Department of Natural Resources
Position Description

Division of Environmental Management
Classification: Air Management Engineer - Entry
Working Title: Air Management Engineer

Position Summary: Use engineering principles to review air pollution control construction permits to new, relocated, reconstructed, replaced, revised or modified direct air pollution sources and operation permits to existing air pollution sources in the State of Wisconsin, and/or to inspect these sources to ensure they are in compliance with applicable federal and state air pollution control requirements. Assist sources, governmental units, and the public in understanding the air management program. At the entry level the engineer will build proficiency in air pollution control technology to effectively contribute to the regional and statewide air management program in the areas of compliance, inspection, and permitting while updating databases and modeling information.

Geographic Scope and Travel Requirements: This position has responsibility for air management facilities in an assigned geographic area of the state as assigned by the supervisor. Travel within assigned counties is common, with occasional travel to other locations in the state for site inspections, training, conferences, and night meetings. This position is part of the Air Management Program, and the person serves as a member of statewide teams as assigned by the supervisor.

Scope of Authority
This position reports to a Regional Manager and/or Section Manager. At the entry level, this position will work under close supervision.

Responsibilities and Duties:

50% Goal A: Air Pollution Compliance and Inspection Activities

A.1. Perform engineering evaluations of air contaminant sources within the assigned geographic area with respect to air pollution control laws and rules and take actions necessary to ensure compliance is achieved.

A.2. Inspect sources of air pollution and determine their compliance with air pollution control regulations applying engineering methods and practices, program policy, state administrative code and statutes, permit and administrative order provisions, federal regulations and court orders in any compliance determination.

A.3. Prepare for inspections by reviewing files, citizen complaints, previous inspections, test reports, permits, orders, and the current emission inventory information in order to determine applicable emission limitations and requirements.

A.4. Perform surveillance and on-site inspections of air pollution sources in order to observe visible emissions and odors, collect samples, and gather information needed to determine

source compliance.

A.5. Perform engineering review of sources to determine compliance through emission calculations and ambient air dispersion modeling. Document findings and recommend future actions based on these findings based on input from senior staff.

A.6. Perform engineering reviews of emission test reports, continuous emission monitor reports, fuel sampling reports, periodic monitoring reports, compliance certifications, compliance plans and other reports and verify that reports are complete and that results are accurate. Prepare a report on accepting or denying the results and on changes to the emission inventory.

A.7. With input from supervisor and senior staff, participate in enforcement actions to ensure sources return to compliance with air pollution control rules to include utilizing state and federal enforcement policy, and in consultation with staff attorney recommend violation notices, referral elements, and compliance plans and schedules to bring the source into compliance. Provide witness testimony at hearings and trials.

A.8. Assist facilities in preparing and updating their air emission inventories. Ensure that the inventory is current and accurate. Follow up with facilities who fail to submit an annual emission inventory, as required.

A.9. With additional guidance and input from supervisor, provide simple engineering advice and guidance to air program staff related to the evaluation of process and air pollution control techniques.

40% Goal B: Air Pollution Permit Review and Permit Development Activities

B.1 With input from supervisor and more senior engineers, perform engineering reviews for renewals of operation permits, issue new permits, compliance plans, and schedules.

B.2 Locate and initiate contact with facilities that may need or require air pollution control permits for new, modified, and existing air pollution sources. With additional guidance and input from supervisor, conduct pre-application meetings and correspond with potential permit applicants to provide information and discuss state and federal air pollution control requirements. Assist sources in the preparation of permit applications.

B.3 Perform engineering reviews on permit applications using established procedures; reviewing applications for completeness. If the proposal is determined to be exempt, prepare documentation of exempt status and provide exemption determination.

B.4 Coordinate comments from compliance and modeling staff into specific permit reviews. Using accepted engineering practices, calculate emissions and assess their ambient air impact. Determine applicable conditions with respect to meeting emission limitations as well as state statutes, administrative code, and department policy. Use engineering analysis to determine if proposed pollution prevention or control technology complies with emission limits.

B.5 Prepare a draft permit and preliminary determination with appropriate support documents. Develop or provide assistance in the preparation, if necessary, of the environmental assessment or impact statement required for the application under NR 150, Wis. Adm. Code. Prepare a notice to inform the public, interested parties and United States Environmental Protection Agency of the opportunity to comment on the permit application. Respond to comments and notify the public of a hearing on the permit application (if warranted) and give a hearing presentation to explain the department's technical evaluation. Prepare a written response to comments received during the public comment period.

B.6 With input from supervisor or more senior engineers, provide peer review and make recommendations on conditions and issuance for permit applications reviewed by central office or regional staff for permits applications they process. Prepare final permit decision documents based on comments received.

B.7 Make entries in WARP as required by the assigned position, including key events, document upload, and permit or inspection tracking.

10% Goal C: Air Management and Team Integration Support.

C.1 Participate actively as a member of the Air Management permit and compliance teams and any additional ad hoc teams assigned in cross program activities to promote communication, procedures and guidance, and performance indicators consistent with air management program strategic goals, and support team concepts.

C.2 Learn, review, and keep abreast of changes in knowledge and practices of industrial process, air pollution and control techniques, test procedures, emission issues, state and federal regulations.

C.3 Prepare forms and reports as necessary for personnel and budget accounting purposes in a timely manner.

Performs other duties as assigned.

Knowledge, Skills, and Abilities

1. Ability to comprehend complex instructions, procedures, and calculations.
2. Skill in air project management, policy development, and analysis involving program planning, implementation, and evaluation.
3. Ability to set objectives, goals, and implement total quality improvement principles.
4. Ability to work collaboratively with team members and stakeholders.
5. Skill in oral and written communication.
6. Knowledge of chemical principles controlling the fate of air contaminants in the environment.
7. Knowledge of basic engineering principles, theories and practices applicable to air management.

8. Ability to interpret and apply policies, procedures, guidance documents, and regulatory requirements.
9. Skill in responding to inquiries from a variety of stakeholders in a professional and timely manner.
10. Knowledge of data management, recordkeeping and database maintenance systems.
11. Skill in utilizing office automation systems including Microsoft Office applications.
12. Knowledge of local, state, and/or Federal air management programs.
13. Knowledge of environmental laws and regulations.

Positions included in these series have duties and responsibilities of such a nature that they are required (by federal or state law or by position analysis) that the incumbent have one of the following:

- Registration as a Professional Engineer as determined by the Department of Safety and Professional Services per s. 443.04, Wis. Stats.;

- A specific record, issued by the professional engineering section of the Department of Safety and Professional Services, showing 4 years or more of experience in engineering work of a character satisfactory to the professional engineering section and satisfactory completion of the fundamentals of engineering exam;

- Have graduated from a recognized college or university with a degree in a related engineering field such as civil, chemical, electrical, environmental, or mechanical engineering; or has successfully completed the DNR engineering equivalency examination;

- Have equivalent professional training and practical experience so as to be deemed a professional engineer as defined in Department of Safety and Professional Services per s. 443.01, Wis. Stats. AND also deemed to be qualified to engage in professional engineering practice as determined by the Department of Safety and Professional Services per s. 443.04 or 443.05, Wis. Stats

Physical Requirements and Environmental Factors:

Strength and Physical Requirements:

- Sedentary work (exerting up to 10 pounds of force or more occasionally and / or a negligible amount of force frequently) occurs 75% of the time; with light (20 pounds to heavy (100 pounds) less than 25% over a year ' s time.

- Physically, the position has minimal physical lifting requirements. Sitting will be approximately 75% or more of the time. The position will require walking and climbing stairs or ladders at industrial facilities, potential exposure to hot and noisy environments, proximity to moving mechanical parts, and exposure to conditions which may potentially affect the respiratory system or the skin, such as fumes or odors. Driving, or providing their own transportation, is required to travel to facilities and meetings.

Environmental Factors:

The position will spend approximately 75% or more of the time indoors doing sedentary, office work. The position will potentially experience exposure to a variety of air pollutants at industrial facilities. Some inspections may require outdoor work with the potential exposure to ticks, other insects, and animals.

Equipment Used:

- Office equipment including computer word processing, spreadsheet, database, and multimedia presentations software. Fax machine, telephone, photocopier, and calculator.

- Personal protective equipment will be required during facility inspections and can include protective eyewear, safety shoes, hearing protection, gloves, hard hat, protective clothing and other.

- Operation of a motor vehicle for travel to facilities for inspections, training and meetings is normally required, but other means for this may be arranged.

Remote Work: Part-time Remote work may be considered for this position.