#### HALIFAX HARBOUR CLEANUP INC. Number 4

#### On the 13th of January 1993, following eight weeks of preparation, Halifax Harbour Cleanup Inc. (HHCI) submitted a 115-page Supplementary Information Report to the Environmental Assessment Administrator. It contains additional information the Federal-Provincial Environmental Assessment Review Panel requested from HHCI in November, following a review of the Environmental Assessment Report (EA Report).

The EA Report, an 800-page document prepared by Jacques Whitford Environment Limited (JWEL) and several sub-consultants, was submitted to the Panel in August 1992, after a year-and-a-half of field study, analysis and preparation. The Panel and the public had 60 days to review the EA Report and comment on its adequacy for discussion at public hearings. The Panel received submissions from several interested organizations and individuals over this period. Following its review of the EA Report and the public submissions, the Panel requested additional information from HHCI. It divided the request into two

# HHCI Responds to Panel's Request for Information

further delay," said Paul Calda, president of HHCI. "At the same time, we wanted to provide meaningful answers to the Panel."

A team of experts from Metro Engineering, ASA Consulting Limited, Land and Sea Environmental Consultants Limited, MacLaren Plansearch (1991) Limited and Porter Dillon Limited worked with JWEL on the response to the Panel's request. In its request, the Panel asked for further detail and clarification of technical information contained in the EA Report, and for further explanation regarding sewage treatment plant siting, alternative technologies and management of the collection and treatment system once it is in operation. Much of the request was prompted by the fact that some engineering refinements have been made since environmental assessment studies began in 1991. For example, plans for the sewage treatment plant were modified to allow the whole facility to be enclosed.

"In order to reply quickly and efficiently, responses were prepared using data that was already available to the study teams," said Jim Axell, president of Metro Engineering, who coordinated the effort. Since the submission, the group has been working on the remainder of the response, required the week before public hearings take place.

"I'm hopeful our response will satisfy the Panel's requirements, and that they will set a date for public hearings as soon as possible," said Paul Calda. The Panel and the public have until

parts: information that was needed before a date for public hearings could be set, and information required one week before the hearings. HHCI acted quickly to fulfill the first part of the Panel's request.

"We wanted to respond to the questions as rapidly as possible to avoid

#### REVISED ENVIRONMENTAL ASSESSMENT SCHEDULE

2 January 1991	The project was registered for Environmental Assessment
24 June 1991	Jacques Whitford began studies for the EA Report
31 July 1992	HHCl submitted the EA Report to the Nova Scotia Department of Environment
7 August 1992	The EA Report was made public
3 November 1992	The EA Panel requested further information
13 January 1993	HHCl submitted Supplementary Information Report to EA Panel
To Be Determined	Public hearings

15 February to review the document. The Panel will then review any submissions from the public regarding HHCl's Supplementary Information Report, and decide whether or not the information is adequate to proceed with public hearings.

#### **CLEAN CURRENTS**

## A Closer Look at HHCI's Response to the Panel

Editor's Note: Since the Panel requested additional information from HHCI in November, we've been hearing questions about the request and our response. We have tried to answer them here, but due to space limitations have summarized what can be found in more detail in the Supplementary Information Report. If you would like a copy of the complete response, please call Patricia Murray, Office Manager for the Panel, at 424-2173.

### 1. What is the progress of the Harbour Cleanup Project?

After 18 months of field studies and analysis, HHCI submitted the three-volume EA Report to the Federal-Provincial Environmental Assessment Review Panel in August, 1992. In November, following a review of the EA Report by the Panel and the public, the Panel requested additional information from HHCI. HHCI submitted the first part of its response, a supplement to the EA Report, to the Environmental Assessment Administrator on 13 January 1993. The Panel and the public have until 15 February to review the document.

### 2. Why did the Panel request additional information?

As Panel chairperson Dr. Shirley Conover stated in her letter to HHCI, in the Panel's estimation it needed more information to address the evolution of the project between the time the component studies for the EA Report were conducted (from June 1991 to March 1992), and the time the EA Report was published (August 1992). As well, after reviewing the EA Report and carefully considering the opinions of the public, interested government departments and independent technical experts, the Panel concluded more information was required. It also wanted to confirm that the information was sufficient to support a thorough and meaningful discussion of all pertinent issues at the public hearings.

#### 3. Are requests like this unusual?

No, not at all. The scope of the Harbour Cleanup Project is so large, and there are so many highly technical issues to address, that it is neither surprising nor unusual that the Panel should request more information. As Jim Clarke, the Panel's coexecutive secretary, said, "It's quite a comprehensive request, but at the same time, it's not an unusual occurrence."

### 4. What kind of information did the Panel request?

The Panel asked for additional detail and clarification of technical information contained in the EA Report. It also asked for further explanation in areas identified by project intervenors (organized groups funded by the Federal Environmental Assessment Review Office (FEARO) to critique the EA Report and make formal submissions on the project). Some of the most significant areas the Panel asked about included potential changes to the environmental assessment because of engineering refinements, sewage treatment plant siting, alternative treatment technologies, future management of the system, and source control (source control refers to preventing industry and individuals from dumping pollutants other than sewage into the wastewater system).

## 5. What were the engineering refinements and how did these changes affect the EA?

One of the most significant refinements was to modify plans to allow the whole sewage treatment facility to be enclosed. Other refinements include technical improvements to the sewage treatment process itself, and minor adjustments to the routing of the collector tunnels. For example, the interceptor system from the southern end of Dartmouth to Dartmouth Cove was moved from Pleasant Street down closer to the waterfront to avoid construction on Pleasant Street. All these revisions have been summarized in a table in HHCI's Supplementary Information Report. Most refinements to the project have resulted in a decrease in the number and severity of predicted environmental impacts. This demonstrates the benefits of environmental assessment during the

early stages of a project, in terms of allowing improvements to be incorporated into the project design.

## 6. What was HHCI's response to the Panel's request to look at alternative technologies?

The Panel asked HHCl to look at alternative technologies not in terms of the overall project, but in the context of a re-examination of a subsidiary treatment plant for Halifax Mainland South. This was an option previously rejected by the residents of the area in favour of connection to the lves Cove treatment plant. In response to this request, HHCI provided the Panel with an analysis of facultative and aerated lagoons, wetland and solar aquatic technologies. The report discusses that while some of these technologies might be implemented in Mainland South, they would take up much larger areas of land than tunnelling and pumping the sewage to the main treatment plant.

#### 7. How did HHCI address the question of how the collection and treatment system will be managed once it is constructed?

HHCI hired Peat Marwick Stevenson and Kellogg in April 1992 to examine options for the operation and maintenance of the system, including how it will be financed when construction is completed. The consultants looked at a number of organizational structures, which ranged from establishing a new organization to having one of the municipalities assume responsibility. The report was referenced in the supplementary information and has been submitted separately to the EA Panel.

#### 8. The Panel has asked HHCI how it will implement a source control strategy as part of the wastewater management system. How did HHCI respond?

HHCl has always recognized the importance of source control as part of an overall wastewater management system. Preventing raw sewage from flowing directly into the harbour is only part of

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## Progress Steady on Sewer Consolidation Program

Local construction firms have completed work on the first two sites of HHCI's sewer consolidation program. Stewiacke Construction Limited of Waverley completed the first consolidation sewer, along Barrington Street between Hanover and Young streets in Halifax, in November 1992. Work on the site began in late July. Woodlawn Construction Limited, a Dartmouth firm, finished work in December on the second site (along CN property), bringing together sewers at North Street and Park Avenue in Dartmouth.

There are four more areas to go before the consolidation program is complete. A contract has already been awarded to Harbour Construction Limited of Dartmouth to consolidate the sewers between Lyle and Best streets in Dartmouth. Work on the project will begin this spring.

Tender documents for the final three sites were finalized in January, 1993. The sites are located in Dartmouth, between Pinehill and Jamieson streets and between King Street and Old Ferry Road, and in Halifax beneath Lower Water Street between Duke and Salter streets. As soon as approvals are received, tenders will be called for the two



Dartmouth sites. Construction at the Halifax site will begin later in 1993.

The sewer consolidation program will eventually reduce the number of outfalls discharging raw sewage into Halifax Harbour from about 40 to 17. Ultimately, the consolidated sewers will hook into HHCI's large-diameter interceptor tunnel. The sewage will then be pumped to the treatment plant at lves Cove. The \$11 million program is scheduled for completion by the end of 1993. It will create over 200 direct and indirect jobs.

#### Continued from page 2

the solution. Preventing harmful domestic and industrial waste from getting into the wastewater stream is the other part. Even though source control is outside HHCI's mandate to design and construct a sewage collection and treatment system, part of the operation and maintenance study included an examination of source control. This study shows that a source control program must focus on education, enforcement of by-laws, monitoring, reporting, and treatment at source. Such programs could be implemented prior to, and independently of, the sewage treatment system.

### 9. How did HHCI respond to the Panel's request to re-evaluate alternative sites?

HHCl used existing information to respond to the Panel's request to re-evaluate other sites in light of refinements to the design of the sewage treatment plant. The history and rationale of the site selection were reviewed, describing the long and careful process undertaken by the Halifax Harbour Task Force and HHCl to select the final sewage treatment plant site at lves Cove. The Supplementary Information Report discusses how other sea level sites, some previously rejected by the Task Force and HHCl (the Halifax Railyards, Dartmouth Cove, Purcells Cove) and some new sites put forward by members of the public (Sandy Cove, FIOR) are unacceptable due to a number of general and specific constraints. For example, some sites are too close to established land uses, while others are too far away from where the treated effluent must be dispersed.

#### 10. What happens next?

After the Panel and public review the supplementary information provided by HHCI, the Panel will decide whether public hearings can be scheduled. HHCI will continue work on the additional information required by the Panel for submission one week before the hearings.

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## **GIS** Captures Project Information

By the time the Harbour Cleanup Project is complete, the amount of information generated by planners, engineers, consultants and contractors would fill room after room with paper. That information will be vital for the future operators of the sewage treatment system, as well as for the municipalities of Halifax, Dartmouth and Halifax County – as long as it can be accessed. But a powerful tool is needed to provide access to such a large pool of information. A geographic information system (GIS), a series of sophisticated computer programs, is just such a tool.

HHCl is using a GIS to capture the information produced as the project develops, from pre-design through design, construction and commissioning of the sewage treatment system. The GIS is also recording information about existing conditions within the project area, including exact locations of sewers, manholes, buildings, property lines and land uses. Photos, maps, diagrams, text and, eventually, video, will be accessed using the GIS.

"One of the magic things about GIS is that, once you have the information, you can use it as a 'what if?' device," says Mark Lee, Metro Engineering's GIS specialist. "You can use it to predict various outcomes, for example, what the impact would be on sewage volume if Metro's population increased by 5,000, 10,000 or 20,000 over a certain time frame. That's very valuable information for the operators of the sewage treatment system."

The project information recorded in the GIS will also be used to assist in ongoing maintenance of the system once it is in place. "Maintenance planners will be able to call up precise information about the location, depth and size of pipes, for example, removing any guesswork for the people doing the work. This saves time and money," explains Lee.



Mark Lee reviews a map generated by GIS

Municipal planning, engineering and works, and finance departments can all benefit from the information captured in the GIS, says Lee. By accessing the GIS, users can select a location on a map, "click" it with the mouse, and call up information about buildings, trees, property lines, fences, and roads in the area. GIS information can be used for everything from planning green spaces to repairing roadways, he explains. "The GIS project was originated by the Halifax Harbour Task Force's recommendation to archive data related to Halifax Harbour," says Lee. "Using GIS to accomplish this benefits the entire community affected by the Harbour Cleanup Project."

### GET INVOLVED IN HARBOUR CLEANUP

The Harbour Cleanup Project is moving closer to the most critical phase of the decade-long process of building a sewage treatment system for Metro - public hearings. Right now, the Federal-Provincial Environmental Assessment Review Panel is reviewing HHCI's Supplementary Information Report. After the review, which ends 15 February, the Panel will announce whether the project will proceed to public hearings. The public hearings will have a major impact on the Panel's recommendation to the federal and provincial environment ministers. Those ministers will determine the environmental acceptability of the project.

Your input into the public hearing process is vital. The Panel is seeking a meaningful public discussion and the broadest range of opinions possible. You don't have to be an expert to get involved. Make your opinion known by writing to the EA Panel, HHCI, your local MLA, MP or municipal leaders, or by attending the public hearings. Or, call HHCI's Public Comment Phone Line, 454-2911, to record your views on the project.

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If you have any comments or questions regarding Clean Currents, please contact the editor at 422-0002, or write:

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