

APPENDIX 1

Protecting Water Quality and Preventing Pollution – Assessing the Effectiveness of the City’s Sewer Use By-law

Toronto Water

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Auditor General’s Office

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EXECUTIVE SUMMARY

The Sewer Use By-law sets limits on pollutants discharged to the sewer system

To protect water quality and wastewater treatment processes, the City of Toronto's Sewer Use By-law, (Municipal Code Chapter 681 – Sewers), sets limits for pollutants discharged into the sewer system. The By-law also requires that industries discharging pollutants submit a pollution prevention plan to the City that identifies ways to avoid, reduce or eliminate pollutants at source.

Discharges that do not meet the requirements outlined in the Sewer Use By-law could have serious consequences on public health and safety, municipal infrastructure and the environment.

Widespread consultations were held prior to the drafting of the By-law

The By-law was drafted after consultation with Environment Canada, the Ontario Ministry of the Environment, Canadian Centre for Pollution Prevention and the World Wildlife Fund. It underwent extensive public consultation to obtain input from industry, industry associations and other stakeholders. The By-law was passed in 2000.

The Environmental Monitoring and Protection Unit (EMPU) of Toronto Water, with a complement of 51 staff, monitors and enforces the Sewer Use By-law for the more than 8,500 industrial, commercial and institutional facilities that discharge pollutants into the City's sewer system.

A risk based approach is used to select businesses for inspection and sampling

Inspection and sampling activities for each of the 8,500 business locations in the City of Toronto have focused on a risk management approach which effectively identifies those businesses with a high-risk to pollute. In view of the limited staff resources available at Toronto Water, an inspection and sampling process which includes all 8,500 business locations is not possible. Consequently, the major challenge for the Division is identifying and addressing high-risk businesses.

Toronto Water is constantly reviewing and re-evaluating its administrative processes and controls to identify all high-risk businesses within the City. Further, once identified, Toronto Water has been relatively diligent in ensuring that the businesses identified are in compliance with the provisions of the Sewer Use By-law.

Improvements are required at all stages of the compliance process

As is the case with the majority of audits, we have identified areas where improvements are required. Improvements are required at all stages of the compliance process including:

- The accuracy and completeness of the business location database
- The modification of established performance measures for the inspection and sampling of discharges by businesses
- The documentation of the review of sampling and inspection activities by supervisory staff
- The need to ensure that appropriate pollution prevention plans have been submitted by businesses and reviewed and approved by staff
- The appropriate follow up of enforcement activities
- The need to ensure that costs incurred are appropriately recovered, where possible
- The need for improved use of information technology.

Steps need to be taken to ensure that businesses receiving reduced water rates are in fact entitled to such reductions

The EMPU is also responsible for monitoring a program under which companies using a high volume of water are eligible to receive a reduced water rate if they meet certain conditions related to environmental protection and water conservation. In this context, the General Manager, Toronto Water, should review all participants in the program to ensure that they met, as at January 1, 2008 and continue to meet, conditions required to receive the reduced water rate. In circumstances where there is non-compliance, immediate action be taken including the retroactive billing of previously reduced rates.

Conclusion

Over the past few years, the Environmental Monitoring and Protection Unit has significantly improved its processes and activities. While management has adopted a risk based approach in its administration of the Sewer Use By-law, in order for this approach to be effective, changes and improvements are required. The implementation of the recommendations in this report will contribute to this increased effectiveness.

BACKGROUND

***The Sewer Use
By-law provides
limits on
discharges to the
sewer system***

To protect water quality and wastewater treatment processes, the Sewer Use By-law, (Municipal Code Chapter 681 – Sewers), provides limits on pollutants discharged to the City’s sanitary and storm sewer system. The By-law was enacted in 2000 following extensive consultation with Environment Canada, the Ontario Ministry of the Environment, industry and environmental groups, and other stakeholders (including the World Wildlife Fund). A two year phase-in period was allowed for organizations to meet the new discharge limits.

Certain pollutants, such as lead and mercury, have limits in terms of allowable discharges to the sewer system due to the fact that the wastewater treatment processes cannot effectively remove them from wastewater. Other pollutants, such as phosphorous, are treatable at the City’s treatment plants. For these treatable pollutants, the By-law sets limits based on the treatment plant’s ability to effectively treat the pollutant. If a company wishes to discharge treatable pollutants above the By-law limits, the City may accommodate this by charging a fee designed to recover the costs of treating the excess pollutants. For these companies, the City enters into a surcharge agreement.

***The Sewer Use
By-law requires
businesses to
submit pollution
prevention plans
to the City***

The By-law requires that certain business sectors submit a Pollution Prevention Plan to the City that identifies ways to avoid, reduce or eliminate pollutants at source. Certain sectors such as the photofinishing and automotive sector must comply with industry specific Best Management Practices as set out by the City.

The Environmental Monitoring and Protection Unit (EMPU) in Toronto Water monitors and enforces the Sewer Use By-law through inspection and sampling activities.

The Unit has three sub-groups as follows:

1. Industrial Waste Control – monitors the discharges of industrial, commercial and institutional business facilities.

2. Pollution Prevention – administers Pollution Prevention Plans and Best Management Practices and carries out inspections. The Unit helps industries identify ways of reducing and/or eliminating pollutants and wastes at some industrial, commercial and institutional facilities.
3. Stormwater Quality – monitors storm sewer outfalls year round and the beaches and lake monitoring program on a seasonal basis.

***The
Environmental
Monitoring and
Protection Unit
generated \$8.6
million in
revenue in 2007***

In 2007, the EMPU incurred expenditures totalling \$3.3 million of which staff costs accounted for \$2.9 million. Approximately, \$8.6 million in revenue was generated by this Unit, of which \$7 million relates to industrial waste surcharge fees. The Environmental Monitoring and Protection Unit operates with a staff complement of 51.

Currently, the EMPU uses a work management system, to administer its information. The system is multi-purpose and is used to maintain a database of business locations and also includes information relating to sampling, inspection and enforcement activities.

Finally, in 2007, City Council approved reduced water rates for industrial facilities that use more than 6,000 cubic metres of water per year. These high volume facilities are required to comply with the Sewer Use By-law and submit a water conservation plan to receive a reduced water rate. The EMPU is responsible for ensuring these businesses meet the criteria required to receive the reduced rate.

AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

***Why we
conducted this
review***

The Auditor General's 2008 Audit Work Plan included a review of the administration of the Sewer Use By-law by Toronto Water. This review was selected based on criteria such as risk to the environment from discharges of pollutants into the sewer system, financial and operational impacts on the wastewater treatment plants and the extent of revenues generated.

Audit Objectives

The objective of this audit was to determine if Toronto Water's inspection and enforcement activities, including mandatory pollution prevention planning, are effective in ensuring businesses meet the requirements of the City's Sewer Use By-law.

***Specific Audit
Objectives***

The specific audit objectives were to determine whether:

- The database of businesses located in the City of Toronto is accurate and complete;
- Businesses submit appropriate Pollution Prevention Plans by the required due dates;
- The frequency of inspections and sampling complies with established targets;
- Inspection activities are properly documented in the work management system and monitored by supervisory staff;
- Timely and appropriate enforcement actions are taken when inspection and sampling results indicate that sewer discharges exceed the By-law limits or when a Pollution Prevention Plan has not been submitted;
- Signed and executed surcharge agreements exist for all businesses with discharges in excess of limits for treatable pollutants;
- Sewer surcharge fees reflect the actual cost of treating pollutants and are accurately calculated;

- Sewer surcharge fees are billed and collected and overdue accounts are followed up on a timely basis;
- Businesses receiving the high volume user water rate discounts meet the eligibility requirements;
- There are any opportunities to improve the efficiency of inspection, sampling and enforcement activities; and
- Information technology is being effectively used to manage inspection and enforcement activities.

Scope of the Review

This audit covered the period from January 1, 2007 to March 31, 2008 and focused on the Industrial Waste Control and the Pollution Prevention Groups of the Environmental Monitoring and Protection Unit within Toronto Water.

Our audit methodology included the following:

- Review of pollution prevention plans for 40 businesses;
- Review of inspection and sampling results for 60 businesses;
- Review surcharge agreements for 20 businesses;
- Interviews with relevant City staff;
- Observation of facility inspections;
- Review of related reports and legislation;
- Examination of documents and records;
- Analysis of data; and
- Any other procedures deemed appropriate.

We also reviewed related audit work conducted by the following entities:

- Office of the Auditor General of Ontario;
- Office of the Comptroller, City of New York;
- Minnesota Office of the Legislative Auditor; and
- City of San Jose, Office of the City Auditor.

We also reviewed the draft report entitled “City of Toronto, Integrated Inspections Enforcement and Prosecution Review” prepared by DPRA Inc., a consulting firm hired by the City Manager’s Office.

***Compliance with
generally
accepted
government
auditing
standards***

We conducted this audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence that provides a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT RESULTS

This section of the report contains the findings from our audit work followed by specific recommendations.

A. DATABASE OF BUSINESS LOCATIONS IN TORONTO

A database of business locations with the potential to pollute is maintained and updated using various sources

By-law officers in the Environmental Monitoring and Protection Unit (EMPU) generally select businesses for inspection and sampling from a database maintained in the work management information system. The database was originally developed based on records maintained by the former cities that amalgamated in 1998 to form the current City of Toronto. Since amalgamation, Toronto Water has used various business resources and industry association membership lists to update the database. For instance, staff are currently updating the database using the Government of Canada's National Pollutant Release Inventory database which identifies businesses that use or release toxic substances. A further information source used by Toronto Water is a publication called Scott's Directory which is a widely recognized database of Canadian manufacturers, wholesalers, distributors and business service providers.

Business location database is not complete and accurate

The business location database is not complete and accurate. We compared Toronto Water's database with a number of business and industrial directories. As a result of this comparison, we identified a number of potentially high-risk businesses such as 33 metal stamping companies and 25 paint manufacturers who were not included in the database. We recognize, however, that certain of these businesses may in fact be warehouses, head offices or other businesses which do not produce pollutants. Nevertheless, these potential high-risk businesses require evaluation to determine whether or not they require further review and analysis.

We have provided a summary of the businesses identified to Toronto Water for further review. Toronto Water has inspected approximately 25 per cent of these businesses and to date has not identified any high-risk businesses. The remaining 75 per cent of the businesses are in the process of being investigated to determine their risk level.

Businesses are not always classified by potential to pollute or on a consistent basis

One field in the database is used to record either potential to pollute or industry classification. Where industry classification is used, it is generally because the industry has a low potential to pollute. However, certain individual businesses could have a higher potential to pollute and this fact will be recorded when identified. Since potential to pollute and industry classification are both important pieces of information it would be more useful if a separate database field were created so that both pieces of information could be recorded for each business location.

Missing or inaccurate information impacts data analysis and inspection scheduling

Finally, certain information pertaining to individual businesses included in the database is not complete and accurate. For instance:

- the address or industry identification code was not recorded for a number of businesses
- businesses in the same industry are given different industry identification codes
- more than 100 businesses in the database no longer operate.

Recommendations:

- 1. The General Manager, Toronto Water ensure that when new industries are identified, site visits be conducted as soon as possible in order to determine whether or not provisions of the Sewer Use By-law apply. In addition, any change in circumstance such as the closure of a business should be updated on the database.**
- 2. The General Manager, Toronto Water, review the business location database to ensure that all important information such as potential to pollute, industry identification code and address are recorded for each business location.**

B. INSPECTION AND SAMPLING ACTIVITIES

Management has procedures for inspection and sampling

Management has established inspection procedures for various types of industries such as metal finishing and industrial laundries that typically discharge significant pollutants into the sewer system. To determine whether pollutants exceed limits, staff collect samples of wastewater discharged to the sewer system for analysis by the City's laboratory.

The frequency of inspections and sampling varies with risk to pollute

Internal management targets on how often industries are to be inspected and sampled have been established. The frequency of inspection and sampling generally varies by type of industry and risk to the environment. For example, industries that are classified as high-risk are inspected twice a year compared to once every two years for other businesses.

Documenting inspections requires improvement

The results of inspections are generally documented in the work management information system. We noted that certain inspection reports were incomplete and did not contain information such as business contact names, inspection type and the status of pollution prevention plans. Further, we were advised by management that supervisors periodically review inspection reports. However, documentation indicating that reports have been reviewed for the most part is not available.

The number of reported inspections include non inspection activities

The number of inspections reported by Toronto Water is significantly overstated. Ten out of forty inspections we reviewed related to non inspection activities. These activities include telephone calls, meetings, incomplete inspections and creating and sending out Notices of Violation.

Recommendation:

- 3. The General Manager, Toronto Water, require that supervisory staff document their review of inspection reports. Non inspection activities such as telephone calls and meetings should not be reported as inspections.**

Some businesses are not being inspected

Based on the information available we identified 5,472 businesses that were not inspected from 2006 to March 2008. This represents 67 per cent of the businesses in the database. Since all business locations should be inspected at least once every two years, it is clear that the majority of businesses are not being inspected according to targets. This percentage is likely higher as the business data base is incomplete and inspection statistics are inaccurate. In terms of industries classified as “high-risk”, 50 per cent were inspected according to targets. We understand that EMPU had numerous vacant positions during the period of our review and that these vacancies would contribute to the shortfall in meeting targets.

An overall inspection plan has not been developed

An overall city wide plan does not exist to ensure that businesses are inspected and sampled. By-law officers generally do not prepare a formal schedule to ensure that businesses in their geographic areas are inspected and sampled to meet management targets. Generally, management does not monitor to ensure that inspection and sampling frequency targets are met.

Use of industry specific inspection checklists should be expanded

Finally, there is a need to create inspection checklists for certain industries to ensure that industry specific risks are addressed. To date, tailored checklists have only been completed for a limited number of businesses.

Recommendations:

- 4. The General Manager, Toronto Water review inspection and sampling targets to ensure that they are reasonable given risks to pollute and the staff resources available and report to City Council by September 2009 on recommended targets and resources required to meet those targets.**
- 5. The General Manager, Toronto Water develop annual and quarterly inspection plans that meet the inspection and sampling frequency targets established by management. Further, actual inspection and sampling activities should be compared to targets by supervisory staff.**
- 6. The General Manager, Toronto Water develop and implement tailored inspection checklists for certain industries to ensure that industry specific risks are addressed on a consistent basis.**

C. POLLUTION PREVENTION PLANS

Every business location discharging certain pollutants into the sewer system must submit a pollution prevention plan or follow agreed upon Best Management Practices

Toronto Water monitors over 8,500 business locations for compliance with the Sewer Use By-law's pollution prevention planning requirements. The By-law requires every business discharging certain pollutants into the sewer system to submit a pollution prevention plan that demonstrates how pollutants will be avoided, reduced or eliminated at source. The By-law also establishes deadlines for the submission of pollution prevention plans for 139 business sectors. These businesses must submit full pollution prevention plans every six years and updates every two years.

Certain commercial sectors follow industry specific Best Management Practices developed by the City and are not required to submit pollution prevention plans.

City has no authority to enforce the implementation of pollution prevention plans

Management credits the requirement for submission of pollution prevention plans for making businesses aware of pollution prevention opportunities. However, a legal opinion obtained in 2000 concluded that the City has no authority to enforce plan implementation, or ensure any reduction in pollutants is achieved. Given the changes arising from the City of Toronto Act, 2006 it may be appropriate to review the 2000 legal opinion to determine if the City's authority to enforce pollution prevention plans has changed. If not, it may be appropriate to review the Sewer Use By-law pollution prevention planning requirements in view of the legal authority of the City.

Given management's assertions that the By-law requirement for submission of pollution prevention plans is useful in that it forces companies to identify potential methods of reducing pollution, we have made additional comments on related processes. However the more important issue is whether or not the City has, or should have, more authority to control the content of plans and enforce their implementation.

Recommendation:

- 7. The General Manager, Toronto Water, in consultation with the City Legal Division, reassess the City's authority to enforce the implementation of pollution prevention plans. Should it be determined that no such authority exists, the General Manager consider whether seeking such authority is necessary.**

More high-risk industries submit a pollution prevention plan

Most companies with a high-risk of polluting, such as metal finishing and industrial laundries, submit pollution prevention plans. For example, for initial plans due in 2001, 80 per cent or eight out of ten high-risk companies we reviewed submitted plans compared to only 26 per cent or four out of 15 low-risk companies. These numbers confirm that Toronto Water is focusing its limited resources on high-risk businesses.

Due to limited resources, focus is on high-risk industries

With a significant number of industries to monitor, Toronto Water does not have adequate staff levels to ensure that all business owners submit plans or comply with due dates. With the resources available the focus appropriately is on high-risk industries.

Preparing a pollution prevention plan requires expertise that many smaller companies do not have. In order to address this issue, Best Management Practices were developed by Toronto Water, in consultation with industry associations, to help small businesses to comply with the By-law.

Submission of pollution prevention plans is not being monitored for all industries

For many industries, the submission of pollution prevention plans is not being monitored. Currently, information created from the work management system is used to track the receipt and approval of pollution prevention plans. High-risk business sectors such as metal finishing also receive written notification of pollution planning requirements and approval letters following submission of their plans. Due to a lack of staff resources, letters are not sent to low-risk facilities.

By-law officers do not always monitor whether inspected facilities have pollution prevention plans

To ensure compliance with pollution prevention planning requirements, reliance is mainly placed on officers to determine whether a pollution prevention plan is available on site during regular facility inspections. During our review of inspections, we found that the Industrial Waste Control group did not always indicate on inspection reports whether pollution prevention plans were submitted.

Recommendation:

- 8. The General Manager, Toronto Water, ensure that officers determine whether a pollution prevention plan was completed and available on site during regular facility inspections.**

Many business owners are not aware of the By-law

A major reason for non compliance with discharge limits and submission of pollution prevention plans is that business owners are not always aware of the By-law. Toronto Water has used various methods such as the City's website, promotional and education material and use of industry associations, to communicate with business owners. However, business owners' lack of knowledge of the By-law continues to be a problem.

Business owners knowledge could be improved by communicating requirements using the City's on-line "Biz Pal" service

The Economic Development, Culture and Tourism Division, has an online service called "Biz Pal" which provides information to the public relating to federal, provincial and municipal permits and licences. By answering an online questionnaire, a business owner can determine what permits and licenses are applicable for their business. According to the Biz Pal coordinator, the Sewer Use By-law requirements, including the submission of pollution prevention plans, could be added to this database.

Recommendation:

- 9. The General Manager, Toronto Water, in consultation with the General Manager, Economic Development, Culture and Tourism, determine whether the on-line application currently being used by the Economic Development, Culture and Tourism Division to communicate various licensing requirements could be used to communicate to business owners the Sewer Use By-law requirements, including the submission of pollution prevention plans.**

Criteria and procedures are needed to guide review and approval of pollution prevention plans

Criteria and procedures are not currently available to provide guidance in determining whether to approve pollution prevention plans. In addition, procedures only require that pollution prevention plans are reviewed for completeness. To assist in assessing the plans completeness, staff reviewing the plans also review sampling results for the facility to ensure that the plans address all pollutants.

The accuracy of the plans is not reviewed

The plans require setting three and six year targets for the reduction of pollutants. Although staff review the plans for reasonableness, they generally do not compare the current with the previous plans to determine if companies have reduced their pollutants. In addition, companies are not requested to submit supporting documents with their pollution prevention plans that would allow verification of information contained in the plans.

Currently, the review and approval of all pollution prevention plans is conducted by one person in the Pollution Prevention Group. It is not possible for one person to conduct a detailed review of all plans submitted under the By-law.

As has previously been indicated, the City at the moment has no legal authority to enforce the implementation of pollution prevention plans. In this context, and in view of the powers of the *City of Toronto Act*, contemplation should be given to seeking a change in authority to do so. If this change occurs, there are issues relating to the plans which should be addressed.

Recommendations:

- 10. The General Manager, Toronto Water, develop criteria and procedures to guide the review and approval of pollution prevention plans including verification of the accuracy of the plan by:**
 - comparing the plan to recent sampling results;
 - comparing the current plan to the previous plan to determine whether targets for reducing pollutants were being met; and
 - requesting companies to provide supporting documentation with their pollution prevention plans.

- 11. The General Manager, Toronto Water, assign appropriate staff to the review and approval of pollution prevention plans to ensure as a minimum that plans are reviewed for high-risk industries and a sample of plans from low-risk industries.**

D. ENFORCEMENT

In 2007, enforcement actions included 138 letters sent and fines of \$49,000 imposed for nine convictions

Maximum fines are \$100,000 for corporations and \$10,000 for individuals found guilty of contravening any provision of the Sewer Use By-law. In 2007, 138 Notices of Violation were issued for failure to comply with the By-law. In addition, 26 violations proceeded to prosecution and all nine cases that have been finalized have resulted in convictions and fines totalling \$49,000.

When a violation is identified, a Notice of Violation letter is sent to the offender. The Notice of Violation describes the nature of the violation and requires the offender to respond in writing within 30 days on corrective action to be taken. If there is no response to the Notice of Violation, a second Notice is issued with a 14 day reply period. Failure to comply with the Notice of Violation can result in prosecution. The City, at its discretion, may also allow the offender additional time to comply.

All violations are not being followed up nor are they issued on a timely basis

Toronto Water staff are not consistently following up all identified violations. For 19 violations included in our review, four companies were not issued Notices of Violation. Of the remaining 15 notifications, seven companies did not respond within the 30-day deadline. Although most Notices of Violation are sent out within one month, two Notices were not sent out more than three months after the violation was identified. Failure to follow up on violations means that the company may continue to pollute at unacceptable levels.

Recommendation:

- 12. The General Manager, Toronto Water, ensure that timely enforcement action is taken where appropriate, for all identified violations of the Sewer Use By-law. Where enforcement action is not considered appropriate, reasons should be documented and reviewed by supervisory staff. Evidence of supervisory review should be documented.**

Toronto Water monitors companies in the compliance program

When discharges to the sewer system exceed limits, a company may enter into an agreement that sets specific goals and timelines to work towards compliance. The compliance agreement requires the company to submit progress reports at predetermined dates. By-law officers are responsible for conducting inspections and sampling to confirm that companies are in compliance. By-law officers are also required to conduct enforcement actions if required.

Enforcement actions were not taken for two companies that did not comply with their compliance agreement

We reviewed three out of the six companies in the compliance program. Two companies did not meet agreed upon limits for pollutants and also exceeded the limits for other pollutants that were not part of the original compliance agreement. Although the two agreements were terminated, enforcement action was not taken to address the violations. In addition, one company did not submit progress reports as required and the other company submitted some but not all the required reports. Further, although one company did not meet its agreement, management advised that they used their discretion and decided not to enforce the agreement but rather to work with the company to achieve the best results possible. However, the reason for this decision was not documented.

Recommendation:

- 13. The General Manager, Toronto Water, monitor companies in the compliance program to ensure that they are meeting the terms of their agreement with the City. If a company fails to comply with their agreement, the compliance agreement should be terminated and appropriate and timely enforcement actions taken. Where management decides to amend, or not enforce the terms of an agreement, the reasons should be documented and approved by appropriate senior staff.**

Use of infraction notices is not yet available to enforce the By-law

The use of infraction notices is currently not available to enforce the Sewer Use By-law. As a result, the City has to resort to prosecution to address violations which is a costly and lengthy process. The use of infraction notices has the potential to allow the City to recover any damages or costs related to excess pollution on a much more timely basis.

*Proposed
infraction
provisions must
first be revised*

In 2006, the proposed process for issuing infraction notices were submitted to Legal Services for their review. For various reasons, including subsequent significant changes to the Sewer Use By-law, this process is still outstanding.

Recommendation:

- 14. The General Manager, Toronto Water, assess the feasibility of using infraction notices to enforce the Sewer Use By-law.**

E. BUSINESSES WHO USE A HIGH VOLUME OF WATER PAY REDUCED WATER RATES

*Council
approved a
reduced water
rate for certain
industrial users*

In June 2007, City Council approved a new water rate structure that, effective January 1, 2008, reduced the water rate by 20 per cent for industrial users who consume over 6,000 cubic metres of water a year. In addition, a further reduction of 10 per cent will be phased in over several years to a maximum of 30 per cent.

For the six month period January 1 to June 30, 2008, 350 businesses received water rate reductions of approximately \$12 million.

*To receive a
reduced water
rate, companies
must comply
with the Sewer
Use By-law*

To be eligible for water rate reductions, businesses are required to comply with the Sewer Use By-law. Further, businesses are also required to submit a comprehensive water conservation plan to the City by July 1, 2008 in order to qualify for the rate reduction. Toronto Water also reported to Council on “an enforcement policy which would disqualify any industrial users from benefiting from reduced water rates if they are in violation of the City’s Sewer Use By-law.”

If Toronto Water identified any violations of the By-law such as non submission of a pollution prevention plan or exceeding limits and a company fails to take corrective action, the reduced water rate would be rescinded retroactive to the date of the violation.

To remain eligible for the reduced rate, companies must submit a water conservation plan by July 1, 2008

Billings for water are administered by the Revenue Services Division. Reduced water rates were automatically applied effective January 1, 2008, based on a list of high volume industrial users provided by the Revenue Services Division. The June 2007 report to Council stated that, “To be eligible for this lower rate, industries must submit detailed water efficiency plans and be in compliance with the Sewer Use By-law”.

Seven companies that did not comply with the By-law received the reduced water rate

We reviewed seven companies that received the reduced water rate. None of these companies complied with the Sewer Use By-law and therefore were not eligible for the reduced water rate. A Pollution Prevention Plan had not been submitted by three companies and one company’s revised plan has been overdue since June 30, 2006. In addition, based on sampling results, the discharges to the sewer system for three companies had exceeded limits. On an annual basis, the reduced water rates provided to these seven companies amounted to \$330,000.

As of June 2008, Revenue Services was not advised of any companies not complying with the By-law

In the fall of 2007, using a preliminary list of high volume industrial users, Toronto Water conducted inspections and sampling to confirm whether businesses were in compliance with the By-law. This work indicated that certain of the companies reviewed were not in compliance with the By-law. However, as of June 2008, the Revenue Services Division had not been advised of any violations under the By-law and therefore all companies initially receiving reduced water rates continued to receive reduced rates.

Recommendation:

- 15. The General Manager, Toronto Water review all participants in the reduced water rate program to ensure that they met, as at January 1, 2008, and continue to meet, conditions required to receive the reduced water rate. In circumstances where there is non-compliance immediate action be taken including the retroactive billing of previously reduced rates.**

F. COST RECOVERY FROM SURCHARGE AND SANITARY DISCHARGE AGREEMENTS

The City enters into agreements and charges a fee for companies who discharge excessive treatable pollutants into the sewer system

The City enters into agreements with companies and charges a fee if treatable wastes in excess of allowed limits are discharged. For non treatable pollutants, the only enforcement option available to the City is prosecution through Court action. For companies with treatable pollutants (for example, breweries, meat packers and dairies), the City may enter into surcharge agreements to recover the costs of treating the waste discharges in excess of Sewer Use By-law limits. In 2007, \$7 million in cost recovery was collected from 135 surcharge agreements.

Toronto Water is currently reviewing the surcharge rate

Toronto Water is currently conducting a review of the waste surcharge program. The surcharge rate used to calculate surcharge fees has not changed in over ten years whereas costs to treat have increased. At the moment it is not possible to determine whether program costs are being fully recovered.

New companies who should be charged for exceeding treatable pollutant limits have been identified but are not yet being billed

In 2006, management initiated a project to identify competitor companies of industries with current surcharge agreements (food and beverage companies, industrial launderers and meat processors). During 2007 and 2008, a number of companies were identified, inspected and sampling conducted. This work is ongoing. As of May 31, 2008, no new agreements have been executed. Although any surcharge will be retroactive once an agreement is finalized, delays in executing the agreement could result in large retroactive billings that could be a financial burden on the company and cause collection difficulties for the City.

Unnecessary credit checks delayed setting up agreements

We did note that one of the reasons for the delay in setting up surcharge agreements was that there was a requirement for a credit check on the subject companies. This credit check process was slowing down the process and may not have been appropriate given the circumstances of these surcharge agreements. It has since been determined that the credit check requirement is no longer applicable to surcharge agreements and the removal of this requirement should facilitate a more timely execution of these agreements.

Establishing new surcharge agreements is a lengthy process

Establishing new surcharge agreements is a time consuming process. The process requires coordination between officers and the engineer who manages the surcharge program. By-law officers conduct sampling and, where appropriate, issue the first Notice of Violation letter to the company giving them 30 days to respond. Once the company responds to the Notice and additional sampling confirms that the company is consistently in violation of the limits, the officer advises the engineer and provides an estimated surcharge fee. The engineer then sends what is termed an offer letter to the company with the estimated fee requesting that they enter into a surcharge agreement.

Agreements are further delayed because offer letters are not always sent on a timely basis

We identified three companies where surcharge sampling was completed and the estimated fees calculated as far back as the fall of 2007. As of May 31, 2008, offer letters have not been sent to two of these companies. The surcharge fee for one company is in the range of \$800,000 annually. Toronto Water is currently meeting with this company to review its options. Surcharge fees are retroactive to the date that sampling identified excess pollutants.

Companies do not always respond on a timely basis to offer letters

Delays finalizing agreements can also occur because companies do not respond to offer letters within the required time limit of 14 days. Companies sometimes take as long as six months to respond to these letters. If companies do not respond, the City's only course of action is litigation.

Recommendation:

- 16. The General Manager, Toronto Water, ensure that when sampling confirms that excess pollutants are being discharged into the sewer system the subject company be immediately advised that they may enter into a surcharge agreement. Immediate follow up be conducted in circumstances where companies do not respond within established time limits.**

Estimates are used in calculating surcharge fees

The basis for calculating surcharge fees relates to the volume of wastewater discharged to the sewer system, which is estimated unless a flow meter is installed.

Estimates for five companies were ten or more years old and likely require revision

For five out of ten companies reviewed, the amount discharged to the sewer is based on outdated engineering studies and estimates provided by the companies themselves that are ten or more years old. Because conditions and operations have likely changed, the volume of wastewater and consequently the surcharge fees billed may be inaccurate.

Recommendation:

- 17. The General Manager, Toronto Water, evaluate all surcharge agreements particularly those that have been in existence for a significant period of time. This evaluation determine the appropriateness of the estimated values of wastewater discharges to the system. Further, all estimates be reviewed on a periodic basis in order to ensure that they are still appropriate.**

A minimum fee of \$500 was billed to 34 companies in 2007

In 2007, 34 companies were billed a minimum surcharge fee of \$500. These companies were advised that the fee was charged because they occasionally exceed limits by a minor amount. New companies are no longer subject to a minimum surcharge and are charged a fee based on actual use. As a result, fees less than \$500 were being billed to several companies in 2007. It is not economical to calculate and charge fees in this manner as fees billed at this level do not recover administrative costs.

Recommendation:

- 18. The General Manager, Toronto Water, develop a fee policy for all surcharge agreements that reflects the cost of sampling and testing and that all companies subject to surcharge agreements be billed on a cost recovery basis.**

Interest is not charged on overdue accounts

There are on occasions, certain businesses who do not pay on time. These businesses are not charged interest on outstanding balances. Although individual agreements have different terms, they generally provide for the payment of interest at prime interest rate starting 30 days after the payment due date. Charging interest at the prime rate may not be the incentive required to encourage some businesses to pay their balance promptly. The City's Municipal Code allows for charging interest on overdue accounts at rates up to 1.25 per cent per month.

Recommendation:

- 19. The General Manager, Toronto Water, take steps to ensure that all financial terms of surcharge agreements are complied with. Interest on overdue payments owed to the City should be charged according to the terms of the surcharge agreement. Agreements should set interest rates in accordance with the rate prescribed by the Municipal Code.**

In 2007, companies paid \$1.6 million for discharging non-City water into the sewer system

Companies that discharge non-City water into the sewer system are required to enter into an agreement with the City and pay a sanitary discharge fee. The volume of water discharged is billed based on engineering reports submitted by the companies. In 2007, fees generated from sanitary discharge agreements amounted to \$1.6 million.

Companies who did not report the amount of water discharged were not billed

In 2007, 25 out of 38 companies with sanitary discharge agreements had not submitted engineering reports to the City and were consequently not billed.

Recommendation:

- 20. The General Manager, Toronto Water ensure companies subject to sanitary discharge agreements provide, on a timely basis, the information required to calculate any amount payable, and that the City promptly bill and collect any amount due.**

G. COORDINATION BETWEEN CITY DIVISIONS AND THE IMPROVED USE OF INFORMATION TECHNOLOGY

In June 2008, a draft report entitled “Integrated Inspections, Enforcement and Prosecution Services Review” was prepared by an outside consulting organization called DPRA Inc. One of the purposes of this review was to examine which processes across the various Divisions providing inspections and enforcement services “could be integrated, realigned or streamlined to improve service delivery staff functions and allocations.”

One of the conclusions in the report indicated that “the non-specialized business functions conducted by Water could be integrated into other Divisions who currently visit the same properties to carry out other inspections, (i.e., Toronto Building, Municipal Licensing and Standards, and Toronto Public Health).”

Further coordination between Toronto Water and Municipal Licensing and Standards Divisions should be reviewed

EMPU has coordinated with Toronto Public Health so that food safety inspectors have added certain pollution protection tasks to their inspections of restaurants. Additional efficiencies can be gained by extending this type of coordination to other City Divisions such as Municipal Licensing and Standards.

The Municipal Licensing and Standards Division issues business licences to automobile repair shops, car washes and public garages and gas stations. According to the Director, Licensing Services, it would be possible for licensing staff to require business owners to meet Sewer Use By-law requirements prior to issuing them a business licence. Similarly, Toronto Water staff who also inspect these businesses could determine whether they have a business license and advise Licensing staff accordingly. A closer coordination of work between staff of these two Divisions would increase the effectiveness of City operations and reduce the number of inspectors from different City Divisions inspecting the same location.

Recommendation:

- 21. The General Manager, Toronto Water Division, in consultation with the Executive Director, Municipal Licensing and Standards Division, and the City Solicitor, review areas where reciprocal inspections between the two divisions would be possible and if appropriate, establish a written protocol governing such inspections.**

Work management information system is not fully utilized

The work management information system is not being fully utilized to manage inspections and sampling activities. It has not been configured to provide standard reports or a scheduling module to monitor whether targets for inspection and sampling are being met.

Reports can be generated from the work management information system

The work management information system has the capability to provide inspection activity reports by individual officer or by industry type as well as statistical information on the number of inspections. These reports are currently only used by one manager.

On a weekly basis, officers input inspection and sampling activities into a spreadsheet which accumulates statistical information and allows management to monitor whether officers achieve their target of five inspections on a daily basis.

Documentation used to track Notice of Violation letters and responses is not accurate

A spreadsheet is also used to track Notices of Violation and company responses, but the information is not complete and accurate. This is a duplication of information available from the work management information system.

Enforcement actions are not documented in the work management system

The Supervisor, Pollution Prevention tracks Notices of Violation and other enforcement actions by reviewing the enforcement tracking module in the work management system. Pollution Prevention officers electronically document enforcement actions, making it easier to determine whether violations are addressed.

The work management system has functions to assist staff track violations

We identified certain functions in the work management system that are not currently used that would make tracking violations easier. For example, the work management system is capable of sending a task to officers to follow up violations, but this function is not being used. Although the system tracks Notices of Violation, it does not prompt staff to follow up if companies do not respond within 30 days. We understand that this deficiency of the database will be addressed as part of the anticipated upgrade to the system.

A report on enforcement activities by officer is available

Although the standard violations report does not provide a list of violations for each officer, the Supervisor, Pollution Prevention can generate a report on enforcement activities by officer. However, officers or other management staff do not currently have access and therefore do not use this report. This report would help individual officers and management ensure that all violations are followed up.

Management intends to upgrade or replace the work management system

Management has recognized that efficiencies can be realized through increased use of information technology and has developed a list of proposed technology improvements. We also understand that there are plans to upgrade or replace the work management system in 2008 and funding for this was included in the approved 2008 capital budget.

Recommendation:

- 22. The General Manager, Toronto Water, prior to the development or acquisition of any new work management system, re-evaluate in detail all reporting requirements relating to inspection, sampling and enforcement activities. Such an evaluation be conducted in concert with all users. Further, development of any new system be required to incorporate detailed performance measurement reporting as well as the reporting requirements outlined in this report.**

CONCLUSION

This report presents the results of our review of Toronto Water's administration of the Sewer Use By-law. We have focused on the efficiency and effectiveness of inspection and enforcement activities and pollution prevention planning in meeting the By-law's requirements. As a part of our review we also identified the fact that a certain number of companies who are in receipt of a reduced water rate in fact are not in compliance with the Sewer Use By-law and are, therefore, not eligible for the reduction.

Sampling and inspection activities are conducted based on a risk management approach where the focus is on those businesses with a high-risk to pollute. With limited staff resources, this is an appropriate and effective approach but only in circumstances where high-risk businesses are identified on a timely basis.

The implementation of the recommendations contained in this report will assist in improving the effectiveness of the Division.