

3/5/02

PLEASE NOTE:

DISTRIBUTION COPY

AS OF 3/12/02, THE ORIGINAL COPY OF
THIS REPORT WILL BE FORWARDED TO MIAO.
NO COPIES WILL BE SENT TO LANG OR
MEYERSON.

March 11, 2002

THANKS,

S.



The City of New York
Department of Environmental Protection

59-17 Junction Boulevard
Corona, New York
11368-5107

Joel A. Miele Sr., P.E.
Commissioner

Mark D. Hoffer
General Counsel

Bureau of Legal Affairs

Tel (718) 595-6555
Fax (718) 595-6543
www.ci.nyc.ny.us/dep

~~Thomas D. Lang, P.E.
Regional Water Engineer
New York State Department
of Environmental Conservation
Division of Water, Region 2
47-49 21st Street, 2nd Floor
Long Island City, NY 11101~~

**RE: WARDS ISLAND STP
MODIFIED ORDER ON CONSENT
DEC FILE NO. R2-0777-93-01**

Dear Mr. Lang:

We are submitting the Wards Island Semi-Annual Compliance Progress Report covering the period July 1, 2001 through December 31, 2001 in compliance with Decretal Paragraph IX. of the above captioned Modified Order On Consent.

Attachment I of this submittal includes the Wards Island Semi-Annual Compliance Progress Report. Attachment II includes DEP's responses to DEC's letters dated December 18, 2001, and December 19, 2001 concerning the discrepancies in the Wards Island Semi-Annual Compliance Progress Reports covering the periods July 2000-December 2000, and January 2001-June 2001, respectively.

Should you require further information, please contact Sarah Pender at (718) 595-6536.

Thank you.

Very truly yours,

Mark D Hoffer

Mark D. Hoffer
Consent Decree and Enforcement Officer



www.nyc.gov/dep

(718) DEP-HELP

Copy to:
 Louis Oliva ✓
 Assistant Regional Attorney
 NYSDEC- Region 2
 47-40 21st Street
 Long Island City, NY 11101

~~Leonard Meyerson, P.E.
 Deputy Regional Water Engineer
 NYSDEC, Region 2
 47-40 21st Street, 2nd Floor
 Long Island City, NY 11101~~

Zhuang Miao ✓
 Environmental Engineer
 NYSDEC, Region 2
 47-40 21st Street
 Long Island City, NY 11101

3/14. ORIGINAL SENT TO MIAO

~~Shibu Mammen
 Executive Assistant to the Deputy General
 Manager for Capital Projects
 New York City Housing Authority
 250 Broadway.
 New York, New York 10007~~

~~DON'T send one to NYCHA~~
 3/27 sent w/ Update per Sarah-

Thomas J. McEnerney, P.E. ✓
 Hazen & Sawyer
 498 7th Avenue, 11th Floor
 New York, New York 10018

cc: Commissioner Miele ✓
 F/D/C Chapin ✓
 D/C Collins ← 134 FL. ✓
 D/C Gaffoglio ✓
 D/C Greeley ✓
 Liebold ✓
 Soi/Pennington/Rizzo ✓
 Cavagnaro (1) Hinz ✓
 Lamarche ✓
 Filed: ✓ 3/14

Per SoI AS is →

Per SoI AS is - 3 copies →

**New York City
Department of Environmental Protection
Wards Island STP
Modified Order on Consent
(DEC File No. R2-0777-93-01)**

**Wards Island STP
Semi-Annual Compliance Progress Report
January 1, 2002**

Period: July 1, 2001 Through December 31, 2001

TABLE OF CONTENTS

SUMMARY.....	6-7
EAST RIVER STUDY.....	8-9
REMOVAL OF LAKE OVERFLOWS.....	10
FLOW TRENDS.....	11
CITYWIDE CONSERVATION INCENTIVE PROGRAM TOILET REBATE PROGRAM.....	12-14
HYDRANT LOCKING DEVICES LEAK DETECTION.....	15
HOUSING AUTHORITY RETROFIT.....	15
ACCELERATED WATER METERING.....	15-18
INTERIM PLANT EXPANSION.....	19-20

LIST OF ATTACHMENTS

MODIFIED APPENDIX:

- APPENDIX A-1: Installation of Magnetic Hydrant Locks
Leak Detection
- APPENDIX A-2: Housing Authority Retrofit
(NYCHA's update will be submitted
under separate cover)
- APPENDIX A-3: Accelerated Water Metering
(Update is provided in Summary)
- APPENDIX A-4: Interim Plant Expansion
(Update is provided in Summary)
- APPENDIX B: East River Study
(Update is provided in Summary)
- APPENDIX C: Dry Weather Flow
- APPENDIX D: Toilet Rebate Program
(Toilet Rebate Program ended with final submissions in
Spring 1997)
- APPENDIX E: Commercial / Industrial and Multifamily Residential Water
Audits, Leak Survey Program
- APPENDIX F: Billing Activity (No material this period)
- APPENDIX G: Alternative Management Training Program

WARD ISLAND STP SEMI-ANNUAL COMPLIANCE PROGRESS REPORT

SUMMARY

This is a semi-annual compliance progress report of the status and progress the NYCDEP made in meeting the objective and milestones of the Wards Island Modified Order on Consent ("Wards Island Orders") for the period July 1, 2001 through December 31, 2001. This Compliance Progress Report also includes reporting of measures taken by NYCDEP which are not required by this Modified Order but which nonetheless contribute to reductions in flow to the Wards Island Water Pollution Control Plant (WPCP). More detailed background information on the conservation programs, interim plant expansion, and other activities discussed in this report can be found in previous monthly progress reports by the NYCDEP as part of the Wards Island Modified Order.

This report is an edited compilation of information supplied by several DEP Bureaus. Further information on the activities and programs discussed in this report can be obtained through one or more of the following:

Phillip Heckler, P.E., Deputy Director, Bureau of Wastewater Pollution Control (BWPC): Flow Monitoring (718) 595-5051

Ernie Cavagnaro, P.E., Chief, Repair Division, Bureau of Water Supply and Wastewater Collection (BWSWC): Leak Detection, Hydrant Locking Devices (718) 595-5268

Warren C. Liebold, Director of Conservation/Technical Services, Bureau of Customer and Conservation Services (BCCS): Residential and Nonresidential Water Audits, Water Metering Study, Tiolet Rebate Program, Water Metering. (718) 595-6656

William Calbert, Chief Inspector, Meter Test Facility, Bureau of Customer and Conservation Services: Meter Slippage Tests (718) 802-1532

Mark Ritze, Deputy Director, Assistant Commissioner, Bureau of Customer and Conservation Services: Water/Sewer Billing, Water Metering, CIS (718) 595-7307

Joseph Ramaglia, P.E., Acting Deputy Director, Wastewater Facilities Construction, Bureau of Environmental Engineering (BEE): Interim Plant Expansion (718) 595-5982

Paul Smith, P.E. Chief, Division of Plant Design, Bureau of Environmental Engineering (BEE): East River Plan (718) 595-6080

Silvana Leggiero, P.E., Project Engineer, Facilities Improvement, Bureau of Environmental Engineering (BEE): Lake Overflows (718) 595-6243

Shibu Mammen, Executive Assistant to the Deputy General Manager for Capital Projects, New York City Housing Authority (NYCHA): Housing Authority Retrofit (212) 306-4506

EAST RIVER STUDY

Issues concerning the Newtown Creek Upgrade/East River Water Quality Plan that NYCDEP's consultants have addressed in further detail as part of this study include:

- Various location, capacity and treatment level alternatives to the Newtown Creek upgrade;
- Alternatives for reducing the water quality impacts of nitrogen discharged by East River WPCP's, including both treatment and non-treatment-based approaches, and
- Additional WPCP facilities planning issues including WPCP treatment capacity and combined sewer overflow (CSO) conveyance capacity.

Water quality models were developed for use in evaluating various alternatives.

Ongoing discussing between NYCDEP and NYSDEC regarding the Newtown Creek WPCP upgrade have led to the drafting of a revised Consent Order for the Newtown Creek upgrade and a new Consent Order addressing nitrogen control requirements. Additional environmental assessment work related to the Newtown Creek WPCP 3 facility upgrade alternative is underway. Task reports for most project tasks have been completed and finalized. The conceptual design of the recommended plan is described in the Task 13 Conceptual Design report. A final project report remains to be completed.

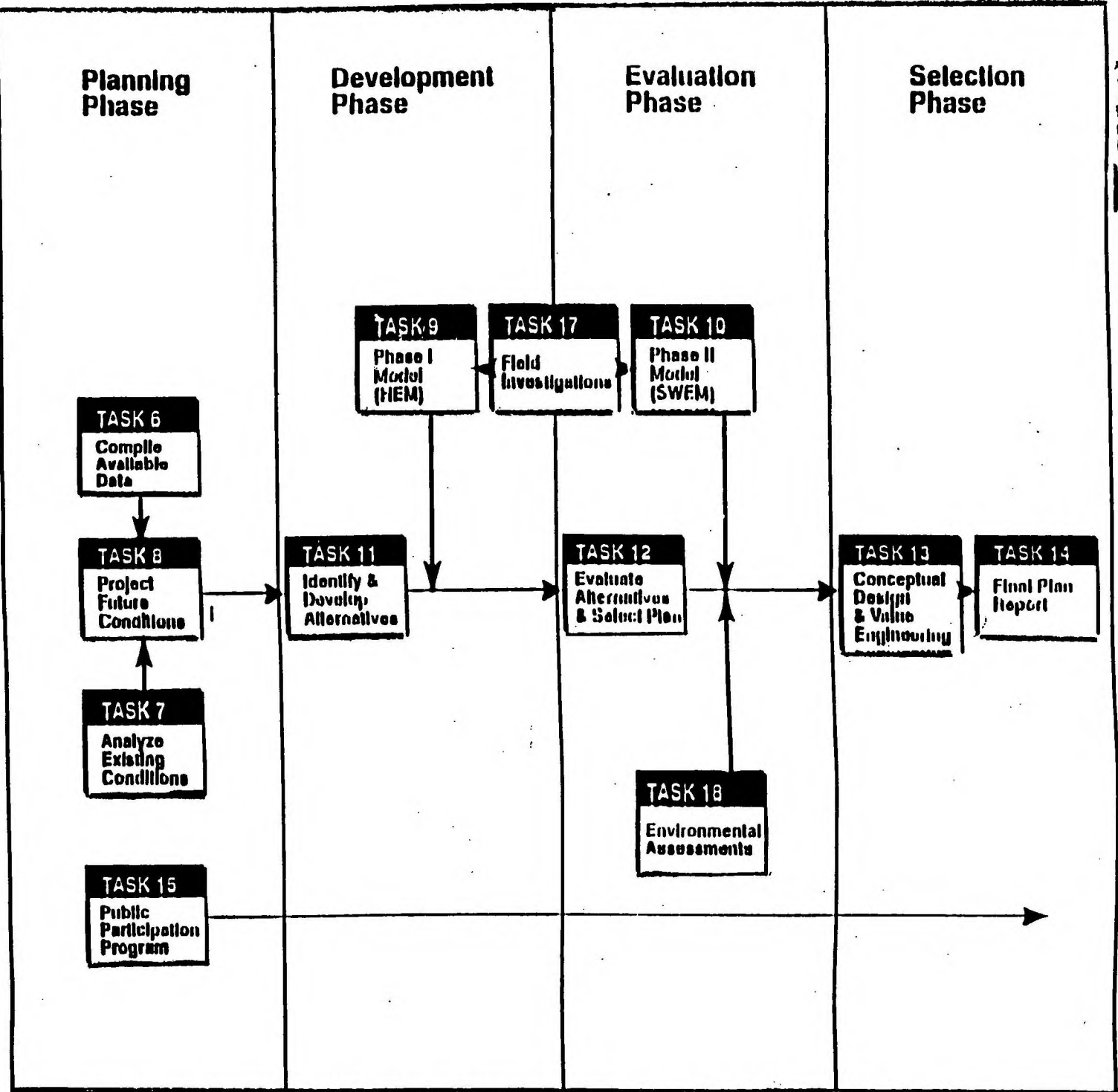
The attached Table 1 shows specific East River Water Quality Planning project tasks and their status as of December 31, 2001.

The attached Table 2 is a flow chart of the scope of work for the East River water Quality Plan.

TABLE I**EAST RIVER WATER QUALITY PLANNING STATUS AS OF DECEMBER 2001**

TASK NO.	TASK DESCRIPTION	PERCENT COMPLETION	TARGET COMPLETION
6	Compilation of Available Data	100%	Completed
7	Analyze Existing Conditions	100%	Completed
8	Project Future Conditions	100%	Completed
9	Phase I Model (HEM)	100%	Completed
10	Phase II Model (SWEM)	100%	Completed
11	Develop and Evaluate Alternatives	99%	Pending
12	Plan Selection	99%	Pending
13	Conceptual Design and Value Eng.	99%	Pending
14	Final Plan Report	78%	Pending
15	Public Participation Program	99%	Pending
17	Water Quality Sampling	100%	Completed
18	Environmental Assessments	88%	Pending

TABLE II



**Scope of Work:
East River Water
Quality Plan**

FIGURE 11-1

Newtown Creek WPCP Facilities Plan Project

**New York City
Department of Environmental Protection**

HAZEN AND SAWYER
Environmental Engineers & Scientists

REMOVAL OF LAKE OVERFLOWS

A limited water management investigation was begun under the Lake Overflow Investigations Task (14) of the Wards Island SSES. This investigation included both Central Park and Van Cortland Park. Overflows from these lakes were measured, and alternatives to remove these overflows from the Wards Island combined sewer system were developed and evaluated. However, it was determined that further, more detailed analyses would need to be performed in order to reach a final recommendation.

A twenty-four month Engineer Services Contract has been awarded to Malcolm Pirnie, Inc. to expand upon these preliminary investigations. All major waterbodies within Central Park (the Reservoir, the Pool, Harlem Meer, the Lake, Belvedere Lake, Conservatory Pond and the Pond), and Van Cortlandt Park (Van Cortlandt Lake and the 4 Henry Hudson lagoons) will be studied. Drainage areas of each individual water body will be delineated, stormwater outfalls discharging into these waterbodies will be identified, non-point runoff sources will be investigated and City water inputs will be determined. In addition, flow from existing wells and groundwater sources will be identified and quantified. A Water Quality model will be developed in order to predict water quality conditions and assist in the selection of the most favorable alternative for the diversion of flow from the Wards Island combined sewer system. In consultation with the Department of parks and Recreation (NYCDPR) and the Central Park Conservancy (CPC) for Central Park, a plan will be selected and an environmental assessment and conceptual design of that plan will be undertaken for each park.

UPDATE AS OF DECEMBER 31, 2001:

While a recommended plan for Van Cortlandt Park has been agreed upon in concept, further work has been deferred until such time as the new City administration can be apprised of the status of this project. NYCDPR is unable to participate in funding the Van Cortlandt Park project at this time, and although NYCDEP is prepared to move forward with components of the plan to reroute stormwater out of the collection system and to the Harlem River, NYCDPR is withholding their consent to let DEP do work in the Park until issues regarding the rest of the plan are resolved. The Central Park Conservancy, the organization that is responsible for the management of Central Park, has not approved the Central Park plan. Similar to the Van Cortlandt Park plan, the Central Park plan will need to be reviewed by the new administration prior to making decisions on implementation.

The pattern of lower flows to the Wards Island WPCP continued this period, with monthly averages consistently well under the plant's permit capacity.

The following table illustrates the 12-month trend through a comparison with the same period one year before.

Wards Island Flows: January - December 2000 and 2001		
	2001	2000
January	184 MGD	182 MGD
February	179 MGD	184 MGD
March	187 MGD	183 MGD
April	185 MGD	177 MGD
May	181 MGD	182 MGD
June	194 MGD	196 MGD
July	187 MGD	185 MGD
August	204 MGD	198 MGD
September	189 MGD	187 MGD
October	180 MGD	171 MGD
November	170 MGD	179 MGD
December	123 MGD	182 MGD
Permit: 250 MGD January 1998 – December 1998 Average : 203 MGD January 1999 – December 1999 Average : 192 MGD January 2000 – December 2000 Average : 184 MGD January 2001 – December 2001 Average : 180 MGD		

A chart of monthly dry weather flows for the Wards Island WPCP from 1986 to present is provided in Appendix C.

CITYWIDE CONSERVATION INCENTIVE PROGRAM

DEP water conservation programs continued to make progress during this period.

The New York City Toilet Rebate Program ended with final submissions in spring 1997. Through June 11, 1997 approximately 1,330,224 toilets have been replaced. Submissions for the Toilet Rebate Program ended on March 17, 1997. The final total of installations is approximately 1.33 million. The toilet and showerhead replacements are estimated to be contributing an estimated 7.1-15.4 MGD flow reduction to the Wards Island WPCP, 4.3-10.3 MGD flow reduction to the North River WPCP, 5.6-13.3 MGD flow reduction to Newtown Creek WPCP, 5.4-12.9 MGD flow reduction to the Coney Island WPCP, and 1.4-3.2 MGD to the Owl Head WPCP. An additional 13.9-32.9 MGD is estimated to be saved outside of the three consent decree drainage areas, for a total of 37.7-87.9 MGD citywide. The flow reduction estimates are based only on the projects completely inspected and paid.

The attached chart illustrates the final status of the program through June 11, 1997. "Applications Approved" reflects the total number of buildings and units which have applied and been approved. "Post-Installation Packages" represent the number of properties (and units) which have submitted the final paperwork for issuance of a rebate check.

The final report on the monitoring and evaluation of the New York City Department of Environmental Protection Toilet Rebate Program, prepared by Westat, Inc. was submitted.

Westat read water meters in the boroughs of Bronx, Brooklyn, Manhattan, and Queens over an 18 month period. Data from these readings was used in the analysis. An average 29% drop in water consumption was measured in the sample of monitored apartment buildings.

Toilet Rebate Program Final Statistics Through June 11, 1997						
	Manhattan	Bronx	Brooklyn	Queens	S.I.	Citywide
Apps. Approved	11,720	14,331	39,956	48,675	6,681	121,363
Units	527,202	306,963	396,109	366,245	26,163	1,622,682
Post-Installation Packages	9,671	13,219	35,914	45,597	5,645	110,046
Units	374,940	269,468	345,057	318,322	22,437	1,330,224
Paid(\$)	82,869,821	60,686,895	77,239,181	70,960,251	4,806,084	296,562,232

Notes:

1. Please note that these are preliminary, unaudited figures. The "Applications Approved: Units" is probably 10 – 15% greater than the eventual total since applications assume 100% toilet replacement, which does not generally occur.
2. The numbers listed for "Applications Approved" and "Apps. Approved, Units" include the numbers for "Post Installation Packages (and Units)"
3. "Post-Installation Packages" are submissions of completed, final paperwork. Once a "PIP" is submitted an inspection is performed and then a rebate check is issued. There is a 30 day period, generally, between submissions of a complete PIP and the issuance of a rebate check.
4. The number of applications or "Post-Installation Packages" are indications of the number of buildings and homes. Units are an indication of the number of toilets.

Volume during the last week is equivalent to weekly production of: \$1.30 million per week paid (5,781 toilets) and 525 PIPs submitted with 7,764 toilets. The totals exclude 12, 734 applications with 112, 646 toilets which were dropped from the TRP through December 6, 1996 as overage.

New York City Department of Environmental Protection

Bureau of Water and Energy Conservation BWEC File:C:\WPDOCS\REBATE\dec2696F.WPD

CENTRALIZED RESPONSIBILITY FOR ISSUING WATER/SEWER BILLS

The primary goals of this task were completed in mid-1995. The new "Customer Information System" (CIS) is operating citywide, new format water / sewer bills are being issued and batch processing and phone customer service functions are now all performed from DEP's Lefrak facility. This concludes the majority of the effort toward "centralized responsibility for issuing water/sewer bills."

QUARTERLY WATER / SEWER BILLING

The Bureau of Customer and Conservation Services is reading its meters on a quarterly cycle. The data for "Attempted Meter Reads," includes Con Edison. An explanation of the October, November, and December data is discussed below. The number of attempted meter readings and meter bills issued during this twelve-month period are as follows:

Attempted Meter Reads and Meter Bills Issued: January 2001 - December 2001

Month	Attempted Meter Reads	Meter Bills
January	247,560	213,297
February	271,510	232,424
March	240,762	234,919
April	251,703	225,560
May	279,379	243,151
June	238,245	236,863
July	254,030	218,113
August	280,726	254,217
September	244,456	241,117
October	255,571	219,247
November	274,733	250,548
December	239,655	195,247

Please note that the October data for "Attempted Meter Reads," includes all Boroughs, in

addition to Con Edison data from the Boroughs of the Bronx and Staten Island. The November data for "Attempted Meter Reads," includes all Boroughs, in addition to Con Edison data from the Boroughs of Manhattan, the Bronx and Staten Island. The December data for "Attempted Meter Reads," includes all Boroughs, in addition to Con Edison data from the Boroughs of Manhattan, the Bronx, Queens and Staten Island.

COMMERCIAL/INDUSTRIAL AND MULTIFAMILY WATER USE SURVEYS

During the period from July 1, 2001 through September 30, 2001, DEP's contractor for the program, Honeywell DMC Services, Inc. (HDMC) surveyed 2,936 private home dwelling units, 8,830 multi-family dwelling units, and 297 small commercial properties. HDMC mailed out 2,388 private home water conservation kits, and 311 water conservation kits to tenants residing in multi-family buildings. During this quarterly period, it is estimated that the annual prorated water savings in gallons is equal to 350,882,165 which translates into monetary savings of \$1,652,150.60.

During the period from October 1, 2001 through December 31, 2001, Honeywell DMC Services surveyed 1,798 private home dwelling units, 3,844 multi-family dwelling units, and 82 small commercial properties. During this quarterly period, it is estimated that the total savings (prorated annually) is 191,234,815 gallons at a cost of \$900,574,88.

A total of 4,734 private home dwelling units, 12,674 multi-family dwelling units, and 379 small commercial properties were surveyed during this semi-annual period.

The Leak Survey Status Reports covering the quarterly periods July 2001-September 2001, and October 2001-December 31, 2001 are provided in Appendix E.

As previously noted, DEP's response to DEC's letter dated December 19, 2001 concerning the cumulative totals for home kits covering the period 2/1/2000-3/3/2001 is provided in Attachment II.

MANAGEMENT ALTERNATIVE TRAINING PROGRAM FOR BUILDING MANAGERS

The Department of Housing Preservation and Development held water Conservation Seminars during this Semi-Annual period. The list for the seminars held from July 28, 2001-December 2001 is provided in Appendix G. Please note that DEP has requested HPD to provide a more comprehensive report, or use the original format in preparing future reports.

As previously noted, DEP's response to DEC's letter dated December 18, 2001 concerning the missing attendance lists for the October 3, November 13, and the December 14, 2001 water conservation seminars is provided in Attachment II.

HYDRANT LOCKING DEVICES

The New York City Fire Department continues to conduct inspections of all hydrants City-wide every six (6) months. Illegally opened hydrants are reported to NYCDEP's 24-Hour Help Center. Defective hydrants are repaired by DEP.

LEAK DETECTION

The complete report of leak detection work in the Wards Island drainage area for the period July 1, 2001 through December 31, 2001 is included in Modified Appendix A-1. Leak Detection summary of completed work is shown by drainage area and survey module. Water savings in the Wards Island drainage area for the six-month period is over 1.6 GPD.

HOUSING AUTHORITY RETROFIT

The New York City Housing Authority's update of the progress made on the existing Retrofit Program properties through December 31, 2001 is being finalized. Shibu Mammen, Executive Assistant to the Deputy General, and Manager of Capital Projects, will submit the update by March 22, 2001.

ACCELERATED WATER METERING

DEP has made progress in meeting this goal; more than 4,050 water meters have been installed in large buildings in the drainage area by DEP meter installation contractors since this order was modified. This number is in addition to the 2,641 water meters that had been installed in large buildings by DEP meter installation contractors in this drainage area at the time this order was modified. Therefore, more than 6,691 new meters have been installed in the Wards Island area by meter installation contractors. This total does not include meters installed during renovations under Local Law 53/1985 or under the Water Board's Reimbursable Metering Program (formerly known as the Window of Opportunity Program). These installations add at least 1,970 additional meters/buildings to the total, based on RMP installations alone. The most recent meter installation contracts bid cover several community boards each, so maintaining an exact count of installations in Wards Island is not as practical as in the past. As of January 2002, there were approximately 65,000 unmetered water/sewer accounts citywide, 86,000 fewer than in July 1999. Of the unmetered properties, approximately 23,000 are surcharged for failing to install a meter while approximately 25,000 of the remainder are considered to be "in process" of being metered since they have submitted requests for DEP contractor installations. The remainder are vacant/unmeterable, duplicate accounts on a lot, exempt or otherwise not included. 93% of all water/sewer accounts are metered.

Final completion has been slowed by customers who refuse to have meters installed, and to some extent by contractual problems. These problems were not considered by either DEP or DEC at the time the Order was negotiated, yet they have caused delays in the substantial completion of meter installations.

These problems, and DEP's responses, include the following:

Small Residential Properties

The first round of all small meter installation contracts was complete for all neighborhoods in the City by 1998. Completed installations during this "first round" total approximately 82% of all possible installations. Some properties are "unmeterable" for physical reasons at the present time, so the completion rate of "meterable" properties is closer to 90%. Of the remaining properties, 5-10% probably require the installation of pit meters. These installations were left until now so that DEP could issue specialized contracts for that work in each borough. The outdoor pit meter contractors began work in the Bronx and Brooklyn in late Spring 1998 and in Queens and Staten Island during late Summer 1998. 2,106 pit meters have been installed in those four boroughs through July 31, 2001. Indoor small meter contracts began work during the last quarter of 1998. 57,000 meters were installed through December 31, 2001 and work continues at a rate of approximately 500 per month.

Over the last few years DEP has been monitoring pilot installations of "single-jet" type water meters, technology in common use in Europe. The single-jet technology has two advantages over displacement, turbine and compound meter technologies: 1) smaller size, which allows meters to fit in more confined locations, and 2) fewer parts, which suggest less of maintenance burden than compound meters. DEP has begun installing single-jet meters as a substitute for compound meters in some locations as of Fall 2000 and has been using them as a substitute for displacement meters in some confined locations where displacement meters cannot fit. In these cases an outdoor pit installation would otherwise have been the only viable alternative, at greater cost to DEP and inconvenience to the customer. Waiting for the delivery for single-jet meters resulted in a delay of at least several hundred and perhaps several thousand small meters in late 2000 which were installed during the first half of 2001.

Large Residential Properties

Large meter installations have been a different story. Among the large meter contracts that are substantially complete, the average completion rate is only 50%, reflecting primarily a lack of cooperation from multifamily building owners. Although perhaps 5% of the total large properties are "unmeterable" for physical reasons, and a somewhat larger number may be delayed by the need for specialized large meter installations in outdoor vaults, the primary barrier has been non-cooperation among multifamily residential property owners. The "first round" of large

meter installation contracts is complete in all community boards with the exception of a half dozen in Brooklyn and Queens, which have relatively few large residential properties. They were bid in mid-1999, and work began during the first quarter of 2000. "Second round" large meter contracts for the Bronx, Staten Island and Manhattan also began work in late 2000. In addition to approximately 61,000 meters installed in multifamily buildings by DEP contractors, another 13,150 have been installed by the private plumbers throughout the city under the Reimbursable Metering Program.

Meter Refusal Surcharge

DEP mailed warning notices to property owners about the meter refusal surcharge during October/November 1999 and a second mailing was issued in March 2000 to properties which did not respond to the first mailing. Meetings with multifamily housing organizations and managers were held during August-October 1999 and a mailing was sent to major real estate managing agents in September. The surcharge warning notices led to record numbers of phone calls to DEP's Call Centers and submission of meter installation requests by more than 75,000 properties. On July 1 approximately 43,000 surcharge bills were issued to unmetered properties which had not submitted requests for meter installations. The number of surcharged properties has since been reduced to approximately 23,000 due to meter installations and cancellation of surcharges for administrative reasons, particularly issues of defective notification of owners.

DEP conducted negotiations to meter New York Housing Authority ("NYCHA") buildings during Summer/Fall 1999. The agreement was finalized during February 2000. Under this agreement NYCHA will meter its own buildings at its own cost over the next three years and will cooperate with DEP on a host of water efficiency programs while being provided several years of "flat-rate" transitional billing. Work on NYCHA's Staten Island properties has begun and the contract for the Queens properties has been awarded. Contracts for the properties in the Bronx were bid during Summer 2001. Commencement of work has been delayed by the relocation of most of NYCHA's central staff after September 11, 2001 from offices at 250 Broadway and 75 Park Place.

Unmemorable Properties

Part of the shortfall among both large and small meter installations is associated with the discovery of properties which are unoccupied, sealed, abandoned or otherwise not consuming water and therefore, unmeterable. This number is estimated at 5,000 - 7,000 Citywide. 1-2% of properties have been found with plumbing systems in a state of imminent failure, preventing meter installation until repairs have been effected. Owners with properties in a state of "imminent failure" are being informed as part of the surcharge process that DEP will provide them an additional three months time to complete repairs and install their meter through the Reimbursable Metering Program. In the case of vacant buildings, DEP recommends a solution

of requiring metering (and any associated service line repairs) when the property is sold or transferred or when a renovation occurs (Local Law 53/1985). DEP does not install meters in vacant buildings.

Contracting Issues.

The initial small meter contracts met with the default of a major contractor, setting the installation schedule back by more than a year and committing limited DEP to spend additional time resolving problems left incomplete by the original contractor. This work, which was only finally resolved in 1999, occupied significant staff time without resulting in a net increase in meters installed.

The bidding of contracts for a final round of small meter installations, and small pit meter installations was twice delayed by legal challenges from licensed plumber organizations and/or unsuccessful bidders. These are factors, which have been beyond DEP's control and required the rebidding of these contracts, for a delay of almost two years (1996-1998).

There are currently no significant contracting problems.

INTERIM PLANT EXPANSION

This report includes a construction schedule progress analysis for the construction contracts, and the completion date for obtaining Milestone No. 9, "Obtain Beneficial Use of Increased Capacity."

Overall Wards Island Project Status

Milestone No. 9, to Obtain Beneficial Use of Increased Capacity at the Wards Island Plant was achieved on August 27, 1997. The Interim Plant Expansion Facilities are currently in operation under the supervision of the Bureau of Wastewater Pollution Control.

Modified Order on Consent

The New York City Law Department, in a letter dated June 19, 1997 to NYSDEC, formally requested a modification of Milestone No. 9 to extend the June 23, 1997 milestone date to August 29, 1997. The NYCDEP, in a letter dated September 9, 1999, confirmed that the subject milestone was met on August 27, 1997, the modified milestone date. There has been no acknowledgment by DEC that DEP has met the above referenced, August 29, 1997, modified milestone date.

Construction Schedule Progress and CPM Analysis

The main issue which is presently being pursued in an effort to complete all construction and close out of this phase, is resolution of Fire Department deficiencies listed against the New Return Sludge Pump Station and the New Fuel Oil Storage Facility.

Conclusion

All nine Consent Decree Milestone dates have been achieved. The overall construction work at Wards Island is approximately 99% complete. The remaining work to complete the New Fuel Oil Storage Facility which is not part of the Consent Order, is now projected to be completed by June 30, 2002.

Please refer to the attached Attachment No. 1 (Master Summary Schedule).

HAZEN AND SAWYER, PC
CONSTRUCTION MANAGEMENT SERVICES
WP-103 WARDS ISLAND INTERIM PLANT EXPANSION
CONTRACTS WI-76G, E, H & P

MILESTONE SUMMARY

AS OF 1/2002

CONTRACT MILESTONES	Contract Milestone Dates		Extended Consent Order Date	Current Anticipated Dates	
	76G, E & P	76H		Last Period	This Period
Notice To Proceed	02/01/95	08/15/95	N/A	N/A	
M1 Complete Temporary Fuel Oil Facility	04/01/95	10/13/95	N/A	Complete (2/16/96)	
M2 Demo Existing Fuel Oil Tanks	05/01/95	11/12/95	N/A	Complete (5/18/95)	
M3 Complete Aeration Tank to El. +/-2.0	10/28/95	05/10/96	N/A	Complete (1/20/96)	
M4 Complete Gallery, Final Settling Tank, Return Sludge Pump Station to El. 17.5	01/16/96	07/29/96	N/A	Complete (8/20/96)	
M5 Complete New Fuel Oil Storage Facilities	07/24/96	02/04/97	N/A	12/31/01	6/30/02
M6 Complete Gallery	11/11/96	05/25/97	N/A	Complete (5/29/97)	
M7 Complete Aeration Tank	12/14/96	06/27/97	N/A	Complete (6/18/97)	
M8 Complete Final Settling Tanks	12/14/96	06/27/97	N/A	Complete (5/29/97)	
M9 Complete Return Sludge Pump Station	12/14/96	06/27/97	N/A	Complete (7/31/97)	
M10 Obtain Beneficial Use of New Facilities	01/16/97	07/30/97	06/23/97	Complete (8/27/97)	
M11 Complete Tie-in to Exist. Secondary System	03/17/97	09/28/97	N/A	Complete (8/27/97)	
M12 Complete Sitework and Landscaping	06/19/97	12/31/97	N/A	Complete (10/21/99)	
Project Complete	06/29/97	01/10/98	N/A	12/30/01	6/30/02