



PENNSYLVANIA

OPERATORS CERTIFICATION PROGRAM

EXTERNAL PROGRAM REVIEW

JANUARY 2011

Prepared by
Bureau of Water Standards and Facility Regulation
Division of Technical and Financial Assistance

PENNSYLVANIA OPERATORS CERTIFICATION PROGRAM EXTERNAL PROGRAM REVIEW

A. BACKGROUND

A requirement of the US Environmental Protection Agency (EPA) is to conduct an “external” review of a state Operator Certification Program at least once every five years. This external program review must be completed by “an entity outside the state operator certification program primacy agency”. Eligible entities that meet this definition include (1) program staff from another state, (2) EPA, (3) an outside contractor or (4) an advisory or stakeholder group convened for this purpose. Having explored all four options, The Department of Environmental Protection (Department) program staff recommended that the Certification Program Advisory Committee (CPAC) complete this review. CPAC agreed to do this in early 2009. Due to staffing and budget cuts and the need to complete the regulatory review process associated with the adopted Chapter 302, Operator Certification Program Regulations, the completion of this external review had to be delayed.

CPAC choose to limit the areas of their review to three categories: *(1) Testing & Training*, *(2) Outreach & Stakeholder Involvement*, and *(3) Status & Trends*. CPAC members were sent a packet of program information to assist them, as a group, assess the acceptability, understanding, and quality of the Operator Certification Program as well as to help identify opportunities for streamlining and improving the program. They developed and distributed surveys to system owners, training and exam providers and examinees. The survey forms were distributed utilizing several methods. Examinees surveys were handed out at examination sessions. Approximately 360 surveys between 10-1-09 and 10-22-09 were collected before the examination services were shut down. The Approved Examination Providers Surveys were distributed by e-mail. Based on 20 surveys distributed, only 6 surveys were completed and returned between December 2009 and January 2010. The Training Provider Surveys were also distributed by e-mail. Based on 195 surveys distributed, 42 surveys were completed and returned between December 2009 and January 2010. The System Owner Surveys were distributed by mail along with the 2010 Available Operator Report to approximately 3200 water and 2800 wastewater systems. Based on 3200 water surveys distributed, 863 surveys were completed and returned between March and June 2010.

A survey for certified operators was also developed however, due to budget constraints; this survey has not been distributed yet. The Department is planning a series of training workshops/sessions for spring 2011 to update the regulated community on the recently finalized program regulations. Certified operators who attend these sessions will be asked to complete this survey at that time. An addendum to this report will then be prepared based on the results.

B. SURVEY RESULTS

Below, are the tabulations of the survey results?

EXAMINEE SURVEY RESULTS - Examinee Survey Results (based on 360 surveys completed between October 1, 2009 and October 22, 2009 testing). Some survey questions were left blank so percentages will not always equal 100%

10-01-09 - Jacobus	43 surveys	10-14-09 - Dubois	65 surveys
10-15-09 - Meadville	17 surveys	10-16-09 - Greensburg	37 surveys
10-20-09 - Washington	52 surveys	10-20-09 - Wyomissing	87 surveys
10-22-09 - Scranton	59 surveys		

The initial 5 questions asked the examinees to identify at what **level they understood specific operator certification components of the Program.** They were to respond based on answer A = "don't understand at all" to answer C = "completely understand".

	A	B	C
1. Exam Application Procedures	18(05%)	112(31%)	229(64%)
2. Education Requirements	28(08%)	106(29%)	224(62%)
3. Experience Requirements	26(07%)	104(29%)	228(63%)
4. Criminal History Check Requirements	18(05%)	51(14%)	289(80%)
5. Who to contact with program questions	50(14%)	109(30%)	200(56%)

The next 5 questions asked examinees to rate their **level of satisfaction with specific components of the Program.** They were to respond based on answer A = least satisfied to answer C = most satisfied.

	A	B	C
6. Exam Availability	95(26%)	123(34%)	142(39%)
7. Exam Location	55(15%)	123(34%)	181(50%)
8. Exam Prep Training	130(36%)	128(36%)	101(28%)
9. Operator Certification Website	75(21%)	150(42%)	133(37%)
10. Earthwise Academy	105(29%)	154(43%)	90(25%)

The next 14 questions related to the **training & testing components of the Program.**

11. Do you feel that the number of certification examinations offered each year is sufficient to meet the demand?

A = yes	157(44%)
B = no	162(45%)
C = n/a	40(11%)

12. Do you feel that the geographic location of examinations offered throughout the Commonwealth has reduced the need for operators to travel long distances to take examinations?

A = yes	199(55%)
B = no	137(38%)
C = n/a	23(06%)

13. Do you feel experience should be required to sit for the certification examination?

A = yes	196(54%)
B = no	142(39%)
C = n/a	21(06%)

14. Do you feel training should be required to sit for the certification examination?
- | | |
|---------|----------|
| A = yes | 209(58%) |
| B = no | 133(37%) |
| C = n/a | 17(05%) |
15. The certification examination consisting of 2 parts; Part I-General Exam and a Part II Technology has been beneficial for an operator for certification?
- | | |
|---------|----------|
| A = yes | 236(66%) |
| B = no | 56(16%) |
| C = n/a | 66(18%) |
16. The primary testing method for operator certification should be:
- | | |
|-------------------------------|----------|
| A = hardcopy paper based | 154(43%) |
| B = electronic computer based | 153(43%) |
| C = n/a | 51(14%) |
17. If you used an Approved Examination Provider, have they provided guidance in appropriate certification requirements for you & your facility?
- | | |
|---------|----------|
| A = yes | 188(52%) |
| B = no | 54(15%) |
| C = n/a | 114(32%) |
18. Are there sufficient training opportunities available to prepare for the operator certification examinations?
- | | |
|---------|----------|
| A = yes | 139(39%) |
| B = no | 200(56%) |
| C = n/a | 20(06%) |
19. Were study materials readily available and useful in preparing for the examination?
- | | |
|---------|----------|
| A = yes | 210(58%) |
| B = no | 136(38%) |
| C = n/a | 11(03%) |
20. What study materials did you use?
- | | |
|-----------------------|----------|
| A = books | 179(50%) |
| B = SAC manuals | 85(24%) |
| C = web-based | 39(11%) |
| D = DEP Training CD's | 125(35%) |
| E = Other | 50(14%) |
21. Did you participate in a DEP approved training course prior to testing?
- | | |
|---------|----------|
| A = yes | 148(41%) |
| B = no | 201(56%) |
| C = n/a | 9(03%) |
22. Was the training useful in preparing you for the operator certification examination?
- | | |
|---------|----------|
| A = yes | 122(34%) |
| B = no | 72(20%) |
| C = n/a | 159(44%) |
23. Did you pass the certification examination on your first try?
- | | |
|---------|----------|
| A = yes | 82(23%) |
| B = no | 141(39%) |
| C = n/a | 128(36%) |

24. What type(s) of training course would you prefer?
- | | |
|-----------------|----------|
| A = classroom | 205(57%) |
| B = web-based | 91(25%) |
| C = on-site | 83(23%) |
| D = conferences | 24(07%) |

The final 7 questions related to the **outreach & stakeholder involvement components of the Program**. Some respondents selected more than one answer for question 27.

25. Have you ever contacted DEP certification personnel for guidance or information?

A = yes	179(50%)
B = no	164(46%)
C = n/a	11(03%)

26. If yes to question 25, were the DEP certification personnel helpful in responding to your issue/concern?

A = yes	154(43%)
B = no	41(11%)
C = n/a	146(41%)

27. My primary source of information about the Operator Certification Program is:

A = DEP operator website	101(28%)
B = other operators	112(31%)
C = training providers	77(21%)
D = DEP certification personnel	20(06%)
E = n/a	21(06%)

28. The Operator Information website presents useful information.

A = yes	173(48%)
B = no	49(14%)
C = n/a	122(34%)

29. The Earthwise Academy is well organized and easy to use.

A = yes	85(24%)
B = no	52(14%)
C = n/a	207(58%)

30. Do you use the Earthwise Academy to identify approved DEP training?

A = yes	74(21%)
B = no	151(42%)
C = n/a	118(33%)

31. Do you use the Earthwise Academy to check and track your continuing education contact hours?

A = yes	78(22%)
B = no	113(31%)
C = n/a	120(33%)

APPROVED EXAMINATION PROVIDER SURVEY RESULTS - Approved Examination Provider Survey Results (based on 20 surveys distributed, 6 surveys were completed and returned between December 2009 and January 2010). Some survey questions were left blank so percentages will not always equal 100%

The initial 7 questions asked the approved examination providers to identify at what **level they understood specific operator certification components of the Program.** They were to respond based on answer A = "don't understand at all" to answer C = "completely understand".

	A	B	C
1. Classification & Sub-classification of Systems	01(17%)	02(33%)	03(50%)
2. Education Requirements	00(00%)	03(50%)	03(50%)
3. Experience Requirements	00(00%)	03(50%)	03(50%)
4. Certificate Renewal Process & Deadlines	01(17%)	02(33%)	03(50%)
5. Certificate Upgrade Process	02(33%)	04(66%)	00(00%)
6. Continuing Education Requirements	00(00%)	02(33%)	04(67%)
7. Who to contact with program questions	01(17%)	03(50%)	02(33%)

The next 5 questions asked the approved examination providers to rate their **level of satisfaction with specific components of the Program.** They were to respond based on answer A = least satisfied to answer C = most satisfied.

	A	B	C
8. Exam Availability	06(100%)	00(00%)	00(00%)
9. Exam Location	03(50%)	03(50%)	00(00%)
10. Exam Prep Training	02(33%)	04(67%)	00(00%)
11. Operator Certification Website	01(17%)	04(67%)	01(17%)
12. Earthwise Academy	00(00%)	04(67%)	02(33%)

The next 7 questions related to the **training & testing components of the Program.**

13. Do you feel that the number of certification examinations offered each year is sufficient to meet the demand?

A = yes	01(17%)
B = no	05(83%)
C = n/a	00(00%)

14. Do you feel that the geographic location of examinations offered throughout the Commonwealth has reduced the need for operators to travel long distances to take examinations?

A = yes	03(50%)
B = no	02(33%)
C = n/a	01(17%)

15. Do you feel experience should be required to sit for the certification examination?

A = yes	02(33%)
B = no	03(50%)
C = n/a	01(17%)

16. Do you feel training should be required to sit for the certification examination?

A = yes	06(100%)
B = no	00(00%)
C = n/a	00(00%)

17. The certification examination consisting of 2 parts; Part I-General Exam and a Part II Technology has been beneficial for an operator for certification?

A = yes	05(83%)
B = no	00(00%)
C = n/a	01(17%)

18. The primary testing method for operator certification should be:

A = hardcopy paper based	02(33%)
B = electronic computer based	03(50%)
C = n/a	01(17%)

19. Are there sufficient training opportunities available to prepare for the operator certification examinations?

A = yes	03(50%)
B = no	02(33%)
C = n/a	01(17%)

The final 6 questions related to the **outreach & stakeholder involvement components of the Program.** Some respondents selected more than one answer for question 22 resulting in more than 100%.

20. Have you ever contacted DEP certification personnel for guidance or information?

A = yes	05(83%)
B = no	01(17%)
C = n/a	00(00%)

21. If yes to question 20, were the DEP certification personnel helpful in responding to your issue/concern?

A = yes	05(83%)
B = no	00(00%)
C = n/a	01(17%)

22. My primary source of information about the Operator Certification Program is:

A = DEP operator website	04(67%)
B = other operators	01(17%)
C = training providers	00(00%)
D = DEP certification personnel	02(33%)
E = n/a	00(00%)

23. The Operator Information website presents useful information.

A = yes	04(67%)
B = no	00(00%)
C = n/a	02(33%)

24. The Earthwise Academy is well organized and easy to use.

A = yes	04(67%)
B = no	01(17%)
C = n/a	01(17%)

25. Do you use the Earthwise Academy to identify approved DEP training?

A = yes	02(33%)
B = no	03(50%)
C = n/a	01(17%)

TRAINING PROVIDER SURVEY RESULTS - Approved Training Provider Survey Results (based on 195 surveys distributed, 42 surveys were completed and returned between December 2009 and January 2010). Some survey questions were left blank so percentages will not always equal 100%

The initial 7 questions asked the training providers to identify at what **level they understood specific operator certification components of the Program.** They were to respond based on answer A = "don't understand at all" to answer C = "completely understand".

	A	B	C
1. Classification & Sub-classification of Systems	04(10%)	14(33%)	23(55%)
2. Education Requirements	02(05%)	14(33%)	25(60%)
3. Experience Requirements	02(05%)	18(43%)	21(50%)
4. Certificate Renewal Process & Deadlines	05(12%)	12(29%)	24(57%)
5. Certificate Upgrade Process	07(17%)	18(43%)	16(38%)
6. Continuing Education Requirements	01(02%)	10(24%)	30(72%)
7. Who to contact with program questions	05(12%)	13(31%)	23(55%)

The next 5 questions asked the training providers to rate their **level of satisfaction with specific components of the Program.** They were to respond based on answer A = least satisfied to answer C = most satisfied.

	A	B	C
8. Exam Availability	17(41%)	18(43%)	06(14%)
9. Exam Location	08(19%)	23(55%)	10(24%)
10. Exam Prep Training	09(22%)	24(57%)	08(19%)
11. Operator Certification Website	02(05%)	25(60%)	14(33%)
12. Earthwise Academy	00(00%)	25(60%)	16(38%)

The next 7 questions related to the **training & testing components of the Program.**

13. Do you feel that the number of certification examinations offered each year is sufficient to meet the demand?

A = yes	16(38%)
B = no	15(36%)
C = n/a	11(26%)

14. Do you feel that the geographic location of examinations offered throughout the Commonwealth has reduced the need for operators to travel long distances to take examinations?

A = yes	20(48%)
B = no	08(19%)
C = n/a	14(33%)

15. Do you feel experience should be required to sit for the certification examination?

A = yes	19(45%)
B = no	16(38%)
C = n/a	07(17%)

16. Do you feel training should be required to sit for the certification examination?

A = yes	24(57%)
B = no	07(17%)
C = n/a	11(26%)

17. The certification examination consisting of 2 parts; Part I-General Exam and a Part II Technology has been beneficial for an operator for certification?

A = yes	27(64%)
B = no	03(07%)
C = n/a	12(29%)

18. The primary testing method for operator certification should be:

A = hardcopy paper based	13(31%)
B = electronic computer based	16(38%)
C = n/a	13(31%)

19. Are there sufficient training opportunities available to prepare for the operator certification examinations?

A = yes	14(33%)
B = no	15(36%)
C = n/a	13(31%)

The final 6 questions related to the **outreach & stakeholder involvement components of the Program**. Some respondents selected more than one answer for question 22 resulting in more than 100%.

20. Have you ever contacted DEP certification personnel for guidance or information?

A = yes	34(81%)
B = no	07(17%)
C = n/a	01(02%)

21. If yes to question 20, were the DEP certification personnel helpful in responding to your issue/concern?

A = yes	35(83%)
B = no	01(02%)
C = n/a	06(14%)

22. My primary source of information about the Operator Certification Program is:

A = DEP operator website	19(45%)
B = other operators	05(12%)
C = training providers	05(12%)
D = DEP certification personnel	16(38%)
E = n/a	02(04%)

23. The Operator Information website presents useful information.

A = yes	33(79%)
B = no	02(04%)
C = n/a	07(17%)

24. The Earthwise Academy is well organized and easy to use.

A = yes	27(64%)
B = no	05(12%)
C = n/a	10(24%)

25. Do you use the Earthwise Academy to identify approved DEP training?

A = yes	21(50%)
B = no	14(33%)
C = n/a	07(17%)

SYSTEM OWNER SURVEY RESULTS - System Owner Survey Results (based on 3200 water surveys distributed, 863 surveys were completed and returned between March and June 2010). Some respondent's survey questions were left blank and a few survey questions resulted in more than one answer so percentages will not always equal 100%

The initial 4 questions asked the system owners to identify at what **level they understood specific operator certification components of the Program.**

They were to respond based on answer A = "don't understand at all" to answer C = "completely understand".

	A	B	C
1. Experience Requirements	52(06%)	300(35%)	503(58%)
2. Education Requirements	53(06%)	237(27%)	564(65%)
3. Continuing Education Requirements	51(06%)	172(20%)	632(73%)
4. Who to contact with program questions	108(13%)	343(40%)	404(47%)

The next 5 questions asked the training providers to rate their **level of satisfaction with specific components of the Program.** They were to respond based on answer A = least satisfied to answer C = most satisfied.

	A	B	C
5. Exam Availability	298(35%)	356(41%)	194(22%)
6. Exam Location	218(25%)	404(47%)	229(27%)
7. Exam Prep Training	183(21%)	432(50%)	235(27%)
8. Operator Certification Website	109(13%)	407(47%)	329(38%)
9. Earthwise Academy	109(13%)	356(41%)	380(44%)

The next 13 questions related to the **training & testing components of the Program.** Some respondents selected more than one answer for questions 19 & 21 resulting in more than 100%.

10. Do you feel that the number of certification examinations offered each year is sufficient to meet the demand?

A = yes	327(38%)
B = no	361(42%)
C = n/a	160(19%)

11. Do you feel that the geographic location of examinations offered throughout the Commonwealth has reduced the need for operators to travel long distances to take examinations?

A = yes	380(44%)
B = no	309(36%)
C = n/a	157(18%)

12. Do you feel experience should be required to sit for the certification examination?

A = yes	528(61%)
B = no	245(28%)
C = n/a	70(08%)

13. Do you feel training should be required to sit for the certification examination?

A = yes	636(74%)
B = no	156(18%)
C = n/a	55(06%)

14. The certification examination consisting of 2 parts; Part I-General Exam and a Part II Technology has been beneficial for an operator for certification?

A = yes	548(64%)
B = no	76(09%)
C = n/a	220(26%)

15. The primary testing method for operator certification should be:

A = hardcopy paper based	417(48%)
B = electronic computer based	271(31%)
C = n/a	153(18%)

16. If you used an Approved Examination Provider, have they provided guidance in appropriate certification requirements for your facility?

A = yes	220(26%)
B = no	66(08%)
C = n/a	551(64%)

17. Are there sufficient training opportunities available to prepare for the operator certification examinations?

A = yes	393(46%)
B = no	318(37%)
C = n/a	134(16%)

18. Were study materials readily available and useful in preparing for the examination?

A = yes	464(54%)
B = no	187(22%)
C = n/a	191(22%)

19. What study materials did you use?

A = books	450(52%)
B = SAC manuals	265(31%)
C = web-based	201(23%)
D = DEP Training CD's	193(22%)
E = Other	216(25%)

20. Did you participate in a DEP approved training course prior to testing?

A = yes	525(61%)
B = no	170(20%)
C = n/a	140(16%)

21. What type(s) of training course would you prefer?

A = classroom	508(59%)
B = web-based	237(28%)
C = on-site	143(17%)
D = conferences	123(14%)
E = n/a	61(07%)

22. Do you feel the current level on continuing education hours required for an operator to renew their certificate is...

A = excessive	324(38%)
B = not enough	11(01%)
C = appropriate as is	486(56%)
D = n/a	35(04%)

The final 7 questions related to the **outreach & stakeholder involvement components of the Program**. Some respondents selected more than one answer for question 25 resulting in more than 100%.

23. Have you ever contacted DEP certification personnel for guidance or information?

A = yes	548(64%)
B = no	246(29%)
C = n/a	45(05%)

24. If yes to question 23, were the DEP certification personnel helpful in responding to your issue/concern?

A = yes	492(57%)
B = no	55(06%)
C = n/a	245(28%)

25. My primary source of information about the Operator Certification Program is:

A = DEP operator website	365(42%)
B = other operators	82(10%)
C = training providers	234(27%)
D = DEP certification personnel	84(10%)
E = n/a	41(05%)

26. The Operator Information website presents useful information.

A = yes	600(70%)
B = no	51(06%)
C = n/a	180(21%)

27. The Earthwise Academy is well organized and easy to use.

A = yes	510(59%)
B = no	100(12%)
C = n/a	225(26%)

28. Do you use the Earthwise Academy to identify approved DEP training?

A = yes	434(50%)
B = no	288(33%)
C = n/a	110(13%)

29. Do you use the Earthwise Academy to check and track your operator(s) continuing education contact hours?

A = yes	578(67%)
B = no	169(20%)
C = n/a	79(09%)

C. ANALYSIS OF RESULTS

PROGRAM ACCEPTABILITY - Most of those surveyed indicated they were satisfied with the Operator Certification Program. The main issue raised by everyone was that there was not enough examination sessions offered to meet the demand. However, it is important to note that while many felt an insufficient number of examination sessions were provided in the past year, they were very understanding of the reasons. There is a clear expectation that a return to the previous levels of examination sessions must be done as quickly as possible, once the new program fees are in place, collected, and the program budget and staff resources restored.

The survey results identified some other interesting facts:

- 57% of the examinees surveyed prefer classroom training;
- 66% of the examinees surveyed, 83% of the Approved Examination Providers, 64% of the Training Providers, and 64% of the System Owners felt the two part, (general & technology based) examinations are beneficial;
- 54% of the examinees, 33% of the Approved Examination Providers, 45% of the Training Providers, and 61% of the System Owners felt experience should be required to sit for a certification examination;
- 58% of the examinees, 100% of the Approved Examination Providers, 57% of the Training Providers, and 74% of the System Owners felt training should be required to sit for a certification examination;
- 48% of the examinees, 67% of the Approved Examination Providers, 79% of the Training Providers, and 70% of the System Owners felt the Department Operator Information website presented useful information;
- 50% of the examinees, 83% of the Approved Examination Providers, 81% of the Training Providers, and 64% of the System Owners have contacted the Department program personnel for guidance or information; and 43% of the Examinees, 83% of the Approved Examination Providers, 83% of the Training Providers, and 57% of the System Owners felt that the Department personnel were helpful in responding to their specific issue.

PROGRAM UNDERSTANDING - A majority of the examinees felt they had a good understanding of the Operator Certification Program; 64% understood the exam application procedures, 62% felt they understood the education & experience requirements, 80% understood the criminal history report requirements, and 56% knew who to contact with program questions.

The approved examination and training providers also had a good understanding of the Operator Certification Program; over 50% understood the classification & subclassification of systems, education & experience requirements, the certificate renewal process & deadlines, and the continuing education requirements.

58% of the system owners felt that they had a good understanding of experience requirements of the Program, 65% felt they had a good understanding of the education requirements of the Program and 73% understood the continuing education requirements.

While 56% of the examinees surveyed did not think there was sufficient training opportunities available to prepare for the operator certification examination; 58% felt that study materials were readily available and useful in preparing for an examination.

Of concern was that 42% of the examinees surveyed do not use Earthwise Academy to identify approved Department training and 31% do not use Earthwise Academy to check and track their continuing education contact hours. Since the Earthwise Academy is focused to serve operators who are already certified, these results could be skewed due to the fact that the majority of operators surveyed were probably not yet certified.

D. OBSERVATIONS OR RECOMMENDATIONS FOR PROGRAM IMPROVEMENTS

CPAC felt that the survey approach resulted in a limited number of respondents. They recognized the need to distribute the survey to certified operators in order to get a complete picture. These surveys will be distributed in the spring, 2011 as part of the Department training to the regulated community on the program regulations. This report will then be revised to reflect the results of this additional information. However, it was agreed that a number of observations and recommendations could be made based on the results received so far; as follows:

- It appears a shift in focus from getting new people interested in the water/wastewater profession to now getting new people certified is needed.
- The administration of on-line examinations needs to be resumed. Options to do this include providing the on-line examinations in the Department Regional Offices or through partnership agreements with colleges and universities. The possibility of utilizing the Approved Examination Providers to help with registration and proctoring should be explored.
- The examinations are composed of a specific number of questions that address the knowledge, skills and abilities (KSA's) needed to successfully operate a treatment system. These KSA's were categorized and their relative importance determined. In addition, the content of these questions have been categorized into broad topics such as math, chemistry, hydraulics, etc. Rather than spending staff time developing more comprehensive study guides, the Department should focus resources on developing the capability to provide feedback to the examinee in the results letter as to what content and categories of KSA's they did well on and what information they need to study further. This same information should be summarized and provided to training providers to facilitate the enhancement of their training in areas where the examinees are deficient.

- Enhancements to the Department website are needed to make it easier to find information, possibly through links within text. The Department needs to expand its outreach efforts to emphasize the importance of the Operator Information Center webpage as the location for anything related to the Operator Certification Program. This includes examination session schedules, education & training opportunities through EarthWise Academy, documents and forms, how to find technical assistance, etc.
- Training Providers and Approved Examination Providers need the ability to access and validate client IDs for those folks who are not yet certified. They explained that folks taking training, if not yet certified, have not been assigned a client ID unless they have taken an examination and thus, training providers have no way to record the training.
- eLibrary is very hard to use.
- The 2010 Drinking Water Operator Certification Annual Report provided to EPA seemed to jump around between Drinking Water and Wastewater. For future reports, there needs to be a clear distinction between the Drinking Water and Wastewater components of the program.
- The Department should look at topic training as a modification to current training modules rather than extensive revisions to these training modules.

E. NEXT STEPS

This final report will be presented to the State Board for Certification of Water and Wastewater Systems Operators (Board) and the Department for review. The Department will then work with the Board to develop a strategic plan to address CPAC's recommendations, complete with milestones and a timeline for implementation. The Department will report back to the Board and CPAC on progress made as this plan is implemented.

CPAC will continue to work on modifications to the report, based on the results of the certified operator surveys to be completed in spring, 2011. Modifications to the strategic plan will also be made once CPAC has completed its review of the results.