

**AN ANALYSIS OF FEES FOR
SERVICES IN THE PESTICIDE PROGRAM**

**OFFICE OF PESTICIDE PROGRAMS
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I. INTRODUCTION

Purpose of Analysis

On September 30, 1978, the Federal Pesticide Act of 1978 (PL 95-396) became law. This law amended the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in several respects and called for several studies in connection with regulation of pesticides. One study required the Administrator of the Environmental Protection Agency (hereafter EPA or Agency) to perform a study on:

"the feasibility of assessing and collecting fees from persons applying to register, or amend the registration of, pesticides to cover the costs incurred by the Environmental Protection Agency in processing such applications under the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act."

Additionally, the Agency also incurs costs for certification and training programs for pesticide applicators through cooperative agreements with states and Indian tribes as well as Federal programs.

This analysis is intended to update prior analyses, prepared by the Office of Pesticide Programs (OPP) on the issue of charging fees for services in connection with the regulation of pesticides by the Agency. This analysis reviews options available in constructing and administering fee schedules for services. The approximate level of fees for various services is presented. The economic impact of such fees on affected parties, consumers, and the economy in general is also discussed.

Background

The fee feasibility study mandated by PL 95-396 was prepared and a report delivered to Congress. The essential findings were that the establishment of a fee schedule for registration actions would be technically and administratively feasible; however, OPP recommended that given the large number of complex activities taking place in implementing the new amendments in PL 95-396, it was not prudent to institute a fee system at that time. Once the bulk of the 1978 amendments was integrated into OPP operations, OPP was instructed by Office of Management and Budget (OMB) to again review the issue of fees for registration. Subsequently, OMB has posed the issue of whether fees should be established to recover the costs incurred by the Agency for pesticide applicator certification and training? The remainder of this paper presents an analysis of fees for both registration and applicator certification and training.

Under Section 3 of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), with certain exceptions, "no person in any State may distribute, sell, offer for sale, hold for sale, ship, deliver for shipment, or receive and (having so received) deliver or offer to deliver, to any person any pesticide which is not registered with the Administrator." In order to obtain registration for their products, applicants are required to submit certain information and

data in support of the registration application. The Administrator must make a determination, among other things, that the use of the pesticide will not cause unreasonable adverse effects on the environment.

The acceptance, processing, and review of data submitted by applicants requires the EPA to provide administrative and scientific resources to accomplish these tasks so that sound regulatory decisions can be reached. Presently, the resources are funded by public funds at the Federal level.

Section 23 of FIFRA authorizes the appropriation annually of such funds as may be necessary for the Administrator of EPA to provide through cooperative agreement an amount up to 50 percent of the anticipated costs for States and Indian tribes to conduct training and certification programs for persons desiring to purchase and apply restricted use pesticide products. Restricted use products are those classified as such upon determination by the Administrator that one or more uses of the products, when used in accordance with widespread and commonly recognized practice, may generally cause unreasonable adverse effects on the environment unless additional regulatory restrictions are applied. In effect, restricted products require an exceptional level of care in their handling and use. Training and certification of that training are the mechanisms under FIFRA which allow for the use of pesticide products with inherently high potential risk of adverse effects to man and the environment.

The Agency presently administers a fee schedule for submissions of tolerance petitions (petitions to establish legal maximum pesticide residue levels) under authority of Section 408(0) of the Federal Food, Drug, and Cosmetic Act (FFDCA). The fees charged vary according to the type of petition submitted, e.g., a substantive amendment requires a deposit of \$4,000, while the fee for an initial tolerance petition for chemical is set at \$10,000. The fee schedule is established by regulation contained in Section 180.33 in the Code of Federal Regulations. The schedule was last revised in 1972.

Fees for tolerances are collected by the Registration Division of OPP and transferred to the Financial Management Division of EPA. Funds are placed into a revolving fund which is charged against as the fees are "earned", i.e., the petition reviews are completed. The EPA Inspector General's audit of the revolving fund found that fees earned were less than one-half of incurred salary costs alone in FY80. The audit report recommended that OPP coordinate with Financial Management Division of the EPA to develop necessary accounting procedures and controls to ensure accuracy of records and reports. Also, OPP should adjust the fee structure to make the revolving fund self sufficient. OPP is in the process of developing procedures to correct the problems identified in the audit.

Summary of Findings

1. Fees would most feasibly be charged on new chemical registrations, old chemical registrations, new biorationals, amended registrations and experimental use permit processing. Registration actions including emergency exemptions, special local needs and supplemental registrations would be less desirable areas for fees and they could be excluded. Exclusions can be considered when services are performed for state or local governments such as emergency exemptions and special local needs registrations, or where the cost of collecting fees would be a significant portion of the fees collected as would be the case for supplemental registrations.
2. Fees could be collected to cover both direct and indirect costs of registration. Costs that accrue for registration include costs of two decision units, Registration, and Special Registration. Also costs of Agency management and supervision, and proportionate shares of research and enforcement budgets can be added where appropriate.
3. Fee schedule development should take a fixed fee approach. Individual fees should be established for like registration activities. Fees should be adjusted annually to reflect actual costs.
4. The costs of registration and hence potential revenues from charging fees total from \$10 million to \$18 million depending on treatment of overhead costs.
5. Charging fees for registration would add up to 5% to the expenditures of basic pesticide producers for product development. The total fees collected under various options would amount to 0.2% to 0.3% of basic pesticide producer annual sales.
6. Major volume active ingredients and formulated products would be little affected by fees. The more minor volume pesticides and products could be burdened by fees. This would be a disincentive to add or modify registration for products.
7. Administration of a fee system would require about 2-10 additional FTE's in OPP.
8. Waivers on a case-by-case basis or as general policy could be utilized to encourage products useful to IPM programs, to prevent additional economic burdens in obtaining minor use registrations, to lessen regulatory burdens on small business, and to encourage development of environmentally more acceptable pesticides.
9. Fees can be considered to recover the costs incurred in pesticide applicator certification and training programs. Charges to participants would need to range \$2-\$5 per year on average. As an option, fees could be charged to pesticide product registrants (up to \$25,000) as either a separable item or as an overhead cost in connection with fees for registration.

10. The charging of user fees to recover costs of registration and applicator certification and training programs have the effect of shifting the costs of these programs from the taxpayer to industry and/or user groups which benefit most directly from them.

II. PRINCIPLES UNDERLYING THE ASSESSMENT OF FEES FOR SERVICES

The basic guidance to Federal agencies on assessing fees for services is contained in a provision of the Independent Offices Appropriations Act of 1952 (U.S.C. §483a). The provision states in part:

It is the sense of the Congress that any work, service, ..., benefit, privilege, use, license, permit, certificate, registration, ... furnished, provided, ..., or issued by any Federal agency ... to any person ... shall be selfsustaining to the full extent possible, and the head of each Federal agency is authorized by regulation ... to prescribe therefore such fee, charge or price, ... to be fair and equitable taking into consideration direct and indirect cost to the Government, value to the recipient, public policy or interest served, and other pertinent facts...

Additional guidance is also available in OMB Circular No. A-25 which provides information on policy relating to "User Charges" for certain Government services and property. The general policy stated in OMB Circular A-25 is that "A reasonable charge... should be made to each identifiable recipient for a measurable unit or amount of Government service or property from which he derives a special benefit." The application of this policy is not clear-cut for pesticides registration given several clarifying provisions. The OMB guidance is primarily intended to serve in the case where clear statutory directives from Congress are not available. Congress retains the option to provide clear direction if it should decide that a "user pays" philosophy is desirable to further and improve upon the regulation of pesticides under FIFRA.

III. COSTS OF OPP SERVICES POTENTIALLY RECOVERABLE THROUGH FEES

Registration

Program Activity Level

Pesticide regulatory programs in the United States are, in general under the aegis of Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) which became law June 25, 1947, and was amended on the subsequent occasions: October 21, 1972, November 28, 1975, and September 30, 1978 and December 17, 1980. Authority to regulate pesticides under FIFRA is primarily the duty of the Environmental Protection Agency. In some areas, States have the primary authority; while in other instances both EPA and the States share authority. The division of authority also occurs in the registration of pesticides.

Registration activities which affect pesticides to be used regionally or nationally must receive review and approval of registration by the Administrator of EPA, or his delegatee, which in most instances is a member of the Office of Pesticide Programs (OPP). Pesticide products which are only to be used within a State's boundaries can be registered by that State for local needs within certain restrictions imposed by EPA regulations. The Federal EPA has responsibility to ensure that State registrations meet the purposes of FIFRA. This Federal/State dualism is an integral part of the current pesticide registration program. This analysis focuses on the Federal program, largely administered by OPP.

Applicants desiring a registration for a product or changes to a registration for a product are required to submit an application and any supportive data which may be required by the Agency to evaluate the risk of the product or from proposed changes in the use of the product. EPA processes and reviews the application, including scientific review of the supporting data where needed. The Agency then approves or denies the application. When a decision can be made that a pesticide product when used with commonly accepted practices will not cause unreasonable adverse effects on the environment, then the product is registered and allowed to be sold in commerce.

Registration activities for which fees might be charged fall into eight categories. These eight categories vary as to the parties to which services are rendered by OPP and also vary in the average resources required to provide the necessary review and processing. Registration activities are defined to include New Chemicals, New Biorationals, Old Chemicals, Amendments, Supplemental Amendments, State/Local Needs (Section 24(c) of FIFRA), Emergency Exemptions (Section 18 of FIFRA), and Experimental Use Permits. As services for which fees might be considered, it is useful to further note that New Chemicals, New Biorationals, some Amended Registrations, some Experimental Use Permits, and some Emergency Exemptions are supported by data requiring scientific review and thus require additional resources to process.

Table 1 summarizes the level of registration activities projected for Fiscal Year 1982. All registration activities are not appropriate candidates for charging fees. Both Section 483a of the Independent Offices Appropriations Act of 1952 and the OMB Circular A-25 make it clear that conditions may exist where it would be prudent and acceptable to waive fees for services. In particular services for foreign, state, or local governments and non-profit organizations may be waived as a matter of policy. Additionally, if the cost of providing a service is small and the resources required to collect fees are a significant proportion of those small costs, then waivers can be granted. The registration activity Supplement Amendment would be an example of the latter type of waiver candidate while State/Local Needs and Emergency exemptions are activities for States and hence would be waived.

Total Costs

OMB Circular A-25 instructs that costs should be determined based on the direct and indirect costs of providing services. In addition to costs such as salaries, fringe benefits, rent, maintenance, etc., such items as a proportionate share of Agency's management and supervisory costs and costs of enforcement, research, establishing standards, and regulations to the extent they are determined to be chargeable to the activity may be included in the cost calculations.

Registration activities are covered within the budget under two decision units within OPP. These decision units are Registration and Special Registration. As shown in Table 2, in Fiscal Year 1982 these two units represent \$7,782 thousand and \$1,993 thousand respectively or a total of \$9,775 thousand out of the OPP Abatement and Control budget of \$32,623 thousand. These two decision units are assigned a combined count of 306 full time equivalent (FTE) personnel.

Another decision unit, Registration Standards, is charged with developing the standards by which pesticides are to be registered in the future. The standards development includes data evaluation that is historically part of the registration processes. Thus, the costs may be considered as an option as part of the costs of registration. The decision unit involved is budgeted for FY 82 with \$8,021 thousand and has assigned 108 FTE in personnel. OPP has committed itself to eventually reregister all products on a generic basis using the registration standard approach. The process to develop standards for all currently registered products is expected to require 15 years or more. The costs of registration standards cannot be directly linked to individual applications for registration or amendments to registration. As such the costs are not appropriate as recoverable through fees. Costs would be recovered when amendments to registrations are applied for under the standards developed.

To complete the estimation of total costs of registration, the indirect cost of related enforcement activities, research, and management and supervision costs can be considered as optionally recoverable through fees. Budget data for FY 82 provide the totals for enforcement and research identifiable for OPP. These amounts can be apportioned on a percentage basis corresponding to the share that

Table 1. Type and Number of Completions for Registration Activities Projected to be Processed Annually Using Fiscal Year 1982 as a Basis

Registration Activities	Number of Completions
<u>Fee Chargeable Activities</u>	
New chemical	30
New biorationals	6
Amended registration	
-Science review required	250
-No science review required	4,750
Old chemical	2,520
Experimental use permit	
-Science review required	115
-No science review required	350
<u>Waiver Candidates</u>	
Supplement Amendments	15,000
State/Local Needs	1,040
Emergency Exemptions	370

Table 2. FY 1982 Abatement and Control Budget Summary
For Registration-Related Decision Units

Decision Unit	Full Time Equivalents		Costs in \$ Thousands	
	OPP Total Inc. Overhead	(% OPP Total)	OPP Total Inc. Overhead	(% OPP Total)
Registration	246.7	(40.8)	7,782	(23.9)
Special Registration	<u>59.5</u>	<u>(9.8)</u>	<u>1,993</u>	<u>(6.1)</u>
Subtotal	306.2	(50.6)	9,775	(30.0)
OPP Total	605.1	(100.0)	32,623	(100.0)

registration activities are of the OPP budget. FY 82 budget information indicates that enforcement and research are 47.6% and 17.1% respectively of the OPP Abatement and Control Budget. The Agency management and supervision costs distinct from OPP would total about 10% of the Abatement and Control costs of OPP based on available budget information.

Table 3 summarizes the total costs that provide the basis for several options on identifying those costs that could logically be recouped by charging fees. The options show several ways to combine the direct and overhead costs attributable to registration activities.

Average Unit Costs

One approach to establish fees for individual registration actions is to calculate an hourly rate per person hour available to perform registration related activities and then multiply by an average number of person-hours needed to accomplish that registration action. With the two decision units, Registration and Special Registrations, there are 306 FTE's available for work on registration applications.

The registration actions identified for charging fees in Table 1 do not, when totaled, account for all of the 306 FTE's available in the Registration and Special Registration decision units. Two categories account for the difference. First, those actions discussed in Section III as not suitable for fees, i.e., waiver candidates, account for part of the difference. The cost incurred in processing waived types of registration actions cannot expectedly be recovered through fees on other actions since only the costs of providing services to recipients are recoverable. The second category is due to activities not specifically related to individual registration actions. The issue raised here is whether time spent in this category should be recovered through fees on chargeable registration actions. Since this study's primary purpose is to establish the framework and bounds of a fee system where identifiable recipients of services are charged fees to recover both direct and indirect costs, the second category is logically included since these additional activities (e.g. Farm Worker Safety) support decisionmaking on all types of registrations. The effect of indirect registration related activities has been calculated to add about 16% to the average calculated using FTE's expended as a basis. In effect, all time spent and costs incurred for indirect registration activities are assumed to be proportionally spread across the fee chargeable activities.

Previously in Table 3, eight options were presented as some of the combinations of costs that could be recouped through fees. In Table 4, four options (1, 2, 4 and 8) are selected for conversion to costs per hour. Option 1 covers the OPP budget for Registration and Special Registration; Option 2 combined Option 1 with 10% add-on for Agency supervision and management; Option 4 is Option 1 plus a proportionate share of the Agency research budget and the 10% add-on for Agency management and supervision; and Option 8 is Option 1 plus proportionate

**Table 3. Development of Registration Costs That Would
Serve as the Basis for Establishing Fees**

Cost Source	Option Number	Thousand Dollars
Registration Decision Unit		7,782
Special Registration Decision Unit		1,993
	(1) Subtotal	9,775
Add 10% Management and Supervision	(2)	10,753
(1) plus proportionate share of Research Add-on (17.1%)	(3)	11,447
(3) plus 10% Management and Supervision Add-on	(4)	12,592
(1) plus proportionate share of Enforcement Add-on (47.6%)	(5)	14,428
(5) plus 10% Management and Supervision Add-on	(6)	15,871
(1) plus Combined Research and Enforcement Add-ons	(7)	16,100
(7) plus 10% Management and Supervision Add-on	(8)	17,710

Note: Bracketed numbers indicate options on combinations of costs as explained in text.

Table 4. Costs Per FTE by Options on Inclusion of Budget Items, 1982

Option (1) <u>1/</u>	$\frac{\$ 9,775,000}{306 \text{ FTE}}$	$\times 1.16 = \$37,056/\text{FTE}$
Option (2)	$\frac{\$10,753,000}{306 \text{ FTE}}$	$\times 1.16 = \$40,763/\text{FTE}$
Option (4)	$\frac{\$12,592,000}{306 \text{ FTE}}$	$\times 1.16 = \$47,745/\text{FTE}$
Option (8)	$\frac{\$17,710,000}{306 \text{ FTE}}$	$\times 1.16 = \$67,136/\text{FTE}$

1/ Options from Table 3.

shares of both research and enforcement budgets and the 10% add-on for Agency supervision and management. These options represented the low, middle and high range of total costs. They furthermore represent the range of treatments of costs other than direct program costs. The average calculated cost of resources per FTE applied to processing a registration application thus ranges from about \$37,056/FTE to about \$67,136/FTE depending on the option.

The OPP FY 82 Integrated Work Plan provides data to make estimates of the resources necessary to, on average, process the various types of registration actions. Resources are estimated using Full Time Equivalent personnel as base units. Table 5 makes use of these estimates in calculating the costs for the four options above using the equivalent dollars per FTE in Table 4. Fees can then be assigned based on these average costs. The significance and impacts of these costs are explained in the impact analysis later in this report.

Applicator Certification and Training

Program Activity Level

Section 3(d)(1)(c) of FIFRA requires that for any pesticide or use of a pesticide which has been classified by the Administrator as restricted, application may only be made by or under the direct supervision of a certified applicator. As stated in the Introduction, Section 23 of FIFRA authorizes cooperative agreements between EPA and States and Indian tribes for purposes of conducting training and certification programs. All states, including the District of Columbia and territories except for Nebraska and Colorado, have established certification and training programs in cooperation with EPA. In Nebraska and Colorado, Federal training and certification programs have been established in lieu of State programs. Currently there are over 1.1 million private certified applicators and over 100 thousand commercial (for hire) certified applicators in the United States. Tables 6 and 7 provide more details on the number of certified applicators.

Although there are data on the current number of certified private and commercial pesticide applicators, firm estimates are not available on the number of applicators expected to be certified annually in the future. Most State certification programs require the recertification of applicators every 3 to 5 years. There would also be an additional number of new applicants for certification. In all there might be as many as 400,000 persons applying for certification or recertification annually.

Total Costs

The EPA incurs costs in connection with certification and training programs to cover the costs of the Federal programs in Nebraska and Colorado and through funds shared with States to cover the State programs. Table 8 provides actual and proposed budget levels for certification and training for Fiscal Years 1981 through 1983. The

Table 5. Average Unit Costs/Fee Possibilities for
Registration Action by Option, FY 82 Basis

Registration Action	Assumed FTE's Per Action	Average Range ^{1/} of Costs
-----dollars-----		
New chemical	1.6	\$59,290 - \$107,357
New biorational	.8	\$29,645 - \$ 53,678
Amended registration		
- Science review required	.154	\$ 5,707 - \$ 10,333
- No science review required	.013	\$ 482 - \$ 872
Old chemical	.025	\$ 926 - \$ 1,677
Experimental use permit		
- Science review required	.054	\$ 2,001 - \$ 3,623
- No science review required	.013	\$ 482 - \$ 872

^{1/} Ranges are based on low and high cost per FTE from Table 4.

Table 6. Number of Certified Private Applicators, by EPA Region, 1981

REGION	APPROXIMATE TOTALS	REMARKS
I	5,736	No data from Massachusetts & Vermont
II	32,964	Includes Puerto Rico & Virgin Islands
III	76,224	
IV	320,723	
V	141,496	No data from Minnesota
VI	191,775	
VII	156,940	
VIII	83,135	
IX	54,662	
X	33,110	
	<hr/> 1,096,765	

Source: Collection of State Data on Certified Applicators and Structural Retired Teachers Association and American Association of Retired Persons. July 1981.

**Table 7. Number of Certified Commercial Applicators,
by EPA Region, 1981**

REGION	APPROXIMATE TOTALS	REMARKS
I	2,121	No data from: Conn., Mass., Vermont
II	14,336	No data from New Jersey; includes Puerto Rico and the Virgin Islands
III	6,861	No data from Va.; includes D.C.
IV	17,818	No data from Alabama
V	21,799	
VI	13,984	
VII	12,334	
VIII	9,651	
IX	11,203	
X	4,165	
	114,272	

**Source: Collection of State Data on Certified Applicators and Structural
Retired Teachers Association and American Association of Retired
Persons. July 1981.**

Table 8. Certification and Training Funds Breakout FY 81 thru FY 83

	FY 81 (Actual)	FY 82 (Proposed)	FY 83 (Proposed)
	\$ in thousands		
State Certification	1,383.8	1,137.5	887.5
Federal Certification (Colorado and Nebraska)	224.3	200.0	200.0
Indian Certification	36.9	25.0	25.0
Training	1,355.0	1,137.5	887.5
Total	3,000.0	2,500.0	2,000.0

Sources: Various budget materials.

states' share of costs is not precisely known. However estimates are available which indicate that for training, States incur about 60% of the costs and EPA 40%, and for certification the ratio is 57% for States and 43% for EPA. Table 9 summarizes the best available estimates for the total costs incurred by both States and EPA for applicator certification and Training in FY 82.

Unit Costs

Within the broad options of either charging (I) participants in certification and training programs or (II) registrants of pesticide products, there are several suboptions. This analysis shall consider the major variations on the basic option as follows:

Suboptions on Option I (charging participants) include:

Ia. Charge fees only to participants in States with Federal certification and training programs to recover costs incurred in those States.

Ib. Authorize states to collect fees to recover both the Federal and State share of expenses incurred.

Ic. Charge fees to participants in all States to recover Federal share of costs.

Suboptions on Option II (charging registrants) include:

IIa. Charge only registrants with restricted use product registrations.

IIb. Charge all registrants regardless of type (restricted or general use) registrations held.

IIc. Include enforcement budget as an overhead item in constructing fee schedule for registration action (This option is a variation of IIb).

Table 10 summarizes these suboptions in terms of groups impacted, approximate fees or costs involved, and total annual revenue possible. Charges to participants would only be \$4 to \$5 while administrative costs to collect these fees would be significantly higher relative to the fees intended for collection.

Table 9. Estimated Total Costs of Certification and Training Programs, FY82

	EPA	States <u>1/</u>	Total
	-----\$ in thousands-----		
Certification	1,162.5	1,541.00	2,703.5
Training	1,137.5	1,706.3	2,843.8
Federal Certification <u>2/</u>	200.0	-	200.0
Total	2,500.0	3,247.3	5,747.3

1/ All States, Territories, and District of Columbia except Colorado and Nebraska.

2/ Federal programs in Colorado and Nebraska

Table 10. Description of Suboptions by Groups Affected and Fees or Costs Recoverable

Option	Person or groups affected	Approximate fee or cost recoverable <u>1/</u>	Annual Revenues generated <u>2/</u>
Ia. Charge participants in federal programs only	47,000 applicators in Colorado and Nebraska	\$4-5 per participant	\$200,000
Ib. Charge all participants to cover state and federal costs	1.2 million private and commercial applicators	\$4-5 per participant	\$5,700,000
Ic. Charge all participants to cover all federal costs	1.2 million private and commercial applicators	\$2-3 per participant	\$2,500,000
IIa. Charge registrants with restricted use products	100-200 registrants	\$12,500-\$25,000 per registrant	\$2,500,000
IIb. Charge all registrants	3,500 registrants	\$700 per registrant	\$2,500,000
IIc. Recover costs as overhead included in registration fee	3,500 registrants	Add 47% to abatement and control costs for OPP (see Table 3)	\$15,000,000 for all enforcement activity including certification and training

1/ Calculated by dividing estimated annual cost by number of entities affected by option.

2/ The potential revenues generated annually would depend on the scope of the fee program and on the decisions as to what costs are appropriately recoverable. A limited fee program applied to the federal programs in Colorado and Nebraska would generate relatively limited revenues as compared to charging fees in all states or recovering all costs of enforcement activity.

IV. FEE SCHEDULE CONSTRUCTION OPTIONS

Optional Approaches

A fee system can be based on typical average costs or an actual cost of resources used to process applications. A combination approach might also be used by establishing a fixed fee based on average costs for administrative processing and a variable charge covering the average cost of scientific review.

Fixed-Fee Schedules

A fee schedule based on the fixed fee approach can be derived from the unit cost estimates contained in program budget documentation. The assumption is made that a fee schedule should generate revenues sufficient to cover the costs incurred. The fee schedule needs to reflect the full resource costs of both lead and support offices, as well as indirect costs associated with the operation of the pesticide registration activity.

Resources-Expended Schedule

The approach used in establishing a fee system based on the resources expended to process and review applications would be to maintain a log with each application. This log or set of process tickets would be attached to the application package and, as each stage of processing or review was completed, the time expended at that stage would be recorded. (In actuality, several processing steps or data reviews may occur simultaneously, necessitating the maintenance of duplicate logs or the collection of process tickets from several sources.) After completion of the processing, the hours expended would be totaled and the applicant would be charged for the hours expended at an appropriate charge per hour.

The key factor needed in a resource-charge fee system is the appropriate hourly rate. The simplest method is to convert the personnel resources available into hours and divide those hours into the total costs to get the hourly charge. The approach used in setting an hourly rate makes use of a few simplifying assumptions. First, all hours expended have the same value. Second, funds used for contracts in support of registration can be proportionately divided among the several registration actions for which fees might be established. Third, the cost of performing miscellaneous activities, such as record keeping, for which fees are not feasible, can be proportioned across those activities for which fees might be established. Fourth, resource hours available but not specifically applied to the registration actions identified here can also be proportioned across these actions.

Fixed-Fee Plus Variable Charge

There can be wide variations in the resources expended in processing and reviewing applications, even of the same type. The major source of variation occurs in the amount of scientific review of data needed, if any. Therefore, one approach, which strikes a balance

between complexity and fairness, would be to have a fixed-fee to cover the administrative costs of registration and a variable charge for scientific review, where needed.

Preferred Option

For ease of administration, user charges typically follow the fixed-fee schedule approach. This approach may lead to some inequities since the processing of individual applications can be expected to require varying levels of resources. However, the potential for inequities can be greatly reduced by judiciously subdividing fee schedules into subgroups of types of applications likely to have similar levels of resources needed to process them. The remaining variation in costs of processing applications of the same type within a fixed-fee schedule should not be significant given the value of obtaining the desired registration. Also, fees could be realigned on an annual basis to keep pace with the actual average costs being incurred to process applications in the program.

V. PROGRAM IMPACTS

Fee Collection Administration

The establishment of a fee schedule implies that an administrative mechanism would have to be in place in order to collect and record the submission of the proposed fees. The fee collection and record keeping activities are in themselves resource consuming. The complexity of the fee administrative procedures likely to evolve is dependent upon the characteristics of the fee schedule itself: fixed-fee, a charge for resources used, and a combination of fixed-fee plus a variable charge.

Fixed-Fee Approach

A fixed fee assigned to the various registration actions would likely require the simplest administration procedures. Applicants would be required to submit payment as outlined in a fee schedule with application for registration.

The administrative processing of fees collected would require additional personnel. Hand processing steps are estimated to require about 30 minutes per application. It is assumed that the receipt of a certified check in payment of the fee would require a visual review of the check for accuracy and completeness, and recording of the receipt of the check. Registrants would also be sent acknowledgment of receipt of the application and check. The number of actions processed on an annual basis equal 8,000. At 30 minutes per action, the additional processing associated with collecting fees using a fixed-fee approach would equal to 4,000 personnel resource hours. The additional resources needed are equivalent to about 2 additional personnel or about \$80,000/year in direct labor costs. These additional costs would be added to the recoverable costs developed in Table 3 giving a total recoverable cost range of \$9.8 to \$17.8 millions. Should fees be charged on the 15,000 supplemental registrations received annually then the equivalent of an additional 3-4 personnel would be required to process the receipt of those fees.

Resources-Expended Approach

A fee schedule based on charging for resources actually expended requires the maintenance of a detailed log containing a record of time spent in processing and reviewing the application and accompanying data. The simplest approach under this system would be to attach a log sheet to the submission on which each person handling the package would record the time spent by that person in processing or otherwise reviewing the application.

After processing is completed, i.e., approval or denial of the application is decided, the resource time is totaled and the applicant would be billed on that basis.

If 8,000 applications require two additional hours to process, then an additional 16,000 person-hours or about 8 person-years of resources would need to be added. Additionally, a billing and receiving capability would be needed. As in the fixed-fee approach it

is assumed that two personnel would be needed to handle these tasks. Thus the administrative cost of a resources-expended system would be about 5 times the cost for a fixed-fee system or the equivalent of about \$400,000/year in additional direct labor cost. The total recoverable costs would be based on Table 3 would be in the range \$10.2-18.1 million.

Fixed-Fee Plus Variable Charge

Administration of a flat-fee plus variable charge approach would be only slightly more costly than the straight fixed-fee system. About 470 actions in FY 79 would require scientific review and hence would be subject to a variable charge. As assumed under the resources-expended approach, if two additional person-hours were needed to process the variable charges, then an additional 940 person-hours of resources would be needed in addition to the cost of administering the fixed-fee approach. Thus about one-half of a person-year of resources would need to be added to the 2 person-years using the fixed-fee approach.

Program Efficiency

One desired outcome from charging fees to applicants for registration actions is to improve the efficiency of interaction between the Agency and applicants. Of particular interest is the encouragement for applicants to submit complete information in an structure is to establish additional fees for resubmissions required resulting from incomplete or otherwise inadequate submissions from applicants. The level of fees to cover the extra resources needed to process incomplete applications would generally be linked to the fee charged to process a complete application, for example, the fee for a resubmission of a new chemical application would be significantly higher than the fee for resubmission of an amended registration review. Another result of charging fees for resubmission is that the fees charged for complete and correctly submitted applications could be reduced in line with the average cost of resources needed to process complete applications. Submitters of complete applications would thus not be subsidizing submitters of incomplete applications.

The general groundrules for establishing fees for resubmissions are that applicants would be charged when submissions were necessitated by errors on the part of applicants. Additional fees above the base charge for an application would probably not be appropriate when, for example, an additional study was found to be needed upon review of a properly conducted and reported study that was part of a tiered approach to evaluating the potential hazards of products. Similarly a properly conducted and updated study in an application may upon review lead to inconclusive outcomes. Additional studies might be required and submitted without involving additional fees.

Table 11 depicts three situations where fees for resubmissions would be appropriate. The incremental fees are intended to be illustrative only. As with other costs/fees in this analysis actual fee schedules could require amendments to FIFRA. In that event, current cost estimates would need to be analyzed in detail before establishing

Table 11. Incremental Fee to Accompany Resubmissions Subsequent to Incomplete First Applications

Cause of Resubmission	Increment to Basic Fee Charged <u>1/</u>
Resubmission to include new material previously totally lacking	+ 10%
Resubmission to include new material to replace inadequate prior submission	+ 25%
Resubmission to correct inaccurate material	+ 5%

1/ These percentage add-ons are exemplary only. Actual add-ons would vary depending on the actual fee system proposed should Congress and the Administration approve the passage of enabling legislation.

fee schedules. The differences in the add-ons for the three situations represent the roughly estimated difference in resources needed by EPA to process the resubmissions. A resubmission, including a report on a field or laboratory study to replace an inadequate prior submission, implies that Agency resources were used to process, review and evaluate the inadequate study. Additional resources would also be expended on the replacement study, thus leading to total duplication of review efforts. On the other hand, a resubmission to complete an application with a previously missing study implies that the review resources still need only be expended one time by the Agency. The additional costs are incurred because of the efficiencies in reviewing an incomplete package when the conclusions on any one part may be expected to depend to some degree on the information gained from all parts taken together. Hence, the incremental fee charged for resubmissions would be expected to vary depending on additional effort required within the Agency to reach a registration decision.

Disposition of Receipts

Should Congress and the President agree that pesticide registrants should be charged fees (with appropriate waivers), the revenues collected might be as much as \$18 million per year. The disposition of those potential revenues affects the relative costs and benefits to society from charging fees for registration. Leaving aside the options on a fee system structure and options on fee waivers, there are also optional uses for funds generated by charging fees.

Without instruction from Congress to the contrary, OMB Circular A-25 instructs that monies generated from user charges should go into the general fund of the Treasury as miscellaneous receipts. This option would provide no significant benefit to any group given the relative minor contribution to Treasury receipts. In the unlikely event that personal or corporate tax rates were cut in response to the anticipated revenues from fees for registering pesticides, the per capita reduction (up to \$0.10) would obviously be insignificant. Pesticide registrants would be net losers under this option in comparison to current practice.

A second use of revenues would be to directly fund the costs of registration activity in OPP. The fees charged for reviewing tolerance petitions are presently intended to cover the costs of those activities. This option would coincide with a comparable reduction in appropriations now intended for pesticide registration. This approach has one major disadvantage in that a revolving fund would tend to be underfunded at times when registration activity declines. Registration processing and reviewing capability must be built based on anticipated work loads. Should these work loads be lighter than anticipated, then revenues would fall short of costs. Again pesticide registrants would be net losers as compared to current practice.

One method to reduce disruption in the program from variations in workload would be to rely on contractor and temporary staff personnel. This method would allow some flexibility in establishing in-house

resources requirements to meet the workload over time. Difficulties with this approach center on the need to maintain quality and consistency of a resource base (contractor or temporary personnel) that might have significant turnover.

A more interesting option available to Congress, should a fee system be instituted, would be to authorize use of revenues generated by fees to further the goals of making environmentally more acceptable pesticides available for both major and minor uses. Goals such as encouraging IPM, development of biological controls, and increasing the availability of pesticides for minor uses could be advanced by using revenues generated through fees for registration to support them. The potential for generating benefits in these areas is positive although it is likely that additional monies would be necessary to adequately fund research and innovation in all of the areas mentioned. For example, \$20 million would be slightly less than the average expenditure by the private sector for bringing a new pesticidal chemical to market.

With an even broader focus, funds generated through charging fees for registration could be made available to improve OPP's ability to regulate pesticides beyond registration. Monies could be used to perform detailed use and usage surveys needed to support both benefits and exposure analyses in connection with OPP regulatory activity. OPP currently must rely on limited data in these areas. Site coverage, geographic detail and scope of data generated need to be improved in future surveys. Of special concern is the very limited data available on household and garden usage of pesticides.

VI. ECONOMIC IMPACT ANALYSIS

Direct Impacts

Basic Producer Level

Pesticide product production usually involves manufacturing an active ingredient, normally in its manufacturing-use form, and then preparing formulated products containing the active ingredient. The firms which produce manufacturing-use products (i.e., basic producers of pesticides) are a small number of the firms. The firms which produce manufacturing-use products are generally referred to as basic producers of pesticides. There are about 30 major producers (which are generally part of national or international petroleum or chemical firms) and about 100 smaller producers which vary greatly in size down to very small levels of pesticide production. Basic producers, especially the larger ones, also are generally involved in formulating products. However, for purposes of analysis, the impacts on the firms which produce active ingredients in the form of manufacturing-use products are separated from the impacts on formulators due to lack of data on the degree to which these two functions overlap among companies in the industry.

The basic producers would be affected when applying for new chemical registration, experimental use permits and, in some cases, amendments to registration. The impacts of charging fees for registration vary from chemical to chemical. There are many factors which determine the charges which may be incurred by products containing any particular chemical. In general, the chemicals most affected are new chemicals and recently registered chemicals on which the number of new use sites would likely expand at a rapid rate.

Some comparisons are useful to place the likely impact in perspective. For example, the fee systems proposed are intended to generate a total of up to \$18 million annually from both basic producers and formulators. Based on data from NACA which stated that its members spent \$395 million on research and development for pesticides in 1980, the additional \$18 million paid in fees would add about 5.0% to the expected research and development costs. Although these additional costs would be shared by several firms, some marginal lines of research might be curtailed where the increased costs swing the projected cash flows into an unfavorable balance.

The cost estimated by this study for a review of an application for a new chemical registration would be about \$60,000 - \$110,000 under the fixed fee approach. A fee of this level would add 0.3 to 0.6% to the cost of the initial registration of a new chemical, causing little significant impact on chemicals currently being developed. However, the impact on the development of a smaller, specialty chemical developed by perhaps a small firm would be to discourage such development unless waivers of fees could be obtained.

Formulators

Pesticide formulators comprise the other major component of pesticide products manufacturing. Firms that formulate pesticide products generally purchase the manufacturing-use products (containing a high concentration of active ingredient), and then, by adding a variety of diluents, solvents, surfactants, etc., produce pesticide products ready for sale to final users.

Formulating firms cover a wide range of sizes. One study completed for EPA (U.S. EPA, 1976) estimated that 3,348 firms were formulating pesticides. Of that number, 500 were classified as large, 1,000 as medium-size, and 1,848 as small-size. Not included in this count were basic producers which also formulate pesticides.

A review of 1,343 out of about 35,000 registered formulated pesticide products in 1977 led to a finding that about one-third of all products produced have sales-at-retail level of over \$20,000 per year (U.S. EPA, 1978). The remaining two-thirds of the products have less than \$20,000 in annual retail sales. The significance of this finding is that, for many formulated products, fees incurred in order to expand or otherwise change a registration (i.e., an Amendment, with potential fees ranging from \$500 to \$10,500) could be financially burdensome. For these products, there would be a great incentive to maintain the registrations as status quo and not attempt to add uses or otherwise change the products.

Higher volume formulated products would not be impacted as severely as the low sales volume products. There would still be a tendency to avoid changes in a registration unless the changes have highly favorable prospects for improving the sales and hence the profits of the product.

Companies, on their own, would have even less incentive than currently exists to add the minor use crops to the registrations for their products when faced with fees for old chemical registration costs of about \$1,000 to \$1,700. Minor use problems would become further dependent on government-sponsored research and special consideration during registration from OPP. As has been previously discussed, minor use registrations would be obvious areas where waivers would be considered. In fact the need to apply for a waiver would impose some burden which could be eliminated with a blanket waiver for minor use if workable criteria for qualification could be established.

The impacts on formulators from any fee system could be reduced once generic registration of pesticides becomes a reality. Under generic registration, formulated products will in general no longer be required to undergo a comprehensive data review which in many cases is a repetitious review of data submitted in support of other identical or substantially similar products. Formulators would be able to simply cite the appropriate sections of the registration standard and make an offer to pay fair compensation to the originator(s) of the cited data. This procedure, along with submission of data indicating that the composition of the formulated product falls within the standard will be

sufficient to obtain registration for many site/pest combinations for which pesticides are now registered. These "me-too" registrations would involve lower levels of resources for processing and review, hence could have lower fees assigned to them.

Indirect Impacts

Pesticide Users

Domestic sales of pesticides from both domestic and foreign production were estimated to reach \$5.8 billion in 1980 (U.S. EPA, 1980). Given this level of sales, the \$20 million in revenue potentially generated by a fee system would represent only about 0.3% of the sales at the user level. If part or even all of these costs were passed on to the final users the price change would be very nominal on the average. However, there would probably be effects on the availability of some pesticide products, especially minor use chemicals.

The severity of product availability impacts would be directly related to the market size of the individual pesticides. In general, major sales volume pesticides used on major use sites would not be expected to be adversely impacted by the charging of fees. On the negative side, for many pesticide chemicals and hence many pesticide use sites, the market size would not support the additional expenditures for obtaining or modifying registrations. Especially impacted would be many of the so called "minor use" chemicals or minor use sites. This result would be at variance with the intent of both Congress and EPA to ease the registration for minor use chemicals.

Consumer Prices

Consumer prices of goods and services in the U.S. economy would not be perceptibly affected. An impact of \$20 million is not significant to U.S. consumers and would not add measurably to inflation.

REFERENCES

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