2017 SAFETY AWARD
Biggest Safety Improvement
Collection & Transfer Technical Division

WASTE MATTERS
Health, Safety & Wellness Program

City of Hamilton, Ontario
Population: 545,000
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EXECUTIVE SUMMARY

The City of Hamilton supports a workplace culture dedicated to achieving a goal of zero workplace injuries and illnesses. Hamilton’s health and safety management system requires all employees have responsibility for supporting and maintaining a safe and healthy workplace. This model promotes collaboration between management and front line staff in achieving and implementing health and safety initiatives.

The City developed "Waste Matters," an innovative health, safety and wellness program for Waste Management employees to address and reduce workplace risks. This multi-faceted program includes a wide range of services and activities to create a healthy and safe environment for employees. The program’s objectives are to reduce risks to employees’ health through safe work practices, creating healthy work environments, building employees’ skills, and health promotion.

Since introducing this program, the City has greatly reduced workplace injuries and associated worker compensation costs.

ABOUT THE CITY OF HAMILTON

The City of Hamilton is Canada’s eight largest City with a population of approximately 547,000 residents living within a mix of urban, suburban, and rural communities. The City is dedicated to providing high-quality, cost effective waste management services for its residents including:

- Innovative solid waste planning
- Comprehensive waste collection for recyclables, organics, yard waste, garbage and bulk
- State-of-the-art waste processing facilities
- Secure landfill operations including stringent environmental monitoring of closed landfills

The City provides waste management services for a wide range of customers including single-family residential properties, multi-residential apartment buildings, municipal buildings, commercial properties, and elementary and secondary schools. Collection services are provided using a blend of both municipal staff for approximately half the City and collection contractor for the other areas of the City. The City’s integrated waste management system is designed to meet the City’s unique diversity.
HAMILTON’S WASTE MATTERS SAFETY PROGRAM

Waste management is a highly specialized essential service provided by the City for its residents. Historically, the Hamilton’s Waste Management staff faced a significantly higher number of injuries compared to other City departments which is attributed to the high risk environment and physically demanding work requirements that involves heavy lifting, repetitive motions, and working in all weather conditions. The City needed to develop an innovative program to address the health and safety concerns for the Waste Management staff.

The City has taken a multi-faceted approach with developing its safety program. Through consultation with various staff teams and union members, the City implemented its “Waste Matters” health, safety and wellness program for waste management employees. “Waste Matters” includes a broad range of initiatives to focus on employee wellness with the goal of decreasing worker injury rates and supporting safe operations. This program consists of several key elements:

- workplace safety improvements
- safety training and ongoing education
- promoting employee wellness
- supporting a positive work environment
- fleet initiatives and new technology

The “Waste Matters” health, wellness and safety program incorporates services offered corporately and those which are specifically designed for Waste Management’s unique work environment.

SWANA Involvement

The City of Hamilton has been an active participant in SWANA’s training activities since 2001. SWANA’s training programs has been available for the City’s waste management staff including front-line staff, supervisors, and management staff. In particular, front-line Waste Collection staff is encouraged to take SWANA training courses to increase knowledge and for career advancement. Several City staff are certified SWANA trainers responsible for leading SWANA training sessions. In addition, Hamilton staff had the honour of leading SWANA webinars and making presentations at WASTECON. Over the years, Hamilton’s staff have been active members on the SWANA Ontario Chapter Board of Directors, including serving as the Chapter’s President.

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Physical Demands Analysis (PDA)
The City utilizes a PDA assessment for the Waste Collection Operator position. The PDA is an ergonomic analysis of the physical requirements to collect waste materials in different environments such as compact City streets and rural areas. The PDA provides valuable information on Waste Collection Operator’s daily physical requirements. The PDA has allowed staff to implement ergonomic training, driver training, new technology, and improved safety standards for vehicles and equipment.

Safety Spot Checks
Random spot checks are conducted among all waste collection crews, both public and contracted, during the course of their work. These spot checks are completed by trained staff to observe operator activities including:
- safe driving practices
- proper lifting techniques
- appropriate personal protective equipment
- mandatory operating supplies and documentation present in vehicle
- appropriate physical and mental condition of employees

Personal Protective Equipment (PPE)
Waste Management staff must wear mandatory PPE while on duty so that they are fully visible to the public. The City supplies each employee with approved PPE including reflective clothing, footwear, and gloves. All safety clothing must meet the Canadian Standards Association guidelines and Provincial Labour Regulations. As part of the “Waste Matters” program, the City broadened the PPE attire to include specialized weather related PPE including ice-cleats to reduce potential injuries during the winter, and cooling bandanas for summer months.

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TRAINING AND EDUCATION

Educational Opportunities

The City of Hamilton is committed to providing its employees with fulfilling careers and learning opportunities. To keep employees up to date on their work skills, the City offers training courses to ensure employees are capable of performing their duties in the most effective manner including educational opportunities, computer skills training, and customer support training. With the expansion of the Waste Matters program, the City adopted e-learning software, video based learning, and safe material handling training. Waste Collection employees are required to participate in essential training programs including First Aid/CPR, Workplace Hazardous Materials Information Systems (WHMIS) training, and Highway Traffic Act training. Employees who complete job related training courses are recognized through the City’s performance appraisal process.

Safety Meetings

All City employees are required to participate in mandatory monthly safety meetings to keep them informed on conditions or procedures in the workplace. Health and safety meetings include the review of health and safety topics, updates on corporate procedures, and review of health and safety legislation. Each health and safety meeting focuses on a specific training topic to raise awareness of potential hazards and educate staff on relevant standards. For Waste Collection staff, their safety meetings focus on the hazards which are prevalent in their work environment. The safety meetings also provide a forum to address operational matters and upcoming program/policy changes.

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The City is committed to ensuring that all staff receives all necessary training to protect their health and safety before they commence any job.

New Employee Onboarding

The City revamped its employee onboarding training platform in 2015 as part of the “Waste Matters” program expansion. New employees go through a rigorous training program to ensure they are able to work effectively and safely. All Waste Collection employees must prove that they are physically able to complete the essential job duties through a health assessment conducted by a third party assessor. Employees must review all standard operating procedures at the start of their training period with a Supervisor and an experienced Waste Collections employee. Each new employee receives a resource manual with all required health, safety and wellness information.

Training Improvements

The City has committed significant resources to ensure the success of training plans which support the “Waste Matters” program. In 2015, the Waste Collection Office training room was renovated to include an electronic information board and additional computer workstations to help with employee training requirements. The new audio-visual equipment complements the enhanced health and safety training and the City’s job coaching project. Safety videos and web-based information are reviewed using the electronic information board. Training bulletin boards were also installed which features a comprehensive list of safety topics and wellness information. The training board includes operational procedures as well as career development information.
EMPLOYEE WELLNESS

Return to Work Services
The City’s Return to Work Services provides health consultation and assistance with employee rehabilitation. They help manage all occupational and non-occupational claims, with a focus on returning employees to work in a safe and timely manner. The City developed a return to work job coaching project for staff as part of the “Waste Matters” program which includes the following:

- A training program to assist injured employees safely return to the workplace
- Reviewing work activities to identify opportunities to avoid future work related injuries and illnesses
- Regular monitoring with supervisory staff to track employee progression through the work job coaching project

Work accommodation assignments for Waste Collection employees include the opportunity to work on administrative projects, customer service activities, and other lighter physical duties.

Waste Collection Wellness Projects
In 2015 and 2016, the Waste Collections Section and the City’s Health, Safety and Wellness Section worked together to support a kinesiology co-operative student placement. The co-op has helped introduce ergonomics projects including employee wellness training sessions, an exercise regime for staff, and musculoskeletal injury prevention initiatives. Tools developed for the “Waste Matters” program include a “Warm Up for Work” exercise booklet and videos with exercises designed for the Waste Collection employees. The co-op placement researched future opportunities including improved seat pans for vehicles to reduce back injuries, new lift assistance technologies to reduce employee strains, and PPE improvements for increased worker protection.

Positive Work Environments
The City supports a healthy work environment through a variety of policies and programs including:

- **Respectful and Supportive Workplace** policies prevent workplace harassment and provide a mechanism to act on concerns in a prompt, fair, and confidential manner. Training is mandatory for all staff to ensure they are aware of their rights and responsibilities.
- **Employee Wellness Assistance Program** provides 24/7 confidential support for employees and their dependents. Employees also have access to “LifeSpeak” - an online library containing video modules on physical and mental health, personal growth, relationships, professional development and communication skills.
- **Employees Recognition** through an “Employee Spirit” award program for individuals and employee teams who have enhanced the City’s profile or to supported community well-being.
- **Community Support** allowing staff to support charitable organizations through a pre-authorized payroll deduction program as well as involvement with other community activities throughout the year.

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FLEET INITIATIVES AND TECHNOLOGY

Driver Safety Action Plan
In 2015 and 2016, the City made significant changes to its driver safety action plan to reduce major safety concerns and to implement strategies to improve safety performance. This major overhaul of the former driver compliance requirements was necessary to address the City’s unfavourable Commercial Vehicle Operator’s Registration (CVOR) rating system for the City’s fleet. The driver safety action plan includes several strategies as follows:

Driver Safety Improvements
The main focus of the City’s Driver Training Plan is to ensure that all vehicles and equipment are operated safely. Each employee who operates a City vehicle must take responsibility for accident prevention. Subsequently, all operators of City vehicles and equipment are required to obey all traffic and safety regulations, conduct themselves in a responsible manner, and to be courteous to other motorists. In 2016, all drivers were required to participate in the driver safety improvement program.

Collision Review Board (CRB)
The CRB was established in 2015 to examine all collisions involving municipal vehicles and equipment. This Board evaluates the vehicle incidents and determine the appropriate course of action. If an incident is deemed preventable by the CRB, a demerit system is used to assess the appropriate action.

Driver Training Enhancements
The City introduced three new Driver Training positions in 2015 to coordinate driver activities including training, coaching, and monitoring performance. A dedicated Driver Trainer is currently assigned to the Waste Collection Section to assist with route training, safe operation of vehicles, and on-route safety inspection.

Driver Safety Award
In 2017, the City will be launching its Driver Safety Award to recognize staff that adhere to all driver safety rules and have not incurred any incidents. The City currently has approximately 1600 vehicle operators, and approximately 92% of these staff will qualify for the award which attests to the safe driving practices among City employees.

New Technologies
The City has installed new Vehicle Dash Cameras and Automated Vehicle Location technologies to improve service delivery and safety performance.

Vehicle Dash Cameras
In 2016, dash cameras were installed in the City’s 40 waste collection vehicles. Hamilton’s vehicle camera pilot has successfully improved driver behaviour, supports staff training initiatives, and assists with risk management concerns by recording audio and video in the event of an accident.

Automated Vehicle Location (AVL) system
In 2016, a new AVL system was installed in all City waste collection vehicles. The AVL system will assist with the City’s route optimization project planned for 2017, improve planning capabilities and balance employee workloads. This will help address employee health and well-being by balancing performance outcomes.
MEASURING RESULTS

The City uses a variety of tools and metrics to measure the performance of the Waste Matters Health & Safety Program. Data collected through the following methods is used to annually benchmark the performance of the City’s new and improved health, safety and wellness program.

**Monthly Reports**
The City issues monthly health and safety reports to help identify and analyze incident trends in the workplace. The report provides a breakdown of each incident and a summary of number of lost time accidents, days lost, incidents requiring medical aid, hazard reports, and types of injuries sustained. Reports are reviewed by the management team so that corrective actions can be implemented.

**Vehicle Maintenance Reports**
At the start and end of each shift, staff are required to complete a detailed pre and post trip inspection checklist on the vehicle they will be using during the shift. The checklist includes CVOR reporting requirements. Data from the inspection checklists are used to generate reports on vehicle condition and maintenance requirements.

**Vehicle Incident Reports**
Employees are required to report any incidents involving City vehicles and equipment immediately after the incident. Reports must follow standard policies and procedures. Incidents are compiled and recorded in a centralized database. Incidents are reviewed and identified as preventable or non-preventable. Corrective actions with the employee include re-education through a defensive driving course or disciplinary action if necessary.

**Risk Management Claims**
Information gathered through the City’s internal incident reports and external risk management claims are monitored by the City’s Risk Management Section. The City’s risk management report includes details on the number of claims, type of claim, and associated costs.

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**Commercial Vehicle Operator Registration (CVOR) Reports**
The Ontario Government Ministry of Transportation oversees the CVOR system which tracks each carrier’s road safety performance. Collisions, convictions, and inspections appear on the carrier’s CVOR Abstract report.

**Work Accommodation Reports**
The City’s Return to Work Services Section maintains records concerning occupational and non-occupational claims for City employees, and work accommodation assignments to assist employees to return to the workplace.
SAFETY PERFORMANCE IMPROVEMENT & BASELINE DATE

The baseline data used to measure the performance and success of Hamilton’s safety program includes the quantitative and qualitative data generated from the monthly health and safety reports, work accommodation reviews, vehicle incident reports, vehicle maintenance records, CVOR data, and risk management claims. These reports are measured on a calendar year from January to December which matches the City’s overall fiscal year. In addition to these reports, there is also staff performance feedback as observed by frontline supervisors during the course of the year. Staff performance and compliance with health and safety procedures forms part of each staff member’s quarterly employee performance reviews.

Health & Safety Reports
Hamilton’s Waste Collection Section’s lost time incidents have dropped significantly as the result of the “Waste Matters” health, safety and wellness program. There has been a 63% reduction in lost time claims between 2015 to 2016 which has resulted in an 81% savings for the Waste Collection Section’s workers safety insurance board claims.

Work Accommodation Reports
Safer work practices among the Waste Collection Section in 2015 and 2016 has resulted in a reduction of more than 85% for employees requiring work accommodation placements.

Vehicle Service Reports
The Waste Collection Section use of new technology has resulted in a 37% savings in vehicle repairs in maintenance and 23% savings in fuel consumption when comparing information from 2015 to 2016.

Risk Management Claims
The City’s risk management claims associated with the City’s waste collection fleet decreased by 32% between 2015 and 2016.

The City has been able to achieve positive outcomes through its “Waste Matters” safety program by using several metrics including health related statistics, worker compensation claims, work accommodation, vehicle details, and risk management claims.

CVOR Reports
The City’s CVOR rating peaked in 2014 and 2015 at over 90%. Through the driver safety program, the CVOR rating was drastically reduced to 49% in 2016. The significant improvement is attributed to several factors including the City’s driver safety action plan, new technology, and the City’s commitment to safety. Staff will continue to focus on the importance of driving defensively and the impact that traffic convictions and collections have on the City’s CVOR.

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<th>Return to Work Program</th>
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<th>Vehicle Maintenance</th>
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<table>
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<tr>
<th>Vehicle Claims ($)</th>
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<tbody>
<tr>
<td>Estimated Cost ($)</td>
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<td>$36,000</td>
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OUR PROGRAM IMPROVEMENT

To address the question, “What do you attribute the improvement in your safety performance in 2016”; the City’s success is the result of the team approach which focuses on providing City employees a safe environment to work in. This team approach includes a wide number of stakeholders who are committed to achieving effective outcomes. The City’s team is comprised of staff from Return to Work Services, Human Resources, Labour Relations, Joint Health & Safety Committees, Fleet Services, the City’s Unions, Public Works Management staff, frontline supervisors and the employees themselves.

Waste Collections is ranked the 5th most dangerous job in North America therefore safety is always a major concern for the City. Hamilton’s Waste Management supervisory team keeps two things in mind when they are making their daily decisions. First, is this decision going to lead to providing exceptional service and second, is this exceptional service being conducted with the utmost commitment to health and safety of the City’s employees and residents. If they can answer yes to both questions everything else falls into place.

Hamilton's success can be attributed to several actions:

- Using emerging technologies and process to help mitigate physical demands on staff
- Effective partnerships with other Divisions
- Amended work practices which focus on working in a safe manner
- Increased field supervision including improved driver observation and coaching.

Team Involvement

Waste Collection employees have the opportunity to be involved with decision-making process to provide input on workplace improvements. Front-line staff is included in the equipment selection process for new waste collection vehicles and operating equipment.

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The Biggest Safety Improvement Excellence Award demonstrates SWANA’s commitment to encourage innovation and safety improvements in the workplace. The City of Hamilton’s “Waste Matters” health, safety and wellness program is worthy of SWANA’s safety award since the City’s program can be used as a model for safety excellence in other organizations.

The City of Hamilton’s goal is to ensure the health, safety and wellness of employees as a top priority. The City has taken decisive and focused actions to improve safety, promote employee wellness, and effectively deal with fleet matters. The successful outcome from the “Waste Matters” program demonstrates how constructive actions influence the City’s operations. These corrective actions are part of the City’s commitment to continuous improvement. The positive outcome of the “Waste Matters” safety program is currently being used as a best practice for other City Departments. The City has been able to achieved considerable improvements in its safety performance over the past few years, but will continue to focus on initiatives to strive towards the City’s goal of zero workplace injuries and illnesses.

Healthy employees are a definite asset to the City because it improves the delivery of municipal services to the community.

Promoting health, safety and wellness has many effective results including decreasing healthcare costs, reducing employee absenteeism, boosting staff morale, and increasing productivity.

The City’s goal is to continuously improve our healthy workplace culture by setting ambitious shared targets and goals for improved health, safety, wellness, and return to work programs.

We will continue to implement innovative leading practices in health, safety, wellness, and return to work by learning from our own and other organizations’ experiences.