

COMPETENCY PROFILE:

# WASTE MANAGEMENT OFFICER

## ROLE OVERVIEW

Waste management officers advise and enforce regulations on facilities that manage waste disposal, collection, and recycling. Their job has a solid regulatory focus and will also assist in implementing rules and evaluating environmental compliance.

They may also be responsible for waste treatment and street cleaning operations. Some posts combine waste management and recycling functions, while others split them into separate jobs entirely. Waste management officers can be involved in all project stages, from establishing a company's waste management goals and objectives to working with employees to help implement waste management policies and evaluating the success of management plans. They play a key role in minimizing the impact of waste and protecting the environment.

## ALSO KNOWN AS:

- Waste Management Specialist
- Waste Disposal Officer
- Waste Diversion Manager
- Waste Management Compliance Officer
- Waste Management Development Officer
- Waste Management Safety Officer

## NATIONAL OCCUPATIONAL CLASSIFICATION:

- 41400 – Natural and applied science policy researchers, consultants, and program officers

## EDUCATION AND EXPERIENCE

- A bachelor's degree is typically required, preferably in environmental science, environmental engineering, waste management, or a related field, providing a solid foundation in waste management principles.
- 3-5 years of hands-on experience in waste management or a similar area to acquire operational skills and knowledge of regulations.
- In some instances, a technical diploma in environmental technology or similar, supplemented with additional relevant experience, can substitute for a bachelor's degree.
- Experience is crucial for understanding waste collection, recycling, landfill management, and ensuring regulatory compliance.
- A mix of formal education and practical experience prepares waste management officers for effective waste disposal and recycling management, adhering to environmental best practices and regulations.

## TECHNICAL



### Budget and Cost Management

Develops comprehensive plans to create, monitor, and evaluate operational budgets and costs to account for all project activities and spending so that operations are financially sustainable.

- Records costs and budget metrics of waste management program, highlighting potential profits and losses for external stakeholders and internal decision-makers.
- Identify funding gaps to address options for filling gaps between available and required funds.
- Monitors waste management operating costs and budget metrics for site processes, procedures, and performance to ensure viable operations.
- Provide senior leadership with input in developing a cost management plan to establish procedures and documentation to manage waste management program costs and yearly budgets.

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### Data Analysis

Uses established statistical methods to analyze data, revealing trends and patterns that guide strategic decisions and enhance waste management initiatives.

- Applies advanced qualitative data analysis techniques and methods to determine characteristics, trends, and impacts.
- Collects baseline and trend data on waste program operational metrics to develop insights and report on crucial sustainability performance indicators.
- Identifies data inconsistencies, errors, or reliability in waste management procedures to take appropriate action to remedy or recreate data.
- Seeks feedback from other technical specialists to confirm interpretations and ensure methods and results adequately address the objectives of the waste management programs.

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## **Waste Management Program Development**

Develops a plan of action for an organization's waste management program objectives to clearly define the scope, risks, goals, and critical success factors to provide guidance and develop effective programs.

- Participate in waste management strategy sessions to develop and implement new waste management initiatives.
- Works with senior leadership to develop a year-long program plan to create actionable items and track deliverables.
- Contributes to a multi-disciplinary team to plan, implement, and execute waste management work to facilitate further activities and development.
- Examines the durability of consumable items and suggests alternatives that are both cost-effective and better for the environment.

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## **Program Evaluation**

Monitors program success by evaluating benefits, risks, key indicators, and stakeholder feedback to create comprehensive reports to communicate the program's standing and status.

- Monitors waste management programs' operating data to ensure statistics are tracked accurately.
- Prepare quarterly and year-end program reports to communicate successes, failures, and the status of deliverables.
- Identifies and addresses gaps in existing Waste Management Program requirements, processes and procedures through observations, assessments, and reviews to generate solutions to fill identified gaps.

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## **Quality Assurance and Control**

Follows appropriate processes, as directed by organizational best practices, to maintain quality throughout waste management operations.

- Applies statistical techniques and calculations to monitor and track the acceptability of quality control results.
- Monitors the execution of waste management project activities to assess the performance of team members and project quality.
- Directs testing activities for environmental components and equipment under designated conditions to ensure that waste management's operational performance meets environmental standards and is proven reliable.
- Analyzes operational data to evaluate operations, processes, or products to ensure efficiency.
- Maintains historical information on operational data to reference and corresponding sources.



## Communication

Positively directs outcomes by delivering communication (both written and verbal) that results in a better understanding of goals and objectives captures interest, and gains support for immediate action.

- Interprets and presents data results to stakeholders and senior management to facilitate decision-making.
- Presents information about climate change, scientific findings, and hazard risks to diverse stakeholders and the public to build awareness of what is involved (and necessary for) climate change adaptation and resilience.
- Asks questions when assigned unfamiliar tasks to ensure understanding and accuracy.
- Prepares documentation for existing and upcoming products to describe functionality and composition and communicate technical specifications in plain language to a broad audience.
- Uses non-technical language to communicate with team members, stakeholders, and the public.

## Collaboration

Engages in professional collaborative efforts with other team members, including sharing information and expertise, utilizing input from others, and recognizing others' contributions to work towards a common goal.

- Works with an interdisciplinary team of experts to incorporate diverse opinions into climate change adaptation and resiliency planning.
- Promotes climate change preparedness across disciplines (flood protection, stormwater, wastewater, transportation, environment, and urban planning) to ensure that resiliency to different consequences of climate change is established.
- Participates in community outreach events, including formal presentations and meetings with stakeholders to incorporate targeted solutions for different communities and keep everyone informed.

## Problem-Solving

Identifies problems and uses logic, judgment, and evidence to evaluate alternative scenarios and recommend solutions to achieve a desired goal.

- Considers the impact on the organization and environment when analyzing specific project objectives and goals.
- Analyzes meteorological data to understand trends and potential areas of concern to take appropriate actions where required.
- Applies mathematical models and techniques to perform analysis and create solutions to specific problems.
- Approaches problems with a balance of logic and creativity to develop innovative solutions.
- Takes an unbiased stance on interpreting new information to solve a problem objectively.



## Environmental Policies

Develops and/or supports creating environmental policies and practices based on available data to alter human behaviours and slow climate change.

- Applies evidence-based decision processes and synthesizes relevant data to generate defensible policy recommendations supporting sustainable climate adaptation strategies/initiatives.
- Generates solutions that are in line with short—and long-term goals and current knowledge about climate risks to create feasible and actionable options.
- Applies an analysis of risk patterns in climate change to propose solutions that mitigate future risks.
- Builds from and leverages existing sustainability, climate adaption, energy, biodiversity, and emissions reduction theories to create the most robust possible responses.
- Simplifies observations to essential variables to create strategies for environmental remediation.

## Environmental Policy Evaluation

Evaluate the sustainability of an organization's policy(s) to develop suitable alternatives to support mitigating climate change effects.

- Identifies sustainability policies that align with organizational values to support the development of sustainable practices.
- Recommends valid policy alternatives from an organization's standard to improve internal policies and adapt to climate change.
- Combines research on organizational best practices with stakeholder feedback to assess the effectiveness of current policies.



## Climate Change Science

Identifies interactions between humans and the environment to monitor changes in the climate and develop adaptation plans that are informed by scientific understanding.

- Identifies the complex interactions between climate and other systems to capture that complexity in climate change analysis.
- Interprets global and local climate trends, impacts, challenges, and concerns to inform policies and practices.
- Studies aspects of climate change to understand the potential effects of activities on the natural and human environments and generate solutions to insulate humans from future climate disasters.
- Incorporates Indigenous knowledge and learning into climate adaptation plans to inform a holistic, well-rounded approach.

*This profile is a living document. If you have any feedback or would like to help us improve the profile, please reach out to [research@eco.ca](mailto:research@eco.ca).*