



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

AUG - 2 1985

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Interim Guidance for the Preparation of QA Project Plans* for Chemical Tests, in the UIC** Program - (UICPG #35)

FROM: *Victor J. Kinn*
Victor J. Kinn, Director
Office of Drinking Water

TO: Water Supply Branch Chiefs/ Underground Injection Control Section Chiefs/QAOs - Regions I-X

Background

On September 30, 1983, the final version of the general grant regulations was published under 40 CFR Part 30. In §30.503(e) the regulations require that States and local governments receiving assistance from EPA implement a Quality Assurance (QA) program. The QA program must have: 1) a management plan identifying the State agency and/or office responsible, resources available and the person in charge of the program; and 2) a commitment on the part of the State to develop and implement QA project plans for environmental measurements, in accordance with scientific methods approved by EPA. This latter requirement would mean, among other things, that each entity administering a UIC program must structure all the components of its sampling and testing program, including sampling and testing by the operators, to insure that data is of known quality and to conform with EPA accepted procedures and State requirements.

In the case of Direct Implementation (DI) programs, the Director (RA) establishes criteria for QA of all environmentally related measurements submitted in support of UIC activities. The authority for QA in the UIC program is based on 40 CFR §144.28(g), §144.51 (e) and §144.52(a)(5), which require adequate QA to be used when submitting data mandated by the program. Data submitted by well operators also need to include QA elements.

* See glossary of terms (p.ii)

** See list of abbreviations (p.vii)

Due to the newness of some of the testing procedures used in the UIC program and the program itself, implementation will take place in three sequential phases. The first phase will address traditional chemical tests*. The second will address widely used physical tests, and the third, less well known geophysical tests.

Purpose

The purpose of a Quality Assurance program is to help assure that methods to obtain environmental measurement data are technically valid, scientifically defensible and of known quality. For this reason, EPA is requiring States to assess the adequacy of their present data gathering-activities and is offering technical help where needed to assist States in upgrading their programs to meet Federal QA standards. If a State already has a comprehensive, coordinated and effective QA program for which a QA project plan(s) have been prepared, it should submit the plan to the Regional Office (RO) for evaluation. The RO may recommend some revisions to assure that the QA project plans are in conformance with scientific methods approved by EPA.

This guidance will help recognized UIC agencies (i.e., State agencies, ROs) in the preparation of a QA project plan for chemical tests in the UIC program. It is not the intention of EPA to modify the existing UIC delegated program in any manner. This guidance does not change the parameters which are being tested for and does not change the frequency of these tests.

Specific QA project plans may deviate from this guidance with proper justification which is acceptable to the ROs. The EPA will evaluate those project plans in light of the overall QA program goal that environmental measurements be representative, accurate, comparable, complete and of known quality.

* These include analyses of injection fluids, formation fluids and any other aqueous solutions in their terminal stable form or any of their intermediary forms.

Guidance

This guidance is based on "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans." (QAMS 005/80, EPA-600/4-83-004, NTIS PB83-170514). Attachment A follows the same organization as the QAMS guidance and it is intended to aid in the preparation of UIC-QA project plans in states that have not developed their own. It contains directions and suggested language that can be modified by the State for more relevance.

The QA project plan for chemical analysis must contain the elements listed below. However, if any of these are duplicated in other programs they can be incorporated by reference (e.g. NPDES, or RCRA QA programs). Furthermore, the preparer can, if warranted, consolidate some of the elements under generic headings. The RO should indicate to States what would be acceptable.

- Plan Overview
- Organization and Responsibility
- Sampling Procedures
- Sample Preservation, Stabilization and Chain of Custody
- Laboratory and Field Equipment Calibration Procedures
- Analytical Procedures
- Documentation, Data Reduction, Validation and Reporting
- Internal Quality Control Checks
- Performance and Systems Audits
- Preventive Maintenance
- Precision and Accuracy Protocols/Limits
- Data Representativeness, Comparability and Completeness
- Corrective Action
- Quality Assurance Reports
- Standard Operating Procedures (SOPs)

Attachment A gives guidance for each of the sections above. It also gives specific examples or "boiler plate" for some of the more generic sections. References are also given which would help the State in preparing the plan and obtaining useful information. Particularly useful documents which the States and EPA could use as models are: "Guidance for the Development of a QA Plan by Regional Team" (Regions 8,9,10) and "Guidance for the Preparation of Combined Work QA Project Plans for Environmental Monitoring" (OWRS QA-1). These are available from the RQAOs. Attachment E includes a QA project plan that addresses the analysis of environmental samples containing complex chemical mixtures.

In preparing the UIC-QA project plan for chemical tests, the UIC agency should consider only the needs and requirements of the State program. Some States, as in the case of a Class II program (oil & gas related) require very few chemical analyses by the operator, and may also include only a few chemical tests

by the UIC agency in support of UIC. In such States, only the tests that are actually done in support of the UIC program should be covered. However, the preparer of the plan should give consideration, not only to the primary use of the data, but also to secondary uses. For example, consideration could be given to possible applications in enforcement activities (secondary use) for any data submitted to support a permit application (primary use). In such cases, the SQAO should make sure that tests done to estimate certain parameters, such as TDS, are adequate to evaluate contamination episodes or for permit purposes.

EPA has not established a valid test for "compatibility" of injection fluids in injection formations. However, if a compatibility test is required under a State UIC program, it must be included in the QA plan. EPA will revise this guidance in the future as compatibility tests are studied. In general, operators perform some tests to evaluate the ease of injection (e.g., whether there is precipitation of solids in the formation). Attachment "C" gives a short discussion of compatibility and a test which can be done to determine ease of injection.

EPA has not developed or approved specific tests and protocols to deal with some complex injection fluids. These will be made available to the States as they are developed.

RCRA and CERCLA offices in the States or EPA Regions should be able to provide sampling guidance for "high hazard" samples taken to analyze Class I hazardous waste injection fluids. The ROs should include this information in the guidance to be given to States that have HW facilities.

Implementation

The ROs will distribute this guidance to the States. Upon receipt, the States will contact all persons (e.g., affected operators, laboratories and other State offices) involved in the sampling, testing, processing and reporting of UIC chemical data. The implementation of this plan in the States should be completed within the 1986 grant year. The RO's UIC section and QA officer will determine the adequacy of the State QA project plan. For DI States, the ROs must send the QA project plan to the Chief, Underground Injection Control Branch in Headquarters after concurrence from the Regional QA officer.

The ROs will include a condition in the grant agreement or workplan with respect to the full implementation of the UIC-QA project plan for chemical test. This condition should read:

"The State agrees to submit to EPA a QA project plan for chemical tests within 120 days after receiving guidance from EPA and to implement this plan within the 1986 grant year. The QA project plan will follow guidance provided by EPA on this subject."

The ROs will prepare a QA project plan for DI States and will send it to the Chief, Underground Injection Control Branch, EPA Headquarters, no later than 120 days from the receipt of guidance on the subject.

This guidance will be updated periodically in the future as warranted. Examples of programs or special situations will be incorporated in future guidances.

Since the primary purpose of QA is the improvement of the quality of the data generated by the States and EPA, the program should be viewed as a cooperative effort between these two parties. The ROs, as the overseeing authority, should remain flexible enough to encourage initiative on the part of the States and the regulated community. The bottom line however, is that a QA program is necessary to assure effective environmental programs and EPA, the States and the regulated community are responsible for implementing such a program. EPA has made the obtainment of data of known quality one of its biggest priorities.

Filing

This guidance should be filed under Underground Injection Control Program Guidance #35 (UICPG #35).

Responsibility

For additional information please contact:

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Phone (202) or FTS 382-5561

Attachments

cc: UIC-QA workgroup

FY 86 UIC GRANT FORMULA FOR TENTATIVE ALLOTMENTSALLOTMENT TO STATE i =

$$+ (0.10 \times \text{Appropriation}) \times \frac{\sqrt{\text{State } i \text{ Population}}}{\sum_{i=1}^{59} \sqrt{\text{State } i \text{ Population}}}$$

$$+ (0.10 \times \text{Appropriation}) \times \frac{\sqrt{\text{State } i \text{ Land Area}}}{\sum_{i=1}^{59} \sqrt{\text{State } i \text{ Land Area}}}$$

$$+ \$6000 + [(0.14 \times \text{Appropriation} - \$6000 \times 59)] \times \frac{\sqrt{\text{State } i \text{ Class I Wells}}}{\sum_{i=1}^{59} \sqrt{\text{State } i \text{ Class I Wells}}}$$

$$+ \$6000 + [(0.41 \times \text{Appropriation} - \$6000 \times 59)] \times \frac{\sqrt{\text{State } i \text{ Class II Wells}}}{\sum_{i=1}^{59} \sqrt{\text{State } i \text{ Class II Wells}}}$$

$$+ \$6000 + [(0.10 \times \text{Appropriation} - \$6000 \times 59)] \times \frac{\sqrt{\text{State } i \text{ Class III Wells}}}{\sum_{i=1}^{59} \sqrt{\text{State } i \text{ Class III Wells}}}$$

$$+ \$6000 + [(0.04 \times \text{Appropriation} - \$6000 \times 59)] \times \frac{\sqrt{\text{State } i \text{ Class IV Wells}}}{\sum_{i=1}^{59} \sqrt{\text{State } i \text{ Class IV Wells}}}$$

$$+ \$6000 + [(0.11 \times \text{Appropriation} - \$6000 \times 59)] \times \frac{\sqrt{\text{State } i \text{ Class V Wells}}}{\sum_{i=1}^{59} \sqrt{\text{State } i \text{ Class V Wells}}}$$

 (Appropriation for FY 86 = \$ 9,100,200)

 (59 States include 57 States and Territories and Indian Lands in Regions 6 and 9)

FY 1986 UIC GRANT ALLOCATION DATA BASE

9100200

| REGION | STATE | POP | AREA | CLASS 1 WELLS | CLASS 2 WELLS | CLASS 3 SITES | CLASS 4 WELLS | CLASS 5 WELLS |
|--------|-------|-------|--------|------------------|------------------|------------------|------------------|------------------|
| I | CT | 3138 | 4872 | 0 | 0 | 0 | 0 | 172 |
| | MA | 5767 | 7824 | 0 | 0 | 0 | 0 | 109 |
| | ME | 1146 | 30995 | 0 | 0 | 0 | 0 | 18 |
| | NH | 959 | 8993 | 0 | 0 | 0 | 0 | 42 |
| | RI | 955 | 1055 | 0 | 0 | 0 | 0 | 33 |
| | VT | 525 | 9273 | 0 | 0 | 0 | 0 | 1 |
| II | NJ | 7468 | 7468 | 0 | 0 | 0 | 0 | 1279 |
| | NY | 17667 | 47377 | 19 | 3254 | 7 | 0 | 2292 |
| | PR | 3261 | 3459 | 0 | 0 | 0 | 0 | 2223 |
| III | VI | 102 | 132 | 0 | 0 | 0 | 0 | 71 |
| | DC | 623 | 63 | 0 | 0 | 0 | 0 | 0 |
| | DE | 606 | 1932 | 0 | 0 | 0 | 0 | 81 |
| | MD | 4304 | 9837 | 0 | 0 | 0 | 0 | 887 |
| | PA | 11895 | 44888 | 0 | 4861 | 0 | 3 | 948 |
| | VA | 5550 | 39704 | 0 | 0 | 0 | 2 | 1806 |
| | WV | 1965 | 24119 | 3 | 318 | 3 | 0 | 60 |
| IV | AL | 3959 | 50767 | 2 | 221 | 1 | 1 | 258 |
| | FL | 10680 | 54153 | 72 | 77 | 0 | 3 | 7206 |
| | GA | 5732 | 58056 | 0 | 0 | 0 | 0 | 3 |
| | KY | 3714 | 39669 | 1 | 5417 | 0 | 0 | 469 |
| | MS | 2587 | 47233 | 8 | 979 | 0 | 0 | 110 |
| | NC | 6082 | 48843 | 4 | 0 | 0 | 0 | 69 |
| | SC | 3264 | 30203 | 0 | 0 | 0 | 0 | 46 |
| | TN | 4685 | 41155 | 7 | 13 | 0 | 0 | 39 |
| | V | IL | 11486 | 55645 | 14 | 12362 | 0 | 0 |
| IN | | 5479 | 35932 | 27 | 3938 | 0 | 4 | 29 |
| MI | | 9069 | 56954 | 49 | 1741 | 8 | 0 | 2741 |
| MN | | 4144 | 79548 | 0 | 0 | 0 | 0 | 19 |
| OH | | 10746 | 41004 | 18 | 3956 | 1 | 0 | 2814 |
| VI | WI | 4751 | 54426 | 0 | 0 | 0 | 0 | 0 |
| | AR | 2328 | 52078 | 6 | 1107 | 0 | 0 | 55 |
| | LA | 4438 | 44521 | 70 | 4471 | 60 | 0 | 0 |
| | MM | 1399 | 121335 | 2 | 3808 | 23 | 0 | 113 |
| | OK | 3298 | 68655 | 13 | 14952 | 1 | 0 | 0 |
| | TX | 15724 | 262017 | 141 | 51481 | 116 | 0 | 464 |
| VII | GI | 0 | 0 | 1 | 3958 | 3 | 0 | 5 |
| | IA | 2905 | 55965 | 1 | 0 | 0 | 0 | 704 |
| | KS | 2425 | 81778 | 55 | 14199 | 5 | 0 | 938 |
| | MO | 4970 | 68945 | 0 | 331 | 0 | 0 | 300 |
| VIII | NE | 1597 | 76644 | 0 | 566 | 0 | 0 | 270 |
| | CO | 3139 | 103595 | 2 | 1106 | 1 | 2 | 158 |
| | MT | 817 | 145388 | 0 | 1438 | 0 | 0 | 1 |
| | ND | 680 | 69300 | 0 | 628 | 2 | 0 | 143 |
| | SD | 700 | 75952 | 0 | 23 | 0 | 0 | 50 |
| | UT | 1619 | 82073 | 0 | 760 | 7 | 0 | 33 |
| | WY | 514 | 96989 | 6 | 5830 | 9 | 0 | 502 |

| | | | | | | | | |
|-------|------|--------|---------|-----|--------|-----|----|-------|
| IX | AS | 34 | 77 | 0 | 0 | 0 | 0 | 0 |
| | AZ | 2963 | 113508 | 0 | 3 | 1 | 0 | 775 |
| | CA | 25174 | 156299 | 6 | 10489 | 1 | 0 | 8350 |
| | CNMI | 18 | 184 | 0 | 0 | 0 | 0 | 0 |
| | GU | 111 | 209 | 0 | 0 | 0 | 0 | 136 |
| | HI | 1023 | 6425 | 0 | 0 | 0 | 0 | 0 |
| | NV | 891 | 109894 | 0 | 6 | 0 | 0 | 13 |
| | TT | 120 | 533 | 0 | 0 | 0 | 0 | 0 |
| | VI | 0 | 0 | 0 | 508 | 0 | 0 | 1 |
| X | AK | 479 | 570833 | 5 | 324 | 0 | 0 | 0 |
| | ID | 989 | 82412 | 0 | 0 | 0 | 0 | 2001 |
| | OR | 2662 | 96184 | 0 | 1 | 0 | 0 | 710 |
| | WA | 4300 | 66511 | 1 | 0 | 0 | 10 | 6596 |
| TOTAL | | 237626 | 3543883 | 533 | 153126 | 249 | 25 | 46271 |

REGIONAL SUMMARY

| | POP | AREA | CLASS 1 WELLS | CLASS 2 WELLS | CLASS 3 SITES | CLASS 4 WELLS | CLASS 5 WELLS |
|--------|--------|---------|------------------|------------------|------------------|------------------|------------------|
| REG 1 | 12490 | 63012 | 0 | 0 | 0 | 0 | 375 |
| REG 2 | 28498 | 58436 | 19 | 3254 | 7 | 0 | 5865 |
| REG 3 | 24943 | 120543 | 3 | 5179 | 3 | 5 | 3782 |
| REG 4 | 40703 | 370079 | 94 | 6707 | 1 | 4 | 8200 |
| REG 5 | 45675 | 323509 | 108 | 21997 | 9 | 4 | 5731 |
| REG 6 | 27187 | 548606 | 233 | 79777 | 203 | 0 | 637 |
| REG 7 | 11897 | 283332 | 56 | 15096 | 5 | 0 | 2212 |
| REG 8 | 7469 | 573297 | 8 | 9785 | 19 | 2 | 887 |
| REG 9 | 30334 | 387129 | 6 | 11006 | 2 | 0 | 9275 |
| REG 10 | 8430 | 815940 | 6 | 325 | 0 | 10 | 9307 |
| TOTAL | 237626 | 3543883 | 533 | 153126 | 249 | 25 | 46271 |

FY 1986 UIC GRANT ALLOTMENT BY WELL CLASS
TOTAL FUNDS: 9100200

| REGION | STATE | POP ALLOT | AREA ALLOT | CLASS 1 ALLOT | CLASS 2 ALLOT | CLASS 3 ALLOT | CLASS 4 ALLOT | CLASS 5 ALLOT |
|--------|-------|--------------|---------------|------------------|------------------|------------------|------------------|------------------|
| | | 0 | 0 | 0.14 | 0.41 | 0.10 | 0.04 | 0.11 |
| I | CT | 16,047 | 5,283 | 6,000 | 6,000 | 6,000 | 6,000 | 13,973 |
| | MA | 21,755 | 6,695 | 6,000 | 6,000 | 6,000 | 6,000 | 12,347 |
| | ME | 9,698 | 13,326 | 6,000 | 6,000 | 6,000 | 6,000 | 8,579 |
| | NH | 8,871 | 7,178 | 6,000 | 6,000 | 6,000 | 6,000 | 9,940 |
| | RI | 8,853 | 2,459 | 6,000 | 6,000 | 6,000 | 6,000 | 9,493 |
| | VT | 6,564 | 7,289 | 6,000 | 6,000 | 6,000 | 6,000 | 6,608 |
| II | NJ | 24,756 | 6,541 | 6,000 | 6,000 | 6,000 | 6,000 | 27,743 |
| | NY | 38,077 | 16,475 | 49,915 | 123,217 | 36,940 | 6,000 | 35,106 |
| | PR | 16,359 | 4,452 | 6,000 | 6,000 | 6,000 | 6,000 | 34,665 |
| | VI | 2,893 | 870 | 6,000 | 6,000 | 6,000 | 6,000 | 11,123 |
| III | DC | 7,150 | 601 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| | DE | 7,052 | 3,327 | 6,000 | 6,000 | 6,000 | 6,000 | 11,472 |
| | MD | 18,794 | 7,507 | 6,000 | 6,000 | 6,000 | 6,000 | 24,107 |
| | PA | 31,243 | 16,037 | 6,000 | 149,267 | 6,000 | 7,392 | 24,719 |
| | VA | 21,341 | 15,082 | 6,000 | 6,000 | 6,000 | 7,136 | 31,837 |
| | WV | 12,699 | 11,755 | 23,450 | 42,643 | 26,255 | 6,000 | 10,709 |
| IV | AL | 18,025 | 17,055 | 20,248 | 36,548 | 17,694 | 6,804 | 15,765 |
| | FL | 29,605 | 17,614 | 91,487 | 24,031 | 6,000 | 7,392 | 57,609 |
| | GA | 21,688 | 18,238 | 6,000 | 6,000 | 6,000 | 6,000 | 7,053 |
| | KY | 17,458 | 15,076 | 16,075 | 157,238 | 6,000 | 6,000 | 19,166 |
| | MS | 14,570 | 16,450 | 34,496 | 70,294 | 6,000 | 6,000 | 12,376 |
| | NC | 22,341 | 16,728 | 26,149 | 6,000 | 6,000 | 6,000 | 11,050 |
| | SC | 16,366 | 13,155 | 6,000 | 6,000 | 6,000 | 6,000 | 10,123 |
| | TN | 19,608 | 15,355 | 32,655 | 13,409 | 6,000 | 6,000 | 9,797 |
| | V | IL | 30,702 | 17,855 | 43,696 | 234,469 | 6,000 | 6,000 |
| IN | | 21,204 | 14,348 | 58,350 | 134,950 | 6,000 | 7,607 | 9,274 |
| MI | | 27,281 | 18,064 | 76,523 | 91,740 | 39,076 | 6,000 | 37,830 |
| MN | | 18,441 | 21,348 | 6,000 | 6,000 | 6,000 | 6,000 | 8,650 |
| OH | | 29,696 | 15,327 | 48,743 | 135,244 | 17,694 | 6,000 | 38,251 |
| VI | WI | 19,746 | 17,659 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| | AR | 13,822 | 17,273 | 30,678 | 74,369 | 6,000 | 6,000 | 10,509 |
| | LA | 19,084 | 15,971 | 90,291 | 143,399 | 96,583 | 6,000 | 6,000 |
| | MM | 10,715 | 26,366 | 20,248 | 132,803 | 62,084 | 6,000 | 12,463 |
| | OK | 16,451 | 19,833 | 42,325 | 257,265 | 17,694 | 6,000 | 6,000 |
| | TX | 35,922 | 38,745 | 125,630 | 472,236 | 131,951 | 6,000 | 19,096 |
| VII | GI | 0 | 0 | 16,075 | 135,277 | 26,255 | 6,000 | 7,359 |
| | IA | 15,440 | 17,906 | 16,075 | 6,000 | 6,000 | 6,000 | 22,131 |
| | KS | 14,107 | 21,646 | 80,716 | 250,856 | 32,149 | 6,000 | 24,620 |
| | MO | 20,195 | 19,875 | 6,000 | 43,385 | 6,000 | 6,000 | 16,530 |
| | NE | 11,448 | 20,955 | 6,000 | 54,887 | 6,000 | 6,000 | 15,990 |
| VIII | CO | 16,050 | 24,362 | 20,248 | 74,338 | 17,694 | 7,136 | 13,642 |
| | MT | 8,188 | 28,861 | 6,000 | 83,922 | 6,000 | 6,000 | 6,608 |
| | ND | 7,470 | 19,926 | 6,000 | 57,495 | 22,538 | 6,000 | 13,270 |
| | SD | 7,579 | 20,860 | 6,000 | 15,855 | 6,000 | 6,000 | 10,299 |
| | UT | 11,527 | 21,685 | 6,000 | 62,649 | 36,940 | 6,000 | 9,493 |
| | WY | 6,495 | 23,573 | 30,678 | 162,898 | 41,083 | 6,000 | 19,622 |

| | | | | | | | | |
|-------|------|---------|---------|-----------|-----------|---------|---------|-----------|
| IX | AS | 1,670 | 664 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| | AZ | 15,593 | 25,501 | 6,000 | 9,559 | 17,694 | 6,000 | 22,925 |
| | CA | 45,452 | 29,925 | 30,678 | 216,450 | 17,694 | 6,000 | 61,555 |
| | CNMI | 1,215 | 1,027 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| | GU | 3,018 | 1,094 | 6,000 | 6,000 | 6,000 | 6,000 | 13,090 |
| | HI | 9,163 | 6,067 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| | MV | 8,551 | 25,092 | 6,000 | 11,033 | 6,000 | 6,000 | 8,192 |
| | TT | 3,138 | 1,747 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| | 9I | 0 | 0 | 6,000 | 52,314 | 6,000 | 6,000 | 6,608 |
| X | AK | 6,270 | 57,188 | 28,528 | 42,987 | 6,000 | 6,000 | 6,000 |
| | ID | 9,009 | 21,729 | 6,000 | 6,000 | 6,000 | 6,000 | 33,196 |
| | OR | 14,780 | 23,475 | 6,000 | 8,055 | 6,000 | 6,000 | 22,200 |
| | WA | 18,785 | 19,521 | 16,075 | 6,000 | 6,000 | 8,541 | 55,377 |
| TOTAL | 0 | 910,020 | 910,020 | 1,274,028 | 3,731,082 | 910,020 | 364,008 | 1,001,022 |

REGIONAL SUMMARY OF ALLOTMENTS

| | POP ALLOT | AREA ALLOT | CLASS 1 ALLOT | CLASS 2 ALLOT | CLASS 3 ALLOT | CLASS 4 ALLOT | CLASS 5 ALLOT |
|--------|--------------|---------------|------------------|------------------|------------------|------------------|------------------|
| REG 1 | 71,787 | 42,230 | 36,000 | 36,000 | 36,000 | 36,000 | 60,941 |
| REG 2 | 82,084 | 28,338 | 67,915 | 141,217 | 54,940 | 24,000 | 108,637 |
| REG 3 | 98,279 | 54,309 | 53,450 | 215,910 | 56,255 | 38,528 | 108,844 |
| REG 4 | 159,662 | 129,671 | 233,109 | 319,521 | 59,694 | 50,195 | 142,941 |
| REG 5 | 147,069 | 104,602 | 239,312 | 608,402 | 80,771 | 37,607 | 112,883 |
| REG 6 | 95,994 | 118,189 | 325,246 | 1,215,349 | 340,567 | 36,000 | 61,427 |
| REG 7 | 61,190 | 80,382 | 108,791 | 355,128 | 50,149 | 24,000 | 79,272 |
| REG 8 | 57,309 | 139,268 | 74,926 | 457,156 | 130,255 | 37,136 | 72,934 |
| REG 9 | 87,801 | 91,118 | 78,678 | 319,357 | 77,389 | 54,000 | 136,371 |
| REG 10 | 48,844 | 121,913 | 56,602 | 63,042 | 24,000 | 26,541 | 116,773 |
| TOTAL | 910,020 | 910,020 | 1,274,028 | 3,731,082 | 910,020 | 364,008 | 1,001,022 |

FY 1986 UIC GRANT FUNDS ALLOTMENT SUMMARY
TOTAL FUNDS: 9100,200

| REGION | STATE | TOTAL STATE ALLOT | PRIMACY PROGRAM ALOT | D. I. PROGRAM ALOT | 1422 PROGRAM ALOT | 1425 PROGRAM ALOT | |
|--------|-------|-------------------------|----------------------------|--------------------------|-------------------------|-------------------------|---------|
| I | CT | 59,300 | 59,300 | 0 | 49,900 | 9,400 | |
| | MA | 64,800 | 64,800 | 0 | 54,100 | 10,700 | |
| | ME | 55,600 | 55,600 | 0 | 45,400 | 10,200 | |
| | NH | 50,000 | 50,000 | 0 | 41,200 | 8,800 | |
| | RI | 44,800 | 44,800 | 0 | 36,800 | 8,000 | |
| | VT | 44,400 | 44,400 | 0 | 35,700 | 8,700 | |
| II | NJ | 83,000 | 83,000 | 0 | 73,400 | 9,600 | |
| | NY | 305,800 | 0 | 305,800 | 155,800 | 150,000 | |
| | PR | 79,400 | 0 | 79,400 | 71,300 | 8,100 | |
| | VI | 38,800 | 0 | 38,800 | 32,200 | 6,600 | |
| III | DC | 37,800 | 0 | 37,800 | 30,200 | 7,600 | |
| | DE | 45,900 | 45,900 | 0 | 38,100 | 7,800 | |
| | MD | 74,400 | 74,400 | 0 | 65,100 | 9,300 | |
| | PA | 240,700 | 0 | 240,700 | 54,900 | 185,800 | |
| | VA | 93,400 | 0 | 93,400 | 83,600 | 9,800 | |
| | WV | 133,500 | 133,500 | 0 | 81,300 | 52,200 | |
| IV | AL | 132,200 | 132,200 | 0 | 82,400 | 49,800 | |
| | FL | 233,700 | 203,600 | 30,100 | 203,600 | 30,100 | |
| | GA | 71,000 | 71,000 | 0 | 57,300 | 13,700 | |
| | KY | 237,100 | 0 | 237,100 | 54,800 | 182,300 | |
| | MS | 160,200 | 73,000 | 87,200 | 73,000 | 87,200 | |
| | NC | 94,200 | 94,200 | 0 | 84,000 | 10,200 | |
| | SC | 63,700 | 63,700 | 0 | 52,500 | 11,200 | |
| | TN | 102,800 | 0 | 102,800 | 82,500 | 20,300 | |
| | V | IL | 351,600 | 351,600 | 0 | 79,600 | 272,000 |
| | | IN | 251,700 | 0 | 251,700 | 94,600 | 157,100 |
| MI | | 296,500 | 0 | 296,500 | 188,200 | 108,300 | |
| MN | | 72,400 | 0 | 72,400 | 59,100 | 13,300 | |
| OH | | 291,000 | 291,000 | 0 | 131,000 | 160,000 | |
| WI | | 67,400 | 67,400 | 0 | 53,900 | 13,500 | |
| VI | AR | 158,700 | 158,700 | 0 | 66,200 | 92,500 | |
| | LA | 377,300 | 377,300 | 0 | 219,200 | 158,100 | |
| | NM | 270,700 | 270,700 | 0 | 116,800 | 153,900 | |
| | OK | 365,600 | 365,600 | 0 | 80,000 | 285,600 | |
| | TX | 829,500 | 829,500 | 0 | 310,600 | 518,900 | |
| | GI | 191,000 | 0 | 191,000 | 55,700 | 135,300 | |
| VII | IA | 89,600 | 0 | 89,600 | 80,000 | 9,600 | |
| | KS | 430,100 | 430,100 | 0 | 156,500 | 273,600 | |
| | MO | 118,000 | 118,000 | 0 | 52,300 | 65,700 | |
| | NE | 121,300 | 121,300 | 0 | 46,400 | 74,900 | |
| VIII | CO | 173,500 | 96,900 | 76,600 | 76,600 | 96,900 | |
| | MT | 145,600 | 0 | 145,600 | 33,000 | 112,600 | |
| | ND | 132,700 | 132,700 | 0 | 60,200 | 72,500 | |
| | SD | 72,600 | 26,100 | 46,500 | 46,500 | 26,100 | |
| | UT | 154,300 | 154,300 | 0 | 74,500 | 79,800 | |
| | WY | 290,300 | 290,300 | 0 | 108,600 | 181,700 | |

| | | | | | | |
|-------|------|-----------|-----------|-----------|-----------|-----------|
| IX | AS | 32,400 | 0 | 32,400 | 25,900 | 6,500 |
| | AZ | 103,300 | 0 | 103,300 | 87,400 | 15,900 |
| | CA | 407,700 | 265,500 | 142,200 | 142,200 | 265,500 |
| | CNMI | 32,200 | 32,200 | 0 | 25,800 | 6,400 |
| | GU | 41,200 | 41,200 | 0 | 34,500 | 6,700 |
| | HI | 45,200 | 0 | 45,200 | 36,200 | 9,000 |
| | NV | 70,900 | 0 | 70,900 | 49,900 | 21,000 |
| | TT | 34,900 | 0 | 34,900 | 27,900 | 7,000 |
| | 91 | 76,800 | 0 | 76,800 | 24,600 | 52,200 |
| X | AK | 153,000 | 73,500 | 79,500 | 79,500 | 73,500 |
| | ID | 87,900 | 87,900 | 0 | 78,700 | 9,200 |
| | OR | 86,500 | 86,500 | 0 | 72,100 | 14,400 |
| | WA | 130,300 | 130,300 | 0 | 121,800 | 8,500 |
| TOTAL | | 9,100,200 | 6,092,000 | 3,008,200 | 4,635,100 | 4,465,100 |

SUMMARY OF REGIONAL ALLOTMENT

| | | | | | |
|--------|-----------|-----------|-----------|-----------|-----------|
| REG 1 | 318,900 | 318,900 | 0 | 263,100 | 55,800 |
| REG 2 | 507,000 | 83,000 | 424,000 | 332,700 | 174,300 |
| REG 3 | 625,700 | 253,800 | 371,900 | 353,200 | 272,500 |
| REG 4 | 1,094,900 | 637,700 | 457,200 | 690,100 | 404,800 |
| REG 5 | 1,330,600 | 710,000 | 620,600 | 606,400 | 724,200 |
| REG 6 | 2,192,800 | 2,001,800 | 191,000 | 848,500 | 1,344,300 |
| REG 7 | 759,000 | 669,400 | 89,600 | 335,200 | 423,800 |
| REG 8 | 969,000 | 700,300 | 268,700 | 399,400 | 569,600 |
| REG 9 | 844,600 | 338,900 | 505,700 | 454,400 | 390,200 |
| REG 10 | 457,700 | 378,200 | 79,500 | 352,100 | 105,600 |
| | 9,100,200 | 6,092,000 | 3,008,200 | 4,635,100 | 4,465,100 |

| | | | | | | | |
|--|---|---|-------------------------|------|----|--|--|
|  <p>US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF DRINKING WATER WASHINGTON, DC 20460</p> <p>UIC FEDERAL REPORTING SYSTEM PART V SUMMARY OF UIC GRANT UTILIZATION <i>(This information is collected under the authority of the Safe Drinking Water Act)</i></p> | | <p>I. REPORTING AGENCY AND STATE <i>(include address)</i></p> | | | | | |
| <p>II. DATE PREPARED <i>(month, day, year)</i></p> | | <p>III. STATE CONTACT <i>(name, telephone no.)</i></p> | | | | | |
| | | <p>IV. REPORTING PERIOD <i>(month, year)</i></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">FROM</td> <td style="width:50%;">TO</td> </tr> <tr> <td> </td> <td> </td> </tr> </table> | | FROM | TO | | |
| FROM | TO | | | | | | |
| | | | | | | | |
| ITEM | | FEDERAL FUNDS (\$) | STATE FUNDS (\$) | | | | |
| <p>V. EXPENDITURE</p> <p>BY</p> <p>OBJECT CLASS</p> | A. Personnel | | | | | | |
| | B. Fringe Benefits | | | | | | |
| | C. Travel | | | | | | |
| | D. Equipment | | | | | | |
| | E. Supplies | | | | | | |
| | F. Contractual | | | | | | |
| | G. Other Direct Charges | | | | | | |
| | H. Indirect Charges | | | | | | |
| | I. TOTAL | | | | | | |
| | <p>VI. EXPENDITURE</p> <p>BY</p> <p>PROGRAM ELEMENT</p> | A. Administration | | | | | |
| B. Permitting | | | | | | | |
| C. Surveillance, Inspection, and Quality Assurance | | | | | | | |
| D. Enforcement | | | | | | | |
| E. Aquifer Identification and Exemption | | | | | | | |
| F. Class V Assessment | | | | | | | |
| G. Data Management | | | | | | | |
| H. Public Information, Training, and Technical Assistance | | | | | | | |
| I. Other | | | | | | | |
| J. TOTAL | | | | | | | |
| <p>VII. REMARKS <i>(Attach additional sheets if necessary)</i></p> | | | | | | | |
| <p>TYPED OR PRINTED NAME AND TITLE OF PERSON FILLING OUT FORM</p> | | | <p>DATE</p> | | | | |
| | | | <p>TELEPHONE NUMBER</p> | | | | |