

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-A	Air Quality
5. Working Title (What the agency calls the position)	11. Section
Environmental Engineer 12	Field Operations
6. Name and Position Code Description of Direct Supervisor	12. Unit
Julie Brunner, Engineer Manager 14	Renewable Operating Permit Central Unit
7. Name and Position Code Description of Second Level Supervisor	13. Work Location (City and Address)/Hours of Work
Brad Myott, Environmental Manager 15	Various, Statewide / 40 hours, typically Monday-Friday
14. General Summary of Function/Purpose of Position	
The Senior Environmental Engineer (EE) Renewable Operating Permit (ROP) Writer is responsible for writing ROPs for facilities throughout the state in accordance with federal and state Air Quality Regulations. These responsibilities will involve technical evaluations of potential air emissions of criteria pollutants, as well as toxic or hazardous substances using engineering principles and judgment. As a senior worker, the EE ROP Permit Writer will independently conduct technical reviews of plans, specifications, and other documents included in ROP applications and work independently to develop and issue these permits, with assistance from assigned district staff and Air Quality Division (AQD) management. The Senior EE ROP Writer will also undertake field work actions regarding assigned facilities, which includes evaluation of the facility's processes and air pollution control equipment, full plant compliance inspections, and determinations for appropriate civil or criminal enforcement actions and evaluation. The Senior EE ROP Writer will also participate in ROP permitting meetings, meetings with the United States Environmental Protection Agency (EPA), public participation meetings regarding ROPs, and other assigned special projects under the ROP program.	

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 80

The Senior EE ROP Writer independently evaluates assigned ROP applications using engineering principles and judgment. The Senior EE ROP Writer also works with various AQD district staff, as appropriate, when writing an ROP to gather site specific information and obtain input and recommendations on the content of the ROP. The Senior EE ROP Writer provides advice and assistance to other AQD district staff, industrial representatives, and environmental consultants regarding the federally mandated ROP Program. Based on the review of these applications, the Senior EE ROP Writer prepares draft renewable operating permits and staff reports, and performs duties associated with the public participation process.

Individual tasks related to the duty.

- Review ROP applications, including those assigned from various district offices throughout Michigan utilizing federal and state air quality regulations.
- Evaluate complex engineering of emission units, air pollution control equipment, associated ventilation systems, and complex emissions calculations utilizing engineering principles, formulas, and equations to calculate emissions from a variety of industrial processes, familiarity with the engineering design principles of air ventilation systems and air pollution control equipment, and other air pollution engineering principles.
- Conduct engineering reviews of sources submitting opt-out applications to determine if they are appropriate and whether the source should be in the ROP program.
- Develop and update ROP Templates for Part 60, 61, and 63 requirements using engineering design principles and judgment for implementation of federal regulations in the Title V program.
- Conduct engineering review of technical plans, engineering plans and specifications submitted as part of the initial or renewal ROP. The engineer must perform and review calculations and equations using the engineering principles of mass and energy balances, heat and mass transfer, thermodynamics and chemical reaction processes for the emissions of all regulated air pollutants emitted by Title V sources.
- Determine applicability of Compliance Assurance Monitoring (CAM) requirements to emission units at ROP-subject facilities. Perform engineering evaluations of submitted CAM plans for completeness. Incorporate acceptable CAM plans as enforceable conditions of a facility's ROP.
- Determine applicability of federal Maximum Achievable Control Technology (MACT) requirements to emission units at ROP-subject facilities. Incorporate applicable MACT requirements into appropriate ROP tables.
- Develop mathematical calculations to determine applicable air regulations. Utilize nomenclature and symbols used in the engineering of regulated industry processes and associated air pollution control equipment.
- Coordinate with Field Engineers to gather site specific information and obtain input and recommendations on the content of the ROP.
- Makes recommendations and provides guidance and assistance to other AQD district staff, industrial representatives, and environmental consultants regarding the federally mandated ROP Program.
- Determine technical completeness of ROP applications. Coordinate with the facility representatives to ensure that the necessary technical materials, data, scientific calculations, equations, and methodologies are accurate and complete. Determine the ROP applicability for each source as defined in state and federal regulations. This determination usually involves emission calculations, stack emission or performance test report evaluations, determination of an acceptable emission factor and other professional and engineering judgments.
- Determine all applicable requirements including Permits to Install (PTI), state regulations, and the applicability of various federal regulations to the source, including the Standards of Performance for New Stationary Sources (NSPS), MACT, CAM, and National Emission Standards for Hazardous Air Pollutants (NESHAP), and incorporate those regulations determined to be applicable into the ROP.
- Develop a written draft ROP. Coordinate with facility representatives, consultants, and environmental attorneys regarding the draft ROP conditions, calculations, monitoring systems, test methods, recordkeeping methods and reporting methods. Defend methods and professional judgments to industrial and trade association representatives, environmental consultants and attorneys when needed.

- Interact with other AQD field staff assigned to ROP facility, as appropriate, when reviewing ROP applications and writing draft ROPs. These interactions will assist the ROP writer in determining appropriate and applicable conditions and requirements to include in the ROP.
- Coordinate all activities with regard to the public participation process. Formulate a working draft ROP, giving the facility ample opportunity to comment. Publish a draft ROP, staff report, and public notice document on the Internet. Publish 30-day notice in the department calendar. If a hearing is requested, hold a public hearing. Write the proposed ROP for the 45-day review by the EPA. Respond to all public and EPA comments. Issue the final permit. These public participation process steps may involve the renegotiation of the permit conditions and defending of calculations, methodologies, and professional and engineering judgments before corporations, trade associations, special interest groups, general public and EPA. In the event that a public hearing is held, the Senior EE ROP writer must be able to communicate the facts clearly and effectively.
- Participate in ROP workgroup meetings and other various Title V permitting meetings including meetings with EPA, the Michigan Manufacturers Association and other various internal and external stakeholder groups. This may include presenting to industry, EPA, or EGLE management on assigned topics and issues regarding Michigan's Title V program.
- Act as a state-wide peer reviewer for ROPs by providing clarification, consistency, and expertise to AQD staff by reviewing and commenting on the working draft ROPs and providing insight and advice on technical issues.

Duty 2

General Summary of Duty 2

% of Time 10

Field support including conducting on-site inspections of industrial and commercial sources of air pollution and associated air pollution control systems and review of any required reporting to determine compliance with air pollution rules, regulations and permits.

Individual tasks related to the duty.

- Evaluate facility processes and air pollution control equipment utilizing familiarity with engineering principles
- Review facility emission calculations and emission factors for compliance purposes utilizing familiarity with engineering principles
- Perform engineering assessments to determine the compliance status of facilities and communicate and defend the results of investigations, conclusions drawn, and the basis of those conclusions to industry, government, and the public. This task involves evaluating the technical feasibility of potential compliance approaches.
- Holds pre- and post-inspection interviews with sources.
- Conduct on-site inspections of sources to determine compliance status with applicable regulations and permits.
- Collect data, samples, photographs, and other information or evidence, as needed.
- Review required reporting and notifications for compliance status.
- Send Violation Notices to facilities in non-compliance.
- Work with source to resolve violations.
- Initiate escalated enforcement action if violations are unresolved.
- Determine applicability of the ROP program to sources by determining the potential to emit for criteria pollutants and/or hazardous air pollutants.
- Initiate compliance efforts.
- Document all activities.

Duty 3

General Summary of Duty 3

% of Time 10

Special Projects and other duties assigned by the District Supervisor, Field Operations Manager, Assistant Division Director, or the Division Director.

Individual tasks related to the duty.

- Participate in other special projects assigned by AQD management.

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

Decisions regarding administrative and technical completeness, adequacy, and consistency of ROP applications, draft permits compliance status and adequacy of compliance programs of facilities, and interpretation of federal standards. These decisions affect the facility concerned, the public, and staff. Also, decisions are made independently during inspections regarding technical aspects of complex facilities.

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

The supervisor reviews decisions involving district and departmental policies and priorities, highly controversial permits, consent orders, or permit denials.

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.

While conducting a facility inspection, the Senior EE ROP Writer is frequently exposed to a wide variety of hazards such as: toxic chemicals, temperature extremes, inclement weather conditions, damaging noise, odors, dust or fumes, and physical hazards (high voltage, slips/trips/falls, working in the area of heavy equipment operation, etc). In addition, complex sources are usually very large, often requiring strenuous physical activities such as walking long distances, standing for long periods of time, and frequent climbing of stairs and ladders in order to reach elevated locations like roof tops and stack testing platforms. The Senior EE ROP Writer must always be capable of wearing personal protective equipment including a hard hat, safety glasses, safety shoes, and more. Periodically, the Senior EE ROP Writer must be capable of traveling to assigned locations outside the district.

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):

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|---|--|
| ☐ 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?

Duties 1 and 2. It is essential that the Senior EE ROP Writer has the ability to travel to inspection sites, conduct compliance inspections and investigations, and accomplish the physical activities identified in Item 18 of the position description; review, draft and issue ROPs; communicate clearly, both verbally and in writing; and use personal protective equipment in accordance with state and federal requirements. To be successful in this position, the following competencies have been identified as essential: decision making, follow up, communication, planning and organizing work, technical professional knowledge and work standards.

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

No changes.

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

This position is vital in processing and issuing the various assigned ROPs for the largest air pollution emitters and most complex facilities in Michigan. This position ensures ROPs are being processed and issued in a timely and consistent manner. This position also helps to ensure Michigan's ROP program fulfills federal commitments for processing and issuing ROPs within federally mandated timelines.

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 12

Three years of professional environmental engineering experience in the protection and improvement of land and water resources, occupational health, or air quality equivalent to an Environmental Engineer, including one year equivalent to an Environmental Engineer P11.

KNOWLEDGE, SKILLS, AND ABILITIES:

Ability to represent the division in a professional manner in all permit reviews, inspections, contact with the public, negotiations, enforcement actions, and other assigned duties. Clear and concise written and verbal communication skills. Thorough knowledge of the principles and practices of environmental sciences. Knowledge of air pollution regulation sources and control systems is also desirable. Advanced knowledge of the Title V ROP requirements and procedures. Advanced knowledge of engineering principles and concepts. Ability to work independently and exercise good judgment. Ability to instruct and direct staff and communicate with groups inside and outside of state government.

CERTIFICATES, LICENSES, REGISTRATIONS:

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.