Achieving the Vision The True Story of Hamilton and Outsourcing

Public Sector Comment

"This partnership was designed to be much more than the typical services outsourcing agreement. It was envisioned as a longterm economic development initiative in the water/wastewater infrastructure management industry. As we have seen, cost reduction, job creation and economic development are complementary and we have been successful on all fronts. We have been pleased by the professional approach Azurix has brought to the partnership and look forward to further gains under their stewardship."

Art Leitch, former General Manager of Transportation, Operations and Environment, Region of Hamilton-Wentworth

Private Sector Comment

"Credit is due to Hamilton for positioning the community to benefit from the revolutionary changes in the water industry. With this public-private partnership, Hamilton taxpayers benefit from more than just stable rates and increased infrastructure investment. As Azurix expands, it generates local job opportunities, an increased tax base and greater local spending. With the broad range of operating and management expertise based in Hamilton, Azurix can say confidently that we are the only North American company offering a full range of water management services tailored to any size of community." *John Stokes, President and CEO, Azurix North America*

Since 1995, the water and wastewater facilities of the City of Hamilton (formerly the Regional Municipality of Hamilton-Wentworth) have been managed by Azurix North America and its predecessor, Philip Utilities Management Corporation.

Although not the first contract operations project in Ontario, this projects' significant size and scope captured immediate attention across the continent. Though smaller outsourcing projects brought regional interest, contract operations for the Hamilton water and wastewater plants attracted international attention and provided a local context for other large Ontario municipalities to test the public-private partnership arena. The contract operations approach is now widely used for the delivery of both water and wastewater services in Ontario.

This groundbreaking partnership, the largest of its kind in North America at the time and among the first of its kind in Ontario, has succeeded in fulfilling the broad vision of the contract and creating economic development opportunities for Hamilton while ensuring high quality drinking water and wastewater treatment.

Certain submissions to the Walkerton Inquiry have without any substantiation whatsoever brought into question not only the quality of Hamilton's drinking water but also the success of the partnership between the City of Hamilton and Azurix North America. This paper is presented jointly by the City of Hamilton and Azurix North America to provide an update on the Hamilton water and wastewater management outsourcing contract, to raise matters of misrepresentation and misstatements contained in other submissions to the inquiry and to confirm the continuing high quality of drinking water provided to Hamilton area residents.





Background

In 1994, Philip Environmental Inc., a large waste management organization based in Hamilton and later renamed Philip Services Corp., proposed to the former Regional Municipality of Hamilton-Wentworth the creation of a public/private partnership for the operation and maintenance of Hamilton's water and wastewater treatment plants. In the proposal, Hamilton was to retain ownership and ultimate control of the facilities, while a Philip subsidiary, Philip Utilities Management Corporation (PUMC) would manage and operate them. The municipality would also retain full control of the laboratory that provided testing and quality oversight. In a unanimous vote, Regional Council directed their Chief Administrative Officer to undertake exclusive regotiations with PUMC to develop a joint venture proposal. Since that time, five amending agreements to increase the scope of the services have been successfully negotiated. The scope of the agreement now encompasses the water plant, three wastewater plants, the outstations, sludge management, and contributions to certain capital improvements.

As part of its commitment under the terms of the agreement, PUMC offered to meet existing performance levels, guarantee cost savings and provide specific economic development benefits. In exchange, PUMC gained valuable experience and credentials from operating such a large system, thus establishing itself as a significant player in the water and wastewater industry, headquartered in Hamilton.

The strategy worked. Hamilton realized immediate, guaranteed cost savings during the ten-year term of the contract and also saw the inception and implementation of some of the long-term economic development benefits. PUMC gained instant credibility in the North American water industry and competed successfully for new business in Ontario and across North America utilizing this as the platform.

As is well documented, financial difficulties with Philip Services Corp. resulted in the sale of its PUMC division to Houston-based Azurix Corp. in the spring of 1999. That division now essentially comprises what is now Azurix North America (Canada) Corp., a wholly-owned, indirect subsidiary of Azurix North America Corp.

Effective January 2001, the Regional Municipality of Hamilton-Wentworth and its former municipalities of Ancaster, Dundas, Flamborough, Glanbrook, Stoney Creek, and the City of Hamilton were amalgamated into the new City of Hamilton. Throughout the remainder of this paper, the words 'Hamilton' and 'City' are used interchangeably to mean both the former Region and new City of Hamilton.

The Contract

The term 'privatization' as it relates to water services has been loosely applied to a wide range of private sector involvement, from operations and management service contracts to the wholesale transfer of assets from public sector ownership, such as occurred in Britain and Wales. Thus the spectrum of 'privatization' includes a wide range of options





available to the public sector, as have been described in detail in other submissions to the Walkerton Inquiry¹.

Azurix's arrangement with Hamilton is essentially an operations and management contract. Within a typical contract of this sort, the private partner is contracted to provide specific service levels at pre-determined quality for a specific term and price. While the public partner in a management contract retains full ownership and oversight of the facilities and full authority to establish rates, the approach allows the private sector greater authority for determining how the required levels of service will be achieved. The service contract and management contract approaches are typical of private sector involvement in water and wastewater service delivery in Ontario and across North America. More complex approaches, including private sector responsibility for the design, building and operation (D-B-O) of water and wastewater facilities, and its many hybrids, are being used increasingly for new or upgraded facilities.

The contract between PUMC and Hamilton was awarded by Council on a sole-source basis. Some argue that such a large proposal should have been awarded through a competitive process and that higher savings could have been achieved. However, criticism directed toward Hamilton or Azurix, alleging that sole sourcing the contract did not achieve the lowest cost contract ignores the underlying rationale for the agreement. The broader objective of this particular partnership included the fostering of economic development, not just at the plant, but throughout the region through the formation of a new, North American business headquartered in Hamilton.

Because Hamilton councilors and staff recognized that the growth of the private sector water and wastewater industry was imminent, they saw the agreement as an opportunity for Hamilton to attract an North American head office and to become the base for a company that was poised to undergo tremendous growth within a new industry in the environmental services market.

Role of Hamilton

Under its agreement with Azurix North America, the City of Hamilton continues to retain ownership of the water and wastewater assets and responsibility for capital investment, budgeting and financing, establishment of water rates, water quality monitoring including operation of the City's environmental laboratory, and for the distribution of drinking water and collection of wastewater in Hamilton. The City's own workforce also operate and maintain the water and wastewater pipes in the streets, conduct by-law enforcement, negotiate overstrength discharge agreements, read meters, issue water bills, conduct water testing and provide customer service.

Control of the water and sewer utilities in Hamilton is held by the public sector; the issue of who was chosen to operate the assets was driven by economic development initiatives and cost reduction opportunities. Thus the public sector retains overall responsibility for

¹ Canadian Council for Public Private Partnerships, "Benefits of Water Service Public-Private Partnerships" presented to the Walkerton Inquiry, January, 2001.





the water system with one component, namely the treatment of drinking water and wastewater having been outsourced to a private company. In this arrangement, the public and private parties are able to contribute their respective strengths. The public sector's main strength lies in setting public policy and regulating the operators by establishing objectives and monitoring the contractor's performance in the best interest of the community. The private sector's strength lies in its access to expertise and long term capital, which it uses to meet the public sector's objectives in the most efficient way possible.

Having removed themselves from the day-to-day responsibility for operation and maintenance of the facilities, municipal staff apply their skills to strategic planning, capital work programs, contract management and quality assurance.

Role of Azurix

The scope of services included in the agreement between the City of Hamilton and Azurix clearly delineates the company's obligations for the management and operation of the water and wastewater facilities. The obligations relate to three general areas:

- Environmental performance;
- Stewardship of assets; and
- Economic development

Under the contract, Azurix has considerable latitude in implementing its own operations policies and procedures as a means of delivering the service standards required by Hamilton and the regulatory regime. While providing a certain amount of autonomy to Azurix to make simple operational changes, more complex operational changes, for example implementation of new processes or substantial modifications to existing processes, must be reviewed and approved by the City.

Environmental Performance

One of Hamilton's principal objectives in entering into the contract was to ensure that the quality of drinking water and wastewater effluent would at a minimum be equal to the quality achieved by Hamilton's own operations – which was historically better than that required by regulation. This objective, as embodied within the City's contract with Azurix, ensures that the public interest in the provision of safe, clean drinking water and minimal environmental impact of wastewater on Hamilton Harbour are protected.

The agreement requires that the operator meet or exceed two sets of effluent criteria. The first is dictated by the provincial operating permits for the facilities, under the applicable Certificates of Approval (COA). The various COAs define the regulatory criteria, values and periods that were established by the Ontario Ministry of Environment (MOE) in relation to the City's facilities.





The second set of operating criteria has been established by Hamilton itself and is applicable only to Azurix under the terms of the contract. Hamilton's criteria, termed Baseline Performance Criteria (BPC), were developed as a four-year average of results achieved under Hamilton's operation from 1990-1993. In all cases, the BPC are more stringent than the COA criteria.

When establishing the average BPC, Hamilton considered and acknowledged that temporary excursions and by-passes had occurred at the wastewater facilities under its management. The effluent quality from a wastewater treatment plant varies on a daily and monthly basis, depending upon the number and severity of storm events, the quality of the influent and the current operational status of the facility, i.e. whether equipment may be out of service for required maintenance or due to minor mechanical breakdowns. Therefore, it was specifically recognized and incorporated into the terms of the Agreement that it is not appropriate to compare the performance of the wastewater plants in any given month to the specified BPC, which is a four-year average.

More significant excursions from the average performance of the wastewater plants can be caused by significantly increased influent concentrations and flows beyond the control of the operator and/or major equipment breakdowns both of which impact the ability of the plant to properly treat the incoming wastewater. The BPC also therefore include maximum limits which allow for excursions from the average BPC.

Historically, final plant samples were taken from one of the interconnected conduits which transport treated wastewater effluent to Windermere basin. For many years, it was through that this sampling point provided a representative sample of the effluent. Recently though, third-party experts demonstrated this to be incorrect. Immediately, the City took corrective action and sample results today are truly representative of the wastewater effluent quality.

Drinking Water Quality

To ensure consistent quality of the drinking water from the plant and within the distribution system, the City of Hamilton's Environmental Laboratory conducts approximately 24,000 tests per year for various bacteriological and chemical parameters. It is important to note that in Hamilton, laboratory staff reports their results directly to the City's manager of water quality, not through Azurix, to eliminate any delay or miscommunication. These tests are undertaken by professional laboratory staff prepare an annual report of water quality issued direct to the City's laboratory staff prepare an annual report of water quality issued direct to the City's water quality manager. The City's laboratory is accredited by the Canadian Association of Environmental and Analytical Laboratories (CAEAL) to conduct tests on drinking water. The environmental laboratory performs all notification activities required under O.Reg. 459/00, and prepares and posts the quarterly drinking water reports for each of the City's 5 water supplies.

Results from the Environmental Laboratory testing demonstrates that the Woodward Avenue Water Treatment Facility and 4 communal based water supplies continue to





provide safe, reliable and high quality drinking water to customers under private management and operation.

These results are reinforced by the MOE's Drinking Water Surveillance Program (DWSP) which commenced in 1986. DWSP is not a compliance monitoring program, but rather a monitoring program developed to provide reliable and current information on municipal drinking water. Participation of operating authorities in DWSP is voluntary and the Woodward Avenue water plant was among its earliest participants. The published reports, covering 1986 – 1999, indicate that *"the Hamilton Water Supply System produced good quality water."*

Additional samples are taken periodically by Azurix as directed by the City of Hamilton and submitted to external laboratories for other analyses, specifically for the presence of pesticides and taste and odour compounds.

In the late 1990's, Lake Ontario experienced annual taste and odour episodes, largely attributed to the naturally occurring decay of algae in the raw water. Though not a health-related concern, the offensive nature of the taste and odour sparked numerous public complaints. As the water industry surrounding the Great Lakes struggled to understand the cause of the increased organic compounds, a situation still not completely understood, Azurix operations staff developed various interim solutions until a long term solution could be implemented. As a long-term solution to control taste and odour in the drinking water, Hamilton modified the Woodward water plant's treatment process to include granular activated carbon (GAC) in the filters, with periodic carbon regeneration.

Wastewater Effluent Quality

Wastewater effluent quality from the Hamilton, Waterdown and Dundas wastewater plants is tested regularly by the City's laboratory.

Final effluent sampling for the Woodward Avenue facility is conducted 5 times per week, under a strict chain of custody. Samples are collected from automatic time sequential samplers by qualified staff working out of the City's environmental laboratory. Specific quality control measures are in place such as weekly sampler inspections and procedures for identifying where an automatic sampler may have failed to take a representative sample. Samples are taken directly to the environmental laboratory for analysis and inclusion in the monthly reporting. Test results are compiled by Azurix and reported to the City's manager of water quality for monthly submission to the MOE, which oversees compliance monitoring. In all, this sampling of effluent at the Woodward WWTP is 5 times more than what is required in this facilities COA.

The wastewater quality produced by the facilities has generally been within COA limits, however at times, certain parameters have exceeded these limits. Excursions to the COA have occurred under both the City's operation and under Azurix operation. Most of the incidents were in part the result of limitations in infrastructure that had already been scheduled for upgrade. The City of Hamilton is developing a long-term water quality strategic plan which includes more than \$630 million in wastewater infrastructure





projects. Even in development, more than \$40 million in projects have already been completed. While these improvements have been underway, maintaining the plant in operation places extra stress on the overall treatment process and this has resulted in some exceedances.

In 1998 and 1999, the Woodward Avenue and Dundas wastewater plants did not meet COA requirements and this has resulted in charges against Azurix. In early August 2001, Azurix settled a number of charges laid by the MOE in connection with five matters. In June 2001, after attempts by both the City and Azurix, the Ministry of Environment granted relief under Section 61 of the Ontario Water Resources Act back over two years and until the improvements are finalized.

The City of Hamilton is continuing with implementation of an investment plan to upgrade the Woodward Avenue and Dundas wastewater treatment plants to improve their performance and minimize their impact on Hamilton Harbour.

The improvements already completed, underway or planned include the following:

- New preliminary treatment facility (commenced in 2000) to improve grit removal and provide a designed peak preliminary treatment capacity to 1350 ML/d. This project is being paid 2/3 by Azurix and 1/3 by the City.
- Replacement of aeration system to improve secondary treatment efficiency and reliability and to reduce equipment downtime, thereby improving overall effluent quality (scheduled for completion in 2001). System sized to accommodate future nitrification. (pilot testing on-site planned for 2002/2003) This project was paid for by City.
- Refurbishment of North Secondary Clarifiers and (scheduled for completion in 2001) This project was paid for by City.
- New hauled waste disposal facility (scheduled for completion in 2002). This project is being paid for by City.
- New sludge handling equipment (completed in 2000) to eliminate co-thickening of waste sludge in the primary clarifier This project was paid for by City.
- Four new primary clarifiers to increase primary treatment capacity (completed in 2000)This project was paid for by City.
- New SCADA (Supervisory Control and Data Acquisition) system (in progress) for water, wastewater and storm treatment systems This project was paid 45% by Azurix and 55% by the City.

The above improvements will eliminate existing process deficiencies at the Woodward plant, contribute to an improvement in overall plant effluent quality and aid in improving the water quality in Hamilton Harbour.





The City's combined sewer system was designed to collect both sanitary sewage and stormwater runoff in the same pipes and convey them to Woodward Avenue WWTP. During large storm events, the flows entering the combined sewer system far exceed the capacity of the collection system itself and that of the treatment plant. To protect against basement flooding and washout of the biological process at the treatment plant, overflows by-pass the plant and are directed to Hamilton Harbour. The construction of combined sewer overflow (CSO) control systems in the sewage collection system and expanded pre-treatment capacity at the treatment plant should help minimize this.

The performance of Hamilton's wastewater systems has been restricted, in part, due to limitations of the existing infrastructure. The City has embarked on a massive \$630 million program to expand plant processes, increase treatment capacity and generally improve effluent quality.

Stewardship of Assets

Staffing is a significant area where Azurix has managed to make profound productivity and quality improvements at the facilities. Staff has been reorganized under a Total Productive Operations approach. Operations and maintenance functions are more effective and efficient, largely as a result of being undertaken in a unified manner, rather than discretely. This approach is becoming more and more common in both public and private sector operations and has demonstrably increased equipment uptime and minimized life cycle costs.

In our efforts to increase the overall efficiency of operations and to reduce the overall cost of service, Azurix and the City are implementing a number of improvements at the facilities, including installation of a new Supervisory Control and Data Acquisition (SCADA) System for operating and monitoring all facilities. In addition, a computerized maintenance management system has been implemented, resulting in more efficient scheduling and recording of equipment maintenance.

At the Woodward water plant, chemical addition has been optimized and the City has replaced the filter media with granular activated carbon to remove seasonally occurring taste and odour compounds in the raw water. At the Woodward wastewater plant, Azurix has made extensive improvements to the plant process, retrofits and repairs to existing equipment and modifications, all with a view to increasing operating efficiencies. These works include installation of centrifuges for higher sludge dewatering efficiency, development of a biosolids land application program, optimized chemical usage, and decommissioning of the sludge incinerator that saved \$10-million in major maintenance costs.

Typical of management contracts of this nature, the city sets the performance standards, and Azurix assumes the operational risk of meeting the service standards to the extent the existing facilities are capable of achieving this performance level. At times, equipment breakdowns, particularly in the case of the wastewater plants, have occurred that have affected the ability of the plant to meet specific levels of service. Advanced maintenance procedures and increased capital expenditures made by the City and Azurix have reduced





such equipment breakdowns. At the start of the contract, the ratio of preventative to breakdown maintenance was approximately 20:80. With a greater focus on preventative maintenance, this ratio has shifted to 70:30. Our goal is to achieve a ratio of 80:20, consistent with typical industry standards.

Economic Development

The City of Hamilton has realized cost savings and economic benefits by contracting operations and maintenance services to the private sector. Direct investment, and economic benefits provided by Azurix and its predecessor to Hamilton totals in the tens of millions of dollars.

Azurix North America Corp., created following the acquisition of PUMC by Azurix Corp. in May 1999 now operates five out of the top eleven outsourced plants in North America. It placed fifth in the most recent rankings of North American water companies by *Public Works Finance* magazine². Azurix's success in achieving this ranking is shared with the Hamilton staff and politicians who supported the original vision and allowed us to gain valuable operating experience and to develop a Canadian-based water services company now recognized North American wide.

In the six years since the signing of the first contract with Hamilton, Azurix has achieved impressive growth in annual revenue to \$236 million (2000). Our employee base has increased from 139 (1995) to 1,046 (2001). Employment in the Hamilton area has grown to approximately 247 (2001), and now represents 25% of Azurix North America employee-base. We have 99 employees elsewhere in Ontario and another 700 employees located in other locations across North America.

Hamilton's contract with Azurix has resulted in a number of financial benefits, including guaranteed reductions in the cost of operating the facilities and funding of capital items by Azurix. In addition to the guaranteed reduction in costs, other items that will provide long-term savings include:

- The development of a biosolids land application program. This long term program provides for a beneficial use of biosolids and resulted in the shutdown of the sludge incinerator which was in need of costly repairs and elimination of local area residents concerns regarding air quality issues from the incinerator.
- The development of a comprehensive energy management strategy which involved the construction of almost \$4 million in equipment and building retrofits which will become the property of the City at the end of the current contract.
- Replacement of the sludge dewatering equipment with centrifuges for the duration of the contract. While Azurix has benefited from this better performing equipment, the City also benefited through avoidance of spending to replace the failing equipment.

² Public Works Financing, "Governmental Outsourcing Revenues in 2000", March 2001, p. 15.





- Development of Canada's only granular activated carbon reactivation facility for municipal drinking water plants. The use of granular activated carbon for combating taste and odour is becoming commonplace around Lake Ontario. It was this trend that was the catalyst for Azurix's establishment of a reactivation facility within the Southern Ontario marketplace. Through a competitive bid process, the City was able to realize economic benefits in Azurix proposal through the reuse of decommissioned facilities at the Woodward plant site. Azurix's rehabilitation of existing infrastructure along with the contribution of base and tolling fees proved to be the most attractive for the City. This partnering approach allowed Azurix a platform for its carbon management business and provided the City both immediate and long term economic benefits.
- As mentioned previously, Azurix committed to pay for 55% of the new SCADA system and 2/3 of the new headwork's project.

The total value of direct investment, long term operations savings and the additional revenue from the carbon services have provided Hamilton and its ratepayers with approximately \$35 million in savings. In addition, the improved operating approach, staffing efficiencies, optimization of chemicals and electricity usage and emphasis on preventative maintenance will generate long-term operations savings of approximately \$1.8-million annually. Hamilton will get the benefit of this amount in perpetuity starting in 2005.

In addition to the savings and benefits listed above, the City receives significant economic benefit, both direct and indirect, associated with the increased employment at Azurix. At its North American headquarters in downtown Hamilton and at other area office locations, Azurix maintains employment of approximately 247 staff. In considering outsourcing, public sector officials have a menu of potential benefits against which to weigh the private sector cost of operations. In addition to the obvious considerations concerning pricing and the necessity of finding an operator who will meet all regulatory requirements, communities may also examine the contractor's willingness to provide capital improvements and to enrich the community as a whole through economic development. In Hamilton, Azurix has committed to several economic development initiatives, many of which have now been fulfilled from Hamilton's perspective.

Accountability

The full accountability of Azurix to Hamilton under the contract is clearly evidenced by the following contractual undertakings:

• Annual Performance Review: Azurix performance under the Plant Operations Agreement is subject to an annual performance review, to be conducted by Hamilton following the end of each contract year. Following the first review for calendar year 1995, Hamilton staff moved towards a more continuous review process that consisted of regular meetings between Hamilton and Azurix contract coordinators. Because the continuous review process resulted in improved performance by Azurix, this informal process was continued for 1996 and 1997. Formal performance appraisals are now





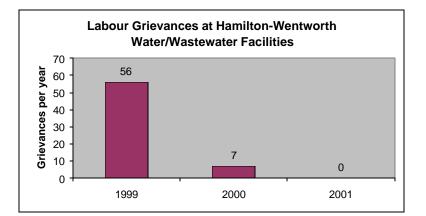
completed and submitted to the Environmental Services Committee and Regional Council.

- Annual Report: Azurix prepares an annual summary of each plant's operating performance, maintenance activity, staffing and certification, and capital works projects. These reports are presented annually to Hamilton and to the MOE. These report submissions are a requirement of the facilities' Certificates of Approval.
- **Monthly reporting** of water quality at the water treatment plant and at the reservoirs and pump stations is supplied by Azurix to City staff for purposes of preparing the quarterly drinking water quality reports required by provincial regulation. Azurix also submits a monthly report of wastewater facility performance to Hamilton staff for submission to the MOE.
- **Meetings** are held between Hamilton, Azurix and the MOE to discuss issues related to the facilities and outstations.
- Formal meetings between the Hamilton and Azurix contract managers are held on a regular basis with at least one contract meeting scheduled every month. In addition, many other informal meetings are held to discuss pressing issues and regular, often daily, contact is made between the parties.
- **Quality assurance testing** of drinking water quality and wastewater effluent quality is conducted by the Hamilton Environmental Laboratory and by independent laboratories retained by the City
- **Financial statements** are provided by Azurix quarterly (unaudited) and annually (audited) for the operation of the facilities and outstations.

Commitment to Employees

Communication among facilities management staff, Hamilton officials and the union has improved greatly since Azurix assumed management of the facility. Azurix places a very high priority on establishing and maintaining positive relationships with stakeholders including our new staff, its client and where applicable, any incumbent unions. Since undertaking operation of the Hamilton facilities in 1999, Azurix has invested

considerable time and effort in improving labour relations and these efforts have been rewarded with an impressive change in attitude between plant management and the union. This is reflected in the reduction of labour grievances, as shown in the chart below.







Labour Relations History

At contract commencement, two bargaining units were represented at the Hamilton water and wastewater facilities. The International Union of Operating Engineers (IUOE) represented approximately 120 workers; the Canadian Union of Public Employees (CUPE) represented 5 workers. As agreed in the contract, Azurix retained all staff for 18 months and negotiated collective agreements with both unions in 1994 and subsequently in 1997 without any work stoppages.

As part of its planned management and work improvement process, Azurix identified a training program that would bring all employees up to a common competency standard for operating equipment across the facilities. The training program also included cross-training of staff. Implementation of the program was to have commenced with a skills assessment of all employees.

The union refused to accept the training program without assurances that severance packages be available to all those who either failed or decided to retire. Azurix agreed to provide packages across the boards; however, Azurix and the union could not come to agreement on the value of the packages. As a result of this impasse, the International Union of Operating Engineers (IUOE), Local 772, voted in favour of a work stoppage at the Hamilton-Wentworth facilities.

Azurix immediately implemented a contingency plan and for the duration of the work stoppage, the facilities were operated by existing management and supervisory staff as well as by personnel from other Company-owned operations.

The negotiations were settled and a new collective agreement was ratified on September 24th, 1999. During the work stoppage Azurix was able to maintain and surpass all permit conditions at the water and wastewater plants, with no interruption of service to any of Hamilton's taxpayers or any threat to public safety or environmental impact.

The new collective agreement offered all staff a buy-out package. Any employee who refused this buy-out and failed the training program received one-half of the full value of this buy-out package.

Midway through the training program, Azurix recognized that many employees were not progressing with the training and a decision was made to re-offer the full buy-out package to all employees. Staff were able to consider this offer in full consideration of their individual progress with the training. At completion, the training program achieved a greater than 90 % pass rate with only two staff failing to meet the required performance level. The union requested a re-test for these two employees. One passed and one didn't. The employee who did not pass received the half-value severance package, the one who passed continues to work at the facility.

Relations with staff have improved steadily since the 1999 strike. There have been few grievances since the strike and no grievances have gone to arbitration. It should be noted that this view is not just held by Azurix management. Greg Hoath, Business Agent, Local 772 International Union of Operating Engineers, in a letter of support dated December





21, 2000, he states, "Labour relations ... have tremendously improved ... and we currently enjoy positive and productive relations. This is demonstrated through improved communications and [the] mutual drive to make the Hamilton-Wentworth plant operate at top efficiency. Our ability to quickly and effectively resolve labour relations matters is indicative of the co-operation, trust and mutual respect we have each developed."

Azurix applies this approach at all facilities across North America and with all organized bargaining units (see sidebar for unions represented at Azurixoperated facilities). Following negotiation of a collective agreement with Amalgamated Local 2327, United Auto Workers for workers in Wildwood, NJ, Fran Smith, Area Director, New Jersey UAW, noted in a letter dated January 18, 2001 that "... Our positive experience ... is evidence that public/private partnerships can be successful if the private partner has the credibility, commitment and understanding demonstrated by Azurix."

Azurix and IUOE Local 772 have achieved zero grievances to date in 2001, a significant improvement when one considers that less than two years ago the facilities averaged one grievance per week. We attribute this dramatic improvement to a combination of better training, better teamwork, better

Organized Bargaining Units
International Union of Operating
Engineers, Local 772
Canadian Union of Public Employees,
Local 167
United Automobile Workers, Local 2327
Oil, Chemical and Atomic Workers'
International Union, Local 4243
International Union of Operating
Engineers, Local 793 (Toronto)
Teamsters Union 879
Labourers International Union of
North America, Local 837
Labourers International Union of
North America, Local 183
Labourers International Union of
North America, Local 1059

management leadership and greater cooperative efforts between the Company and the union leadership.

Health and Safety

Azurix has a fundamental and far-reaching commitment to best-industry practices in health and safety and considers the greatest importance to the safety, health and welfare of its employees to be of vital importance. Azurix recently received the Ontario Electrical Utility Safety Association (EUSA) Low Accident Frequency Award for large-scale utilities with greater than 125,000 hours worked with no lost time accidents and received the EUSA President's Award, distinguishing those operations with over 250,000 hours worked with no lost time accidents.

As of July 31, 2001, there had not been a lost time accident for over two years. Azurix's operations employees were recognized for this achievement as part of the ongoing health and safety program.

Azurix's commitment to health and safety is demonstrated in the continuous improvement in its Ontario Workplace Safety and Insurance Board performance index. Since acquiring responsibility for operations and management in the second quarter of 1999, with near immediate results Azurix has transformed the approach and commitment to Health and Safety from those previous and has now achieved the good rating by the Ontario Workplace Safety and Insurance Board (WSIB).





Azurix efforts in enhancing safety and health of the local environment are directed not only within our facilities, but also to the local community we feel fortunate to serve. In Hamilton, Azurix is a member of Safe Communities Incentive Program (SCIP), a program organized by the Ontario Workplace Safety and Insurance Board. Azurix also participates in the Safe Workplace Awareness Program (SWAP) as a mentor to other area businesses. As a health and safety mentor, Azurix provides professional Health and Safety personnel to undertake audits and inspections of local business and to provide advice to their staff.

Public Communications

We appreciate the importance of an effective and meaningful mechanism by which the public can have input into how to minimize any negative impact from the facilities on the surrounding area. As good corporate citizens of Hamilton, the City and Azurix have a vested interest in ensuring that the public understands the operation of the facilities and that they are kept informed of major activity and plans.

A Residents Liaison Committee has evolved and meetings with the City and Azurix are arranged upon request to discuss and inform them of operations and any current work being undertaken at the facilities. Issues for discussion have included off-site odours from the wastewater plant and on-site construction and associated noise and traffic concerns.

To help respond to residents concerns quickly, local residents have been provided with the cell phone number for the on-duty Process Supervisor.

Azurix also carries out a program of professional, community and school tours, and has developed promotional and informational material the facilities.

Summary

For a partnership to be successful, both parties must achieve more together than they could have achieved separately.

Hamilton embarked on a program to outsource the operation and maintenance of its water and wastewater system with a vision of participating in the development of a water management services platform and providing the impetus to grow a local concern into a significant North America-wide player in the growing water and wastewater industries. Through its partnership with Azurix, Hamilton is achieving this vision.

In this arrangement, the public and private parties are able to contribute their respective strengths. The public sector's main strength lies in setting public policy and regulating the operators by establishing objectives and monitoring the contractor's performance in the best interest of the community. The private sector's strength lies in its access to expertise and the implementation of innovative solutions, which it uses to meet the public sector's objectives in the most efficient way possible.





The City of Hamilton has realized cost savings and economic benefits by contracting operations and maintenance services to the private sector. Direct investment, and economic benefits provided by Azurix and its predecessor to Hamilton totals in the tens of millions of dollars.

With its corporate head office located in Hamilton, Azurix is a major participant in the North American water industry. The company's success in achieving this status is shared with Hamilton staff and politicians who supported the original vision and allowed us to gain the valuable operating experience necessary to develop a Canadian-based company that can compete in the North American market.



