

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
	Environment, Great Lakes, and Energy
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission)
4. Civil Service Position Code Description	10. Division
Environmental Engineer 9-P11	Drinking Water and Environmental Health
5. Working Title (What the agency calls the position)	11. Section
Environmental Engineer	Environmental Health
6. Name and Position Code Description of Direct Supervisor	12. Unit
Tanya Rule, Environmental Manager 14	Onsite Wastewater Management Unit
7. Name and Position Code Description of Second Level Supervisor	13. Work Location (City and Address)/Hours of Work
Dana DeBruyn, State Administrative Manager 15	Constitution Hall, Lansing, or another District Office 80 hours/pay period

14. General Summary of Function/Purpose of Position

The Environmental Engineer position conducts Onsite Wastewater Management Unit (OWMU) engineering review/analysis to provide recommendations to OWMU staff or Licensed Engineer to assist in providing technical assistance, consultation, and training to Local Health Departments on engineered wastewater system projects, alternative wastewater treatment system projects, and other wastewater system proposals prepared by a third-party licensed engineer for land divisions, subdivisions, condominiums, and commercial developments of less than 10,000 gallons per day, as these issues relate to the Land Division Act, Michigan Criteria for Subsurface Sewage Disposal (MCSSD), Public Health Code, and related administrative rules. The position conducts the engineering review and provides recommendations to OWMU staff of proprietary wastewater treatment product proposals for efficacy in the State of Michigan. This position will make recommendations on updating technical manuals, technical data, and related guidance documents.

This position assists OWMU staff in performing scheduled accreditation evaluations and self-assessment reviews of LHDs' administration of Onsite Wastewater Program (OWP) s funded under the Essential Local Public Health Services contract.

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** 40

Conduct engineered and alternative onsite wastewater treatment systems design review and recommend issuance of permit.

Individual tasks related to the duty.

- Conduct initial technical review and provide recommendation to OWMU staff regarding site suitability, soil conditions, and onsite wastewater treatment system design evaluation, review, and approval.
- Conduct initial engineering analysis and examination of third-party licensed engineer or other qualified professional-certified plans, soil logs, specifications, bases of design, maintenance schedules, and supporting studies or other documentation for LHD permitting projects that include onsite wastewater treatment and provide recommendations to OWMU staff.
- Provide recommendations to OWMU staff for modifications, issuance or denial of construction permits according to the LHD's Sanitary Code, Michigan Criteria, Draft Michigan Criteria, Administrative Rules, Public Health Code, and/or Septic Replacement Loan Program based on defined standards and sound engineering practice.
- Provide field technical support to LHDs on site evaluations. Provide recommendations to OWMU staff on determination of site suitability approval for onsite wastewater systems, including soil conditions (permeability, water table assessment, groundwater mounding analysis, and treatment capabilities), site limitations, and unique site considerations. Evaluations may involve onsite wastewater systems for proposed land divisions, subdivisions, or condominiums.
- Assist OWMU staff in the development of training and presentations for engineers and non-engineers on soil identification and properties in accordance with the USDA Soil Classification System, onsite wastewater system design and performance, site specific hydrogeologic studies to determine groundwater table mounding in direct response to the placement of proposed onsite wastewater soil dispersal systems, and plan review protocols of wastewater treatment system projects. Present training of supervisor approved program materials.
- Prepare draft responses to inquiries by the public, LHDs, government officials, industry associations, and various organizations regarding statewide standards and considerations for onsite wastewater treatment projects.

Duty 2

General Summary of Duty 2 **% of Time** 30

Review technical documents and analyze technical data related to alternative and conventional onsite wastewater technologies and recommend approval of their use in Michigan.

Individual tasks related to the duty.

- Review technical studies, literature, plans, and engineering reports on alternative and conventional onsite wastewater treatment technologies and provide recommendation of their approval.
- Assist in the development of technical guidance and information; and provide training on approved wastewater treatment technologies for LHDs, consultants, engineers, and contractors.
- Assist in the development of technical guidance and information; and provide training on groundwater mounding analyses related to onsite wastewater treatment systems for LHDs, consultants, engineers, and contractors.
- Collect and interpret data from field evaluations, third-party testing, or other documentation to determine system effectiveness.

Duty 3

General Summary of Duty 3 **% of Time** 20

Assist OWMU staff in conducting evaluations and self-assessment review of each LHD's administration of the OWP as part of the Michigan Local Public Health Accreditation Program.

Individual tasks related to the duty.

- Contribute to the development of documents, forms, checklists, and templates to facilitate efficient LHD administration of the OWMU.
- Assist OWMU staff to conduct office evaluations of LHD procedures to assess compliance with minimum program requirements (MPRs).
- Provide written reports for the OWMU supervisor approval, that details the findings from program evaluation activities.
- Assist OWMU staff to conduct follow-up evaluations, as necessary, to verify and document LHD compliance with MPRs and state standards.
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Duty 4

General Summary of Duty 4

% of Time 10

Other duties as assigned.

Individual tasks related to the duty.

- Complete special projects or tasks by deadlines.
- Prepare reports of findings from program initiatives and/or statewide studies, as assigned and approved by the Unit Supervisor.

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

The environmental engineer is responsible for providing recommendations to OWMU staff, Licensed Engineer, or Supervisor on onsite wastewater projects to the permitting LHD from an engineering standpoint to ensure the public's health, safety, and the environment are protected. Project costs are anywhere from several thousand dollars to several million dollars, so a prompt review of the project is critical to the developer.

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

The Michigan Criteria requires that detailed construction plans for projects costing more than \$15,000 be submitted by a licensed professional engineer only. Projects subject to the Administrative Rules also require plans to be prepared by a licensed professional engineer, registered environmental health sanitarian, or other competent professional. EGLE should require the same credentials for the staff reviewing and approving these submittals on behalf of the LHDs. Further, these reviews and decisions must ensure that the systems will function properly so that the developer may recover these initial capital investments. This position assists OWMU staff in providing preliminary review. Final decisions on these projects shall involve consultation and approval with the unit supervisor and/or Licensed Engineer. This position is able to make recommendation to the unit supervisor or Licensed Engineer for decisions on potential uses of newer, third-party verified, onsite wastewater proprietary technologies in the State of Michigan. Deviations from traditional design standards or product proposals that may adversely affect public health, or the environment, shall involve consultation with and approval by the unit supervisor. Decisions on matters which may impact statewide program policy or that may involve litigation are provided by the unit supervisor.

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.

General office environment: stooping, bending, use of computers, etc. Some hazards exist in driving throughout the assigned geographical area. Field work can include exposure to heavy equipment, such as backhoes and well drilling equipment. Physical hazards could occur during soil identification in below-grade pits, while traversing varying terrain, or through potential exposure to chemicals in use. There is also occasional use of hand driven augers to complete soil borings. Knowledge of the hazards of entry into confined spaces is essential to minimizing risk. Conducting field assessments of subdivisions or condominiums requires multiple hours of physical labor in doing hand auger borings and/or supervising backhoe excavations, climbing in and out of backhoe pits, and walking across acres of property in varying climatic conditions.

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>

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

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?

This position assists the OWMU supervisor and other program staff, including Licensed Engineer to provide engineering review and approval of onsite wastewater treatment system projects in which LHDs are responsible for issuing a construction permit. The position is also assists OWMU staff in conducting the engineering review and approval of proprietary wastewater treatment product proposals for efficacy in the State of Michigan. Technical manuals, technical data, and related guidance documents will be reviewed and prepared by this position for approval by the unit supervisor.

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

Position is being downgraded for backfill and training purposes. The Environmental Engineer position conducts Onsite Wastewater Management Unit (OWMU) engineering review/analysis to provide recommendations to OWMU staff or Licensed Engineer to assist in providing technical assistance, consultation, and training to Local Health Departments on engineered wastewater system projects, alternative wastewater treatment system projects, and other wastewater system proposals prepared by a third-party licensed engineer for land divisions, subdivisions, condominiums, and commercial developments of less than 10,000 gallons per day, as these issues relate to the Land Division Act, Michigan Criteria for Subsurface Sewage Disposal (MCSSD), Public Health Code, and related administrative rules. The position conducts the engineering review and provides recommendations to OWMU staff of proprietary wastewater treatment product proposals for efficacy in the State of Michigan. This position will make recommendations on updating technical manuals, technical data, and related guidance documents.

This position assists OWMU staff in performing scheduled accreditation evaluations and self-assessment reviews of LHDs' administration of Onsite Wastewater Program (OWP) s funded under the Essential Local Public Health Services contract.

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

The OWMU is responsible for consulting with LHDs concerning single and two-family residential wastewater sites, non-residential sanitary wastewater sites, approval of subdivisions, review of land divisions less than one acre in size, and review of condominium project proposals. The program responsibilities are divided geographically among other OWMU staff and this position will assist in engineered wastewater treatment projects statewide to provide recommendations to OWMU staff for approval. This position is responsible to assist in the review of proprietary and alternative treatment proposals in projects statewide for approval by the OWMU supervisor.

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 the protection and improvement of land and water resources, environmental health, onsite wastewater treatment design, and alternative onsite wastewater technology equivalent to an Environmental Engineer 9.

Environmental Engineer P11

Two years of professional experience equivalent to an Environmental Engineer including one year equivalent to an Environmental Quality Analyst 10.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Knowledge of the principles and practices of environmental engineering.
- Knowledge of the principles of environmental health, including onsite water supply and onsite wastewater treatment. Knowledge of the scientific principles relative to environmental control.
- Knowledge of mathematical models that simulate or predict waterflow and dispersal.
- Knowledge of nomenclature and symbols used in engineering, drafting, and design.
- Ability to apply principles and practices to environmental engineering.
- Ability to read engineering drawings.
- Ability to read, interpret, and write engineering reports.
- Ability to collect and analyze engineering data.
- Work experience and training in the United States Department of Agriculture's Soil Classification System.
- Ability to interpret and create soil reports; interpret complex scientific and legal document; prepare written documents; conduct verbal presentations; and work effectively with other professionals and the public.
- Ability to maintain records, and prepare reports and correspondence related to the work.
- Comprehensive knowledge of computer operations (Word, Excel, Access, PowerPoint).
- Ability to communicate effectively with others.
- Ability to maintain favorable public relations.

CERTIFICATES, LICENSES, REGISTRATIONS:

- Driver's License Preferred
- Ability to obtain a Michigan Professional Engineer License within 3 years of offer of employment to transition to an Environmental Engineer Licensed 12 position.

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.