and D of least. Some of the classification criteria included potential for residues of concern in food or drinking water, significance of outstanding data requirements, potential for worker exposure, Special Review or restricted use status, and unintended adverse effects to animals and plants.

FIFRA '88 established mandatory reregistration timeframes and duties. The five phases of the reregistration process are:

Phase 1: Listing of Active Ingredients - EPA published Lists A, B, C, and D within 10 months of FIFRA '88 and asked registrants of these pesticides whether they intended to seek reregistration.

Phase 2: Declaration of Intent and Identification of Studies - Registrants were required to notify EPA whether or not they intended to reregister their products; to identify and commit to providing necessary new studies; and to pay the first installment of the reregistration fee. During this phase, EPA issued guidance to registrants for preparing their Phase 2 and Phase 3 responses. Phase 2 activities were completed in 1990.

Phase 3: Summarization of Studies - Registrants were required to submit summaries and reformatted acceptable studies, "flag" studies indicating adverse effects, re-commit to satisfying all applicable data requirements, and pay the final installment of the reregistration fee. Phase 3 ended in October 1990.

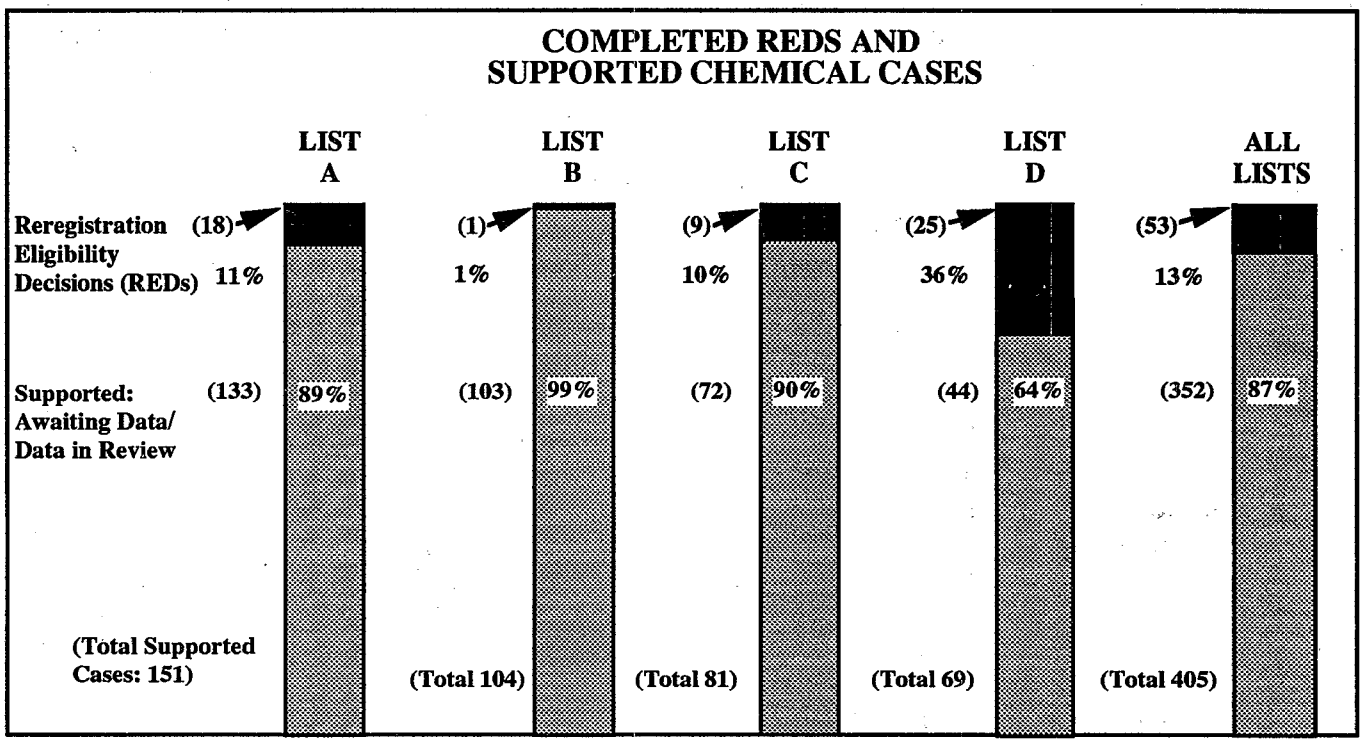
Phase 4: EPA Review and Data Call-In's - In Phase 4, EPA reviewed all Phase 2 and 3 submissions and required registrants to meet any unfulfilled data requirements within four years. Phase 4 was completed in 1993.

Phase 5: Reregistration Decisions - In this phase, EPA reviews all the studies that have been submitted for a chemical case, and decides whether or not to reregister products containing the active ingredients in that case. A pesticide will be considered eligible for reregistration if its data base is substantially complete, and if it does not cause unreasonable adverse effects to people or the environment when it is used according to product label directions and restrictions.

B. Current Status of Reregistration

Figure 1 shows the status of supported chemical cases in Lists A, B, C, D, and all lists combined, through the end of the first quarter fiscal year 1994. Each column shows the total number of supported chemical cases currently on each list. Also shown are the numbers and percentages of those cases that have REDs completed, and cases that are in the category of Awaiting Data/Data in Review. Of the total of 612 cases[2] (representing 1,138 AI's) that were eligible for reregistration in 1988, 405 (representing 590 AI's) still are supported while 207 are not supported by their registrants. A list of REDs appears in Appendix A, Cumulative Summary of Reregistration Actions.

Figure 1
Current Status of Reregistration - Supported Chemical Cases - First Quarter FY 94



Note: These numbers change frequently as the reregistration process continues. Percentage discrepancies may result from rounding.

[2] This number was originally 611 cases, which became 612 when two active ingredients were separated to become individual cases.

II. REREGISTRATION PROGRESS

A. REDS Completed This Quarter

This section summarizes RED production during the first quarter of fiscal year 1994, and summarizes the information in the individual REDs.

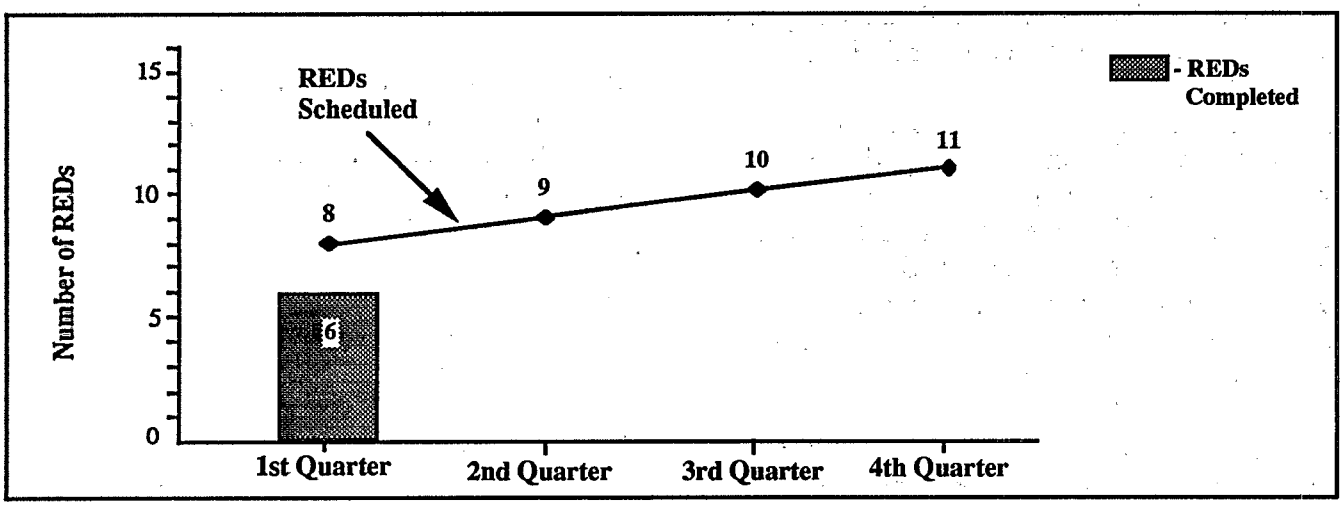
In reviewing pesticides for reregistration, EPA gathers a substantially complete set of data on each chemical case, examines related health and environmental effects, and attempts to mitigate effects of concern. This evaluation and risk management process is complete when EPA is satisfied that the pesticide(s), used in accordance with approved labeling, will not pose unreasonable risks to human health or the environment.

When some or all uses of a pesticide are determined to be eligible for reregistration (or when another regulatory conclusion has been reached), EPA issues a Reregistration Eligibility Decision (RED), usually embodied in a RED document. In about 14 months, once certain product-specific data and revised labeling are submitted and approved, EPA will begin reregistering single-active ingredient products containing the pesticides included in these REDs. Products that contain active ingredients in addition to these will not be reregistered until all of their active ingredients are eligible for reregistration.

FY 93 REDs Production

Figure 2 shows the number of REDs scheduled to be completed by quarter during fiscal year 1994, and the number actually completed during the first quarter. Six REDs were completed in the first quarter, covering a total of 16 chemicals and 314 products. The target for the fiscal year is 38 REDs. A total of 53 REDs have been completed to date. Further information about the completed REDs can be found in Appendix A, Cumulative Summary of Reregistration Actions.

Figure 2
REDs Scheduled and Completed - FY 94



1st Quarter RED Summaries

During the first quarter of fiscal year 1994, EPA completed the 6 REDs summarized below.

Barium Metaborate - Barium metaborate is a microbiocide and microbiostat used as an industrial preservative in the manufacture of paints, paper, paper products, industrial adhesives and coatings. A newly registered barium metaborate product used as a fungicide to protect walls, ceilings, and pipes from mold and bacteria is not subject to this RED. All the industrial preservative uses are eligible for reregistration. The chemical is a compound of boron, which is ubiquitous in the environment, is an essential element for many organisms, and occurs naturally in soils, water, food, and forage.

Barium metaborate has no registered food uses, so no dietary risks are posed. The industrial preservative uses, which involve open pouring methods, could involve significant worker exposure. However, the risks posed are minimal. These indoor uses are not likely to result in significant amounts in effluent, and any minor amounts released would dissociate rapidly to naturally-occurring components. Risks to fish, wildlife, and endangered species are minimal. For additional information, please contact Brigid Lowery at (703) 308-8053.

Bromine - Bromine is a disinfectant and sanitizer used in water filters to purify drinking water aboard Navy ships and offshore oil well platforms. It also is used in indoor, non-food contact areas such as commercial establishments, hospitals, and households to control bacteria and fungi. All registered uses are eligible for reregistration.

Human health risks from exposure to bromine residues in drinking water, including bromate a probable human carcinogen and possible by-product of bromination, are expected to be negligible because water must be tested to ensure that residues are at a sufficiently low level prior to consumption. The two surface sanitizer products have a very low bromine content, resulting in low potential human exposure. They will not pose an unacceptable risk provided that personal protective equipment is used and reentry restrictions are followed, in accordance with product labeling. The current uses patterns of bromine that do not result in environmental exposure or risk. For additional information, please contact Mark Wilhite at (703) 308-8586.

Flower and Vegetable Oils - The flower and vegetable oils are a group of compounds that are natural components of plants. The six active ingredients (essential oils, oil of lemongrass, oil of eucalyptus, oil of mustard, soybean oil, and oil of anise) are registered for use as animal repellents, feeding depressants, insecticides, and miticides. Some of the essential oils are registered for use in antimicrobial products. However, since they have no independent pesticidal activity in these products, the use of essential oils for antimicrobial purposes is ineligible for reregistration. All other uses of the flower and vegetable oils are eligible for reregistration.

EPA believes that a broadly reduced set of data requirements is appropriate for reregistration of the flower and vegetable oils, and waived most of the studies usually required. These chemicals (except oil of mustard) are of low acute toxicity, and most are Generally Recognized as Safe (GRAS) by the Food and Drug Administration. As pesticides, they employ a non-toxic mode of action. They are used at low concentrations in products that are used at low volumes in the U.S., resulting in low exposure and risk to humans and the environment. For additional information, please contact Virginia Dietrich at (703) 308-8157.

Lithium Hypochlorite - Lithium hypochlorite is a algicide, fungicide, and food contact surface sanitizer. Its primary pesticidal use is to control algae, bacteria, and mildew in swimming pool water systems, hot tubs, and spas. It also is used to sanitize food and cheese processing plant equipment, dairies, and eating establishment equipment and utensils. All uses are eligible for reregistration.

Lithium hypochlorite has no food or feed uses, so no dietary risk is posed. The chemical causes severe irritation and is corrosive to the eyes and skin, but exhibits only moderate acute oral and dermal toxicity. EPA is continuing to require use of appropriate protective clothing to protect applicators. No other human risk of concern is expected. Aquatic organisms, however, may be at risk from exposure to industrial effluent containing this pesticide. Such discharge is regulated and risks may be reduced through the National Pollutant Discharge Elimination System (NPDES) permit program. Use of lithium hypochlorite, therefore, is not expected to pose unreasonable risks to humans or the environment. For additional information, please contact Ron Kendall at (703) 308-8068.

Mineral Acids - The mineral acids include four active ingredients. Hydrogen chloride is used as a disinfectant for bathrooms, surgical instruments, animal cages, swimming pool tiles, drinking fountains, and on dishes, glasses and utensils, in a variety of commercial, industrial, medical, and institutional premises. Phosphoric acid is used as an antimicrobial in industrial processing water, empty mushroom houses, food and dairy premises, on processing plant equipment, in kennels, hospitals and morgues, and in bathrooms. Sodium bisulfate is used as a disinfectant for toilet bowls. Sulfuric acid is used as a desiccant on potato crops, and as a sanitizer for food processing and dairy facilities, equipment, and utensils. All uses, except the use of sulfuric acid as a potato vine desiccant, are eligible for reregistration.

The four mineral acids pose no human dietary risks. People may be exposed to these chemicals used as antimicrobials, however, this exposure involves such dilute solutions that is believed to be inconsequential. The use of concentrated sulfuric acid as a potato vine desiccant results in high potential worker exposure and risk, as well as significant hazard to birds and other terrestrial wildlife. EPA is not able to determine if this use is eligible for reregistration and will assess the benefits to make this decision. The other uses of the mineral acids pose risks to birds and fish, which are mitigated by strengthened product labeling. For additional information, please contact Kathryn Scanlon at (703) 308-8178.

Peroxy Compounds - The three peroxy compounds, hydrogen peroxide, peroxyacetic acid, and potassium peroxymonosulfate sulfate, are microbiocides. When mixed with water and applied by spraying, fogging, or immersing, they kill bacteria, fungi, and viruses on hard surfaces including equipment, floors and walls, indoor agricultural premises, food establishments, commercial and industrial locations, hospitals and medical institutions, and bathrooms in residences. All uses of these compounds are eligible for reregistration.

Essentially no dietary exposure occurs from use of the peroxy compounds so no dietary risks are posed. These chemicals are corrosive and pose acute toxicity risks of severe eye and skin irritation to applicators and mixers. These risks are minimized through use of protective equipment, as required by product labeling. Risks to humans are considered negligible. Risks to wildlife are considered minimal since the compounds are used indoors and exposure to wildlife is extremely low or nonexistent. For additional information, please contact Rieman Rhinehart at (703) 308-8584.

Correction

In the October 1993 edition of the Progress Report, the Glyphosate RED summary on page 4 states that the pesticide does not appear to cause long-term health effects "(except some evidence of developmental toxicity)." We retract the statement in parentheses. Glyphosate is not considered a developmental toxicant. In two developmental toxicity studies, only minor developmental (not teratogenic) effects were observed in one species and only at a dose level which was highly toxic to the mother.

B. RED Candidates for Fiscal Year 1994

Table 1 shows the current RED candidates for fiscal year 1994. It is likely that for some of these chemicals, REDs will be postponed until the next fiscal year. It is also possible that some new chemicals may be added. REDs were completed for six of these chemical cases in the first quarter of fiscal year 1994. The target for fiscal year 1994 is a total of 38 REDs.

Table 1
RED Candidates for FY 94

List A				
Alachlor	Bentazon	Fenamiphos	Metalaxyl	Picloram
Amitraz	Captan	Fenitrothion	Methiocarb	Pronamide
Asulam	Difenzoquat	Hexazinone	Metolachlor	Tebuthiuron
Barium Metaborate *	Ethion	Maleic Hydrazide	Oryzalin	Vendex

List B		List C	
Benzyl-4-Chlorophenol	N6-Benzyladenine	BHAP	Limonene
Ethalfluralin	Terbuthylazine	Busan 1016	Lithium Hypochlorite *
Methylene-BIS		DBNPA	Sodium Cyanide

List D			
2,4-Xylenol	Hexacadienol	Muscalure	Phenol
Bromine *	m-Cresol	Periplanone B	Piperalin
Chlorine	Mineral Acids *	Peroxy Compounds *	Vegetable and Flower Oils *
Ethanolamine			

* REDs were completed for these chemical cases for the first quarter of FY 94.

C. Suspended Chemical Cases

EPA may issue a Notice of Intent to Suspend (NOITS) a pesticide product based on a finding that the registrant has failed to submit data under the requirement(s) of a FIFRA section 3(c)(2)(B) or a 4(d)(6) Data Call-In (DCI). Events that may result in the issuance of a NOITS include failing to provide adequate responses or data on time during the reregistration process or the Special Review process.

Suspension is an Agency action which affects the legal status of a pesticide product registration. After a suspension becomes final and effective, the pesticide registrant subject to suspension may not legally distribute, sell, use, offer for sale, hold for sale, ship, or deliver to any person the product(s) subject to the suspension. The product registration, however, remains in existence.

Suspension of the registration of each product will become final unless, within 30 days of receipt, one of the following actions is taken by the registrant: 1) compliance with the Agency's requirements is shown, 2) the registration is withdrawn, or the use which triggered the requirements is withdrawn, or 3) a hearing with EPA is requested.

EPA's Office of Compliance Monitoring (OCM) has initiated 602 NOITS actions for non-compliance with FIFRA resulting in 111 product suspensions from November 1989 to December 1993. In other cases, various outcomes resulted; for example, suspensions did not occur because data were submitted after the NOITS's were issued, or the matters were settled resulting in data submission.

D. Data Submitted for Reregistration

While EPA has formally evaluated the risks of only 53 chemical cases for which REDs have been completed, the Agency actually has obtained a substantial amount of information on the remaining chemicals.

Figure 3 shows the total number of studies received and reviewed by discipline for List A chemicals. These studies were submitted in response to the Registration Standards issued prior to FIFRA '88, as well as subsequent Data Call-In Notices.

Figures 4, 5, and 6 show the total number of studies received and reviewed so far for Lists B, C, and D chemicals respectively in response to Data Call-Ins under FIFRA '88.

Figure 3
List A - Total Studies Received and Reviewed as of First Quarter FY 94

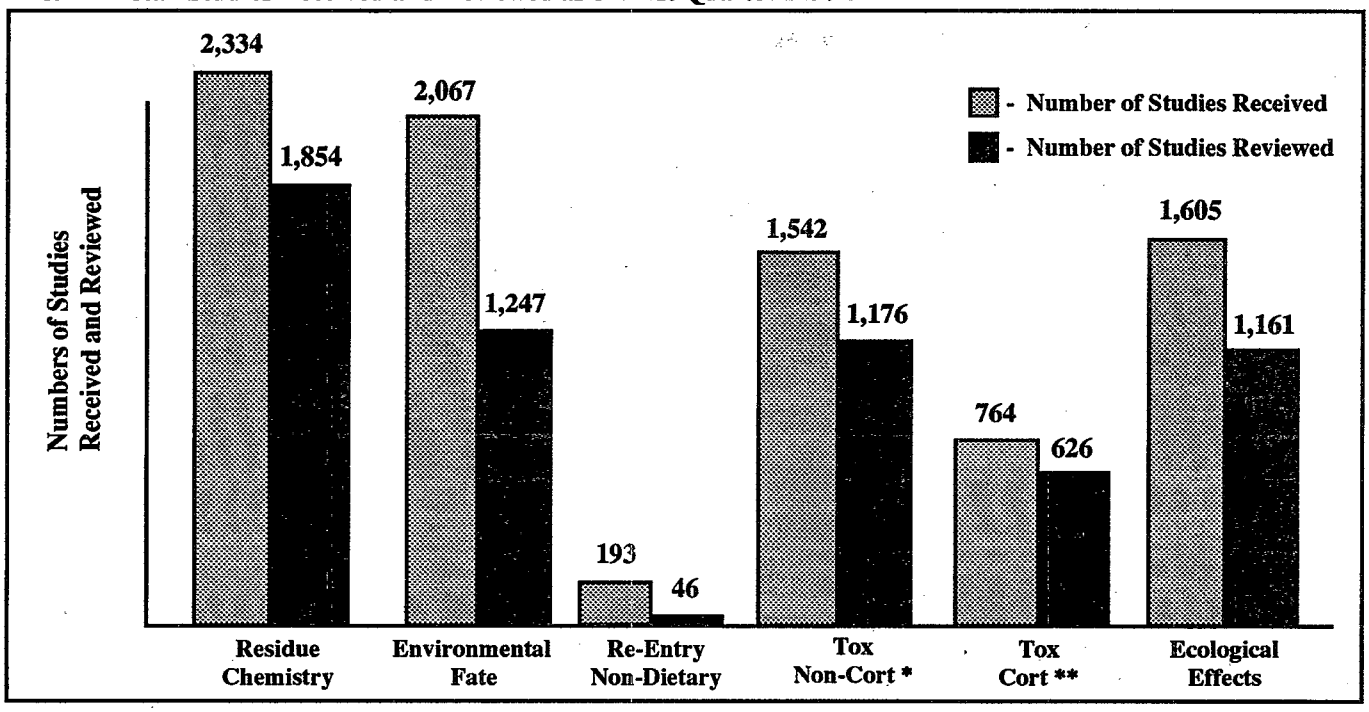
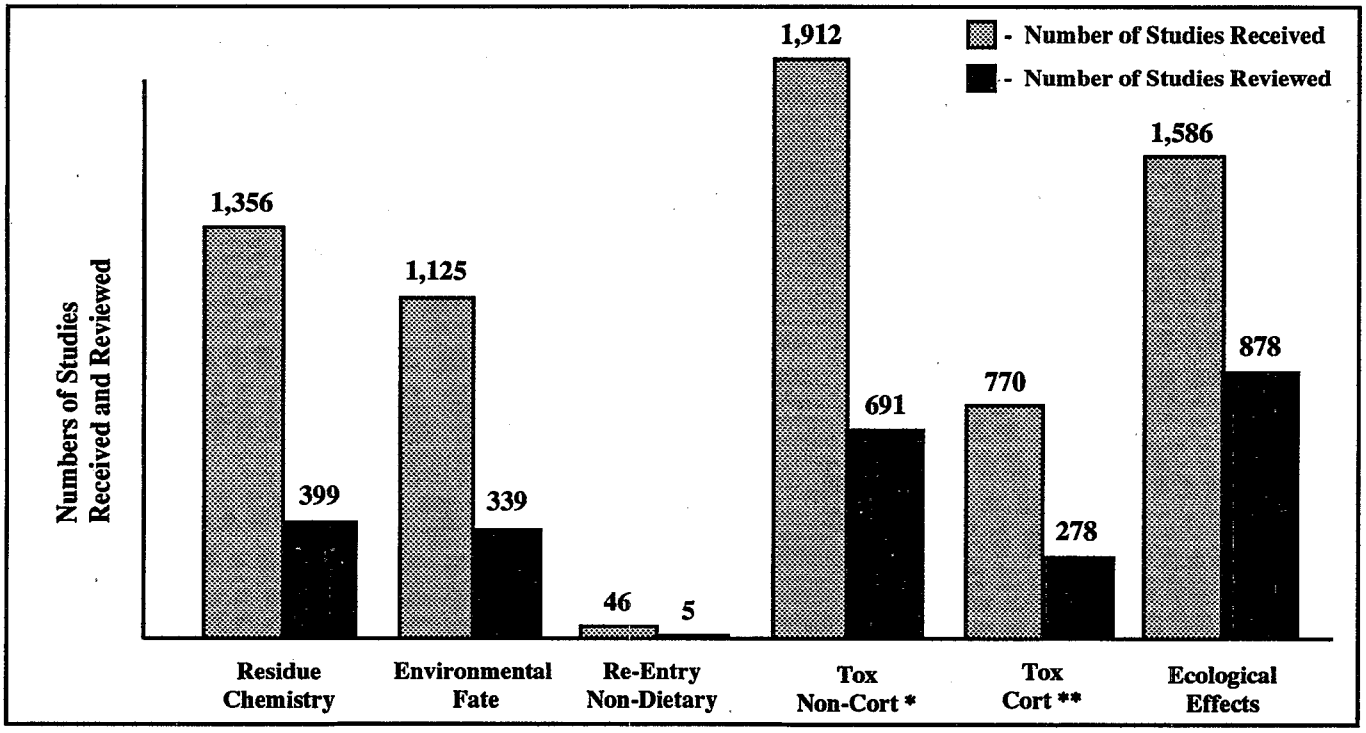


Figure 4
List B - Total Studies Received and Reviewed as of First Quarter FY 94



** TOX (CORT): Chronic Feeding, Carcinogenicity (Oncogenicity), Reproduction, and Developmental Toxicity (Teratology).

* TOX (Non-CORT): These studies measure toxicity of pesticides in other than CORT studies.

Figure 5
List C - Total Studies Received and Reviewed as of First Quarter FY 94

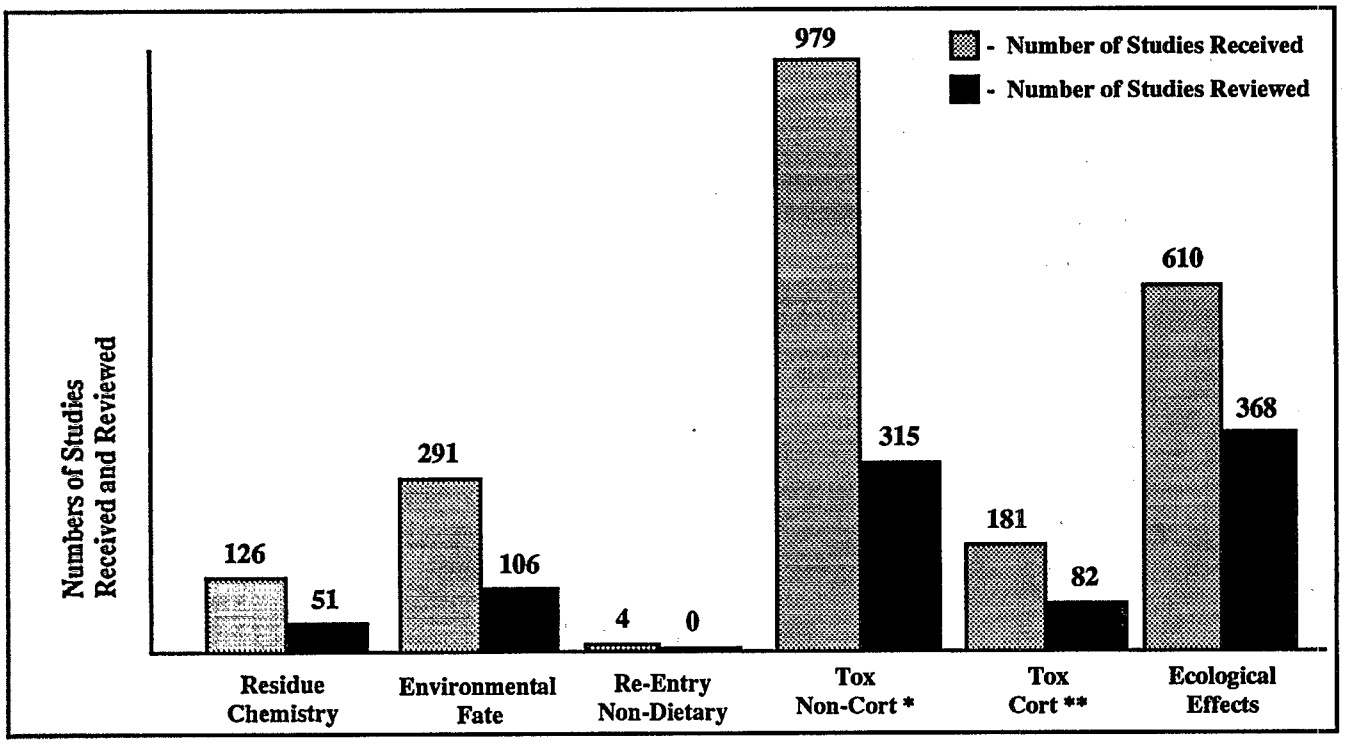
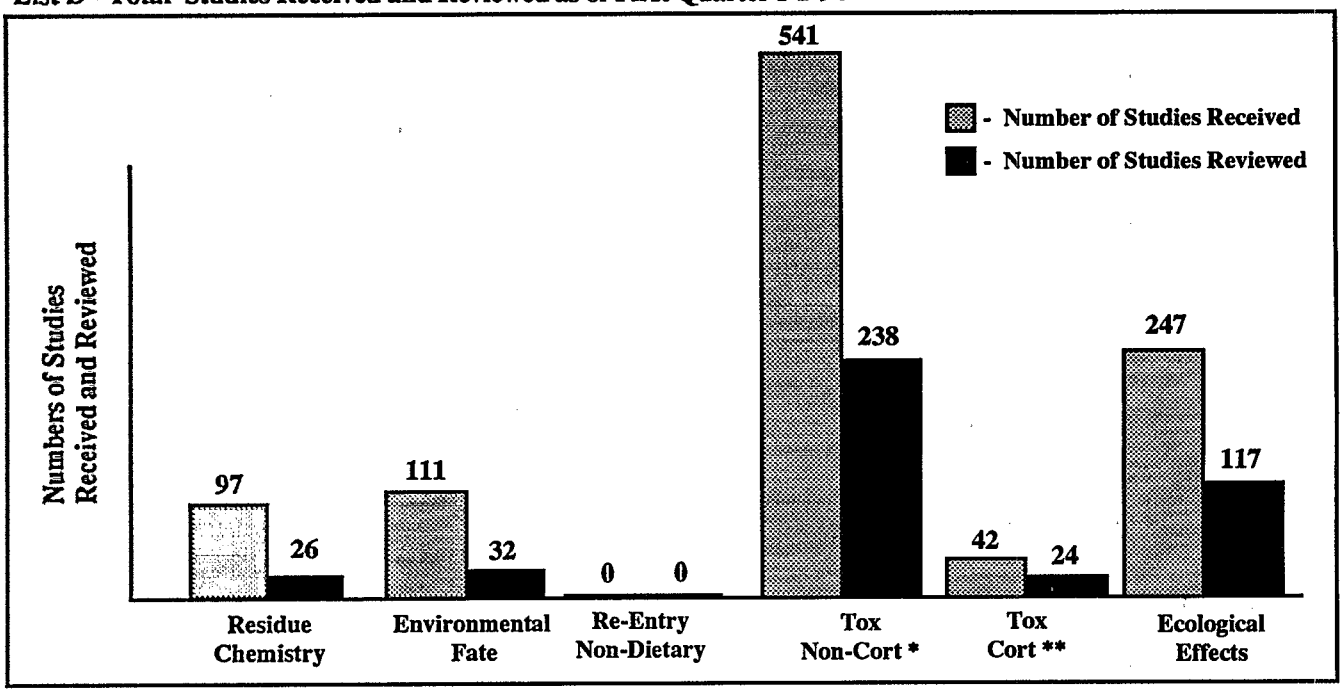


Figure 6
List D - Total Studies Received and Reviewed as of First Quarter FY 94



** TOX (CORT): Chronic Feeding, Carcinogenicity (Oncogenicity), Reproduction, and Developmental Toxicity (Teratology).

* TOX (Non-CORT): These studies measure toxicity of pesticides in other than CORT studies.

III. OTHER MEASURES OF PROGRESS

A. Minor Uses

Table 2 provides information from the U.S. Department of Agriculture, National Agricultural Pesticide Impact Assessment Program (NAPIAP). The Reregistration Notification Network (RNN) provides information to interested parties on recent or impending pesticide cancellations. For further information on any of the following pesticides, contact your NAPIAP State Liaison Representative or USDA at 301-504-8846.

Table 2
Proposed Use Cancellations or Tolerance Revocations - First Quarter FY 94

Chemical	Products	Affected Uses
Azocosterol HC1	Ornitrol	Avitrol Corporation plans to allow its toxicant, Ornitrol, to be canceled as of 11/23/93. It is registered for use on AGRICULTURAL PREMISES for pigeon control. The registrant will be allowed to sell and distribute their product for 1-year following cancellation; users and retailers will be allowed to use and sell this product until existing stocks are exhausted.
Bone Oil		The J C Ehrlich Company plans to allow the registration of their product, Magic Circle Deer Repellent (bone oil), to be canceled as of 11/23/93. This product is registered on GRAIN CROPS, VEGETABLE CROPS, FRUIT TREES, FORAGE CROPS, and ORNAMENTALS. The registrant will be allowed to sell and distribute this product for 1-year following its cancellation; existing stocks in the hands of users and retailers may be used and sold until exhausted.
Chloroform, Epichlorohydrin, Ethylene Dichloride, Hexane, Methyl Chloride, Perchloroethylene, Propylene Oxide		EPA has revoked the exemptions from the requirement of a tolerance for the seven inert ingredients in or on raw agricultural commodities resulting from the application of pesticide products. The revocation is effective as of 10/21/93.
Carbophenothion	Trithion	EPA has proposed the revocation of all tolerances for residues of carbophenothion. This insecticide and miticide was canceled in 1989. Because existing stocks are believed to be depleted, and treated agricultural commodities are believed to have passed through the channels of trade, no action levels will be recommended to replace the tolerances upon their revocation. Carbophenothion was registered for use on over 60 sites.

Table 2, cont.
Proposed Use Cancellations or Tolerance Revocations - First Quarter FY 94

Chemical	Products	Affected Uses
Oxydemeton-methyl	Metasystox-R	Miles Inc., has requested, as of 10/1/93, the voluntary cancellation of all uses of its insecticide-miticide, Metasystox-R. Following the EPA acceptance of this action, it is unlikely there will be any registrations left for oxydemeton-methyl. It is presently registered on these sites: ALFALFA (SEED), APPLES (ORN-NB), APRICOTS (NB), BEANS, BEANS (LIMA), BEANS (SNAP), BROCCOLI, BROCCOLI RAAB (CA only), BRUSSELS SPROUTS, CABBAGE, CABBAGE (CHINESE), CANTALOUPES, CAULIFLOWER, CHERRIES (NB), CHRISTMAS TREES (MI, NC, OH and WA only), CITRUS (NB), CLOVER, CORN, CORN (FIELD), CORN (POP), CORN (SWEET), CRABAPPLES (NB), CUCUMBERS, COTTON, DOUGLAS-FIR (OR and WA only), EGGPLANT, FILBERTS (OR and WA only), FLOWERING PLANTS (ORN), GRAPEFRUIT, GRAPES (NB), LEMONS, LETTUCE (HEAD), MELONS, MUSKMELONS, NECTARINES (NB), NURSERY STOCK (OR and WA only), ONIONS (BULB), ONIONS (SPANISH), ORANGES, PEACHES (NB), PEARS, PECANS (NB), PEPPERMINT, PEPPERS, PLUMS (NB), PRUNES (NB), PUMPKINS, QUINCES (NB), SAFFLOWER, SHRUBS (ORN), SORGHUM (GRAIN), SPEARMINT, SQUASH, SQUASH (SUMMER), SQUASH (WINTER), STRAWBERRIES (OR and WA only), SUGAR BEETS, TREES (ORN), TURNIPS, WALNUTS, and WATERMELONS. (NB=nonbearing, ORN=ornamental, CA=California, MI=Michigan, NC=North Carolina, OH=Ohio, OR=Oregon, and WA=Washington State.) It is expected that EPA will grant 1-year of sales of existing stocks of this pesticide by the registrant following cancellation; existing stocks will likely be allowed to be sold by retailers and used until exhausted.
All Pesticides		EPA has proposed that the tolerance regulations for pesticide residues be expanded to show the term, SORGHUM (GRAIN) is equal to SORGHUM SPP. [SORGHUM (GRAIN), SUDANGRASS (SEED CROP), AND HYBRIDS OF THESE GROWN FOR ITS SEED], and the term, SORGHUM (FODDER, FORAGE) is equal to SORGHUM SPP. [SORGHUM (FODDER, FORAGE), SUDANGRASS, AND HYBRIDS OF THESE GROWN FOR FODDER AND/OR FORAGE].
All Pesticides		EPA has expanded its interpretation on ONIONS (DRY BULB ONLY) to include SHALLOTS (DRY BULB ONLY) for the purposes of pesticide tolerance regulation. This rule was final as of 12/8/93.

Table 2, cont.
Proposed Use Cancellations or Tolerance Revocations - First Quarter FY 94

Chemical	Products	Affected Uses
Benomyl	Benlate	DuPont & Co., petitioned EPA to revoke the food additive tolerance for benomyl use on RAISINS on the basis that raisins should be regulated as a raw agricultural commodity (RAC), not a processed food. Currently, EPA classifies RAISINS as a processed commodity. DuPont took this action after assessing the 1992 Court order upholding a strict interpretation of the Delaney Clause. Dupont also requested EPA to consider a label amendment to remove benomyl use on grapes grown for RAISINS if the RAC proposal is not accepted.
Chlorpyrifos	Lorsban	The Food and Drug Administration (FDA) has agreed to EPA's request to exercise discretion and allow imported STONE FRUITS and PEARS to temporarily have chlorpyrifos residues up to 0.05 ppm (the current tolerance is 0.01 ppm). EPA expects to have the 0.05 tolerance in place for chlorpyrifos on pears, peaches, nectarines, and plums by 1/25/94. Regional and District offices of FDA will notify FDA headquarters whenever STONE FRUITS or PEARS are found to contain chlorpyrifos residues (parent compound only) at levels between 0.01 and 0.05 ppm. FDA headquarters will evaluate the results on a case by case basis and make regulatory decisions accordingly.
Fensulfothion	Dasanit	EPA has revoked all tolerances for pesticide residues of the insecticide/nematicide, fensulfothion, as of 11/17/93. Because the sale of fensulfothion has been prohibited since 1989, and no residue problem is anticipated due to environmental contamination, no action levels are being recommended to replace these revoked tolerances.
Mercuric Chloride Mercurous Chloride	Calo-Gran Calo-Clor	Grace Sierra Crop Protection Company has requested and EPA has accepted the voluntary cancellation of its fungicide products, Calo-Clor and Calo-Gran. The Agency has waived the usual comment period; consequently the cancellation became effective on 11/1/93. These are the final two mercurial based pesticide products registered under FIFRA, as amended. These products are used only on golf course greens, tees, and aprons to control snow mold on ORNAMENTAL TURF. EPA has granted Grace Sierra's request to sell and distribute existing stocks of the canceled products until 6/24/94; other distributors or users of these products may sell, distribute, or use existing stocks until such stocks are exhausted.

Table 2, cont.
Proposed Use Cancellations or Tolerance Revocations - First Quarter FY 94

Chemical	Products	Affected Uses
Methyl Bromide		EPA has added methyl bromide to the Clear Air Act of Class I Ozone Depleting Substances as of 12/10/93. The final rule on methyl bromide will freeze U.S. production and importation from 1994 through 2000 at 1991 levels, does not require interim reductions, and provides for a phase out of production and importation by January 1, 2001. This rule takes effect on 1/1/94. Although there is no single alternative treatment to this soil and space fumigant, EPA feels alternative chemicals and growing methods can substitute in many situations.
Ronnel	Korlan Trolene	EPA has proposed the revocation of all tolerances for residues of ronnel. The final product containing this insecticide was canceled in 1991. There is no anticipation of a residue problem. Consequently, no action levels will be recommended to replace the revoked tolerances. Ronnel presently has tolerances on BANANAS, CATTLE, EGGS, GOATS, HOGS, MILK, POULTRY, and SHEEP.
Toxaphene		The Food and Drug Administration (FDA) has revoked the Agency's action levels for residues of the canceled insecticide, toxaphene. These action levels covered PROCESSED ANIMAL FEED, ARTICHOKES, ASPARAGUS, CHERRIES, FIGS, FISH, MELONS, MUSTARD GREENS, PLUMS, PUMPKINS, CERTAIN ROOT VEGETABLES and SMALL FRUITS, SQUASH, and TURNIP GREENS. Toxaphene was canceled by EPA in 1982 and existing stocks of the canceled products were not allowed to be used after 1990. EPA revoked all existing tolerances on 9/1/93 and FDA has been unable to detect, with a few exceptions, measurable levels of toxaphene residues in over 40,000 of its samples. For this reason, FDA has decided to revoke all action levels for toxaphene effective 9/30/93.
Chlorothalonil	Bravo	ISK Biotech Corporation has submitted applications to EPA to delete from their products of the fungicide (chlorothalonil), the sites ONIONS (GREEN), SHALLOTS, and LEEKS due to the potential for residues to exceed established tolerances. ISK Biotech plans to retain all other registered sites including dry bulb onions, garlic, and onions grown for seed, and may reconsider the deletion of shallots in light of EPA's new crop grouping list.
Dichlorvos	DDVP	EPA has revoked the food additive tolerances for residues of the insecticide, dichlorvos, in or on PACKAGED OR BAGGED NONPERISHABLE PROCESSED FOOD as of 3/10/94. This action is in response to a petition submitted in March of 1991 claiming that these tolerances violate the Delaney Clause in Section 409 of the FFDCA. EPA found that dichlorvos does induce cancer in animals and does violate the Delaney Clause.

B. Rejection Rate Analysis

The Rejection Rate Analysis was developed to address the high rate of rejected studies submitted to OPP during the reregistration process. EPA discovered that the submission of unacceptable studies is the most significant factor in delaying REDs. Conducting replacement studies can add several years to the reregistration process.

EPA's study of rejection rates, with the cooperation and active involvement of the pesticide industry, is an intensive effort to analyze rejected studies and understand the reasons for rejection. The resulting reports for each discipline should minimize the reoccurrence of deficiencies in future studies as the Agency enters the major data submission phase of reregistration.

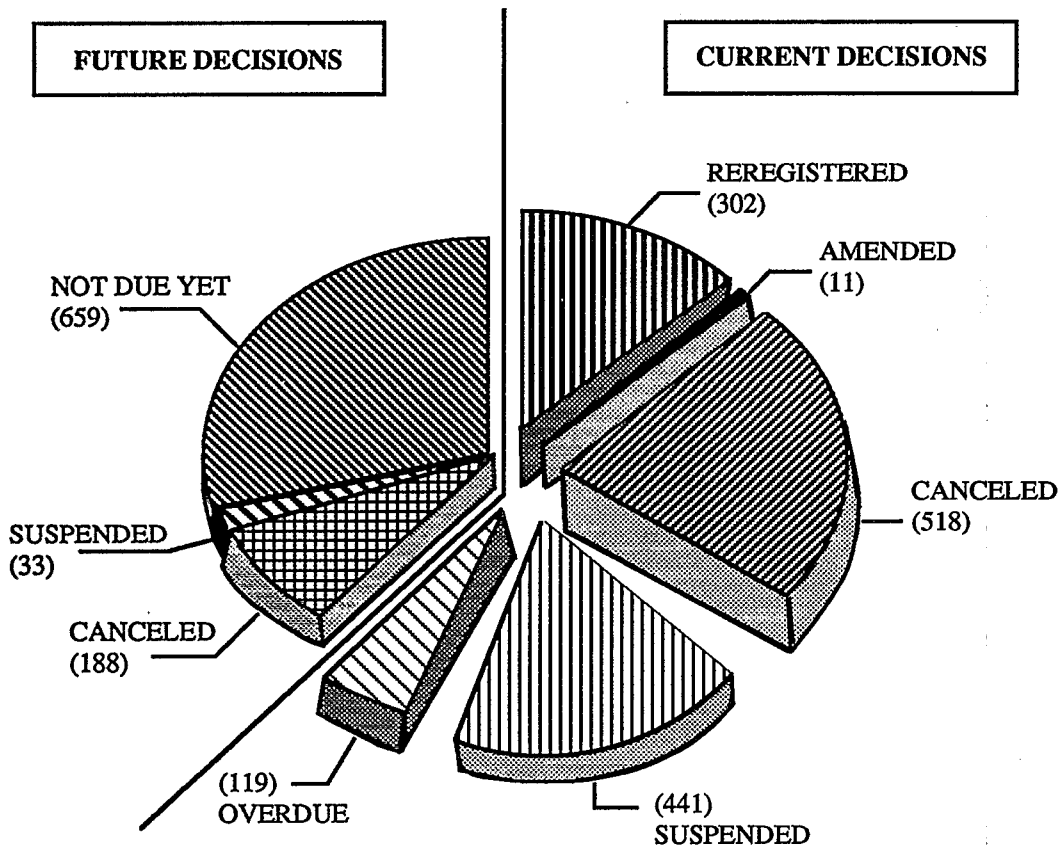
The Residue Chemistry, Toxicology, Environmental Fate, and Occupational and Residential Exposure Chapters of the Rejection Rate Analysis all have been completed and are available from U.S. EPA NCEPI, telephone (513) 891-6561, Fax (513) 891-6685. See Appendix B, Other Sources of Information, for the publication numbers of these documents.

The Ecological Effects chapter will be completed during the next few months.

C. Product Reregistration Status

Figure 7 shows the status of products subject to Reregistration Eligibility Decisions (REDs) issued to date. "Current Decisions" covers those products for which EPA should have made a decision to reregister as of January 5, 1994.[3] In this category, 302 products have been reregistered, 11 amended, 518 voluntarily canceled, 441 suspended, and 119 still need a decision. "Future Decisions" includes products for which the Agency's product reregistration decision is not yet due. In this category, 188 products have been voluntarily canceled, 33 suspended, and 659 are progressing toward a reregistration decision.

Figure 7
Product Reregistration Status of 2,271 Products for 38 REDs* as of January 5, 1994



*Involves 57 active ingredients. As of 1/5/94, EPA has issued product specific data call-in's for all products/REDs above.

[3]According to FIFRA, the Agency should reach a reregistration decision on each product 14 months after issuance of a RED, provided acceptable data are received on time.

IV. TOPICS OF THE QUARTER

A. Toxics Release Inventory

EPA has recommended adding 313 chemicals to the Toxics Release Inventory (TRI), a legally mandated annual compilation of hazardous chemicals released by manufacturers and chemical users. The list of recommended additions nearly doubles the list of chemicals subject to reporting, and includes 170 chemicals used in the formulation of pesticides.

The TRI is mandated by the "Emergency Planning and Community Right-to-Know Act" (EPCRA), signed into law in October 1986. The law is based on the premise that citizens have a right to know about chemicals in their communities. It has two main purposes: to encourage planning for response to chemical accidents; and to provide the public and the government information about possible chemical hazards in their communities.

Section 313 of EPCRA currently requires certain manufacturers to report to EPA and to the states, the amounts of over 300 toxic chemicals and 20 chemical categories that they release directly to air, water, or land; or inject underground; or transfer to offsite facilities. In addition, the law specifies that EPA must compile these reports into an annual inventory of releases and transfers--the Toxics Release Inventory.

The proposed addition of 313 chemicals to the TRI is based on their acute human health effects, carcinogenicity, or other chronic health effects and their environmental effects. EPA is currently refining the process for reviewing the list of chemicals, so that those included meet the intent of the TRI. EPA plans to issue a final rule for the recommended additional 313 chemicals by November 30, 1994, thereby making the added chemicals effective for the 1995 reporting year.

B. Reregistration Status Report Card

SRRD is pleased to announce that the first Reregistration Status Report Cards were issued in December 1993. The first mailing consisted of approximately one-third of the active ingredients undergoing the reregistration process. A second mailing was recently sent and the remaining reports should go out shortly. All mailings include chemicals from all four reregistration lists (A, B, C, and D).

The Report Card is possible because of some recent improvements in our data systems. We believe it will help us and registrants monitor chemicals more efficiently and effectively and permit us to be more proactive in handling issues that may arise. Each Reregistration Status Report Card represents our understanding of the current status of each active ingredient undergoing reregistration at a given point in time. It is not intended to supersede or change any data requirements, or extend any deadline of any Data Call-In(s), or any other agreements entered into with the Agency pertaining to such prior Notice under Section 3(c)(2)(B) and/or Section 4 of FIFRA.

An Instruction/Glossary was included with each Report Card to help in interpreting it. If registrants have any questions concerning their Report Cards, the Chemical Review Manager (CRM) noted on upper right-hand corner of the Report Card should be contacted.

So far, we have received numerous comments concerning the Report Cards. The majority of the comments have been positive. We are interested in your feedback on this important communication tool. Please send your comments directly to Kathleen Depukat, Chairperson, Report Card Task Force, Special Review and Reregistration Division, 7508W, 401 M Street, S.W., Washington, D.C. 20460.

V. SPECIAL REVIEW DECISIONS

This section summarizes the significant regulatory decisions made on chemicals in the Special Review process during the first quarter, fiscal year 1994. The formal Special Review process for chemicals which have met or exceeded risk criteria of unreasonable adverse effects is set forth in 40 CFR Part 154.

Special Review decisions represent major EPA actions which may ultimately cancel, deny, or reclassify the registration of pesticide products, because uses of the products may cause unreasonable adverse effects on human health or the environment. In addition, Special Review decisions may establish policy or guidelines on which other environmental decisions relating to pesticide registrations are based. For further information on Special Review chemicals, please call (703) 308-8010.

Inorganic Arsenicals

The PD 4 announcing the conclusion of the Special Review of the remaining non-wood preservative uses of inorganic arsenicals was published in the Federal Register on Wednesday, December 8, 1993 (58 FR 64579). The only remaining registrations of inorganic arsenicals are wood preservative uses and one registration of arsenic trioxide ant bait packaged in sealed metal containers. All other registrations have been canceled voluntarily or by Agency action.

DDVP

The food additive regulation for residues of dichlorvos (2,2-dichlorovinyl dimethyl phosphate or DDVP) in or on packaged or bagged nonperishable processed food was revoked with a November 10, 1993 publication in the Federal Register (58 FR 59663). The revocation is effective 120 days after the publication date and is being effected due to inconsistency with the Delaney Clause in section 409 of the Federal Food, Drug, and Cosmetic Act.

Tolerance Revocations

During the first quarter of fiscal year 1994, SRRD processed three tolerance related actions in addition to the DDVP/Delaney revocation already discussed. A description of each of those follows.

Fensulfothion - On November 17, 1993, the Agency published a final tolerance revocation notice (58 FR 60558) for residues of fensulfothion in or on various agricultural commodities. All registered uses of fensulfothion were previously canceled.

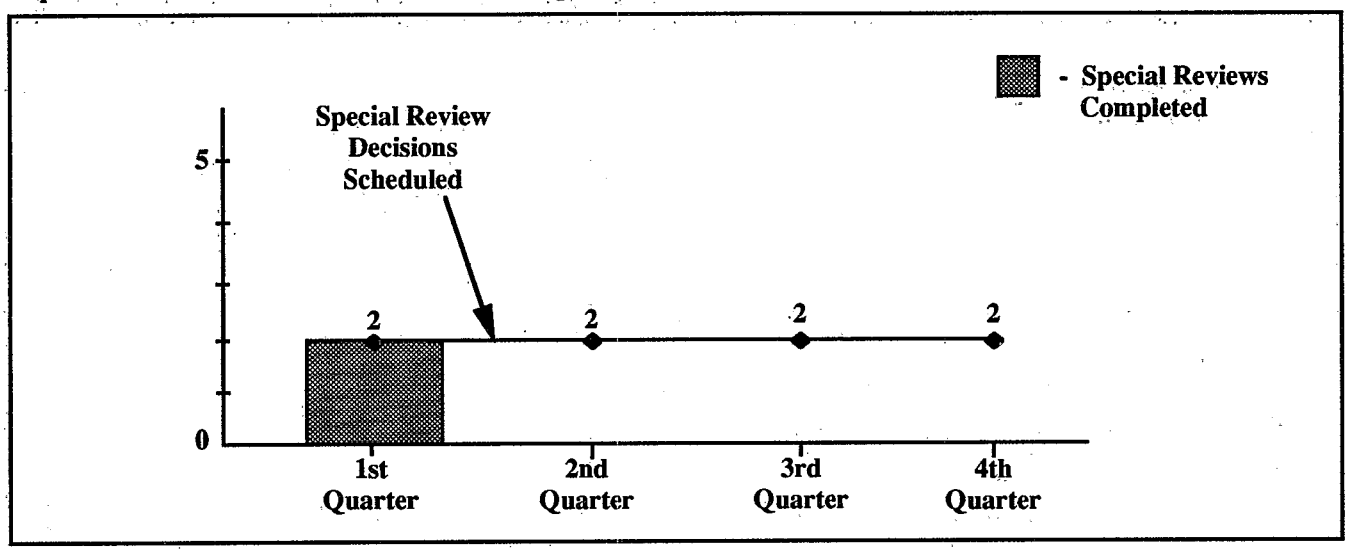
Ronnel - On November 17, 1993 (58 FR 60573), the Agency proposed to revoke the tolerances for residues of ronnel (0,0-dimethyl 0-(2,4,5- trichlorophenyl)phosphorothioate), including its 2,4,5-trichlorophenyl-containing metabolites, in or on all raw agricultural commodities. The tolerances are listed at 40 CFR 180.177. This action was proposed because all registered uses on ronnel on these commodities have been canceled and tolerances are no longer required.

Carbophenothion - On October 21, 1993 (58 FR 54316), the Agency proposed to revoke all tolerances for residues of carbophenothion on raw agricultural commodities and all food and feed additive regulations. The tolerances are listed at 40 CFR 180.156. All registered uses of carbophenothion on these uses have been previously canceled and tolerances are no longer required.

FY 94 Special Review Decisions

Figure 8, Special Review Decisions Scheduled and Completed, shows that OPP met the scheduled target of two special review decisions for the first quarter of FY 94. The target for FY 94 is a total of eight special review decisions.

Figure 8
Special Review Decisions Scheduled and Completed - FY 94



VI. CHEMICALS IN SPECIAL REVIEW

The table below lists those chemicals that are currently in the formal Special Review process or that have had preliminary notifications issued for more than six months. The table also presents the next possible stage in the review process and whether or not the chemical is funded under FY 94 resource allocations.

SPECIAL REVIEW CHEMICALS		
CHEMICAL	NEXT STEP	FUNDED FOR FY 94
2,4-D[1]	See footnote	no
Aldicarb (groundwater)	PD 4	yes
Atrazine[2]	See footnote	yes
Dichlorvos (DDVP)	PD 2/3	yes
Ethylene oxide	PD 2/3	no
Lindane[2]	See footnote	yes
Oxydemeton-methyl	PD 2	yes
Parathion[2]	See footnote	yes
Phorate[2]	See footnote	yes
Propoxur[2]	PD 1/2/3	yes
Telone (1,3-dichloropropene)	PD 2/3	yes
Terbufos[2]	See footnote	yes
Triphenyltin hydroxide (TPTH)	PD 2/3	yes

[1] The Agency issued a Federal Register Notice proposing not to initiate Special Review. A final decision is pending based on carcinogenicity evaluation by expert panel.

[2] The Agency has issued preliminary notifications of possible Special Review for these chemicals. Next step could be issuance of PD 1 or issuance of notices not to initiate Special Review. Public dockets are available for these chemicals.

VII. CALENDAR OF EVENTS (FY 1994)

2nd Quarter FY 94	3rd Quarter FY 94
• The final group of "Report Cards" will be mailed. • Nine REDs are scheduled to be completed, for a total of 15 since the beginning of FY 94. • Two special review decisions are scheduled to be completed for a total of 4 since the beginning of FY 94.	• Ten REDs are scheduled to be completed, for a total of 25 since the beginning of FY 94. • Two special review decisions are scheduled to be completed, for a total of six since the beginning of FY 94. • The OPP Workshop on pesticide regulatory issues and initiatives, postponed earlier this year, is rescheduled for June 13-15, 1994. • The Ecological Effects chapter of the Rejection Rate Analysis is scheduled to be completed.

Appendix A. Cumulative Summary of Reregistration Actions

The following is a cumulative summary of the reregistration actions completed to date. OPP has completed REDs and summary fact sheets for each of the pesticides (cases) listed below. Copies of the REDs and the fact sheets may be obtained during the public comment period from the Docket, Public Response and Program Resources Branch, Field Operations Division (7506C), Office of Pesticide Programs, U.S. Environmental Protection Agency, Washington, DC 20460 Tel: (703) 305-5805. After the comment period, documents are available from the National Technical Information Service (NTIS), Attention: Order Desk, 5285 Port Royal Rd., Springfield, VA 22161 Tel: (703) 487-4650.

CUMULATIVE RED TOTALS

Total REDs = 53
Total Chemicals/AI's Covered = 88
Total Products Covered = 2,989
Total Tolerances Reassessed = 198

DATA CALL-IN SUMMARY

Fiscal Year	Number of DCIs Issued
FY 1990	27
FY 1991	159
FY 1992	97
FY 1993	93
FY 1994	32
Total	408

FY 91 REDs Summary

RED Case Name	List	Date Signed	# Chemicals/AIs Covered	# Products*1 Covered	Total Tolerances
1. Fosetyl-Al (Aliette)	A	12/90	1	2	24
2. Heliothis zea (NPV)	A	12/90	1	1	0
3. Sulfur	A	3/91	1	332	0
4. Methoprene	A	3/91	1	63	23
5. Warfarin	A	6/91	2	76	0
6. Potassium Bromide	A	6/91	1	2	0
7. Sodium and Calcium Hypochlorites	A	9/91	2	770	0
8. Sodium Diacetate	D	9/91	1	2	0
9. Silicon Dioxide/Silica Gel	D	9/91	2	75	0
10. Dried Blood	D	9/91	1	3	0
11. Carbon and Carbon Dioxide	D	9/91	2	9	0
12. Propionic Acid	D	9/91	1	14	0
13. Sodium and Potassium Nitrates	D	9/91	2	6	0
Totals			18	1,355	47

*1 NOTE: The number of products listed reflects the number registered at the time the RED was completed. This number is constantly changing.

FY 92 REDs Summary

RED Case Name	List	Date Signed	# Chemicals/AIs Covered	# Products*1 Covered	Total Tolerances
14. Heptachlor	A	3/92	1	2	0
15. Allium Sativum (Garlic)	D	6/92	1	4	0
16. Putrescent Whole Egg Solids	D	6/92	1	6	1
17. Citric Acid	D	6/92	1	3	0
18. Capsaicin	D	6/92	1	8	0
19. Alkyl Amine Hydrochloride	C	8/92	1	3	0
20. Indole-3-Butyric Acid (IBA)	B	8/92	1	31	0
21. Zinc Salts	D	8/92	2	7	0
22. Sodium Hydroxide	D	9/92	1	9	0
23. Streptomycin	A	9/92	2	26	14
24. Chlorinated Isocyanurates	A	9/92	5	741	0
25. Nosema Locustae	D	9/92	1	6	0
26. Ethylene	C	9/92	1	8	0
27. Soap Salts	D	9/92	2	25	0
28. Bone Oil	C	----*	1	2	N/A
Totals			22	881	15

* Voluntarily canceled

FY 93 REDs Summary

RED Case Name	List	Date Signed	# Chemicals/AIs Covered	# Products*1 Covered	Total Tolerances
29. Oxalic Acid	D	12/92	1	4	0
30. Iron Salts	D	3/93	3	5	0
31. Oxytetracycline	A	3/93	3	7	2
32. OBPA	A	6/93	1	15	0
33. Biobor	C	6/93	2	12	0
34. Silver	D	7/93	1	65	0
35. Menthol	D	9/93	1	1	1
36. Eugenol	D	9/93	1	5	1
37. Glyphosate	A	9/93	2	56	126
38. Daminozide	A	9/93	1	4	0
39. Cedarwood Oil	C	9/93	1	5	0
40. Thymol	C	9/93	1	5	0
41. Sodium Lauryl Sulfate	D	9/93	1	2	1
42. Boric Acid	A	9/93	7	189	1
43. Sulfuryl Fluoride	A	9/93	1	1	0
44. Butylate	A	9/93	1	14	3
45. Inorganic Halides	D	9/93	2	35	0
46. Hydroxymethl 1-2-nitro	C	9/93	1	9	0
47. PEP**	C	9/93	1	5	0
Totals			32	439	135

*1 NOTE: The number of products listed reflects the number registered at the time the RED was completed. This number is constantly changing.

** Exempted from regulation as pesticides under Section 25(b) of FIFRA.

FY 94 REDs Summary

RED Case Name	List	Date Signed	# Chemicals/AIs Covered	# Products*1 Covered	Total Tolerances
48. Barium Metaborate	A	12/93	1	3	0
49. Bromine	D	12/93	1	4	1
50. Mineral Acids	D	12/93	4	212	0
51. Vegetable and Flower Oils	D	12/93	6**	32	0
52. Lithium Hydrochloride	C	12/93	1	40	0
53. Peroxy Compounds	D	12/93	3	23	0
Totals			16	314	1

** One A.I., "essential oils" will become 24 A.I.s after the RED is issued; many of these will eventually be declared inert ingredients.

*1 NOTE: The number of products listed reflects the number registered at the time the RED was completed. This number is constantly changing.

Appendix B. Other Sources of Information

For documents or further information on reregistration issues related to this progress report, please contact the following sources.

The following publications are available from:

NCEPI
P.O. Box 42419
Cincinnati, OH 45242-0419
Tel: (513) 891-6561
Fax: (513) 891-6685

- Pesticide Reregistration pamphlet, May 1992
  Publication Number: EPA 700-K92-004

- Status of Pesticides in Reregistration and Special Review (Rainbow Report), June 1993
  Publication Number: EPA 738-R-93-009

- Rejection Rate Analysis, Residue Chemistry Chapter, June 1992
  Publication Number: EPA 738-R-92-001

- Rejection Rate Analysis Residue Chemistry Guidance for:
  Storage Stability
  Theoretical Concentration Factors
  Raw Data Guidance
  Publication Number: EPA 737-R-93-001

- Rejection Rate Analysis Residue Chemistry Guidance on Conducting Rotational Crop Studies
  Publication Number: EPA 738-B-93-001

- Rejection Rate Analysis Guidance for Conducting Plant and Livestock Metabolism Studies
  Publication Number: EPA 738-B-92-001

- Rejection Rate Analysis, Environmental Fate Chapter, August 1993
  Publication Number: EPA 738-R-93-010

- Rejection Rate Analysis Toxicology Chapter, July 1993
  Publication Number: EPA 738-R-93-004

- Rejection Rate Analysis Occupational and Residential Exposure Chapter, August 1993
  Publication Number: EPA 738-R-93-008

* * * * * * * * * * * * * * * *

Federal Register Publication of Lists A, B, C, and D
List A: FR 2/22/89, pages 7740-7750
List B: FR 5/25/89, pages 22706-22714
List C: FR 7/24/89, pages 30846-30855
List D: FR 10/24/89, pages 43388-43396
For information contact: (703) 305-5805

Status of Chemicals in Special Review, February 1993
For information contact: (703) 308-8173

National Pesticide Telecommunications Network (NPTN)
For information about pesticide poisoning symptoms and general information:
Tel: 1-800-858-7378; Fax: 806-743-3094

Comments

EPA welcomes your comments on this progress report or on activities related to reregistration. Please address your comments to the following:

Attention: Ed Setren
Pesticide Reregistration Progress Report
Special Review and Reregistration Division (7508W)
United States Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

For more copies of this report (Publication Number: EPA 738-R-94-001) or to be added to the "SRRD MABELS" mailing list, please write or fax the following address:

U.S. EPA, NCEPI
P.O. Box 42419
Cincinnati, OH 45242-0419
Telephone: (513) 891-6561
Fax: (513) 891-6685