RED-76-100
5-3-76

REPORT TO THE CONGRESS

093749

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

Need For Better Management And Control Over Scientific Equipment

Environmental Protection Agency

The Environmental Protection Agency does not insure the most effective management and use of its scientific equipment. A large amount--$7.2 million--was infrequently or never used and unnecessary equipment purchases were being made.

GAO recommends reemphasizing the need to comply with Federal Property Management Regulations thereby maximizing scientific equipment use and preventing unnecessary equipment purchases.

The Environmental Protection Agency concurred with GAO's findings and initiated major corrective actions which when completed will fully implement GAO's recommendations.

RED-76-100 ~~707348~~ 093749 MAY 3, 1976

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-166506

To the President of the Senate and the
Speaker of the House of Representatives

This report summarizes the need for the Environmental Protection Agency to improve its management of scientific laboratory equipment.

The review was made because in earlier review work at Environmental Protection Agency laboratories we found inaccurate and incomplete property records and noted that only limited coordination was occurring between laboratories before new equipment was purchased.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

Copies of this report are being sent to the Director, Office of Management and Budget; the Administrator of General Services; and the Administrator, Environmental Protection Agency.

Comptroller General
of the United States

Contents

ABBREVIATIONS

EPA	Environmental Protection Agency
FPMR	Federal Property Management Regulations

COMPTROLLER GENERAL'S REPORT
TO THE CONGRESS

NEED FOR BETTER MANAGEMENT AND CONTROL OVER SCIENTIFIC EQUIPMENT
Environmental Protection Agency

D I G E S T

The Environmental Protection Agency has not complied with Federal Property Management Regulations with respect to the management of scientific equipment in that

--property records were not complete,

--new equipment was being purchased without adequate screening against existing equipment, and

--little used or unneeded equipment was not being reported.

As a result, large amounts of infrequently or never used scientific equipment remained in inventory. (See pp. 3 to 8.)

While $7.2 million of scientific equipment was used infrequently, or in some cases never used or used only once, pooling and sharing to maximize equipment use were not initiated. In addition, unnecessary scientific equipment purchases were being made. (See pp. 3 and 8 to 10.)

Property custodians at four major laboratory locations visited by GAO identified equipment with an acquisition cost of $1.3 million which had never been used, used only one time, or was in storage. (See p. 7.)

An additional $484,966 in equipment could not be located by Agency property custodians. (See p. 8.)

In a 1972 report to the Congress, GAO reported on the need for more efficient management and use of Agency laboratory equipment. At that time, GAO recommended

that a study be made at Agency laboratories not included in GAO's review to identify underused or excess equipment and that procedures be established for more pooling and sharing of equipment. To date no specific study has been made and similar conditions still exist. (See p. 3.)

GAO is recommending that the Administrator, Environmental Protection Agency, reemphasize to Agency property management personnel the need to comply with the requirements of the Federal Property Management Regulations with respect to:

--Establishing and maintaining complete and uniform descriptive property records.

--Making annual walk-through inspections to identify idle and unneeded equipment.

--Establishing equipment pools and promoting sharing of equipment.

In addition, GAO is recommending that the Administrator establish uniform procedures and identify specific responsibilities for insuring the use of idle, unneeded, or excess equipment before buying new equipment. (See p. 13.)

The Agency concurred with GAO's conclusions and recommendations and initiated major corrective action. Laboratory officials were directed to make walk throughs of their facilities and identify excess equipment. As a result, through early March 1976, 990 scientific equipment items valued at $1.6 million were identified as excess.

The Agency said it was reviewing the property management regulations from an equipment management and procurement standpoint. The property accounting system was being revised to provide information for possible equipment pooling arrangements, and all scientific

equipment was being identified in accordance with the Federal cataloging system. The Office of Audit was directed to make progress audits of the actions outlined to improve equipment management. (See pp. 15 to 16.)

The actions initiated by the Agency, when completed, will fully implement GAO's recommendations.

CHAPTER 1

INTRODUCTION

The Environmental Protection Agency (EPA) has over 60 laboratories, including four major laboratory locations at Cincinnati, Ohio; Corvallis, Oregon; Research Triangle Park, North Carolina; and Las Vegas, Nevada. As of June 30, 1975, EPA had an equipment inventory of over 49,000 items with an acquisition cost of about $74 million of which about $41 million was scientific laboratory equipment. EPA equipment acquisitions from July 1, 1972, through April 30, 1975, totaled about $19 million.

FEDERAL PROPERTY MANAGEMENT REGULATIONS

Federal Property Management Regulations (FPMR) issued by the General Services Administration apply to equipment management in all Federal agencies. Each agency's regulations are written to implement and supplement the Federal regulations.

Under FPMR, each agency is required to uniformly identify, classify, name, and number property and equipment used by the Federal Government. By using uniform and accurate identification, such as national stock numbers in a national supply system concept, Government property can be used economically and effectively. The benefits to be derived include standardization, disclosure of interchangeability and substitutability of property items, and better agency use of its equipment.

Under FPMR, each agency is also to continuously survey equipment under its control to insure maximum use. Unneeded or idle property and equipment should be reassigned within the agency when feasible. Purchases should not be made when existing property can be substituted or adapted.

In addition, FPMR requires identifying idle equipment and establishing equipment pools to achieve maximum use. Both management and senior scientific personnel should periodically tour laboratory facilities to identify idle and unneeded equipment. Where feasible, equipment pools and sharing arrangements should be established to increase average use thereby improving economy of operation.

EPA PROPERTY MANAGEMENT RESPONSIBILITIES

EPA headquarters has responsibility for establishing policies and procedures for managing EPA equipment. EPA has issued property management regulations to implement and

supplement the FPMR. A computerized property accounting system is operated on a centralized basis for managing all EPA personal property items valued in excess of $200. The system has not been approved by the Comptroller General. However, EPA intends to include the system as part of its general accounting system design currently being documented for submission to the Comptroller General.

Accountability for EPA property is divided into 17 separate organizational and geographic accountable areas. Within these areas, 437 individual property custodians have been designated as responsible for the proper use, maintenance, care and protection of specific property items. Accountability for individual items of property varies among the various property custodians from less than 20 items to over 900 items.

SCOPE OF REVIEW

We reviewed EPA management of scientific laboratory equipment with an acquisition cost of about $41 million. Our review work was directed toward evaluating EPA's application of FPMR requirements. Our work was done primarily at EPA headquarters and at Research Triangle Park, North Carolina, but we did visit four of EPA's major laboratory locations at Cincinnati, Corvallis, Research Triangle Park, and Las Vegas where most of EPA's scientific equipment is located.

We obtained and analyzed equipment use and location data; reviewed agency property, procurement, and disposal records; reviewed regulations; verified selected equipment management procedures; and interviewed various EPA officials responsible for equipment management. We obtained equipment use data from EPA's property custodians nationwide through the use of a comprehensive questionnaire which we mailed to 437 EPA property custodians. The custodians were asked to categorize how often each scientific equipment item in EPA's February 1975 equipment inventory was used and its location. Responses were received from 404 property custodians. Computer techniques were used to summarize the information obtained.

CHAPTER 2

INADEQUATE SCIENTIFIC EQUIPMENT MANAGEMENT PRACTICES

The Environmental Protection Agency generally has not complied with the equipment management practices specified in the Federal Property Management Regulations and EPA property management regulations. EPA's management of scientific equipment located at its many laboratories throughout the country was not adequate in that (1) property records were not complete enough to enable the ready identification of the various equipment items held in inventory, (2) equipment needs were not screened against unused equipment on hand before new equipment was purchased, (3) annual laboratory walk throughs were not properly used as a means of identifying idle, unneeded, or excess equipment, and (4) equipment pools and sharing procedures were not established to make maximum use of equipment. Also, EPA's internal audit staff had not made any reviews relating specifically to scientific equipment management because of work in higher priority areas, such as the $18 billion municipal waste water treatment construction grant program authorized under the Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1251).

In a November 21, 1972, report to the Congress entitled, "Need to Improve Administration of the Water Pollution Research, Development, and Demonstration Program" (B-166506), we reported on the need for more efficient management and use of EPA laboratory equipment. We recommended that a study be made at the EPA laboratories not included in our review to identify underused or excess equipment and that procedures be established for more pooling and sharing of equipment. To date no specific study has been made and similar conditions still exist.

INCOMPLETE PROPERTY RECORDS

Incomplete property records have contributed towards or caused unnecessary equipment purchases. We compared 328 new purchases for July 1, 1974, through March 31, 1975, to existing unused or little used equipment and found 19 instances of unnecessary purchases. For example:

--At one laboratory location, we noted that two hydrocarbon analyzers were purchased in January and February 1975 at a total cost of $4,420, yet the same location owned, at the time of purchase, six identical units which were being used less than once every 6 months.

--At another laboratory location, two constant temperature baths were purchased at a combined cost of $992. At the time of acquisition, the laboratory location owned two identical baths, one being used only once a month and the other less than once a month.

--The same location in September 1974 purchased a water jacket incubator for $1,428 when three identical items were owned and used less than once a month.

EPA laboratory personnel agreed that the existing items of equipment could have been shared with another user, thereby making the additional purchases unnecessary. Equipment property records were not adequate, however, to provide for this type of management screening before the new equipment was purchased.

Frequently general, yet identical, nomenclatures were used to identify a variety of types and kinds of items, such as pumps, balances, scales and microscopes, even though many of these items differed significantly in their capacities and functions. We examined the property records for 3,533 items and found that 2,250 items, or 64 percent, were not identified with specific descriptions including manufacturers names or model numbers.

Nondescriptive nomenclatures were commonly found as the only description in the property records. For example, EPA property records for 38 items listed "pump" as the only description. These 38 items cost between $80 to $5,550. Overall we found about 800 items in the property records with assorted and varying descriptions of pump.

Laboratory property officials said that property records do not contain complete descriptive information because many of these records were incomplete when they were turned over to EPA from various governmental agencies when EPA was organized in 1970. They said about $54 million of property was obtained in this manner. In 1973 property officials from four of the major laboratory locations met to discuss (1) problems relating to the lack of stock numbers and adequate descriptions and manufacturer model information in the property records and (2) ways to make the property records more complete.

On the basis of the 1973 meeting, as a first priority property officials were to identify each item in the property records with standard nonmenclature, manufacturer, and model and serial number. In October 1974, as directed by FPMR, national stock numbers were to be added to the

property records.

To determine the completeness of information currently being entered in the scientific equipment property records at the four major laboratory locations, we examined the property records for 509 items acquired by EPA during the first 9 months of fiscal year 1975. We found that, of the 509 items, 410 had been recorded without complete national stock numbers and that 181 items were entered in the records without sufficient manufacturer information.

Laboratory location	Total items recorded	Items without adequate manufacturer model information	Items without national stock numbers
Cincinnati	139	29	137
Corvallis	74	3	21
Research Triangle Park	239	142	230
Las Vegas	57	7	22
Total	509	181	410

We discussed with headquarters officials the reasons the property records were not being properly maintained. They stated that generally the information being provided on the purchase requisitions, purchase orders, and invoices was not sufficiently complete to permit the property records to be better maintained. For example, some equipment purchases are made using manufacturer catalog numbers rather than complete item descriptions. Headquarters officials acknowledged that, if the purchase documents were properly prepared, sufficient descriptive data would be available to correctly maintain the property records.

INADEQUATE REQUISITION SCREENING PROCEDURES

From July 1, 1972, through April 30, 1975, EPA spent about $19 million for new scientific equipment without adequately considering equipment on hand as an alternative to purchasing new equipment.

Laboratory officials said that requisitions for laboratory equipment are to be initiated by the individual laboratory researcher. The requisitions are then to be processed through the applicable supervisor to the labo-

ratory director who, based on his technical knowledge of the need for the equipment, either approves or disapproves the purchase request. Once the requisition is approved, a property management officer should review the request for availability of the equipment from excess equipment listings or equipment on hand before forwarding the requisition to the procurement group for acquisition. We found that most such reviews were done from memory with limited use of excess equipment listings or property records.

FPMR requires that each agency insure that property on hand is being used before purchasing new equipment. EPA's property management instructions did not establish uniform procedures and specific responsibilities for screening purchases. As a result, varying procedures were in effect at the four major laboratory locations we visited. For example, at two laboratory locations, the requisitions were approved by laboratory officials but were not screened by either laboratory or property management officials against even their own on-hand equipment.

At another laboratory location, only requisitions for items with an acquisition cost of over $2,500 were screened by property management personnel against equipment available at the location. At this laboratory location, only 10 percent of the items in the equipment inventory had unit acquisition costs of $2,500 or more and thus were subject to equipment screening procedures.

At the fourth laboratory location, all equipment requisitions were subject to review by a committee consisting of laboratory and property management branch representatives. Although an official said that some requisitions had been withdrawn because sharing arrangements had been made at the location, we found no evidence of such sharing arrangements and the minutes of the committee meetings did not show that any requisitions had been disapproved because equipment on hand could fill the need or be jointly shared.

We held discussions with six laboratory directors at one of the laboratory locations on the availability of EPA funds for new equipment. All agreed that equipment funds were always adequate and that no requisitions for new equipment were denied during fiscal year 1975. Five of the six directors could not recall disapproving a request for new equipment.

NEED TO IDENTIFY IDLE, UNNEEDED, AND EXCESS EQUIPMENT

The four laboratory locations were not effectively complying with the provisions of EPA property management regulations which require that annual laboratory walk throughs be used as a means of identifying idle, unneeded, and excess equipment.

The walk throughs consist of observing equipment where it is physically located and interviewing employees to determine the extent of use and whether it is needed. It is most successful when done by top management and senior scientific personnel operating as a team.

During 1975 two of the four laboratory locations, including one that controls nearly one-third of the agency's $74 million equipment inventory, did not make the required walk throughs. The remaining two laboratory locations made walk throughs but did not identify more than a few items of idle and unneeded equipment. At one laboratory location the walk through was made by lower echelon personnel.

The following shows the quantity and cost of items identified by our questionnaire as infrequently used at the four laboratory locations.

Laboratory location	Walk through in FY 1975	Equipment not used		Equipment used one time only		Equipment in storage awaiting further use (note a)	
		Quantity	Acquisition cost	Quantity	Acquisition cost	Quantity	Acquisition cost
Cincinnati	yes	77	$137,997	95	$166,693	5	$ 87,535
Corvallis	no	66	177,188	51	73,295	145	113,652
Research Triangle Park	no	105	185,425	55	92,319	193	255,454
Las Vegas	yes	9	5,338	3	1,463	-	(b)
Total		257	$505,948	204	$333,770	343	$456,641

[a]Includes equipment purchased for assigned programs not yet started.

[b]None.

Overall the property custodians at the various laboratory locations in responding to our questionnaire identified about $2.3 million of equipment that had not been used, had been in storage awaiting further use, or had been used only one time. (See app. II.) The property custodians, overall, could not locate $484,966 in additional equipment that was recorded in the property records.

In our previous report, on the basis of walk throughs that we made with EPA teams of top management and senior scientific personnel, equipment costing about $106,800, or about 6 percent of the laboratory equipment inspected, was identified as excess to user needs. We recommended that a study be made at EPA laboratories not included in our review to identify equipment that may be underused or excess to the laboratories' needs. No specific study was made or effective corrective actions taken and as evidenced above similar conditions still exist.

NEED FOR BETTER EQUIPMENT USE THROUGH POOLING AND SHARING

EPA has not taken steps towards maximizing the use of its scientific equipment. We obtained from EPA property custodians by questionnaire usage information on 22,075 items totaling $40.9 million. Although our analysis of this usage information showed that $7.2 million of equipment was used infrequently, equipment pools and formal sharing procedures had not been established except for a small number of radiation monitoring items at one laboratory location.

Our review of scientific equipment located at four of EPA's major laboratory locations which managed about 76 percent ($31 million) of EPA scientific equipment showed that

- --257 items of scientific equipment held in inventory with an acquisition cost of $505,948 had never been used,
- --204 items held in inventory with an acquisition cost of $333,770 had been used only one time,
- --343 items with an acquisition cost of $456,641 were being held in storage awaiting further use, and
- --1,787 items with an acquisition cost of $2,681,914 had been used less than once in a 6-month period.

Many of these items, including those that had never been used, had been in EPA equipment inventories for as long as 3 years.

FPMR and EPA property management regulations require that equipment pools and sharing arrangements be established so that equipment with low usage can be more efficiently managed and used. The agency can thereby limit the purchase of needed quantities of specific equipment items resulting in more economical operations.

Other Federal laboratories operating equipment pools have reported procurement economies resulting from pooling and also have pointed to a number of other important advantages including the following:

1. Because filling requests for additional equipment can frequently require a substantial period of time, requests for additional equipment often could be filled more rapidly by borrowing from the pool.

2. The selection of the most suitable piece of equipment for experiments can be enhanced through using pool equipment on a trial basis. Otherwise, equipment may be purchased without sufficient assurance that it will fill the need most effectively.

3. Pool equipment can be loaned for equipment needing repairs so that research programs can continue with a minimum of delay.

4. Better controls reduce equipment losses.

EPA property custodians in responding to our questionnaire were asked to obtain information on equipment use and location from the actual users and managers of the equipment items. The property custodians responded as follows:

Equipment status and use	Items		Acquisition cost	
Never been used	373		$776,772	
One time only	299		638,385	
Less than once every 6 months	2,422		3,456,075	
Less than once a month but at least once every 6 months	1,719		2,346,968	
		4,813		$7,218,200
Once every month or more	14,740		29,334,842	
Excessed items awaiting disposal	210		384,215	
Items declared surplus	539		951,697	
On loan to another EPA custodian	1		2,100	
On loan to a grantee or other Federal agency	768		1,720,273	
In storage awaiting further use	558		853,157	
		16,816		33,246,284
Items could not be located		446		484,966
Total		22,075		$40,949,450

Complete details on the response to our questionnaires by accountable areas are shown in app. II.

As shown above, 4,813 items of equipment with an acquisition cost of about $7.2 million had either never been used, had been used only one time, or had been used less than once a month.

Equipment pools, as stated in FPMR, are especially successful where average usage does not warrant the assignment of such equipment on a permanent basis and it is accessible to other users. The four laboratory locations are responsible for about 75 percent (16,494, of 22,075 items) of the equipment items discussed above. At these four locations, 4,438 items (with a cost of about $6.6 million) were used once a month or less, including 461 items of equipment with an acquisition cost of $839,718 which had never been used or had been used only one time. This equipment, generally located in centralized facilities, lends itself to pooling and sharing.

At the different locations various quantities of little used items were on hand. For example, one location had 72 platinum crucible evaporation dishes with an acquisition cost of over $21,000, yet each item had a usage of less than once every 6 months. This same location had other duplicate items, such as analyzers and recorders, with infrequent usage. At the other three laboratory locations, duplicate items, such as amplifiers, colorimeters, and recorders, were also noted with low usage. The following are examples of items identified by the property custodians with usage levels that indicated they could be pooled or shared.

Laboratory location	Equipment item	Quantity on hand	Total cost
Research Triangle Park	Analyzer, O_3	16	$68,752
	Analyzer, SO_2	13	81,860
	Crucible, platinum	72	21,456
	Recorder, strip chart	4	9,648
Cincinnati	Amplifier, tachometer	7	5,075
	Crucible, platinum	10	2,369
	Flourometer	3	5,398
Corvallis	Recorder, magnetic	6	14,850
	Recorder	10	7,275
	System, data logging	8	49,640
Las Vegas	Colorimeter	4	2,232
Total			$268,555

Laboratory property officials at the four locations were aware of FPMR and EPA property management regulations and most recognized the benefits associated with equipment pooling. We found, however, that the limited sharing arrangements that existed were the results of informal agreements between individual researchers and that no special instructions or directives requiring pooling and sharing had been issued. The reasons provided for not establishing equipment pools included the reluctance of researchers to share equipment, the lack of personnel to operate such pools, and the problems associated with the movement of sensitive and bulky equipment.

Our previous report identified equipment which cost about $105,000, or about 12 percent of the equipment inspected at two locations, as underused, yet no formal policy or procedures for pooling or sharing had been established. We recommended establishing formal procedures requiring more pooling or sharing of equipment. As shown above, equipment pools or sharing procedures still have not been established except for a small number of radiation monitoring items at one laboratory location.

CONCLUSIONS

In our earlier report to the Congress, we reported on the need for more efficient management and use of EPA laboratory equipment. EPA however, as evidenced by this report, still has not effectively managed its scientific equipment inventory. The failure to comply with the requirements of

FPMR and EPA equipment management instructions has resulted in (1) property records that are not complete, (2) equipment needs not being screened, (3) a lack of adequate walk-through inspections to identify idle or unneeded equipment, and (4) a need for establishing equipment pools. As a result, EPA has numerous items of scientific equipment in its inventory that have not been used or have been used infrequently.

Although FPMR and EPA property management regulations state that idle, unneeded, and/or excess equipment should be the first source of supply in filling needs for equipment, EPA instructions do not contain uniform procedures or identify specific responsibilities for screening purchase requisitions against lists of such equipment before the requisition is approved.

RECOMMENDATIONS

We recommend that the Administrator, EPA, reemphasize to EPA property management personnel the need to comply with the requirements of FPMR and EPA property management regulations with respect to

- --establishing and maintaining scientific equipment property records containing complete and uniform descriptive information including, where appropriate, national stock numbers;

- --annual walk-through inspections by top echelon administrative and research officials for the purpose of identifying idle and unneeded scientific equipment; and

- --establishing scientific equipment pools, particularly at the major laboratory locations, for items with infrequent or low usage and promoting equipment sharing where equipment does not lend itself to pooling.

To maximize scientific equipment use, we also recommend that the Administrator revise the EPA property management regulations to establish uniform procedures and identify specific responsibility for screening purchase requisitions against lists of idle, unneeded, and/or excess equipment before the requisition is approved.

We further recommend that the Administrator require EPA's Office of Audit, in future review work at the laboratories, to make progress audits of the actions taken by

EPA property management personnel to implement the above recommendations.

AGENCY COMMENTS AND OUR EVALUATION

In commenting on our report (see app. I), EPA stated that it concurred strongly with our conclusions and recommendations. On the basis of the report findings, EPA established a moratorium throughout the agency on scientific equipment purchases. During February and early March 1976, laboratory officials made walk throughs of their facilities to identify excess equipment. As a result of this effort, through early March 1976, 990 items of scientific equipment valued at $1.6 million were identified as excess.

EPA said that its personal property accounting system was being revised to include equipment usage data in determining the feasibility of equipment-pooling arrangements. A concerted effort to identify scientific equipment in accordance with the Federal cataloging system was also under way. In addition, EPA's property management regulations were being reviewed to insure that there was a clear understanding concerning property responsibilities and standard procedures for equipment procurement and laboratory walk throughs. In future review work at EPA laboratories, EPA's Office of Audit was directed to make progress audits of the actions being taken to improve equipment management.

We believe that the actions initiated by EPA, when completed, will fully implement our recommendations.

APPENDIX I

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 12 1976

OFFICE OF
PLANNING AND MANAGEMENT

Mr. Henry Eschwege
Director, Resources and Economic
Development Division
U. S. General Accounting Office
Washington, DC 20548

Dear Mr. Eschwege:

We have received GAO's proposed report entitled "Need for Improving Scientific Equipment Management," and concur strongly in its conclusions and recommendations. On the basis of the report findings, I immediately established a moratorium throughout the Agency in the purchase of scientific equipment. During late February and early March, laboratory officials conducted walk-throughs of their facilities to identify excess equipment and to start updating the usage data recorded during your audit. Through this effort, we have identified as excess 1,212 property items valued at $1,761,718; of these, 990 items valued at $1,617,743 are scientific.

The EPA Personal Property Accounting System is being revised to include usage data. We intend to use this information to determine the feasibility of pooling equipment, where possible, and to increase efficiency and economy in laboratory management.

In addition, our administrative and scientific personnel have begun a concerted effort to completely identify our scientific equipment in accordance with the Federal Cataloging System. We anticipate that this effort will be completed by June 30, 1976.

Our Property Management Regulations are being reviewed to ensure that there is a clear understanding concerning property responsibilities and standard procedures in equipment procurement and laboratory walk-throughs.

I have also directed EPA's Office of Audit, in future review work at the Agency's laboratories, to conduct progress audits of actions taken to improve equipment management.

These actions have been taken to fully implement your recommendations and we appreciate your bringing them to our attention.

I feel that this report has been of great and immediate value in identifying a critical area needing our attention. Your "knowledgeable outsider's" view has highlighted management problems that were not apparent to us in the press of day-to-day operations. We thank you for your efforts and for the opportunity to review the draft report prior to its submission to Congress.

Sincerely yours,

Alvin L. Alm
Assistant Administrator
for Planning and Management

APPENDIX II

SUMMARY OF SCIENTIFIC EQUIPMENT USAGE DATA

OBTAINED FROM EPA'S PROPERTY CUSTODIANS (note a)

Accountable area	At least once a week	Less than once a week but at least once a month	Less than once a month but at least once every 6 months	Less than once every 6 months	One time only	Never been used
EPA headquarters	180 $ 393,026	18 $ 14,824	9 $ 12,934	24 $ 9,788	- $ -	- $ -
Motor Vehicle Emissions Test Ann Artor Michigan	414 $ 1,573,020	51 $ 369,433	44 $ 120,936	42 $ 145,252	15 $213,739	12 $110,194
Laboratory Location Cincinnati, Ohio	2,298 $ 4,757,390	783 $ 898,079	275 $ 533,094	242 $ 445,331	95 $166,693	77 $137,997
Laboratory Location Research Triangle Park, North Carolina	3,534 $ 8,303,265	1,314 $2,210,670	698 $ 958,195	881 $1,365,387	55 $ 92,319	105 $185,425
Laboratory Location Corvallis, Oregon	2,300 $ 4,276,449	482 $ 681,788	323 $ 414,934	639 $ 806,824	51 $ 73,295	66 $177,188
National Field Investigations Center	247 $ 584,521	117 $ 127,700	25 $ 15,491	1 $ 327	1 $ 237	1 $ 240
Laboratory Location Las Vegas, Nevada	318 $ 972,180	51 $ 95,206	37 $ 28,759	25 $ 64,372	3 $ 1,463	9 $ 5,338
Region I Boston	108 $ 203,364	58 $ 68,400	25 $ 17,357	12 $ 7,596	14 $ 12,212	9 $ 3,660
Region II New York	67 $ 124,416	31 $ 17,745	4 $ 2,193	6 $ 4,655	- $ -	- $ -
Region III Philadelphia	397 $ 666,647	73 $ 80,556	32 $ 34,102	72 $ 71,464	11 $ 3,364	20 $ 67,684
Region IV Atlanta	495 $ 1,021,164	260 $ 292,377	96 $ 106,184	57 $ 68,863	- $ -	1 $ 680
Region V Chicago	99 $ 69,710	138 $ 122,057	15 $ 6,867	154 $ 172,918	45 $ 50,110	4 $ 3,048
Region VI Dallas	147 $ 313,817	21 $ 22,749	10 $ 10,320	38 $ 27,032	- $ -	1 $ 488
Region VII Kansas City	238 $ 377,636	87 $ 57,350	37 $ 21,131	10 $ 5,335	- $ -	9 $ 18,582
Region VIII Denver	124 $ 201,196	3 $ 904	1 $ 909	151 $ 214,171	- $ -	14 $ 37,992
Region IX San Francisco	18 $ 37,254	4 $ 1,193	1 $ 136	7 $ 3,361	- $ -	- $ -
Region X Seattle	134 $ 265,108	131 $ 133,648	87 $ 63,426	61 $ 43,399	9 $ 24,953	45 $ 28,256
Total items	11,118	3,622	1,719	2,422	299	373
Total cost	$24,140,169	$5,194,679	$2,346,968	$3,456,075	$638,385	$776,772

a/First figure in set is number of items; second figure is acquisition cost.

b/Items which were declared surplus during the period we were obtaining usage data.

c/Includes nine items acquired at $14,633 which were returned with a usage code of "unkown."

APPENDIX II

In storage awaiting further use	Excessed items awaiting disposal	On loan to another EPA custodian	On loan to a grantee, contractor or other Federal agency	Items could not be located	Items declared surplus (note b)	Accountable area totals
-	-	-	-	-	-	231
$ -	$ -	$ -	$ -	$ -	$ -	$ 430,572
82	-	-	42	2	1	705
$248,234	$ -	$ -	$ 91,731	$ 2,375	$ 6,389	$ 2,881,303
5	94	-	7	24	79	3,979
$ 87,535	$156,275	$ -	$ 28,226	$ 27,554	$204,510	$ 7,442,684
193	114	1	389	204	237	7,725
$225,454	$226,970	$2,100	$1,078,786	c/$243,140	$479,555	$15,401,266
145	1	-	125	68	101	4,301
$113,652	$ 475	$ -	$ 162,420	$ 50,893	$145,495	$ 6,903,413
-	-	-	1	-	29	422
$ -	$ -	$ -	$ 752	$ -	$ 25,224	$ 754,492
-	-	-	1	34	11	489
$ -	$ -	$ -	$ 750	$ 47,548	$ 4,369	$ 1,219,985
-	-	-	5	3	18	252
$ -	$ -	$ -	$ 1,472	$ 919	$ 19,210	$ 334,190
-	-	-	-	-	-	108
$ -	$ -	$ -	$ -	$ -	$ -	$ 149,009
14	-	-	21	18	17	675
$ 18,523	$ -	$ -	$ 28,265	$ 5,878	$ 26,202	$ 1,002,685
-	-	-	59	29	7	1,004
$ -	$ -	$ -	$ 87,073	$ 34,155	$ 8,726	$ 1,619,222
-	-	-	23	17	5	500
$ -	$ -	$ -	$ 54,160	$ 23,635	$ 2,017	$ 504,522
111	-	-	11	26	1	366
$107,937	$ -	$ -	$ 8,133	$ 15,858	$ 499	$ 506,833
-	-	-	13	16	21	431
$ -	$ -	$ -	$ 30,693	$ 28,289	$ 17,668	$ 556,684
6	-	-	-	1	-	300
$ 21,015	$ -	$ -	$ -	$ 371	$ -	$ 476,558
2	1	-	40	1	3	77
$ 807	$ 495	$ -	$ 123,716	$ 2,839	$ 7,144	$ 176,945
-	-	-	31	3	9	510
$ -	$ -	$ -	$ 24,096	$ 1,512	$ 4,689	$ 589,087
558	210	1	768	446	539	22,075
$853,157	$384,215	$2,100	$1,720,273	$484,966	$951,697	$40,949,450

APPENDIX III

PRINCIPAL EPA OFFICIALS RESPONSIBLE FOR ACTIVITIES DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
ADMINISTRATOR:		
Russell E. Train	Sept. 1973	Present
John R. Quarles, Jr. (acting)	Aug. 1973	Sept. 1973
Robert W. Fri (acting)	Apr. 1973	Aug. 1973
William D. Ruckelshaus	Dec. 1970	Apr. 1973
ASSISTANT ADMINISTRATOR FOR PLANNING AND MANAGEMENT:		
Alvin L. Alm	July 1973	Present
Thomas E. Carroll	Dec. 1970	July 1973
DEPUTY ASSISTANT ADMINISTRATOR FOR ADMINISTRATION:		
Edward Rhodes	Aug. 1975	Present
Alexander Greene (acting)	June 1975	Aug. 1975
Howard Messner	Dec. 1970	June 1975

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Mr. Quattrociocchi
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