

NRC'S DRUG TESTING PROGRAM ANNUAL REPORT CY 1994

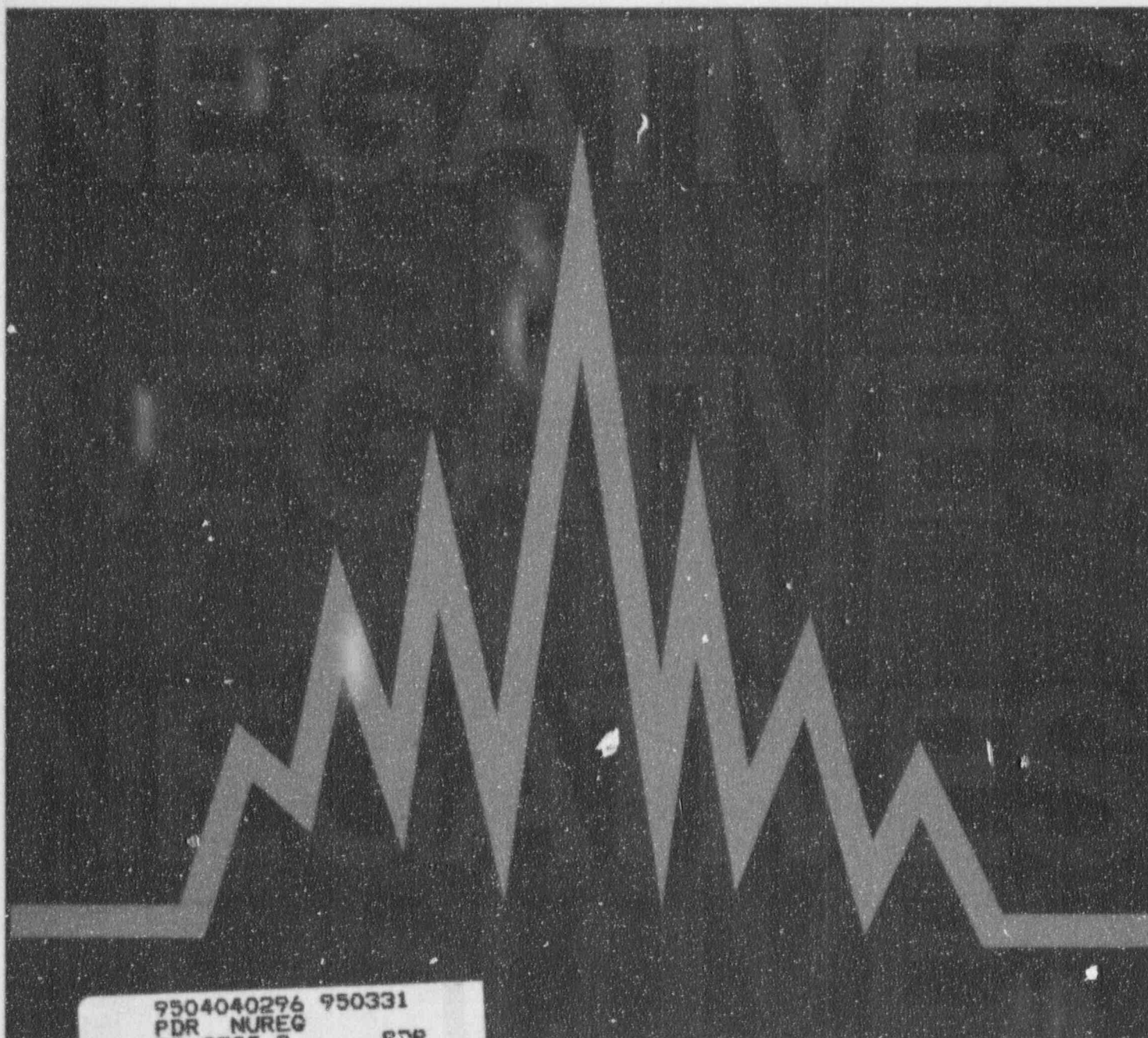


Nuclear
Regulatory
Commission

March 1995



Office of
Administration
Division of
Security



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The picture on the cover depicts a chromatogram showing the ion peaks of the drug or drug metabolite being analyzed.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

MEMORANDUM TO: The Commission

FROM: James M. Taylor *James M. Taylor*
Executive Director for Operations

SUBJECT: NRC'S DRUG TESTING PROGRAM

This sixth annual report prepared by the Office of Administration's Division of Security covers the administration and operation of NRC's Drug Testing Program from January through December 1994. The following major highlights are noted:

- We conducted 852 random tests. One employee tested positive for marijuana. This individual was assessed in December 1994 by the NRC's Drug Rehabilitation Assessment Coordinator (DRAC) and referred to a treatment program. Two other employees who tested positive, one in 1992 and the other in 1993, because of improper use of another individual's prescription drug, successfully completed follow-up testing during this reporting period and are now subject to random testing.
- Several significant changes were made to the Program based on the revised Department of Health and Human Services (HHS) Mandatory Guidelines.
- The Commission approved maintaining the current 50-percent annual testing rate for all NRC's testing designated positions.
- The NRC Drug Testing Manual was updated to reflect previously approved changes in testing procedures.
- Two employees voluntarily admitted to drug use. One completed rehabilitation and is in follow-up testing and the other was assessed in December 1994 by the DRAC.
- A total of 60 pre-employment tests were conducted and all test results were negative.
- We continued to closely monitor the quality of NRC's program, for example, through internal reviews and the use of a program questionnaire.
- The overall cost for the sixth year was approximately \$80,000, which is \$3,000 less than the previous year.



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I. Introduction

Calendar Year 1994 (CY 1994) was the sixth full year of Drug Testing Program activities following the U.S. Nuclear Regulatory Commission's (NRC's) approved Drug Testing Plan.

Several significant modifications were made to the Program during CY 1994 that were based on changes to the Department of Health and Human Services (HHS) Mandatory Guidelines on Federal Drug-Free Workplace Programs published June 9, 1994. The changes became effective September 1, 1994, and are discussed in Section II of this report.

In addition, on July 14, 1994, the Commission approved SECY-94-164, maintaining the recommended current 50-percent testing rate for all NRC testing designated positions. The Commission also requested a status report in two years recommending whether any change in the testing rate is warranted.

This annual report also contains statistical information (Exhibits 1-7), including a comparison of the number of random tests and positive testing rates for the period CY 1989 through CY 1994.



II. NRC's Program: January Through December 1994

General Operations

The Division of Security (SEC) continued to administer and operate the Drug Testing Program which includes pre-employment, reasonable suspicion, accident-related, voluntary, follow-up and random testing. The program is supported by two professional security staff members. To implement NRC's nation-wide drug testing, the staff works and interacts daily with specimen collection, laboratory, and medical review contractor personnel; as well as with headquarters Office of Personnel and regional Division of Resource Management and Administration (DRMA) personnel. In addition, SEC staff maintains program records.

Random collections were conducted at NRC headquarters, regional offices, and at nuclear power plant, fuel cycle, and uranium enrichment facility sites (remote sites) throughout the year. Exhibit 1 reflects the general distribution of approximately 1,738 testing designated positions (TDPs) subject to random testing as of December 1994. The fact that 852 random tests were conducted rather than 869 (50-percent annual testing rate) is primarily due to the fact that the number of TDPs fluctuates during the year and the number of employees tested at remote site locations varies. During this year's random testing, one administrative employee at a regional office tested positive for marijuana.

Pre-employment testing continued for prospective employees being seriously considered for a TDP. Applicants provided specimens at contractor specimen collection sites close to NRC headquarters or regional offices. A total of 60 pre-employment tests were conducted and all were negative. Exhibit 2 reflects the distribution for pre-employment testing for headquarters and the regional offices.

During 1994 the staff conducted 3 follow-up tests on one employee who tested positive in 1992. This employee successfully completed follow-up testing and is now subject to random testing. They also conducted 6 follow-up tests on another employee who tested positive in 1993. This employee also successfully completed follow-up testing during this reporting period and is now subject to random testing. In addition, 27 follow-up tests were conducted on one employee who voluntarily admitted to drug use. This employee successfully completed a treatment program and is now in follow-up testing. A second employee who voluntarily admitted to drug use in December 1994, was tested 3 times in December.



Oversight

The Office of National Drug Control Policy (ONDCP) continues to be the lead agency for the drug testing programs for Federal employees. The Interagency Coordinating Group (ICG), with Executive Committee members from HHS, Department of Justice (DOJ), Office of Personnel Management (OPM) and ONDCP, operates under the authority of ONDCP. NRC representatives regularly attend the ICG open meetings.

All Federal agencies continue to submit semiannual drug testing reports to HHS for review by the ICG Executive Committee. The ICG analyzes the data as part of ONDCP's oversight responsibility and compares programs for consistency.

Changes and Developments

As discussed in last year's annual report, NRC's Drug-Free Workplace Program (DFWP) was reviewed on July 27 and July 28, 1993, by a two-person site team from Lewin-VHI, Inc. (Lewin), a consulting firm under contract to ONDCP and to the Substance Abuse and Mental Health Services Administration (SAMHSA). A final report on their review of the NRC program, incorporating comments made on the draft report by ONDCP, SAMHSA, and NRC representatives in September 1993, was issued February 28, 1994. The major findings of the Lewin review, unchanged from the draft report, are as follows:

- NRC has fully implemented all four components of its program, including employee assistance, supervisory training, employee education, and drug testing. NRC's program is in accordance with its certified plan.
- Lewin rated NRC's program management of its DFWP as excellent.
- Lewin recommended that NRC officials consider options for improving central oversight of Employee Assistance Program (EAP) services. (The NRC provides EAP services to regional and remote site personnel through an interagency agreement with the U.S. Public Health Service.)
- Lewin recommended that NRC develop stronger ongoing supervisory training and employee education programs and consider surveying supervisors who complete training sessions about the quality and relevance of the class.



- Lewin had no recommendations or suggestions for improving the SEC drug testing portion of NRC's DFWP. The site team found (1) that the program was well staffed and managed; and (2) that NRC had established mechanisms for ensuring the quality and reliability of the drug testing process. Lewin rated NRC's drug testing portion of its DFWP as outstanding.

Lewin used the information presented in this and the other 25 agency reports to prepare a summary report on Federal agencies' efforts to achieve a drug-free workplace. The final summary report was issued December 19, 1994. The NRC's Office of Personnel (OP) responded on January 27, 1995, to Lewin's recommendations.

Revised HHS Mandatory Guidelines were published June 9, 1994, and became effective September 1, 1994. On August 2, 1994, the Executive Director for Operations (EDO) approved the adoption of the revised Guidelines by NRC.

Adopting the new Guidelines required several modifications to existing drug testing contracts and NRC specimen collection procedures. An Agency Announcement, dated August 22, 1994, informed all employees of NRC's new procedures.

These changes included the following:

- The amount of urine required for a specimen was lowered from 60 milliliters (ml) to 30 ml. For split specimens, a minimum of 45 ml is collected instead of 90 ml. This means that 30 ml of urine is collected for the first specimen (bottle A) and up to 15 ml of the remainder of urine is collected for the second (split) (bottle B) specimen. Previously, 60 ml of urine was collected for bottle A and 30 ml of the remainder of urine was collected for the bottle B specimen.
- If the specimen volume is less than 30 ml and the temperature is within the acceptable range, the specimen is discarded and a second specimen is collected. Previously, a donor's partial specimens were combined.
- The initial screening cutoff for marijuana metabolites was lowered from 100 nanograms (ng)/ml to 50 ng/ml. HHS stated that lowering the initial test level should increase the ability to detect any use of marijuana and may result in a greater number of confirmed positive results for marijuana. The employee who tested positive for marijuana in 1994 would have also tested



positive using the higher cutoff level specified in the previous Mandatory Guidelines.

- The requirement for agencies to maintain a minimum of 10-percent blind quality control samples was lowered. Current practice, since September 1994, is to maintain 5-percent blind quality control samples.
- A new section to the Mandatory Guidelines describing procedures to collect split specimens was added. This procedure requires that both portions of the split specimen (e.g., bottles A and B) be sent to the same testing laboratory. If the test of the first specimen (bottle A) is verified by the Medical Review Officer (MRO), the test result will be reported to the agency as a positive test result. Only the donor may request through the MRO that the second specimen (bottle B) be tested at the contract testing laboratory or another HHS certified laboratory. This request must be made within 72 hours of the donor having received notice by the MRO that he or she tested positive. Previously, the split portion of specimen (bottle B) was sent to a second HHS certified laboratory for temporary storage and possible confirmatory testing. Also, the MRO could independently order a confirmatory test on the split portion (bottle B) of specimen.

The NRC Drug Testing Manual was updated in July 1994 to reflect previously approved changes in testing procedures (e.g., remote site testing, reasonable suspicion testing based on several court decisions, and changes to regional employee notification/identification procedures). Since the Manual was published before the implementation of the revised Guidelines, the Manual will be revised again in May 1995 to incorporate these changes.

Contractual Support

NRC purchases quality control specimens from the Armed Forces Institute of Pathology through an interagency agreement that was initially signed in August 1988. This agreement was extended September 29, 1992, for a three-year period. Quality control specimens are prepared as normal NRC employee specimens and sent to the primary testing laboratory.

NRC's primary testing laboratory is Northwest Toxicology, Inc. (Northwest), located in Salt Lake City, Utah. NRC's three year contract with Northwest commenced September 14, 1993. Northwest was previously NRC's secondary laboratory.



A new purchase order for NRC's secondary laboratory to test the split portion of positive specimens, if requested by the donor through NRC's MRO, was awarded to ElSohly Laboratories, Inc. (ElSohly), located in Oxford, Mississippi. The purchase order, effective September 14, 1994, is for one year.

The NRC continues to use other existing contracts which support its drug testing program, although they were modified to incorporate changes based on the HHS revised Guidelines. These include a contract with Tracor Technology Resources, Inc. (TTR), NRC's nation-wide specimen collection contractor, Rockville, Maryland, and a contract with McCormack Levitis Chartered, Bethesda, Maryland to provide MRO services.

Quality Control

As part of NRC's Drug Testing Program, the SEC staff regularly monitored specimen collections performed by contractors on site at NRC's headquarters facility at One White Flint North (OWFN). In addition, the SEC staff conducted unannounced visits at the Walnut Creek Field Office (formerly Region V) and applicant collection facility in March 1994, at Region II and the region's applicant collection facility in November 1994, and an announced visit to NRC's primary laboratory, Northwest, November 22, 1994.

The site visits at Region II and the Walnut Creek Field Office and their respective applicant collection facilities resulted in some corrective action recommendations for the Regional Assistant Drug Program Coordinators (REG ADPC) and the collection contractor, TTR.

The review at Northwest verified that NRC specimens were being tested, stored, and safeguarded in accordance with HHS Mandatory Guidelines and NRC contractual requirements.

On May 10, 1994, SEC conducted a quality control visit of facilities used and procedures followed by NRC's MROs. To date, we have received excellent service from Drs. McCormack and Levitis.

As part of SEC's ongoing quality control measures—

1. OP is sent biweekly discrepancy reports between SEC's records and the OP database used to create NRC's drug testing pool.
2. OP is sent a monthly update of all changes (additions or deletions) to the Individual Access List (a list of employees with access to Foreign Intelligence and/or Sensitive Compartmented Information) controlled by SEC.



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3. The REG ADPCs are routinely kept advised of program activities through memoranda, reports, and telephone conversations.
 4. SEC documents collection problems and sends written notification to the Contract Administrator in the Division of Contracts (DC) and TTR, the collection contractor. SEC works closely with DC and TTR to resolve any problems.
 5. For each series of random testing, NRC continues to purchase and submit blind quality control specimens that are sent for testing. The contents of all 85 blind specimens submitted during CY 1994, some of which were contaminated with one or two of the five drugs NRC tests for, were correctly identified by our primary laboratory.
 6. Questionnaires are periodically distributed nationwide to NRC employees participating in NRC's Drug Testing Program. Employees continue to respond with constructive comments.



III. Employee Assistance Program

The EAP plays a very supportive role in NRC's Drug Testing Program in fulfilling NRC's policy of maintaining a drug-free Federal workplace. The EAP Manager administers contracts with six substance abuse and mental health providers who deliver a variety of clinical and educational services to NRC headquarters employees. Two are psychiatrists specializing in the treatment of addictive diseases. They act as the Drug Rehabilitation Assessment Coordinators (DRACs) in assessing employees who test positive for illegal drug use, referring them to treatment, monitoring their progress, and recommending follow-up drug testing schedules. EAP services are available to all NRC personnel through an interagency agreement with the U.S. Public Health Service EAP consortium.

One employee tested positive for marijuana in November 1994 and was assessed by the DRAC in December 1994. The DRAC recommended an out-patient treatment program. Two other employees who tested positive, one in 1992 and the other in 1993, because of improper use of another individual's prescription drug, successfully completed follow-up testing during this reporting period and are now subject to random testing. In addition, two individuals voluntarily admitted to drug use and agreed to undergo rehabilitation. One has completed rehabilitation and is in follow-up testing. The other was referred to the DRAC (in December 1994) for assessment and referral for education and treatment. Drug awareness education, including the availability of services offered under the EAP, was provided to NRC employees through individual counseling, on-site training, and written material.



IV. Statistics

Testing Data and Results

NRC conducted a total of 951 tests of all types during CY 1994 (see Exhibit 3). Of these, 852 were random tests. The distribution of random tests by location is shown in Exhibit 4. During CY 1994, one regional employee tested positive for an annual positive rate of 0.12 percent. This compares with an annual positive rate of 0.12 percent for CY 1993, 0.09 percent for CY 1992, 0.18 percent for CY 1991 and an annual positive rate of 0.20 percent for each of CYs 1989 and 1990 (see Exhibit 5).

Because employees are eligible to be selected for each of the 10 random testing series, an employee may be selected more than once during the reporting period. During CY 1994, 78 percent of the number of employees tested were tested once, 19 percent were tested twice, nearly 3 percent were tested three times, and less than 1 percent were tested four or more times. According to NRC's Mathematical Statistician, Office of the Controller, these numbers are within 1 percent of their probabilistic expectations. The number of random tests and the number of employees tested is reflected in Exhibit 6.

Exhibit 7 reflects the spread of pre-employment tests conducted over the 12-month period. None of these tests were positive.

Nine follow-up tests were conducted on two employees. One of these employees tested positive under random testing conducted in 1992, and the second employee tested positive under random testing in 1993.

Twenty-seven follow-up tests were also conducted on one employee who voluntarily admitted to drug use and successfully completed a treatment program. A second employee who voluntarily admitted in December 1994 to drug use was tested three times in December 1994.

Costs

The overall cost for the sixth full year was approximately \$80,000, \$3,000 less than the previous year's overall cost of approximately \$83,000. (The overall cost for CY 1992 was approximately \$110,000 and for CY 1991, approximately \$170,000.) The highest portion of this cost continues to result from remote site specimen collections.

Program costs cover (1) specimen collections at headquarters, remote sites, and regional offices for random testing and specimen collections at



contractor collection sites for NRC applicants; (2) the actual testing of specimens (initial screening and confirmatory testing when necessary); (3) temporary storage of split portions of specimens and possible confirmatory testing; (4) the review and certification of all test results by an MRO; and (5) the purchase of quality control specimens from the Armed Forces Institute of Pathology. The NRC incurred no unexpected costs during 1994.



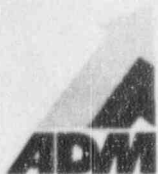
V. Summary

Exactly 951 tests of all types were conducted between January 1, 1994 and December 31, 1994. Because each employee subject to random testing has an equal chance of being selected each time, some NRC employees were randomly tested more than once. All testing results have been negative except for one employee who tested positive for marijuana. That employee was assessed in December 1994 by the NRC's DRAC and referred to an out-patient treatment program. Two other employees who tested positive, one in 1992 and the other in 1993, because of improper use of another individual's prescription drug, successfully completed follow-up testing during this reporting period and are now subject to random testing. (A fourth employee who tested positive under random testing conducted in 1991 successfully completed follow-up testing in September 1993 and continues to be subject to random testing.)

Internal quality control reviews were completed during the past year to ensure NRC's program continues to be administered in a fair, confidential, and effective manner.

NRC spent approximately \$80,000 during CY 1994 for drug testing.

NRC's Drug Testing Program remains firmly based upon the principles and guidance provided through E.O. 12564, Public Law 100-71, Department of Health and Human Services guidelines, and Commission decisions.



VI. Glossary of Drug Testing Program Terms

Chromatogram:	The measurement of ion peaks of a drug or drug metabolite being analyzed.
Concentration:	Amount of a drug in a unit volume of biological fluid, expressed as weight/volume, for example, urine concentrations may be expressed as nanograms per milliliter.
Confirmation:	The process of using a second analytical procedure to identify the presence of a specific drug or metabolite that is independent of the initial test and which uses a different technique and chemical principle from that of the initial test in order to ensure reliability and accuracy, for example, Gas Chromatography/Mass Spectrometry (GC/MS).
Cutoff level:	A value serving as a cutoff point for labeling a urine drug test result as positive or negative, for example, the initial screening cutoff for marijuana metabolites is 50 ng/ml.
Drug Rehabilitation Assessment Coordinator (DRAC):	The individual designated by the Employee Assistance Program (EAP) Administrator to provide initial counseling, assessment, and referral services to all NRC employees.
Immunoassay test:	An initial screening test performed to detect a particular drug or drug metabolite in urine specimens, for example, EMIT (Enzyme Multiplied Immunoassay Test). When an initial (screening) test is negative, the specimen needs no further examination and does not need to undergo a more costly confirmation test.
Medical Review Officer (MRO):	The individual responsible for receiving laboratory drug test results. This official is a licensed physician with knowledge of substance abuse disorders and the appropriate medical training to interpret and evaluate all positive test results together with an individual's medical history and any other relevant biomedical information.



Negative test result:	A test result that is below the initial cutoff level determined by HHS and is considered "negative" for the following five drugs or classes of drugs: marijuana metabolites, cocaine metabolites, opiate metabolites, phencyclidine, and amphetamines.
Metabolite:	A compound produced from chemical changes of a drug in the body.
Positive test result:	A test result that has been screened "positive" by an FDA-approved immunoassay test and confirmed by gas chromatography/mass spectrometry. A verified positive test result meets these criteria and is also determined by the MRO to have no valid justification for the positive result.
Quality Control specimens:	Urine specimens that contain pure urine or a known concentration of a drug or drug metabolite and are submitted to a laboratory for analysis along with specimens not known to be negative or positive for drugs of abuse. Quality Control specimens are used to monitor the performance of the drug testing laboratory.
Random number generator:	A function from a commercial software package that generates random numbers and uses the time of day as its seed. The number that is generated is considered the record number of the employee selected in the drug testing pool.
Split specimen:	A single urine specimen that has been divided into two separate portions (bottles A and B).
Testing Designated Positions (TDPs):	Employment positions within the NRC that have been designated for random drug testing.

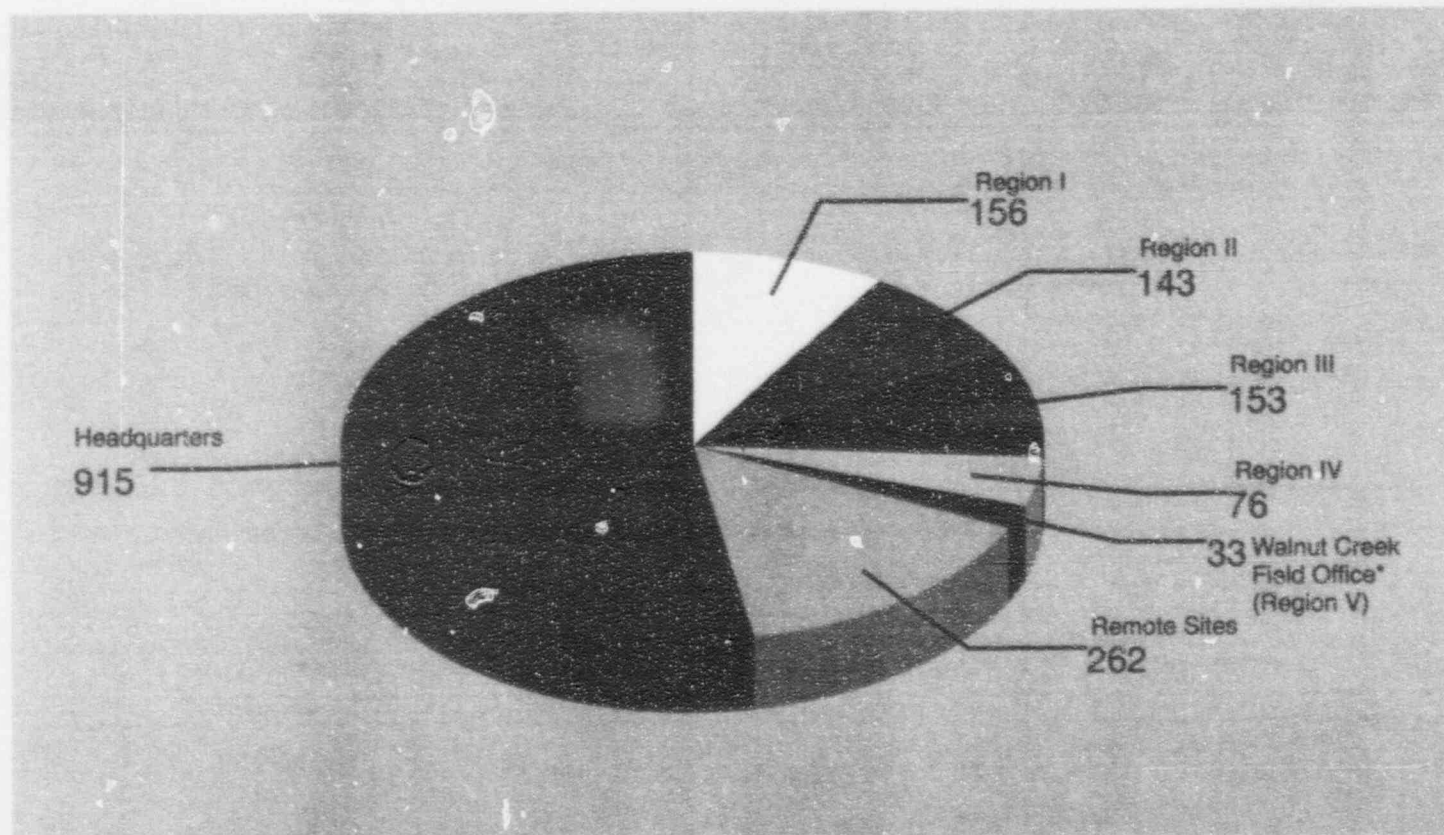


EXHIBITS

Exhibit 1:

GEOGRAPHIC DISTRIBUTION OF EMPLOYEES IN THE DRUG TESTING POOL (TDPs)

December 1994



Total: 1738

* Region IV and V consolidation effective April 4, 1994; however, transfer of employees not completed until October 1, 1994. For drug testing purposes, the Walnut Creek Field Office will be treated as a remote site in 1995.

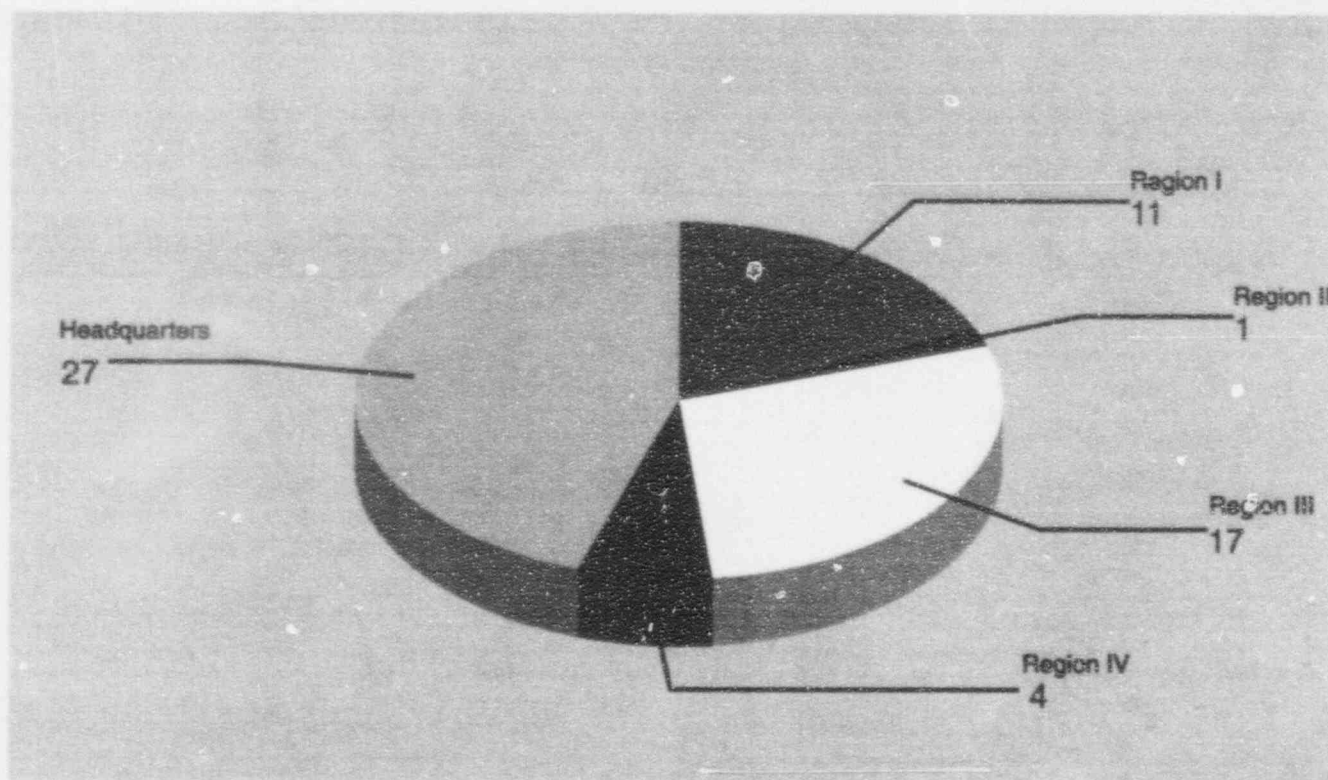




Exhibit 2:

APPLICANT DRUG TESTS CONDUCTED

By Testing Group



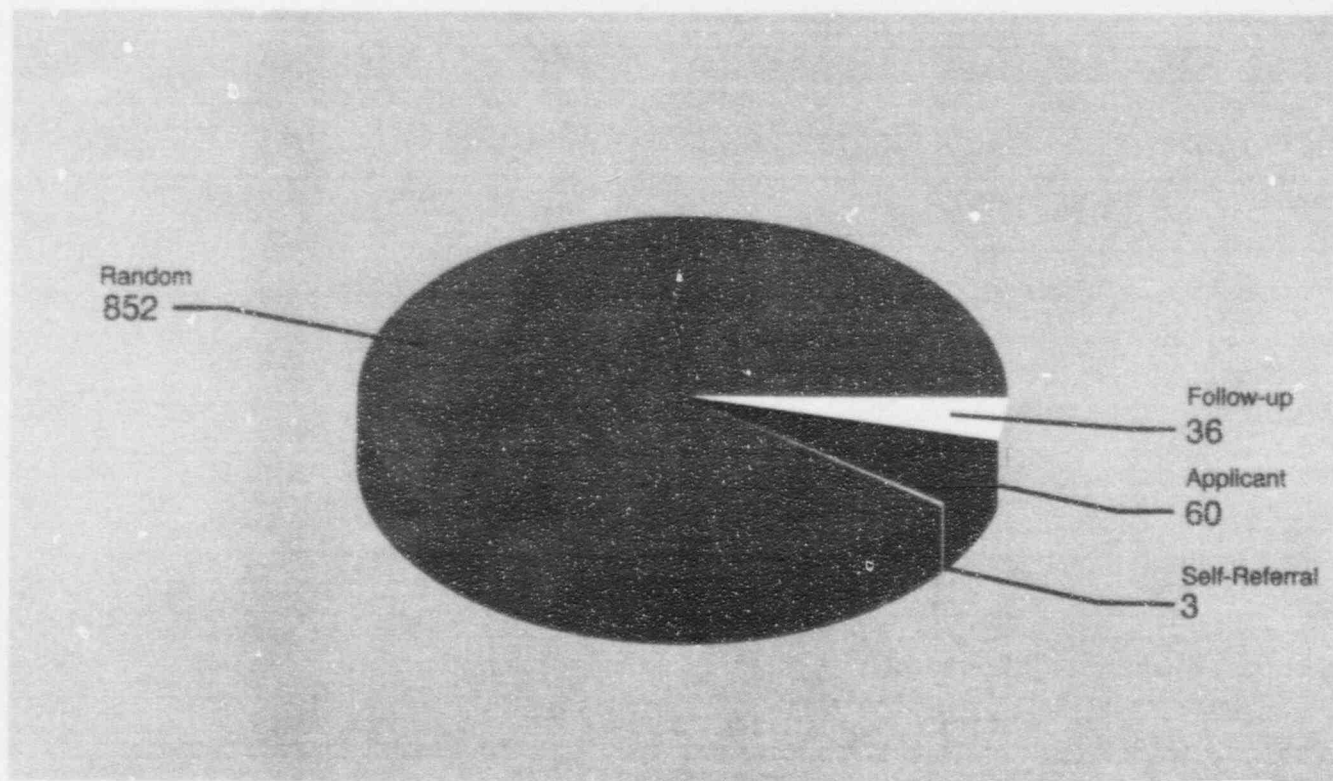
Calendar Year 1994

Total applicant tests: 60

Exhibit 3:

DRUG TESTS CONDUCTED

By Test Type



Calendar Year 1994

Total tests of all types: 951



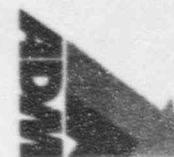
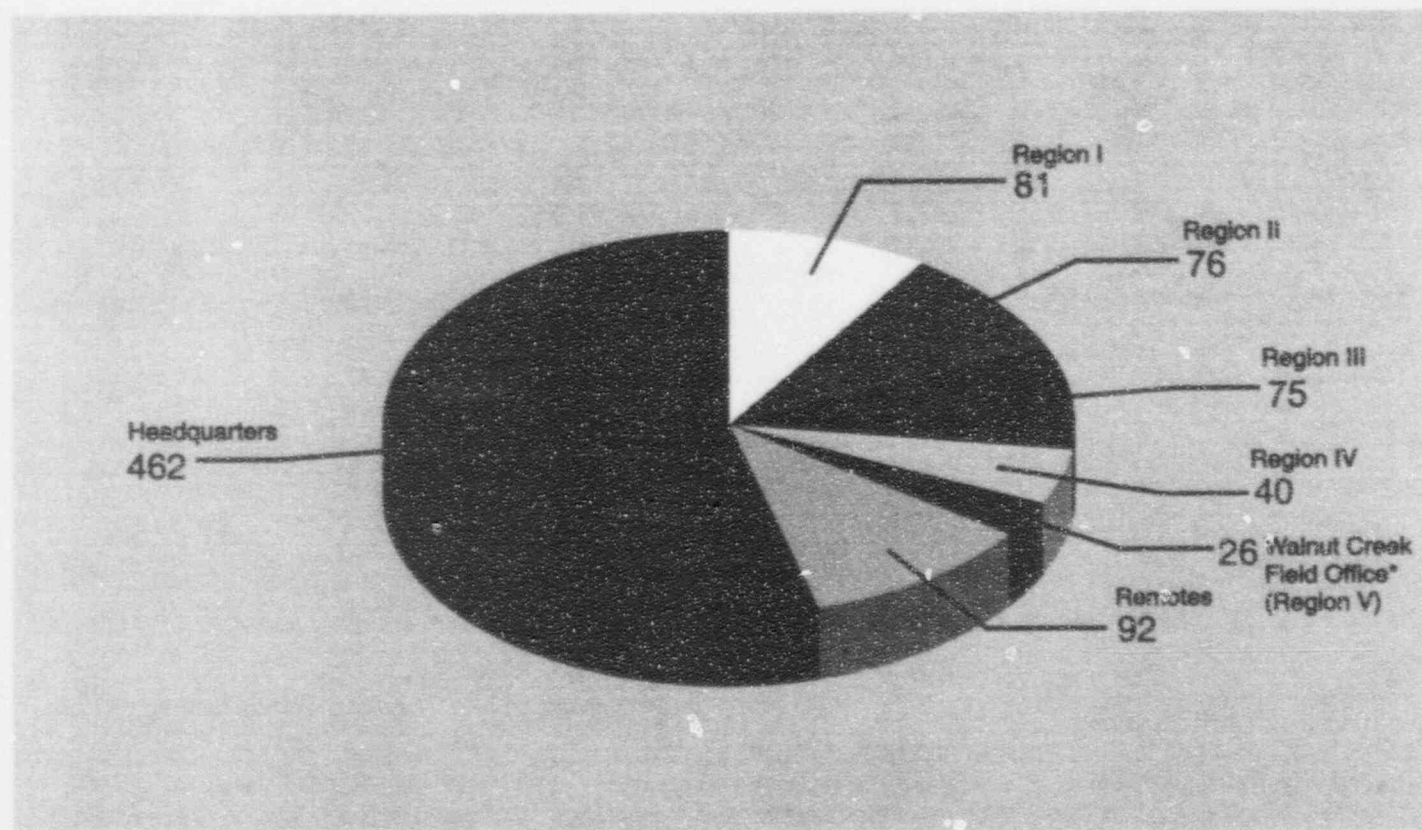


Exhibit 4:

RANDOM TESTS CONDUCTED

By Testing Group



Calendar Year 1994

Total random tests: 852

* Region IV and V consolidation effective April 4, 1994; however, transfer of employees not completed until October 1, 1994. For drug testing purposes, the Walnut Creek Field Office will be treated as a remote site in 1995.

Exhibit 5:

RANDOM TESTING POSITIVE RATE

By Calendar Year (Expressed as Percentage)

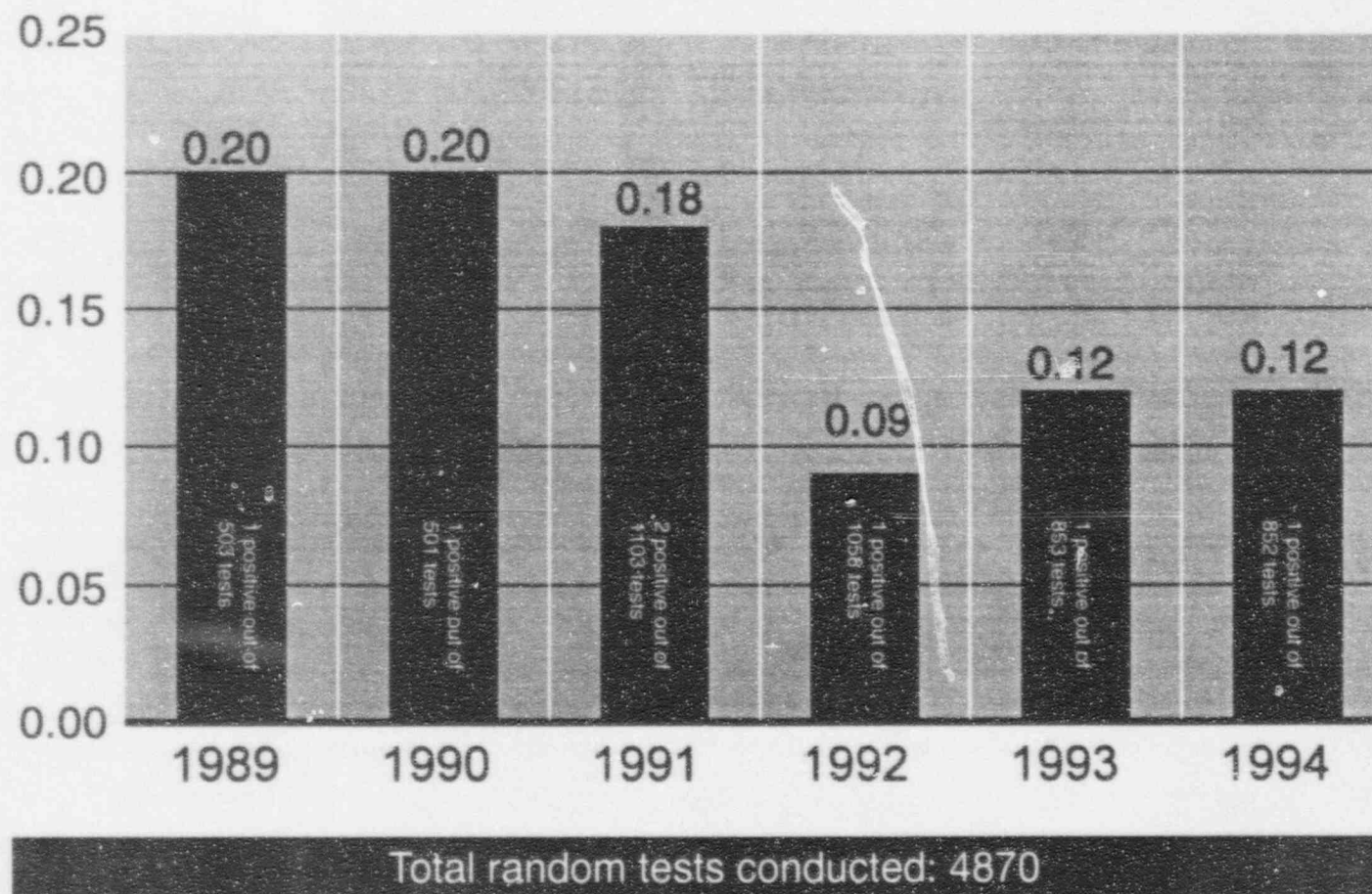
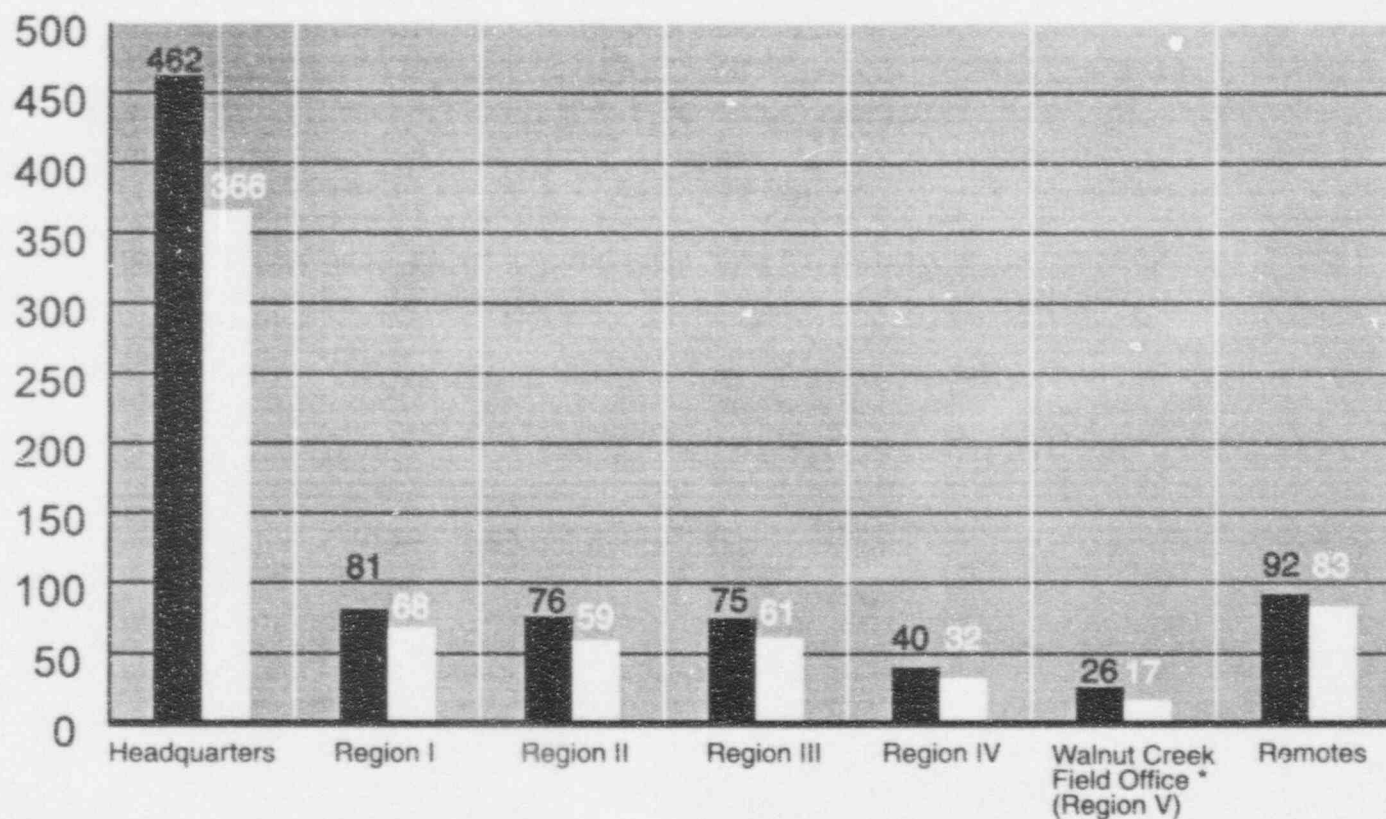


Exhibit 6:

NUMBER OF RANDOM TESTS/EMPLOYEES TESTED

By Testing Group for Calendar Year 1994



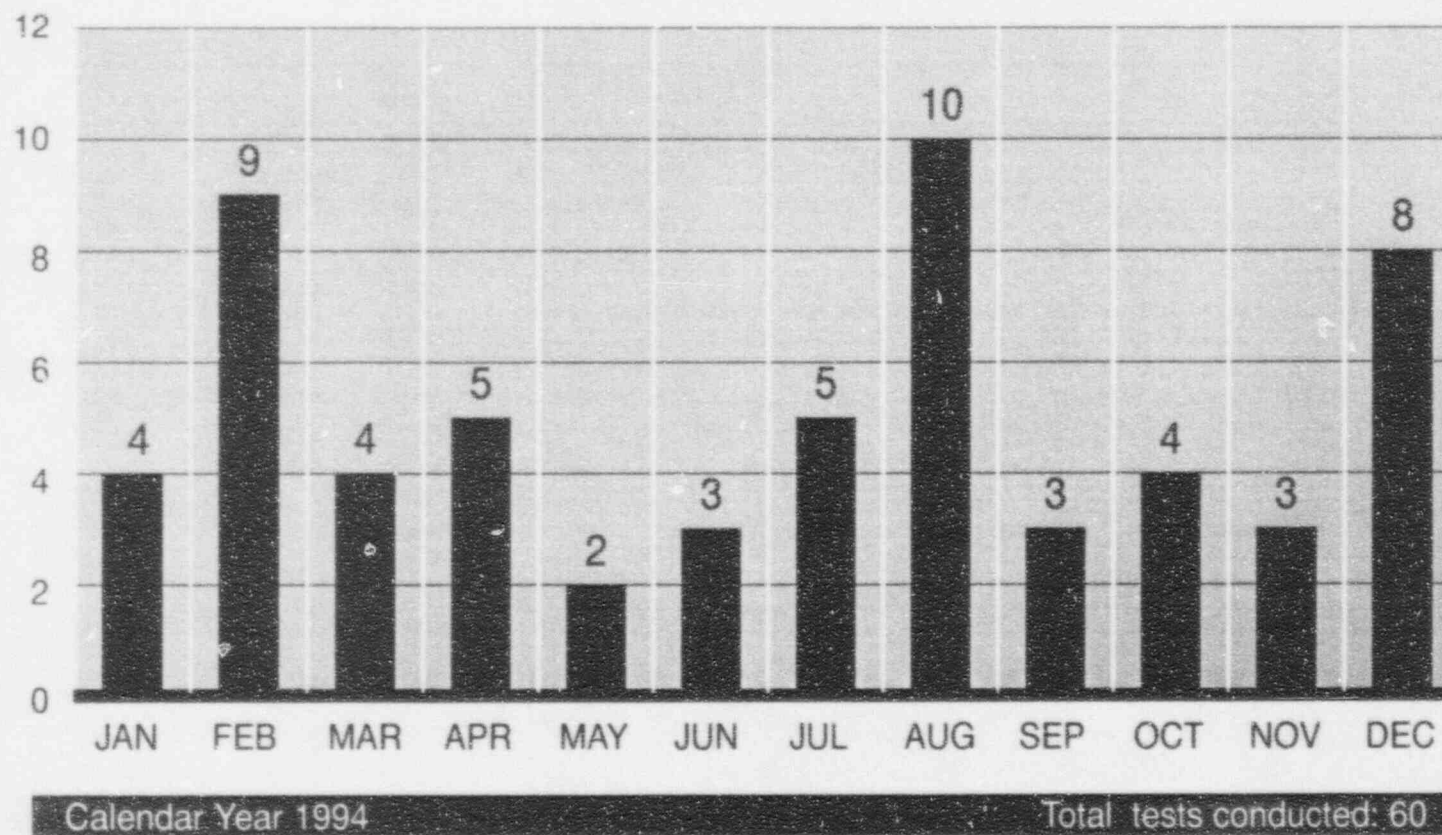
Total number of tests conducted: 852

Total number of employees tested: 686

* Region IV and V consolidation effective April 4, 1994; however, transfer of employees not completed until October 1, 1994. For drug testing purposes, the Walnut Creek Field Office will be treated as a remote site in 1995.

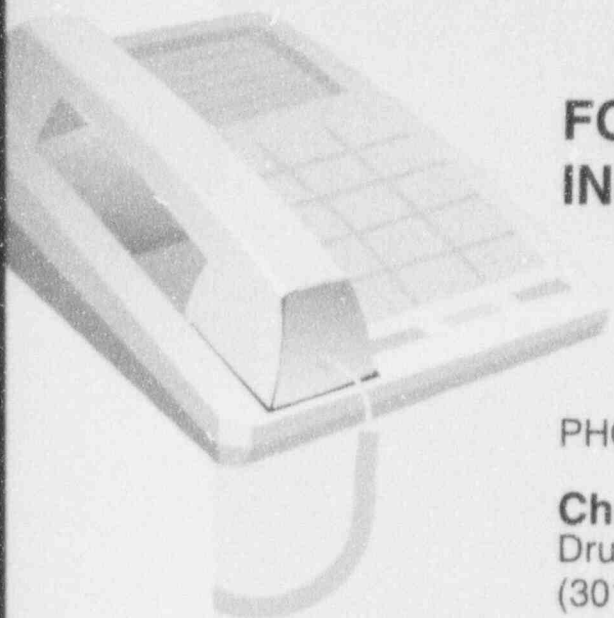
■ Number of Tests □ Employees Tested

Exhibit 7: **APPLICANT TESTS CONDUCTED BY MONTH**





Federal Recycling Program



**FOR ADDITIONAL
INFORMATION**

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