

# STATE OF MICHIGAN REQUIREMENTS FOR CERTIFICATION

## Under Act 399, P.A. 1976 and Administrative Rules for Water Treatment & Distribution System Operators

### **R 325.11910. APPLICATION FOR EXAMINATION; NOTICE TO ACCEPTED APPLICANTS OF EXAMINATION.**

Rule 1910. (1) To be certified for the operation of a public water supply other than a class F-5, class D-5 or class S-5, an individual shall submit, to the department, not less than 45 days before the announced examination date, an application for examination on a form provided by the department. To be certified for the operation of a class F-5, class D-5, or class S-5 an individual shall submit, to the department, not less than 20 days before the examination date, an application for examination on a form provided by the department. The information contained on the application shall be evaluated by the department, shall be subject to review by the advisory board, and shall constitute a part of the examination. The department may require verification of the education and experience of an applicant for an examination.

(2) Not less than 15 days before the examination the department shall notify all applicants of its findings and shall notify those applicants accepted for examination of the date, time, and place of the examination.

### **R 325.11911. APPLICANT FOR CERTIFICATION; GRADING.**

Rule 1911. (1) An applicant for certification shall be graded in 4 major divisions as follows:

- (a) Educational qualifications of the applicant.
- (b) Experience qualifications of the applicant, where applicable.
- (c) The examination.
- (d) The laboratory examination, where applicable.

(2) An applicant shall satisfy the minimum criteria established by the department as outlined in table 1 (see page 4 of this document) for educational qualifications before admission to the written examination.

(3) Criteria used for grading shall be determined by the department subject to the approval of the advisory board and shall be made available by the department.

(4) An applicant for certification may be required to submit, to the department, on request, names of persons familiar with the experience qualifications of the applicant.

### **R 325.11915. RENEWAL REQUIREMENTS.**

Rule 1915. (1) The department shall renew a certificate on a 3-year cycle. To renew a certificate, a certificate holder shall submit, to the department, an application for renewal on a form provided by the department.

(2) To have a certificate renewed, a holder of an F-1 or F-1 (restricted), F-2 or F-2 (restricted), F-3 or F-3 (restricted), D-1 or D-1 (restricted), D-2 or D-2 (restricted), D-3 or D-3 (restricted), S-1 or S-1 (restricted), S-2 or S-2 (restricted), S-3 or S-3 (restricted) certificate shall have completed, during the renewal cycle, not less than 24 hours of advisory board-approved training or continuing education, regardless of the category or class or number of certificates held. To have a class F-4 or F-4 (restricted), D-4 or D-4 (restricted), or S-4 or S-4 (restricted) certificate renewed, a certificate holder shall have completed, during the renewal cycle, not less than 12 hours of advisory board-approved training or continuing education. To have a class F-5, class D-5 or class S-5 certificate renewed, a certificate holder shall have completed not less than 9 hours of advisory board-approved training or continuing education during the renewal cycle.

## WATER TREATMENT AND WATER DISTRIBUTION CERTIFICATION EXAMINATION PROCEDURES

There are three examination categories, “F” for Filtration, “D” for Limited Treatment and “S” for Distribution. Each category has various levels, 1-5. The “1” level represents the upper most level and the “4” level is considered the entry level for community water supplies. The F-1, F-2, D-1 and D-2 exams are generally scheduled in May. The S-1 and S-2 exams are generally scheduled in November. The F-3, F-4, D-3, D-4, S-3 and S-4 exams are offered two times a year on the same dates as the upper level exams. The level “5” exams are not usually of interest to community water utility employees. For information regarding the level “5” exams, call Matt Tomlinson at 517-241-8913 or email at [tomlinsonm@michigan.gov](mailto:tomlinsonm@michigan.gov)

1. **Starting Time:** Exams begin at 8:30 a.m. Eastern time. An applicant may not be allowed to write an exam if (s)he arrives at the examination site later than 8:30 a.m. Applicants are encouraged to arrive at the exam site by 8:15 a.m.
2. **Exam Classification & Level Approval:** It is expected that the applicant will write the exam(s) that they were approved to write, except as discussed below in Part 3, “Number of Exams”.
3. **Number of Exams:** An approved applicant may write up to two (2) examinations except that an applicant may write all three “4” level or “5” level examinations at one sitting. The applicant should decide which exam (s)he wants to write first, but applicants cannot look over the exams to decide. If an applicant is handed an exam, the exam will be graded even if the applicant does not attempt to answer any of the questions. If an applicant arrives at the exam site approved to write a particular examination but decides (s)he would rather write a lower level exam in the same classification, (s)he may do so providing:
  - a. Extra exams are available;
  - b. (S)he has been approved for a higher level exam;
  - c. (S)he does not review the higher level exam prior to making the decision not to write it.
4. **Applicants writing F and D examinations may also be required to take a laboratory examination.** Applicants writing an F exam at the following locations are expected to take the lab exam on exam day: Allen Park, Ann Arbor, Holland, Lansing, Port Huron, Saginaw, or in the Upper Peninsula. Applicants writing an F exam at other locations will be contacted later and a lab exam scheduled. Applicants writing a D examination at any location are expected to take the lab exam on exam day.
5. **Cheating:** Examinees found to be cheating during the examination forfeit the exam and may not be allowed to write the exam again until approved to do so by the Advisory Board.
6. **Make-Up Exam:** Make-up exams will only be given when an extreme emergency prevents the applicant from writing the regularly scheduled exam. Applicants requesting a make-up exam must notify the department, in writing, within six (6) business days from the date of the scheduled exam with a valid reason for requesting a make-up examination. Make-up exams will be conducted in Lansing or the Gwinn area. There is no make-up exam for applicants writing the “3”, “4”, or “5” level examinations because these exams are offered twice each year.
7. **Grading of Exams:** Examinations are based on a final grade of 100% for perfect examinations. All examinations are multiple choice exams, 70% is considered a passing grade. There is no partial credit or re-grading for multiple-choice exams.

8. **Release of Scores:** Exam scores will be reported out on the official examination notification letter, within 45 days from the date of the examination. Please do not call DEQ for a score during this time period. Exam scores are not disclosed over the phone.
9. **Exam Failures and No Shows:** An individual who fails an examination with a score of 40% or less or who has failed the same level examination three times is not eligible to write that exam again or a higher level exam in the same category until (s)he demonstrates that (s)he is prepared for the next exam. The individual must contact the Operator Training and Certification Unit at 517-241-7157 to discuss areas of difficulty and consider a course of action. Once understood and agreed upon, the individual must satisfactorily complete the training program.

In addition, the supervisor of an applicant failing an examination for the third time may be notified that significant preparation and review will need to be demonstrated before the applicant will be permitted to write again. If an applicant fails to show up for a particular examination twice, notification may be sent to the applicant's employer. If the number of times an applicant fails to show up for an exam and the number of times (s)he fails the exam adds up to three, it will be considered that (s)he has failed the exam three times. If an applicant, prior to an exam or on exam day, notifies the DEQ, Water Bureau at 517-241-7199 of a conflict or emergency situation that prevents them from writing, they will not be considered as a no-show.

10. **Individual Subtest Reports:** Individuals writing a "1", "2", "3" or "4" level exam, whether they pass the exam or fail it, will receive an Individual Subtest Report. This report shows whether or not a particular subject was mastered. The subjects not mastered or partially mastered are areas that should be studied prior to retaking the exam or taking a higher-level exam in the same category. Call the Operator Training & Certification Unit secretary at 517-241-7199 to request an Individual Subtest Report.
11. **Exam Content:** The subjects typically covered on the various certification examinations are noted on the following page. These subjects may change without notification.

## Level 1 & 2 Examinations

### **F CLASSIFICATIONS**

Alkalinity, Bacteriology, Chemistry, Chlorination, Coagulation-Flocculation, Contingencies & Emergencies, Corrosion, Cross Connections, Customer Relations, Filtration, Fluoridation, Hydraulics, Instrumentation, Laboratory, Management, Membrane Technology, Microbiology, Operation & Maintenance, Other Disinfectants, Pretreatment, Pretreatment, Pumps & Motors, Record Keeping, Safety, Sampling, SDWA (Act 399), Sludge, Softening, Source, Storage, Taste & Odor, THM's

### **D CLASSIFICATIONS**

Corrosion, Cross Connections, Disinfection, Emergency/Security, Fluoridation, Hardness/Softening, Hydraulics, Instrumentation, Iron Removal, Laboratory Procedures, Management, Membrane Technology, Microbiology, Operation & Maintenance, Phosphate, Public Relations, Pumps & Motors, Record Keeping, Safety, Sampling, SDWA (Act 399), Taste & Odor, Wells

### **S CLASSIFICATIONS**

Chlorination, Contingencies & Emergencies, Corrosion, Cross Connections, Customer Relations, Hydrants, Hydraulics, Instrumentation, Main Installation, Management, Meters, Operation & Maintenance, Pipes & Joints, Pumps & Motors, Record keeping, Safety, Sampling, SDWA (Act 399), Storage Reservoirs, Valves, Water Quality

## Level 3 & 4 Examinations

### **F CLASSIFICATIONS**

Alkalinity, Chemistry, Coagulation & Flocculation, Contingencies & Emergencies, Corrosion, Cross Connections, Customer Relations, DBP's, Disinfection, Filtration, Fluoridation, Hydraulics, Instrumentation, Laboratory, Management, Membrane Technology, Microbiology, Operation & Maintenance, Other Disinfectants, Pretreatment, Pumps & Motors, Record Keeping, Safety, Sampling, SDWA (Act 399), Sludge, Softening, Source, Storage, Taste & Odor

### **D CLASSIFICATIONS**

Corrosion, Cross Connections, Disinfection, Emergencies & Security, Fluoridation, Harness/Softening, Hydraulics, Instrumentation, Iron Removal, Laboratory, Management, Membrane Technology, Microbiology, Operation & Maintenance, Phosphate, Public Relations, Pumps & Motors, Record Keeping, Safety, Sampling, SDWA (Act 399), Taste & Odor, Wells

### **S CLASSIFICATIONS**

Chlorination, Contingencies & Emergencies/Security, Corrosion Control, Cross Connection Control, Customer Relations, Hydrants, Hydraulics, Instrumentation, Management, Meters, Microbiology, Operation & Maintenance, Pipes & Joints, Pumps & Motors, Record Keeping, Safety, Sampling, SDWA (Act 399), Storage, Valves, Water Quality, Water Main Installation

# POINTS REQUIRED TO WRITE AN EXAMINATION

## EDUCATIONAL QUALIFICATIONS

F-1	80	D-1	70	S-1	70
F-2	70	D-2	60	S-2	60
F-3	60	D-3	60	S-3	60
F-4	60	D-4	60	S-4	60
F-5	60	D-5	60	S-5	60

## EXPERIENCE QUALIFICATIONS

F-1	60	D-1	48	S-1	48
F-2	30	D-2	24	S-2	24
F-3	15	D-3	12	S-3	12
F-4	3	D-4	6	S-4	6
F-5	(NR)	D-5	(NR)	S-5	(NR)

NR-Not Required

F-1 Education Requirements--The 80 education points must include a high school education or equivalent and either two years of college credit or the equivalent. Two years of college credit may be a degree or a minimum of 60 semester hours without a degree. The equivalent is comprised of a list of "Required" and "Optional" courses determined by the Advisory Board. (See page 7 of this document.)

## SCHEDULE OF POINTS GIVEN FOR FORMAL EDUCATION

8 <sup>th</sup> Grade	40	*Approved Two Year	
10 <sup>th</sup> Grade	50	Water-Wastewater Tech.	80
H.S. Diploma or GED	60	** B. S. in Engineering,	
2 yr. Associate Degree	70	Chemistry or Microbiology	80
Bachelor Degree	70	** Advanced Degree in	
Advanced Degree	70	Engineering, Chemistry or	
		Microbiology	90

\* Curriculum approved by Advisory Board

\*\* Degree must be in Engineering, Chemistry or Microbiology

## EDUCATION POINTS ALLOWED AS SUBSTITUTION FOR EXPERIENCE

	F-1	F-2	F-3	F-4	D-1	D-2	D-3	D-4	S-1	S-2	S-3	S-4
**Science B.S.	12	9	6	0	12	9	6	3	12	9	6	3
**Advanced Degree	18	12	6	0	18	12	6	3	18	12	6	3
Bachelor Degree	4	4	0	0	2	2	0	0	2	2	0	0
Advanced Degree	4	4	0	0	2	2	0	0	2	2	0	0
* W/WW Tech	0	0	0	3	0	0	0	6	0	0	0	6

## SUBSTITUTION OF EXCESS EXPERIENCE TOWARD EDUCATION

Excess experience only, can be substituted for education. This excess is based on exceeding the minimum points for the highest class in a category; for example, the F-1 requires 60 experience points. Therefore, if a person was applying for an F-3, (s)he would need 15 experience points to satisfy experience credit but (s)he would not begin calculating excess experience until after accumulating 60 experience points. Each excess experience point is worth 1/2 point of education with a maximum of 10 education points.

## EXPERIENCE IN ALLIED FIELDS

Applicants holding multiple DEQ certificates may apply and qualify for the following exams

	F	D	S
DEQ Water Treatment Certificate F-1	---	D-4	S-4
DEQ Water Treatment Certificate F-2	---	D-4	S-4
DEQ Limited Treatment Certificate D-1	F-4	---	S-4
DEQ Limited Treatment Certificate D-2	---	---	S-4
DEQ Water Distribution Certificate S-1	F-4	D-4	---
DEQ Water Distribution Certificate S-2	---	D-4	---
DEQ Wastewater Treatment Certificate A	F-4	D-4	---
Registered Professional Engineer in a Responsible Drinking Water System Design or Construction Position	F-4	D-4	S-4

NUMBER OF FULL CATEGORIES WORKING IN	POINTS/MONTH	ALLOWABLE EXAM LEVEL	EXPERIENCE QUALIFICATIONS MUST INCLUDE
4	1	S-1	48 Points plus: work in 4 or more full categories for at least 1 year AND at least 2 years of operating experience of which 1 year is in a S-2 system or higher.
3	1	S-2	24 Points plus: work in 3 or more full categories for at least 1 year AND 1 year of operating experience in a S-3 system or higher.
2	1/2	S-3	12 Points plus: work in 2 or more full categories for 1 year.
1	1/2	S-4	6 Points
1/2	1/4	S-4	6 Points
NUMBER OF FULL CATEGORIES WORKING IN	POINTS/MONTH	ALLOWABLE EXAM LEVEL	EXPERIENCE QUALIFICATIONS MUST INCLUDE
4	1	F-1	60 Points plus: work in 4 or more full categories for at least 1 year AND at least 3 years of operating experience of which 1 year is in a F-2 system or higher.
3	1	F-2	30 Points plus: work in 3 or more full categories for at least 1 year AND 15 months of operating experience in a F-3 system or higher.
2	1/2	F-3	15 Points plus: work in 2 or more full categories for 1 year
1	1/2	F-4	3 Points
NUMBER OF FULL CATEGORIES WORKING IN	POINTS/MONTH	ALLOWABLE EXAM LEVEL	EXPERIENCE QUALIFICATIONS MUST INCLUDE
3	1	D-1	48 Points plus: work in 3 or more full categories for at least 1 year AND at least 2 years of operating experience of which 1 year is in a D-2 system or higher.
2	1/2	D-2	24 Points plus: work in 2 or more full categories for at least 1 year AND at least 2 years of operating experience in a D-3
1	1/2	D-3	12 Points plus: work in 1 or more full categories 1 year.
1	1/2	D-4	6 Points

Experience points awarded from "allied fields" or "education allowed as experience" MAY be counted as one full category

## EDUCATION - F-1 APPLICANTS

F-1 Education Requirements--The 80 education points must include a high school education or equivalent and either two years of college credit or the equivalent. Two years of college credit may be a degree or a minimum of 60 semester hours without a degree. The equivalent is comprised of a list of "Required" and "Optional" courses determined by the Advisory Board. Each application will be thoroughly evaluated so that the individual will be given all the substitution credits (s)he is entitled to under the guidelines. If an individual is considering taking a course that is not specifically listed, they should check with Koren Carpenter at 517-241-7157 to make certain it is an acceptable equivalent.

### REQUIRED COURSES

### MAX. POINTS GIVEN

1.	Basic Chemistry or equivalent	3.8
2.	Applied Math or equivalent	3.8
3.	Applied Hydraulics or equivalent	3.8
4.	M.S.U. Water Bacteriology	3.5
5.	M.S.U. Water Chemistry	3.0
6.	Water Treatment Plant Operation, Volume I	4.0
7.	Water Treatment Plant Operation, Volume II	4.0
8.	M.S.U. Effective Communication or equivalent	3.0
9.	M.S.U. Management/Supervision or equivalent	4.0

### OPTIONAL COURSES

Must have satisfactorily completed SIX of the Optional Courses in addition to the required courses.

10.	Coagulation/Softening Short Course	2.0
11.	Water Distribution System Operation & Maintenance	4.0
12.	University of Michigan Borchardt Conference	1.5
13.	C.M.U. Plankton Course	2.8
14.	Pump/Motor Maintenance Course	2.0
15.	Basic Electricity	2.5
16.	Advanced Electricity	2.5
17.	Water Treatment Short Course I	2.5
18.	Water Treatment Short Course II	2.5
19.	Maintenance Management (M.S.U.)	3.0
20.	I.C.S. WTP Operation	Varies
21.	A Quantitative/Qualitative Chemistry Course	Varies
22.	A Sanitary Microbiology Course	Varies
23.	A Water Treatment Design Course	Varies
24.	An Accounting/Record Keeping Course	Varies

Please note that courses 6-9 and 18-23 are not provided through DEQ. They can be taken through universities, colleges, and community colleges. Courses 6, 7, 8, 9, 18 and 19 are all correspondence courses. Course 2 and 11 may also be taken by correspondence. Correspondence course versions are 3.0 points.

## CERTIFICATION RENEWAL STATUS

*For Michigan Department of Environmental Quality,  
Water Bureau  
Certified Waterworks Operators*

Individuals writing and passing a certification examination are issued certificates on the basis of a 3-year renewal cycle. This applies regardless of the number of certificates already held. The expiration date of the certification is extended so that it coincides with the **expiration date** for the exam most recently passed.

Individuals renewing a certificate are issued certificates on a 3-year renewal cycle provided they have met the continuing education renewal requirement for the highest level of certification held and submitted the completed renewal application. A certificate will expire on one of the quarterly expiration dates, as shown below, regardless of the calendar year.

Persons with an expired certificate are eligible for employment at a waterworks system; however, they cannot serve as the “operator in charge” or “back-up operator” of a distribution system, a treatment system or a shift at a water treatment plant.

A certificate that has expired may be reinstated within 1-year from the expiration date of the certificate only when an individual has completed the necessary continuing education requirements as prorated from the certificate’s expiration date. **If a certificate is not reinstated within 1-year, the individual will no longer hold any drinking water certification and will be required to re-test for the desired certification.**

Quarterly <b><u>Expiration Dates</u></b> regardless of calendar year	January 15	April 15	July 15	October 15
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The following is a guide to help calculate the prorated CEC’s for the expired D, DR, F, FR and/or S, SR certifications held.

Certification Level Held	Renewal CEC’s needed	1 to 90 days expired	91 to 180 days expired	181 to 270 days expired	271 to 365 days expired
1, 2, or 3	2.4	2.6	2.8	3.0	3.2
4	1.2	1.3	1.4	1.5	1.6
5	0.9	0.9	1.0	1.1	1.2

For example, if an individual wrote and passed a fall 2005 exam, the issue date would be the day of the exam, 11/2/2005. Three years out would be in November 2008, but the closest future quarterly expiration date is January 15, 2009. If the individual did not meet the renewal CEC’s needed, the schedule above would apply. The days denoted in the table above are an approximation since the DEQ works with quarterly expiration dates only. **There is no flexibility in this policy. It is the certified operator’s responsibility to maintain a training history and be able to verify any training attended, and to submit a renewal application no sooner than 8 weeks prior to certification expiration.**

A renewal applicant who does not meet the continuing education requirements for the higher certification levels (1, 2 or 3) but meets the continuing education requirements for the level 4, may choose to renew at the 4 level and give up the higher certification level. The request to give up the higher level certification level and be renewed as a 4 level must be in writing.

Certified operators can check their CEC’s and certification status online at:  
<http://www.michigan.gov/deqoperatortraining>

Certified operators who are due to expire can generate a renewal application online 8 weeks or less prior to expiration.

## CONTINUING EDUCATION CREDIT

*For Michigan Department of Environmental Quality, Water Bureau  
Certified Waterworks Operators*

A holder of a "1", "2", or "3" level certificate is required to obtain not less than 24 hours (2.4 CECs) of credit during the certificate renewal period. Holders of a "4" level certificate are required to obtain not less than 12 hours (1.2 CECs) of credit during the certificate renewal period. Holders of a "5" level certificate are required to obtain not less than 9 hours (0.9 CECs) of credit during the certificate renewal period. Continuing education credit may be awarded to individuals successfully completing a course. In order for a training course to qualify for continuing education, it must be advisory board-approved. Individuals may contact Matt Tomlinson at 517-241-8913 about continuing education credit for courses not shown in this document.

**Successful Course Completion** - One or two day DEQ meetings and seminars require full day attendance for successful completion. Upon arrival at the meeting or seminar (within 30 minutes of the start of the meeting), individuals desiring continuing education credit must obtain a continuing education credit form. This form must be validated by a course official immediately following the conclusion of the meeting. The individual retains a copy of this form and a second copy is left with the course official. This second, validated form will be sent to the Water Bureau, DEQ and recorded. If an individual leaves a meeting early, the form will not be validated and continuing education credit will not be given. Credit for one and two-day meetings of this type are normally assigned on the basis of contact hours with 1.0 CEC for 10 contact hours. Partial credit will not be given for one-day meetings. For courses of a longer duration, such as the 3-day courses or 12-week courses, successful completion for full credit generally requires individuals to, in addition to meeting the attendance requirement, write and pass a course-ending quiz. Individuals not passing the course ending quiz, but otherwise fulfilling the course requirements, may be awarded a lesser number of continuing education credits (partial credit).

**Repeat Credit** - Full credit may be awarded for repeat attendance at meetings and seminars with a changing course content or agenda, such as Regional Meetings and the Michigan Section, AWWA and Michigan Rural Water Association annual conferences. For courses that basically repeat the course content, continuing education credit may be awarded as follows. When repeating a course, full credit may be awarded to the individual for each successful repeat that occurs outside or after his or her current renewal cycle. No credit will be awarded for repeating such courses during the current certificate renewal period. This method for calculating repeat credit became effective on April 17, 2003. Courses taken prior to this date will be subject to the repeat credit considerations in effect at the time they were taken.

**Credit for Course Instructors** - Continuing education credit for course instructors may be awarded for certain courses of long duration. Such credit will be awarded based on the number of contact hours available to students taking the course, except that instructors may not be awarded more than one-half the number of continuing education hours required for their own level of certification. This maximum value applies to all such courses conducted by an instructor within the instructor's current renewal period.

**In-Service Training & College Courses** - Advisory board-approved water utility in-service training and individual college courses may be awarded continuing education credit. Water utility in-service training programs must be approved by the advisory board of examiners. CECs will be awarded for any college course when the student receives credit from the college or university provided the course is a semester in duration and relates to the duties, responsibility, operation, maintenance or supervision of a drinking water system. The following course categories merit credit: Math, Chemistry, Physics, Computer, Electronics, Public Administration/Management, Mechanics/Technical, General Business, Engineering, Technical Writing/Communication, and Microbiology. It is recommended that students electing to take such courses contact Matt Tomlinson at 517-241-8913 prior to enrolling in the course.

**Other Credit** - Continuing education credit equal to 1 hour (0.1 CEC) maximum may be awarded annually for an active individual, an active affiliate or an active organization representative membership in certain organizations, such as the American Water Works Association (AWWA) and Michigan Rural Water Association (MRWA). This credit value is based upon full year membership. Accordingly, individuals holding membership each month of the 3-year renewal period may be awarded the maximum available credit of 3 hours (0.3 CECs). This credit may also be awarded in ensuing renewal periods. Also, a maximum of 6 hours (0.6 CECs) for exhibits, such as Joint Expo or MRWA annual exhibits will be allowed in any 3-year renewal cycle.

# The DEQ, Water Bureau

## Operator Training and Certification Staff

**Eric Way** - Program Chief

**Renee Arntz** – Secretary, 517-241-7199, email arntzr@michigan.gov  
Provides clerical support for drinking water and wastewater programs.  
Mails exam applications and training information for both programs.

### Drinking Water Staff

**Paul Brun Del Re** – Analyst, 517-241-8914, email: brundelrep@michigan.gov  
Coordinates Teleconferences, Operators’ Day, Regional Meetings and Homestudy Courses.  
Prepares drinking water exam study guides and worksheets.  
Answers questions on drinking water certification; renewal, exams, status.

**Laura Chuhran** – Technical Engineer, 517-241-7157, email: chuhranl@michigan.gov  
Provides technical training for drinking water operators.  
Coordinates courses at Gull Lake and Higgins Lake.  
Answers questions on drinking water certification; renewal, exams, status.

**John Koenigsknecht** – Environmental Tech, 517-373-0191, email: koenigsknechtj@michigan.gov  
Maintains operator training and certification database, processes certification renewals.

**Matt Tomlinson** – Analyst, 517-241-8913, email: tomlinsonm@michigan.gov  
Coordinates course approvals for CEC’s. Coordinates Level 5 Exams.  
Answers questions on drinking water certification; renewal, exams, status.

### Wastewater Staff

**Doug Hill** – Wastewater Specialist, 517-373-4754, email: hilld8@michigan.gov  
Provides technical training and technical assistance for wastewater treatment facilities.  
Answers questions on industrial wastewater certification and exams.

**Dan Holmquist** – Wastewater Specialist, 517-373-4753, email: holmquistd@michigan.gov  
Provides technical training and technical assistance for wastewater treatment facilities.  
Answers questions on municipal wastewater certification and exams.

**Bruce Lack** – Technician, 517-373-4755, email: lackb@michigan.gov  
Assists with municipal and industrial wastewater training and certification program.  
Answers questions on wastewater training and certification; courses registration, certification exams.