

Position Code

1.

State of Michigan
Civil Service Commission
Capitol Commons Center, P.O. Box 30002
Lansing, MI 48909
POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete this form as accurately as you can as the position description is used to determine the proper classification of the position.

2.Employee's Name (Last, First, M.I.)	8.Department/Agency
VACANT	ENVIRON, GREAT LAKES & ENERGY
3.Employee Identification Number	9.Bureau (Institution, Board, or Commission)
4.Civil Service Position Code Description	10.Division
Environmental Engineer-E	Drinking Water and Environmental Health (DWEHD)
5.Working Title (What the agency calls the position)	11.Section
Surface Water Engineer	Field Operations Section
6.Name and Position Code Description of Direct Supervisor	12.Unit
Michael Bolf, Engineer Manager Licensed 15	Engineering Unit
7.Name and Position Code Description of Second Level Supervisor	13.Work Location (City and Address)/Hours of Work
Brandon Onan, State Division Administrator 17	Various / 80 hour pay period

14. General Summary of Function/Purpose of Position

The surface water engineer performs engineering review and surveillance of public water supplies as defined by the Michigan Safe Drinking Water Act (Act 399, PA 1976, as amended) for surface water systems. The activities consist of, or are related to, evaluation, construction, and surveillance and monitoring of surface water treatment for these public water supplies. The surface water engineer also performs the first-line engineering review of construction permit applications and supporting documentation. The following duties are to be assigned to Genesee, Lapeer, Gratiot, Isabella, Saginaw, Sanilac, Midland, Bay, Arenac, Iosco, Alpena, Mackinac, Chippewa, Schoolcraft, Delta, Menominee, Marquette, Baraga and Ontonagon Counties.

- 15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.**
List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary of Duty 1 **% of Time** 50

Provide engineering surveillance and evaluation of water systems subject to the Surface Water Treatment Rules.

Individual tasks related to the duty:

- Perform routine/regular site visits and sanitary surveys to evaluate the safety and acceptability of drinking water supplies. Evaluate existing system operations and technologies. Make compliance determinations, if warranted.
- Provide technical assistance to operators and recommend engineering solutions to operational/water quality problems. Interpret and explain Surface Water Treatment Rules.
- Meet with operators/suppliers to discuss engineering improvements to the facility and/or its operation and maintenance, including those necessary for achieving or maintaining compliance.
- Review water supply files and monthly operation reports/water quality data. Complete pertinent portions of the sanitary survey checklist.
- Interpret survey findings and identify areas of engineering deficiency to include in the final letter and report. Communicate issues to the water supplier in person or telephone conversations, emails, and draft final letter for approval by the unit supervisor or specialist.

Duty 2

General Summary of Duty 2 **% of Time** 15

Analyze incoming monitoring and reporting submittals from public water supplies. Issue notices and recommend fines and escalated enforcement referrals for authorization by the supervisor.

Individual tasks related to the duty.

- Review incoming submittals. Determine if supply has missed required sampling and/or reporting event(s). Record information associated with monitoring and reporting submittals in appropriate information management systems.
- If an initial violation has occurred, draft formal violation notice on behalf of the supervisor directing compliance and public notification, if required. Include warning that future missed events will result in administrative fines.
- For subsequent violations, determine the appropriate amount and prepare the request for administrative fine for supervisor approval.
- Recommend escalated enforcement for supplies that repeatedly violate monitoring and reporting requirements.
- Prepare reports of monitoring and reporting data for inclusion in the Area-Wide Optimization Program (AWOP).

Duty 3

General Summary of Duty 3

% of Time ____15

Perform engineering review related to Act 399 construction permits for surface water treatment plants, including distribution system permits.

Individual tasks related to the duty.

- Conduct initial engineering analysis and examination of applications, construction plans, project specifications, and bases for design for surface water treatment plants.
- Ensure that plans adhere to design standards for surface water treatment and distribution, including AWWA Standards, ELGE Suggested Practices, and Great Lakes Upper Mississippi River Board Standards (Ten States Standards).
- When warranted, perform computations or reviews of complex plans, with the assistance of the supervisor or specialist, to confirm the adequacy of the proposed design.
- Recommend issuance/denial/modification of construction permits. Identify areas of concern or engineering deficiencies, as appropriate.
- On behalf of the supervisor and/or specialist, meet with community officials and consultants to discuss design considerations for critical and complex projects.

Duty 4

General Summary of Duty 4

% of Time ____10

Perform miscellaneous activities, under direction of the unit supervisor and surface water specialists.

Individual tasks related to the duty.

- Review engineering reports, treatment studies, operating procedures, and other information relating to the treatment plant.
- Respond to emergencies and complaints related to water quality or service reliability.
- Respond to general questions, emails, or other correspondence related to the operation of the treatment plant.
- Disseminate information related to surface water treatment plants to water utility staff, consulting engineers, local officials, the general public, and government officials (local, state, & federal).
- Assist with operator certification duties.

Duty 5

General Summary of Duty 5

% of Time 10

Attend and participate in trainings and meetings to develop skills and knowledge necessary to effectively regulate surface water treatment facilities.

Individual tasks related to the duty.

- Attend technical training related to surface water treatment including regulations, operations, microbiology, treatment/corrosion chemistry, etc.
- Attend and participate in meetings and training to develop technical communication skills
- Participate in the state's Area Wide Optimization Program (AWOP)
- Review research and attend training focused on surface water treatment elements of membrane filtration, conventional treatment, and disinfection.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

Identify areas of engineering deficiency or concern during routine site visits. Determine if water supply has missed required sampling and/or reporting event(s). Recommend appropriate administrative fine(s) and recommend escalated enforcement as needed.

Parties impacted by these decisions include water treatment plant owners and operators, DWMAD district and program staff, the general public, consulting engineers, and government officials (local, state & federal). In addition, the budgets of local units of government, the scope of consulting engineering services, and the confidence of the public are impacted by these decisions.

17. Describe the types of decisions that require the supervisor's review.

Decisions on technical or politically sensitive issues. Decisions regarding a water supply's regulatory compliance status. Decisions regarding complex technical subjects and/or when no precedence or guidance is available. Decisions with significant public health implications.

18. What kind of physical effort is used to perform this job? What environmental conditions is this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Routine activities include telephone communications, operation of computer terminals, and other related duties encountered in a typical office environment. Travel by automobile to district offices or water utilities, including overnight stays for the purpose of on-site evaluations or consultations will arise. The amount of time and intensity of each activity will vary with the daily workload.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis. (If more than 10, list only classification titles and the number of employees in each classification.)

<u>NAME</u>	<u>CLASS TITLE</u>	<u>NAME</u>	<u>CLASS TITLE</u>
None			

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply): NA

___ Complete and sign service ratings.

___ Assign work.

___ Provide formal written counseling.

___ Approve work.

___ Approve leave requests.

___ Review work.

___ Approve time and attendance.

___ Provide guidance on work methods.

___ Orally reprimand.

___ Train employees in the work.

22. Do you agree with the responses for Items 1 through 20? If not, which items do you disagree with and why?

Yes

23. What are the essential functions of this position?

Providing engineering surveillance and evaluation of water systems subject to the Surface Water Treatment Rules; analyzing incoming monitoring and reporting submittals from public water supplies, and issuing notices and recommending fines and escalated enforcement referrals for authorization by the supervisor; and performing engineering review related to Act 399 construction permits for surface water treatment plants, including distribution system permits.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

The only change was clarification of the geographic counties assigned to the position.

25. What is the function of the work area and how does this position fit into that function?

The function of the Field Operations Section is to carry out the responsibilities of a comprehensive program of supervision and control over all public water supplies mandated by the Michigan Safe Drinking Water Act (Act 399, P.A. 1976 as amended). This surface water engineer is responsible for providing engineering surveillance and evaluation of water systems subject to the Surface Water Treatment Rules; analyzing incoming monitoring and reporting submittals from public water supplies, and issuing notices and recommending fines and escalated enforcement referrals for authorization by the supervisor; and performing engineering review related to Act 399 construction permits for surface water treatment plants, including distribution system permits.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position?

EDUCATION:

Possession of a bachelor's degree in engineering.

EXPERIENCE:

Environmental Engineer 9

No specific type or amount is required.

Environmental Engineer 10

One year of professional environmental engineering experience in drinking water, the protection and improvement of land and water resources, occupational health, or air quality equivalent to an Environmental Engineer 9.

Environmental Engineer P11

Two years of professional environmental engineering experience in drinking water, the protection and improvement of land and water resources, occupational health, or air quality equivalent to an Environmental Engineer, including one year equivalent to Environmental Engineer 10.

KNOWLEDGE, SKILLS, AND ABILITIES:

Ability to communicate accurately and tactfully with individuals and groups, both verbally and in writing. The surface water area engineer must meet and work with people at both a technical and layman level. The engineer must have basic knowledge of the Safe Drinking Water Act including an understanding of design/operation concepts of membrane filtration, conventional water treatment, or disinfection practices. Knowledge of computer software commonly used to analyze operational data is also required.

CERTIFICATES, LICENSES, REGISTRATIONS:

Michigan Professional Engineers License is preferred.

A valid driver's license is preferred.

NOTE: Civil Service approval of this position does not constitute agreement with or acceptance of the desirable qualifications for this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor's Signature

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to statements of the employee(s) or supervisors.

I certify that the entries on these pages are accurate and complete.

Appointing Authority Signature

Date

TO BE FILLED OUT BY EMPLOYEE

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee's Signature

Date

NOTE: Make a copy of this form for your records.