

# Ontario Clean Water Agency

Follow-up on VFM Section 3.12, *2008 Annual Report*

## Background

The Ontario Clean Water Agency (OCWA) operates 313 drinking-water systems and 225 wastewater systems for about 180 customers, mostly municipalities, on a cost-recovery basis. Other services provided by OCWA include project management for facility maintenance and construction; capital improvement planning; and loan financing. OCWA employs approximately 700 staff. In the 2009 calendar year, OCWA essentially broke even on its water-utility operations and generated an overall profit of \$2.4 million.

In our *2008 Annual Report*, we concluded that OCWA generally had adequate procedures in place to ensure that it provides effective drinking-water and wastewater treatment services. As well, OCWA was making headway in achieving full cost recovery in the operations side of its business. Nevertheless, we identified a number of areas where further improvements could be made:

- A regulation under the *Safe Drinking Water Act, 2002* requires OCWA to test drinking water for over 160 substances, such as *E. coli*, lead, and uranium. Overall, 99.6% of water samples tested met legislated quality standards. Although OCWA-operated facilities experienced more adverse water-quality

incidents than other provincial drinking-water systems on average, OCWA had relatively fewer incidents in the most high-risk microbiological category, such as *E. coli*.

- To help monitor the facilities it operates for compliance with legislation, OCWA had implemented a facility assessment review process and more in-depth compliance audits. Action plans were developed for any compliance issues identified. As of mid-March 2008, our work indicated that 1,471 of the problems from 2007, or 70%, still had not been addressed.
- For a sample of operators we reviewed, over 10% were not listed as having the proper drinking-water certificate or wastewater licence indicating that they had met the education and experience requirements. A number of these operators were listed as having expired certificates. In following up on this, OCWA was subsequently able to provide us with evidence that these operators had valid certificates, but this was indicative of the need for more effective oversight.
- Over the previous five years, OCWA's expenses had increased only 2.8% annually, on average, and OCWA had been successful in gradually reducing its operating deficit, from \$9.5 million in 2003 to \$1.3 million at the time of our 2008 audit.

- The majority of OCWA's 205 contracts to provide facility operating and maintenance services were for a fixed price over several years, adjusted for inflation. Consequently, OCWA was bearing the risk of any price increases above the rate of inflation. In addition, its margin or markup on direct costs may not be sufficient to cover overhead costs, and some contracts did not even recover all direct contract costs.
- We found that the employee travel expenses we tested were for legitimate business purposes and were properly approved. However, controls over the competitive purchase of goods and services needed to be improved.
- OCWA needed better information to adequately monitor its field operations. In addition, it needed to enhance the reliability and usefulness of its reporting to the Senior Management Committee and the Board of Directors to assist them in effectively meeting their respective management and oversight responsibilities. We did note that OCWA had recently been successful in adding several well-qualified members to its Board of Directors.

We made a number of recommendations for improvement and received commitments from OCWA that it would take action to address our concerns. As well, the Standing Committee on Public Accounts held a hearing on this audit in April 2009.

## Status of Recommendations

According to information received from OCWA, we noted that substantial progress was being made on all of the recommendations in our *2008 Annual Report*, although in a few instances, more time will be required to fully address them. The status of action taken on each of our recommendations at the time of our follow-up was as follows.

## DRINKING-WATER AND WASTEWATER TESTING

### Drinking-water Testing

#### Recommendation 1

*To help further reduce the risk of drinking-water health hazards, OCWA should:*

- *formally review adverse water-quality incidents to determine whether there are any systematic issues necessitating changes to its operating procedures;*
- *improve procedures to help ensure the accuracy of data presented in annual reports to system owners and the public;*
- *utilize the best practices developed by local offices to standardize policies and procedures for compliance technicians to follow when tracking and monitoring drinking-water samples tested; and*
- *ensure that lab results are locked into the system on a monthly basis, as currently required.*

#### Status

OCWA informed us that it had hired an operations analyst in 2009 who was responsible for tracking water-quality incidents and identifying trends across the Agency. Water-quality incidents are usually analyzed and resolved at the local level. Data and analysis on water-quality incidents are reported to the Operations and Compliance Committee. The committee then reviews the incidents and determines whether any further corrective action is required. Incidents are also reported to the Senior Management Committee and Board of Directors on a quarterly basis, to identify any trends that may require further action. Beginning in 2010, the operations analyst was also to review data with the Ministry of the Environment to ensure that incidents are reported accurately.

With respect to improving procedures to ensure that data presented to the public and system-owners is accurate, OCWA informed us that operations managers are regularly reminded of the importance of ensuring that annual reports on the

drinking-water system are reviewed for completeness and accuracy before they are submitted to clients. Accuracy is assured through the operations management staff's review of the reports and their approval by one or more cluster, operation, and/or regional manager.

In December 2008, OCWA issued updated operating procedures aimed at standardizing best practices for tracking and monitoring drinking-water samples.

OCWA indicated that the lab results from the drinking-water-quality testing for a given month are reviewed and locked 45 days following the close of the month to prevent the results from being altered. As part of their responsibilities, operations management staff ensure that all lab results are locked within the specified time frame and follow up on any exceptions.

## Wastewater Testing

### Recommendation 2

*To help protect the environment from the effects of untreated or partially treated wastewater and biosolids, OCWA should:*

- identify the causes of all incidents of discharge exceedances, bypasses, and overflows to determine if there are any operational measures that could be taken to reduce such incidents;
- periodically report to the Senior Management Committee and the Board of Directors on the details of the incidents and what potential actions OCWA could take to help correct the situations identified; and
- develop standard policies and procedures to ensure that the amount of biosolid material removed from its facilities is accurately recorded and applied to land within the amounts specified in the sites' Certificates of Approval.

### Status

OCWA indicated that it had substantially implemented our recommendation on wastewater testing and expected it to be fully implemented by Nov-

ember 2010. The operations analyst hired in 2009 is responsible for tracking and identifying trends and issues relating to the causes of all incidents of discharge exceedances, bypasses, and overflows of wastewater. Wastewater effluent exceedances are reviewed quarterly by OCWA's Operations and Compliance Committee and Senior Management Committee, and are also reported to the Board of Directors.

OCWA informed us that, in March 2009, it updated its operating procedure for tracking biosolids material removed from facilities to ensure that these are accurately recorded and applied to land within the amounts specified in the site's Certificate of Approval. This procedure reinforces the requirement to verify the load and the daily and seasonal totals of biosolids hauled to each land site. In addition, OCWA is planning to prepare a biannual report on biosolids generation, haulage, and spreading.

## FACILITY MONITORING AND COMPLIANCE

### Recommendation 3

*To help ensure compliance with environmental, health, and safety requirements and to ensure that the significant and recurring problems identified are promptly corrected, OCWA should:*

- review its compliance audit process to make sure that a sufficient number of facilities are selected for audit, and that those facilities rated as the highest risk are selected, or document the justification for any alternative selection;
- rank and/or record deficiencies noted in facility assessment reviews, compliance audits, and ministry inspections by type and significance to ensure that the most serious problems are dealt with expeditiously;
- assess the cause of recurring problems and consider means, such as additional staff training, to help prevent their recurrence; and
- prepare ongoing reports for the Senior Management Committee and the Board of Directors,

*outlining the frequency, type, and severity of issues raised and the status of corrective actions.*

### Status

In February 2010, OCWA implemented an enhanced risk-based process for selecting Agency-operated facilities for audit, ensuring that high-risk facilities are targeted first. In addition, the Corporate Compliance Group now selects facilities for audit independently from the operations section. These selections are reviewed and approved by the Senior Management Committee.

OCWA indicated that all deficiencies identified during facility assessment reviews and compliance audits are assigned a risk level to prioritize the corrective action called for in the Operations and Compliance Committee's quarterly review. Deficiencies identified by Ministry of the Environment inspections are immediately reported to the owner of the facility so that it can undertake corrective action with the support and technical help of OCWA, if requested. In addition, OCWA indicated that it had provided a workshop for regional compliance advisers on determining the root causes of recurring problems and supporting operations staff in developing action plans for identified deficiencies.

OCWA also informed us that it had enhanced its reporting procedures. Its operational compliance annual reports now indicate the frequency, type, severity, and cause of deficiencies. They are then reviewed by the Agency's Operations and Compliance Committee, and reported to the Senior Management Committee and Board of Directors.

## FACILITY MAINTENANCE AND REPAIRS

### Recommendation 4

*To ensure that facilities and equipment are maintained in good working order, OCWA should develop a quality-assurance process to verify periodically that regularly scheduled maintenance is completed and documented as required.*

### Status

OCWA indicated that it had reviewed its work management system and made improvements to ensure that the maintenance of facilities and equipment is completed as required and properly documented. In June 2009, it provided training to at least one employee from each hub or satellite office on the work management system requirements for data collection and data entry, maintenance procedures, and asset management. In addition, to effectively manage the maintenance work orders and ensure that work is scheduled and performed as required, OCWA has set the monitoring and review of work orders as a performance measure for each operations manager. Each quarter, the status of work orders is to be provided to each vice-president of operations and to regional operations managers for timely follow-up of any areas of concern.

## STAFF CERTIFICATION, LICENSING, AND TRAINING

### Recommendation 5

*To help ensure that staff have the educational and experience requirements necessary to maintain their certificates and licences, OCWA should:*

- *include on its list of operators and the certificates and/or licences they hold the level and type of all facilities they operate to help management ensure that operators have the appropriate type of certificate and/or licence for the facilities they work at;*
- *consider implementing additional incentives to encourage operators to upgrade their qualifications at least to the level of the facilities they work at;*
- *ensure that only staff who can respond immediately and effectively to emergency situations are appointed as overall responsible operators, in accordance with regulatory requirements; and*
- *assess best practices throughout the organization to help develop corporate policies and procedures for recording, approving, and storing training records, as well as procedures to ensure*

that staff are completing the required number of training hours on a consistent basis.

### Status

OCWA indicated that it has a process in place to ensure that all operators are properly licensed for the facilities in which they operate and that the licences are posted at each facility, and that it has improved its process for capturing information on licence renewals for internal reporting purposes.

With respect to additional incentives to encourage operators to upgrade their qualifications/licences, OCWA informed us that it supports its staff in upgrading their qualifications by providing pay-for-certification and course funding, and by recognizing staff for new licences or certificates received. With respect to further increases to the amount provided for pay-for-certification, OCWA informed us that it had brought the matter forward to be addressed through collective bargaining.

OCWA indicated that it has made improvements to its procedures for recording, approving, and storing training records to ensure that operators have completed the required number of training hours for the type and class of licence held. In June 2009, OCWA also provided a course on the changes made to the training database, emphasizing the importance of accurate training records.

## REVENUE GENERATION

### Recommendation 6

*To work toward providing services on a cost-recovery basis at the operations level, OCWA should:*

- *assess the progress of its 2006 revitalization project and implement the cost-saving initiatives that it deems appropriate;*
- *put controls in place to ensure that before each contract is approved, the pricing decision and supporting rationale are clearly documented, as required by policy;*
- *develop a methodology that reasonably estimates the margin required to recover all costs, including corporate overhead;*

- *implement an approval process whereby contracts with lower margins receive greater scrutiny; and*
- *implement procedures to ensure that project proposals for engineering services are properly approved, formal contracts are on file, quarterly client reports are prepared, and a quality assurance review is done at the completion of each project.*

### Status

Overall, OCWA's operating results for the year ended December 31, 2009, indicated that the Agency essentially broke even on its utility operations, because its operating loss was only \$188,000, compared to a loss of \$1.3 million in 2007.

OCWA indicated that it has introduced a number of initiatives to provide its operational services to the water and wastewater sector on a cost-recovery basis. These included:

- identifying specific measures in its 2009 and 2010 Business Plans to reduce discretionary expenses;
- accepting some recommendations on realizing cost savings arising from a consultant's review of the revitalization project completed in 2006; and
- implementing further cost-savings recommendations that came out of an internal review, such as modifying processes within the work management system, financial system, and human resources.

To achieve further cost savings, OCWA indicated that it had changed the way it manages facility operating agreements. The changes it implemented included centralizing documentation for pricing decisions and rationale, and senior management reviews of each contract prior to execution.

OCWA also informed us that it had reviewed its approach to contract pricing with the help of an external consultant and had identified a process for capturing all costs to ensure the recovery of both direct operating costs and corporate overhead.

As a result, in September 2009, it developed a methodology to assist in the development of pricing strategies for new projects and contracts. In addition, contracts with lower cost margins were further scrutinized by comparing annual projected contract amounts to planned and actual margins. The Senior Management Committee receives quarterly reports on contracts performing at low cost margins.

Finally, to ensure that project management agreements for engineering services generate a profit and contribute to corporate overhead costs, OCWA informed us that it had implemented an Engineering Services Agreement Protocol in December 2008. This protocol defines the requirements for agreement preparation, scrutiny, implementation, and retention in relation to the type of assignment.

## PROCUREMENT OF GOODS AND SERVICES

### Recommendation 7

*To comply with its procurement policies, which provide for the acquisition of goods and services in an open and competitive manner, OCWA should implement procedures to ensure that:*

- *corporate-card and travel-expense statements submitted for review are supported by original and itemized receipts;*
- *goods and services are acquired in accordance with OCWA's competitive purchasing policy;*
- *signed contracts and other relevant documentation is on file for all major purchases; and*
- *payments to vendors are made in accordance with agreed-upon terms and prices.*

### Status

OCWA indicated that it recognized the importance of a competitive acquisition process for goods and services to ensure that these are acquired economically. Accordingly, it has reminded its staff of the appropriate documentation required to support corporate-card and travel-expense statements, and has prepared a checklist to be used for

reviewing travel claims before they are paid. For other purchases, OCWA has made its staff aware of documentation requirements in the competitive purchasing policy and it has directed the purchasing agents and controller to review documentation and ensure that any exceptions, such as sole-source or single-source purchases, have an adequate rationale on file.

OCWA informed us that it had enhanced its procedures for reviewing invoices to ensure that payments are made to vendors in accordance with contract terms.

## GOVERNANCE, ACCOUNTABILITY, AND EFFECTIVENESS

### Governance and Accountability

#### Recommendation 8

*To assist the Board of Directors in carrying out its responsibility to oversee the affairs of the organization and set its corporate direction, OCWA should enhance the reliability and usefulness of its summary reporting to its Board.*

#### Status

OCWA indicated that the Board of Directors had worked closely with senior management to determine what additional information it needed to effectively carry out its oversight. As a result, the following information is provided to the Board:

- quarterly environmental compliance reports, including details on the number of occurrences and year-over-year trends of adverse water-quality incidents, boil-water advisories, effluent bypasses, and Ministry of the Environment inspections and investigations;
- additional reporting on OCWA's internal compliance audit program, including compliance audits, facility assessment reviews, Quality and Environmental Management System audits that identify the frequency, type, severity, and cause of incidents, and management's responses;

- a greater level of detail in the quarterly financial reports;
- quarterly reports itemizing new business, contract renewals, and details of contracts lost; and
- quarterly review of the new key performance indicators for operational efficiencies, plant performance, financial performance, health and safety, and regulatory compliance.

## Measuring and Reporting on Effectiveness

### Recommendation 9

*In order to enhance the performance measures currently contained in its annual report, OCWA should:*

- *enhance performance measures for its mandate to protect human health and the environment; and*
- *consider enhancing its performance measures by focusing more on outcomes than on activities.*

### Status

OCWA informed us that it had developed performance measures, placing a greater focus on those that are outcome-based over those that are activity-based. For 2009, these included a measure of client satisfaction based on a survey, a commitment to year-over-year reductions in the number of Provincial Officer Orders issued by the Ministry of the Environment, and a commitment to reduce the average fuel consumption for the agency's fleet of vehicles. In its 2010 Business Plan, OCWA increased outcome-based measures to improve the expected results with respect to protecting human health and the environment, and to meet its regulatory obligations to produce clean potable water, and wastewater effluent that meets the discharge criteria.