

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development
and Implementation of a Former
Manufactured Gas Plant Site
Investigation and Remedial
Response Program for four Sites by
KeySpan Gas East Corporation,
d/b/a Brooklyn Union of Long Island

ORDER ON CONSENT
Index #D1-0001-98-11

DEFINITIONS

For purposes of this Order,

- A. "Commissioner" means the Commissioner of Environmental Conservation of the State of New York.
- B. "Contemplated Use" for each of the Sites addressed by this Order means commercial, light industrial or public utility use.
- C. "Department" means the New York State Department of Environmental Conservation.
- D. "ECL" means the Environmental Conservation Law of the State of New York.
- E. "Hazardous materials" means hazardous wastes; hazardous substances as that term is defined in 42 U.S.C. 9601(14) that are in violation of law or that exceed State environmental quality standards (as, those set forth in 6 NYCRR Part 703); MGP Residuals; and petroleum-based substances.
- F. "Hazardous waste" means hazardous waste as ECL 27-1301 defines that term.
- G. "Investigation Work Plan": the Department-approved Investigation Work Plan pertaining to a Site that Respondent shall implement as may be modified under the terms of this Order and is an enforceable part of this Order. The Investigation Work Plans for the following Sites are identified as follows:
 - 1. that for the Bay Shore Site, Exhibit "A-1";
 - 2. that for the Hempstead Site, Exhibit "A-2";
 - 3. that for the Glen Cove Site, Exhibit "A-3"; and
 - 4. that for the Halesite Site, Exhibit "A-4."
- H. "IRM" means an Interim Remedial Measure, which is a discrete set of activities to address both emergency and non-emergency Site conditions, which can be undertaken without

extensive investigation and evaluation, to prevent, mitigate, or remedy environmental damage or the consequences of environmental damage attributable to the Site.

I. "LILCO" means the Long Island Lighting Company.

J. "MGP" means manufactured gas plant.

K. "MGP Residuals" means coal/coke ash, coal tar, purifier waste, or petroleum-based residues and other substances associated with MGP operations, including hazardous wastes as ECL 27-1301 defines that term, that MGP facilities formerly operating on the Site generated.

L. "Professional engineer": an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.

M. "Remediation Work Plan": the Department-approved Remediation Work Plan pertaining to a Site that Respondent shall develop and implement, as may be modified, under the provisions of this Order and is an enforceable part of this Order. The final Remediation Work Plans for the following Sites will be identified as follows:

1. that for the Bay Shore Site, Exhibit "B-1";
2. that for the Hempstead Site, Exhibit "B-2";
3. that for the Glen Cove Site, Exhibit "B-3"; and
4. that for the Halesite Site, Exhibit "B-4."

N. "Reports" means the following evaluation and assessment reports that LILCO submitted to the Department on the Sites:

Date of Report	Title
<u>for Bay Shore:</u>	
March 1993	"Field Investigation Report", Bay Shore Manufactured Gas Plant, Malcolm Pirnie, Inc.
December 1993	"Feasibility Analysis Report", Bay Shore Manufactured Gas Plant, Malcolm Pirnie, Inc.
December 1993	"Baseline Risk Assessment Report", Bay Shore Manufactured Gas Plant, Malcolm Pirnie, Inc.
<u>for Glen Cove:</u>	

April 1997 "Phase I Site Investigation Report for the Glen Cove Former Manufactured Gas Plant", Atlantic Environmental Division, GEI Consultants, Inc.

for Hempstead:

July 1992 "Baseline Risk Assessment Report" Hempstead Gas Plant, Roy F. Weston, Inc.

October 1992 "Field Investigation Report", Hempstead Gas Plant, Roy F. Weston, Inc.

November 1993 "Remedial Alternatives and Feasibility Analysis Report", Hempstead Gas Plant, Roy F. Weston, Inc.

for Halesite:

August 1997 "Phase I Site Investigation Report," Halesite Manufactured Gas Plant, Fluor Daniel GTI, Inc.

O. "Respondent" means KeySpan Gas East Corporation, a business corporation organized under the laws of the State of New York. Respondent is the business entity formed from the merger of LILCO and the Brooklyn Union Gas Company.

P. "Sites" means the following four properties:

1. "Bay Shore" being six contiguous parcels, the first of which is located on the west side of Fifth Avenue and the east side of Clinton Avenue, having as its tax map identifier District 0500, Section 392, Block 1, Lot 30; the second of which is located on the east side of Clinton Avenue and south of a Long Island RR right-of-way, having as its tax map identifier District 0500, Section 392, Block 1, Lot 31; the third of which is located on the west side of Clinton Avenue and south of a Long Island Railroad right-of-way, having as its tax map identifier District 500, Section 392, Block 1, Lot 22.1; the fourth of which is located on the south side of Orinoco Drive and the east side of East Court, having as its tax map identifier District 0501, Section 6, Block 1, Lot 51; and the fifth and sixth of which are located on the east side of Clinton Avenue and on the south side of Orinoco Drive, having as its tax map identifier District 500, Section 392, Block 1 and Lots 24 and 26, all of which are located in Bay Shore, Town of Islip, Suffolk County.

2. "Hempstead" being three contiguous parcels, which are located on the south side of Second Street, the east side of Cedar Valley Avenue (no road) and the west side of a Long Island Railroad right-of-way, having as its tax map identifier Section 34, Block 174, Lots 1, 209-A and 209-B in the Town of Hempstead, Nassau County.

3. "Glen Cove", which is located on the east side of the Glen Cove arterial highway and the nearest cross street being the corner of Grove and Stanco Streets; having as its tax map

identifier Section 21, Block H, Lots 302 and 311 in Glen Cove, Town of Oyster Bay, Nassau County.

4. "Halesite", which is located on the east side of New York Avenue (Harbor Road), having as its tax map identifier District 0400, Section 31, Block 2, Lot 21 in Halesite, Town of Huntington, Suffolk County.

Collectively, these properties are referred to in this Order as the "Sites"; individually, each is referred to as a "Site."

WHEREAS,

1. The Department is responsible for enforcement of the Environmental Conservation Law, which, *inter alia*, requires the Department to carry out the environmental policy of the State set forth in ECL 1-0101. ECL 3-0301.1.

2. A. By operation of merger, Respondent has come to own the Bay Shore and Hempstead Sites. On May 28, 1998, the Long Island Power Authority obtained ownership of Glen Cove and Halesite. Notwithstanding the property transfer, Respondent agrees to include performance of work at these Sites as a part of its responsibilities under the terms of this Order, subject to access limitations that may be imposed by the Long Island Power Authority.

B. None of the Sites has active MGP facilities on them but some or all of those facilities generated, *inter alia*, MGP Residuals. Other hazardous materials also may have been disposed at each of the Sites, resulting from each Site's use after MGP operations ceased.

3. A. The Department's general authority over abatement and remediation of, *inter alia*, hazardous materials is derived from statutory provisions, including, but not limited to, ECL 1-0101, 3-0301, 71-1929, 71-2703, and 71-2705 and Navigation Law, Article 12.

B. In addition, the Department has the power, *inter alia*, to provide for the prevention and abatement of water, land, and air pollution.

C. Furthermore, the Department has the authority to require abatement and remediation of significant threats to human health or the environment caused by threatened releases of hazardous wastes.

1. Pursuant to ECL 27-1313.3.a, whenever the Commissioner "finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department, at such site, and (ii) to implement such program within reasonable time limits specified in the order."

2. Any person under order pursuant to ECL 27-1313.3.a has a duty imposed by ECL Article 27, Title 13 to carry out the remedial program committed to under order. ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative and/or criminal sanctions.

4. Respondent, desirous of implementing program acceptable to the Department to investigate the nature and extent of hazardous material contamination on each of the Sites and to remediate of them to an extent acceptable to the Department, consents to the terms and conditions of this Order.

5. The Department and Respondent agree that the goals of this Order are for Respondent to, with respect to each of the Sites,

A. implement the Investigation Work Plan and, if necessary, develop and implement a Department-approved Remediation Work Plan for the Site and

B. reimburse the State's administrative costs as provided in this Order.

6. Respondent agrees to be bound by the terms of this Order. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Performance and Reporting of the Investigation Work Plan for a Site and Development and Implementation of the Remediation Work Plan for that Site. if Necessary: and IRMs

A. Respondent shall commence implementation of the Investigation Work Plan for a Site and implement it in accordance with the terms of that Site's Investigation Work Plan, which requires Respondent to complete the Investigation of one of Respondent's Sites approximately every three months. The Department and Respondent agree that the Respondent shall first complete the investigations at the Rockaway Park and Sag Harbor Sites under Department Order Index No. D1-0002-98-11 before commencing investigations under this Order.

B. Respondent shall notify the Department of any significant difficulties that may be encountered in implementing that Investigation Work Plan or any Department-approved modification to it and shall not modify any obligation unless first approved by the Department.

C. In accordance with the schedule contained in that Investigation Work Plan, Respondent shall submit to the Department a separate final investigation report for each of the Sites. The final investigation report for each of the Sites shall:

1. include all data generated and all other information obtained during the investigation and in the Site's Reports;

2. provide all of the assessments and evaluations identified in that Investigation Work Plan;

3. identify any additional data that must be collected; and

4. include a certification by the individual or firm with primary responsibility for the day to day performance of the investigation that all activities that comprised the investigation were performed in full accordance with that Investigation Work Plan.

D. 1. After its acceptance of a Site's final investigative report submitted under Subparagraph I.C of this Order, the Department shall determine whether it has sufficient information respecting the nature and extent of the contamination on, and from, that Site.

i. If the Department determines that it does not have sufficient information respecting the nature and extent of such contamination, it will so notify Respondent in writing. Respondent shall collect such additional data under a Department-approved revision to that Site's Investigation Work Plan and made a part of this Order, being identified as follows:

1. that for the Bay Shore Site, Exhibit "A-1a";
2. that for the Hempstead Site, Exhibit "A-2a";
3. that for the Glen Cove Site, Exhibit "A-3a"; and
4. that for the Halesite Site, Exhibit "A-4a."

ii. If the Department determines that it has sufficient information respecting the nature and extent of that Site's contamination, it will so inform Respondent in writing, explaining the basis for its determination, and the Department will inform it in that communication whether the Department has determined that the hazardous materials disposed at that Site constitute a significant threat to the environment or public health and whether they are reasonably foreseeable to constitute a significant threat to the environment or public health and whether remediation of that Site's contamination is needed to allow that Site to be used for its Contemplated Use. In making its "significant threat" determination, the Department shall be guided by the provisions of 6 NYCRR 375-1.4.

2. If the Department determines that the hazardous materials disposed at the Site do not constitute a significant threat to the environment or public health and are not reasonably foreseeable to constitute a significant threat to the environment or public health and that no remediation is needed to allow the Site to be used for its Contemplated Use, it shall so state in writing; and Respondent's obligations under this Order with respect to that Site shall be satisfied and, except with respect to Paragraphs VI, VIII and IX, shall terminate effective the date the Department notifies Respondent in writing of its determination.

3. If the Department determines that the hazardous materials disposed at the Site constitute a significant threat to the environment or public health or could reasonably foreseeably constitute a significant threat to the environment or public health or that remediation is needed to allow the Site to be used for its Contemplated Use, it shall so state in writing. Respondent shall propose a remedial plan that the Department shall evaluate using the factors set forth in 6 NYCRR 375-1.10(c); and the Department shall select an appropriate remedial response for the Site in consultation with Respondent that eliminates or mitigates all significant threats to the environment or public health that those hazardous materials constitute and that allows the Contemplated Use to proceed safely, and Respondent shall prepare and submit to the Department for its approval a proposed Remediation Work Plan for that Site. Respondent agrees that the proposed Remediation Work Plan shall provide, *inter alia*, that if during that Remediation Work Plan's implementation, contamination is discovered that was not discussed in the final investigative report, Respondent shall investigate the nature and extent of such newly discovered contamination, and the Remediation Work Plan will be revised to have Respondent remediate such newly discovered contamination in the event that this remediation is needed to eliminate a significant threat to the environment or public health; or to foreclose the reasonable foreseeability that the hazardous materials could constitute a significant threat to the environment or public health; or to allow the Contemplated Use to proceed. That Proposed Remediation Work Plan shall then be noticed for public comment in accordance with Subparagraph I.D.5 of this Order.

4. The Department's selection of a remedial response for a Site or its disapproval of a proposed Remediation Work Plan for a Site shall be subject to the dispute resolution provisions of Paragraph XI if Respondent files a Statement of Position within 45 days after the Department's selection of a remedial response or disapproval of a proposed Remediation Work Plan is communicated to Respondent.

5. The Department will publish a notice in the Environmental Notice Bulletin to inform the public of the public's opportunity to submit to the Department by no later than 30 days after the date of the issue of the Environmental Notice Bulletin in which the notice shall appear, comments on the proposed Remediation Work Plan and shall mail an equivalent notice to:

- in the case of the Bay Shore Site, the Town of Islip and Suffolk County.
- in the case of the Hempstead Site, the Town of Hempstead and Nassau County.
- in the case of the Glen Cove, the Town of Oyster Bay and Nassau County.
- in the case of Halesite, the Town of Huntington and Suffolk County.

If, as a result of its review of the comments received, the Department determines that the Site's proposed Remediation Work Plan to implement the Department-approved remedial activities for the Site must be revised:

i. due to environmental conditions related to the Site that were unknown to the Department at the time of its approval of the proposed Remediation Work Plan; or

ii. due to information received, in whole or in part, after the Department's approval of the proposed Remediation Work Plan, which indicates that the activities carried out in accordance with it will not eliminate all significant threats to the environment or public health that the hazardous materials constitute or reasonably foreseeably could constitute, or that are not sufficiently protective of human health and the environment for the Contemplated Use,

then the Department will so notify Respondent, which will revise the proposed Remediation Work Plan accordingly. If the Department agrees to Respondent's revisions to the proposed Remediation Work Plan, the revised proposed Remediation Work Plan shall become the final Remediation Work Plan that shall be attached to this Order and become an enforceable part of it. If the Department does not make such a determination, the proposed Remediation Work Plan shall become the final Remediation Work Plan that shall be attached to this Order and become an enforceable part of it.

5. Respondent shall commence implementation of, and implement, the Site's final Remediation Work Plan in accordance with its terms. If that final Remediation Work Plan requires the development and implementation of a remedial design to implement the Department's remedial objectives for the Site, Respondent shall submit to the Department for its review and approval such remedial design. The remedial design shall be prepared by and have the signature and seal of a professional engineer who shall certify that it was prepared in accordance with this Order; and shall include the following:

a. A detailed description of the remedial objectives and the means by which each element of the selected remedial alternative will be implemented to achieve those objectives, including, but not limited to:

- i. the construction and operation of any structures;
- ii. the collection, destruction, treatment, and/or disposal of hazardous materials and their constituents and degradation products, and of any soil or other materials contaminated thereby;
- iii. the collection, destruction, treatment, and/or disposal of contaminated groundwater, leachate, and air;
- iv. physical security and posting of the Site;

v. quality control and quality assurance procedures and protocols to be applied during the remedial design's construction; and

vi. monitoring which integrates needs which are present on-Site and off-Site during the remedial design's construction.

b. "Biddable Quality" documents for the remedial design including, but not limited to, documents and specifications prepared, signed, and sealed by a professional engineer. These plans shall satisfy all applicable local, state and federal laws, rules and regulations;

c. A time schedule to implement the remedial design;

d. The parameters, conditions, procedures, and protocols to determine the effectiveness of the remedial design, including a schedule for periodic sampling of groundwater monitoring wells on-Site and off-Site;

e. A description of operation, maintenance, and monitoring activities to be undertaken after the Department has approved construction of the remedial design, including the number of years during which such activities will be performed (where appropriate) a specific description of the criteria to be used to decide when an operation of the remedy may be discontinued.

f. A contingency plan to be implemented if any element of the remedial design fails to achieve any of its objectives or otherwise fails to protect human health or the environment;

g. A health and safety plan for the protection of persons at and in the vicinity of the Site during construction and after completion of construction. This plan shall be prepared in accordance with 29 CFR 1910 by a certified health and safety professional; and

h. A citizen participation plan which incorporates appropriate activities outlined in the Department's publication, "Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook," dated June 1998, and any subsequent revisions thereto. Any document repositories that may be created as part of a required citizen participation plan pertaining to a Site will contain documents only for such Site.

E. 1. In accordance with the schedule contained in the Site's final Remediation Work Plan, as may be modified, Respondent shall submit to the Department a final engineering report that shall include "as-built" drawings showing all changes made during construction, to the extent necessary; and a certification that all activities were completed in full accordance with the final Remediation Work Plan, any Department-approved modification to the final Remediation Work Plan, any Department-approved detail, document, or specification prepared by or on behalf of Respondent pursuant thereto, and this Order.

2. Respondent shall submit to the Department a detailed post-remedial operations and maintenance plan ("O&M Plan"), to the extent necessary, by the completion of the construction activities identified in the Department-approved remedial design.

3. A professional engineer must prepare, sign, and seal the O&M Plan, "as built" drawings, final engineering report, and certification.

F. Should post-remedial operation and maintenance prove to be necessary, upon the Department's approval of the O&M Plan, Respondent shall implement the O&M Plan in accordance with the schedule and requirements of the Department-approved O&M Plan.

G. Within 60 days after receipt of the final engineering report, the Department shall notify Respondent in writing whether the Department is satisfied that the Site's Remediation Work Plan was satisfactorily implemented, which determination shall not be unreasonably withheld.

H. During implementation of all activities conducted on the Site under either the Investigation Work Plan or the Remediation Work Plan, Respondent shall

1. have on-site a full-time representative who is qualified to supervise the activities undertaken; and

2. notify the Department of any significant difficulties that may be encountered in implementing the Investigative Work Plan, the Remediation Work Plan, any Department-approved modification to either of them, or any Department-approved detailed document or specification prepared by or on behalf of Respondent pursuant to either, and shall not modify any obligation unless first approved by the Department, which approval shall not be unreasonably withheld.

I. Respondent may propose one or more IRMs for any of the Sites. In proposing each IRM, Respondent shall submit to the Department a work plan that includes a chronological description of the anticipated IRM activities together with a schedule for performance of those activities (an "IRM Work Plan" for that Site). Upon the Department's determination that the proposal is an appropriate IRM and upon the Department's approval of such work plan, the IRM Work Plan shall be incorporated into and become an enforceable part of this Order; and Respondent shall submit to the Department for its review and (as appropriate) approval, in accordance with the schedule contained in the Department-approved IRM Work Plan, detailed documents and specifications prepared, signed, and sealed by a professional engineer to implement the Department-approved IRM. Such documents shall include a health and safety plan prepared by a certified health and safety professional in accordance with 29 CFR 1910, contingency plan, and (if the Department requires such) a citizen participation plan that incorporates appropriate activities outlined in the Department's publication, "Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook," dated June 1998,

and any subsequent revisions. Respondent shall then carry out such IRM in accordance with the requirements of the approved IRM Work Plan, detailed documents and specifications, and this Order. Respondent shall notify the Department of any significant difficulties that may be encountered in implementing the Department-approved work plan, detailed documents, or specifications and shall not modify any obligation unless first approved by the Department. During implementation of all construction activities identified in the Department-approved IRM Work Plan, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.

1. If the performance of the Department-approved IRM encompassed construction activities, Respondent shall submit to the Department a detailed post-construction operations and maintenance plan ("IRM O&M Plan") to the extent necessary, by the completion of the construction activities identified in the Department-approved IRM Work Plan.

2. Within the schedule contained in the Department-approved IRM Work Plan, Respondent shall submit to the Department a final engineering report prepared by a professional engineer that includes a certification by that individual that all activities that comprised the Department-approved IRM were completed in accordance with the Department-approved IRM Work Plan and this Order.

3. If the performance of the Department-approved IRM encompassed construction activities, the final engineering report also shall include "as-built" drawings and a final engineering report (each including all changes made to the Remedial Design during construction); and a certification by a professional engineer that the IRM was implemented and all construction activities were completed in accordance with the Department-approved detailed documents and specifications for the IRM and all such activities were personally witnessed by him or her or by a person under his or her direct supervision. The IRM O&M Plan, "as built" drawings, final engineering report, and certification must be prepared, signed, and sealed by a professional engineer.

4. Upon the Department's approval of the IRM O&M Plan, Respondent shall implement the IRM O&M Plan in accordance with the requirements of the Department-approved IRM O&M Plan.

After receipt of the final engineering report and certification, the Department shall notify Respondent in writing whether the Department is satisfied that the IRM was completed in compliance with the Department-approved IRM Work Plan and design.

II. Progress Reports and Job Meetings

A. Respondent shall submit to the parties identified in Subparagraph X.A.1 in the numbers specified therein copies of written monthly progress reports that:

1. describe the actions which have been taken toward achieving compliance with this Order;

2. include all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents in the previous month, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent;

3. identify all reports and other deliverables required by this Order that were completed and submitted during the previous month;

4. describe all actions, including, but not limited to, data collection and implementation of the Investigation Work Plan or the Remediation Work Plan, that are scheduled for the next month and provide other information relating to the progress at the Site or Sites to which the report pertains;

5. include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of Respondent's obligations under the Order, and efforts made to mitigate those delays or anticipated delays; and

6. include any modifications to the Investigation Work Plan or the Remediation Work Plan that Respondent has proposed to the Department and any that the Department has approved.

B. Respondent shall submit these progress reports to the Department by the tenth day of every month following the effective date of this Order; and Respondent's obligation to submit the progress reports pertaining to a Site shall terminate upon its receipt of the written satisfaction notification identified in Subparagraph I.G of this Order approving Respondent's final engineering report concerning that Site's Remediation Work Plan's implementation. However, Respondent shall continue to submit reports pertaining to that Site concerning the implementation of any O&M Plan that may be required under this Order for that Site, in accordance with that Plan's requirements.

C. Respondent also shall allow the Department to attend, and shall provide the Department at least five days advance notice of, any of the following: prebid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

III. Review of Submittals

A. 1. The Department shall review each of the submittals Respondent makes pursuant to this Order to determine whether it was prepared, and whether the work done to

generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondent in writing of its approval or disapproval of the submittal. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. i. If the Department disapproves a submittal, it shall so notify Respondent in writing and shall specify the reasons for its disapproval and may request Respondent to modify or expand the submittal. Within such period as the Department may identify in its notification that Respondent's submittal has been disapproved, Respondent shall make a revised submittal to the Department which endeavors to address and resolve all of the Department's stated reasons for disapproving the first submittal.

ii. If the Department disapproves the revised submittal, Respondent may dispute such disapproval under the provisions of Paragraph XI if Respondent files a Statement of Position within 45 days of the Department's disapproval. If the Department approves the revised submittal, it shall be incorporated into and become an enforceable part of this Order.

B. Within 30 days after the Department's approval of the final engineering report, Respondent shall submit to the Department one microfilm copy (16 millimeter roll film M type cartridge) of that report and all other Department-approved drawings and submittals. Such submission shall be made to:

Director, Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

IV. Enforcement

A. Respondent's failure to comply with any term of this Order constitutes a violation of this Order and the ECL. Nothing in this Order precludes Respondent from contesting in a Department hearing any possible future Department allegations that Respondent failed to comply with this Order or from contesting any penalty for an alleged failure to comply.

B. Respondent shall not suffer any penalty under this Order or be subject to any proceeding or action if it cannot comply with any requirement hereof because of war, riot, or an unforeseeable event which the exercise of ordinary human prudence could not have prevented. Respondent shall, within five days of when it obtains knowledge of any such condition, notify the Department in writing. Respondent shall include in such notice the measures taken and to be taken by Respondent to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such five-day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall have

the burden of proving that an event is a defense to compliance with this Order pursuant to this Subparagraph IV.B.

V. Entry upon Site

Subject to conditions which may be prescribed in a Site's health and safety plan, Respondent hereby consents to the entry upon each of the Sites or areas in the vicinity of each Site which may be under the control of Respondent by any duly designated employee, consultant, contractor, or agent of the Department or any State agency having jurisdiction with respect to the matters addressed in the Work Plan for purposes of inspection, sampling, and testing and to ensure Respondent's compliance with this Order. Upon request, Respondent shall provide the Department with suitable office space at any of the Sites, including access to a telephone.

VI. Payment of State Costs

The Department shall establish an interest-bearing account into which the Department shall place all monies received from Respondent under the provisions of this Paragraph VI in order to pay for the State's expenses (including, but not limited to, direct labor and fringe benefits, overhead, travel, analytical costs, and contractor costs) incurred by the State of New York, to fund work associated with the Site to the effective date of this Order, reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with administering the requirements of this Order. Respondent shall make payments to the Department as follows:

A. Within 30 days after the effective date of this Order, Respondent shall submit to the Department the sum of \$160,000, which shall represent the State's estimate of the first year expenses (including, but not limited to, direct labor and fringe benefits, overhead, travel, analytical costs, and contractor costs) incurred by the State of New York to fund environmental monitors for work associated with reviewing and revising submittals made pursuant to this Order and to Department Order Index No. D1-0002-98-11 to the effective date of this Order, overseeing activities conducted pursuant to this Order and that Order, collecting and analyzing samples, and administrative costs associated with administering the requirements of this Order and that Order. Respondent shall make subsequent quarterly payments to the Department for the greater duration of this Order and of that Order in order to maintain an account balance sufficient to meet the next nine months' anticipated above-described State costs. Each quarterly billing will be based on expenditures incurred to date. The quarterly billing will take into account matters such as inflation, salary increases, accrued interest to be applied to the balance, changes in operating hours and procedures and the need for additional personnel and supervision of such personnel by full-time supervisors. Costs and expenses to be covered by this account include:

1. Direct personal service costs and fringe benefits of the State's staff assigned to work associated with the Sites to the respective effective dates of this Order and of

that Order, reviewing and revising submittals made pursuant to this Order and that Order, overseeing activities conducted pursuant to this Order and that Order, collecting and analyzing samples, and administrative costs associated with administering the requirements of this Order and that Order, including their supervisors and including the costs of replacement personnel for the persons regularly assigned to these duties;

2. Direct non-personal service costs, including but not limited to purchase of a vehicle if necessary and its full operating costs, any appropriate chemical sampling and analysis, travel, supplies, and contractual costs;

3. Indirect support or overhead costs at the annually approved indirect support cost rate; and

4. Consultant services, provided, however, that the Department shall consult with Respondent before retaining same.

B. The Department shall notify Respondent in writing when a quarterly payment is due by submitting a quarterly billing. Respondent shall make such payment in the form of a check payable to the order of the New York State Department of Environmental Conservation and shall submit such payment to the Department at the following address no later than 30 days from receipt of such billing:

New York State Department of Environmental Conservation
50 Wolf Road, Room 611
Albany, NY 12233-1510
ATTENTION: Director of Environmental Monitors

Payments are to be in advance of the period in which they will be expended.

C. Upon termination of this Order or Department Order Index No. D1-0002-98-11, whichever termination is later, and upon payment of any outstanding costs and expenses, the Department shall return the unexpended balance, including interest, to Respondent.

D. Actual personal service costs will be based on a Site-specific time and activity ("T&A") code. Non-personal service costs are prorated based upon the percentage of T&A incurred for each Site identified in this Order and in Department Order Index No. D1-0002-98-11 for that time period.

E. Actual costs incurred will be documented by quarterly T&A reports for personal service costs. Non-personal service costs will be documented by expenditure reports. Copies of actual invoices will not be provided but shall be made available for auditing purposes.

F. Respondent may dispute an invoice by informing the Department in writing within 30 days of receipt of such invoice that the amount of such invoice is unreasonable. For purposes of this Order, the sole grounds for determining that an invoice is unreasonable are that it contains clerical errors; and that all or a portion of a billing cannot be substantiated by the documentation identified in this Paragraph VI of this Order; and/or that it does not cover an activity addressed by this Order. The procedures contained in Subparagraph XI of this Order shall be used to resolve such dispute, and Respondent shall pay the amount as those procedures shall determine Respondent shall pay, within the time period they shall require.

VII. Reservation of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's rights (including, but not limited to, nor exemplified by, the right to recover natural resources damages) with respect to any party, including Respondent.

B. Nothing contained in this Order shall prejudice any rights of the Department to take any investigatory or remedial action it may deem necessary.

C. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

D. Nothing contained in this Order shall be construed to affect the Department's right to terminate this Order at any time during its implementation if Respondent fails to comply substantially with this Order's terms and conditions.

E. Except as otherwise provided in this Order, Respondent specifically reserves all defenses Respondent may have under applicable law respecting any Departmental assertion of remedial liability against Respondent; and reserves all rights Respondent may have respecting the enforcement of this Order, including the rights to notice, to be heard, to appeal, and to any other due process. The existence of this Order or Respondent's compliance with this Order shall not be construed as an admission of liability, fault, or wrongdoing by Respondent, and shall not give rise to any presumption of law or finding of fact which shall inure to the benefit of any third party.

VIII. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns; provided, however, that Respondent shall not indemnify the Department, the State of New York, and their representatives and employees in the event that

such claim, suit, action, damages, or cost relate to or arise from any unlawful, willful, grossly negligent, or malicious acts or omissions on the part of the Department, the State of New York, or their representatives and employees.

IX. Notice of Sale or Conveyance/Deed Restriction

A. Within 30 days after the effective date of this Order, with respect to the Hempstead Site and the Bay Shore Site, Respondent shall

1. file a Notice of Order, the model for which is attached to this Order as Exhibit "C," with the clerk of the county in which the Site is located to give all parties who may acquire any interest in that Site notice of this Order and
2. provide the Department with evidence of such filing.

B. If Respondent proposes to convey the whole or any part of Respondent's ownership interest in a Site, Respondent shall, not fewer than 60 days before the date of conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order. It is understood by the Department that Respondent is not the present owner of the Glen Cove and Halesite sites, and has no control over conveyances of these sites by the Long Island Power Authority.

C. Within 30 days of Respondent's receipt of the Department's notification pursuant to Subparagraph I.G of this Order approving Respondent's final engineering report concerning a Site, Respondent shall record an instrument with the clerk of the county in which that Site is located, to run with the land, that:

1. shall prohibit the Site from ever being used for purposes other than the Contemplated Use without the express written waiver of such prohibition by the Department, or if at such time the Department shall no longer exist, any New York State department, bureau, or other entity replacing the Department;
2. shall require Respondent and Respondent's successors and assigns to continue in full force and effect any and all institutional and engineering controls the Department may require be put into place and maintained; and
3. shall provide that Respondent, on behalf of itself and its successors and assigns, hereby consents to the enforcement by the Department, or if at such time the Department shall no longer exist, any New York State department, bureau, or other entity replacing the Department, of the prohibitions and restrictions that this Paragraph IX requires to be recorded, and hereby covenants not to contest such enforcement.

D. Within 30 days after Respondent's receipt of the Department's notification pursuant to Subparagraph I.G of this Order approving Respondent's final engineering report concerning a Site, Respondent shall provide the Department with a copy of such instrument certified by the clerk of the county in which the Site is located to be a true and faithful copy of the instrument as recorded in the Office of that County Clerk.

X. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

1. Communication from Respondent shall be sent to:

James Van Hoesen, P.E.
Chief, Central Field Services Section
Bureau of Construction Services
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

with copies to:

Director, Bureau of Environmental Exposure Investigation
New York State Department of Health
2 University Place
Albany, New York 12203

and to:

Mr. Raymond Cowen
Regional Director (Region 1)
New York State Department of Environmental Conservation
SUNY, Building 40
Stony Brook, NY 11790-2356

and

Charles E. Sullivan, Jr., Esq.
Director
Division of Environmental Enforcement
New York State Department of Environmental Conservation
50 Wolf Road, Room 627

Albany, New York 12233-5500

2. Communication to be made from the Department to Respondent shall be sent to:

Mr. Lawrence H. Liebs
Managing Director
KeySpan Gas East Corporation
One Metro Tech Center
Brooklyn, New York 11201

with copies to:

Steven Zelkowitz, Esq.
Deputy Counsel
KeySpan Gas East Corporation
One Metro Tech Center
Brooklyn, New York 11201

and to

Dennis P. Harkawik, Esq.
Jaekle Fleischmann & Mugel, LLP
700 Fleet Bank Building
Twelve Fountain Plaza
Buffalo, New York 14202

B. Copies of work plans and reports shall be submitted as follows:

Four copies (one unbound) to Mr. Van Hoesen

Two copies to the Director, Bureau of Environmental Exposure Investigation

One copy to Mr. Cowen.

C. 1. Within 30 days of the Department's approval of any report submitted pursuant to this Order, Respondent shall submit to Director, Division of Environmental Remediation, a computer readable magnetic media copy of the approved report in American Standard Code for Information Interchange (ASCII) format.

2. Within 30 days after the Department's approval of the RI/FS, Respondent shall submit one microfilm copy of the RI/FS to Director, Division of Environmental Remediation.

D. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

XI. Dispute Resolution

A. If after conferring in good faith for a period not to exceed 30 days, there remains a dispute between Respondent and the Department concerning a provision of this Order identified as subject to this Paragraph XI's procedures, Respondent shall be in violation of that provision unless within the time period provided in that provision Respondent shall serve on the Department a request for an appointment of an Administrative Law Judge ("ALJ"), and a written statement of the issues in dispute, the relevant facts upon which the dispute is based, and factual data, analysis, or opinion supporting its position, and all supporting documentation on which Respondent relies (hereinafter called the "Statement of Position"). The Department shall serve upon Respondent its Statement of Position, including supporting documentation no later than ten (10) business days after receipt of Respondent's Statement of Position. Respondent shall have five (5) business days after receipt of the Department's Statement of Position within which to serve upon the Department a reply to the Department's Statement of Position, and in the event Respondent serves such a reply, the Department shall have five (5) business days after receipt of Respondent's reply to the Department's Statement of Position within which to serve upon Respondent the Department's reply to Respondent's reply to the Department's Statement of Position. In the event that the periods for exchange of Statements of Position and replies may cause a delay in the work being performed under this Order, the time periods may be shortened upon and in accordance with notice by the Department as agreed to by Respondent.

B. The Department shall maintain an administrative record of any dispute being addressed under this Paragraph XI. The record shall include the Statement of Position of each party served pursuant to Subparagraph XI.A and any relevant information. The record shall be available for review of all parties and the public.

C. Upon review of the administrative record as developed pursuant to this Paragraph XI, the ALJ shall issue a final decision and order resolving the dispute. If the matter in dispute concerns a submittal,

1. Respondent shall revise the submittal in accordance with the Department's specific comments, as may be modified by the ALJ and except for those which have been withdrawn by the ALJ, and shall submit a revised submittal. The period of time within which the submittal must be revised as specified by the Department in its notice of disapproval shall control unless the ALJ revises the time frame in the ALJ's final decision and order resolving the dispute.

2. After receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval of the revised submittal.

3. If the revised submittal fails to address the Department's specific comments, as may be modified by the ALJ, and the Department disapproves the revised submittal for this reason, Respondent shall be in violation of this Order and the ECL.

D. In review by the ALJ of any dispute pursued under this Paragraph XI, Respondent shall have the burden of proving by a preponderance of the evidence that the Department's position should not prevail.

E. A deadline involving any matter that is the subject of the dispute resolution process described in this Paragraph XI shall be held in abeyance while it is the subject of the dispute resolution process unless the Department and Respondent otherwise agree in writing. The invocation of the procedures stated in this Subparagraph shall constitute an election of administrative remedies by Respondent, and such election of this remedy shall constitute a waiver of any and all other administrative remedies which may otherwise be available to Respondent regarding the issue in dispute.

XII. Miscellaneous

A. 1. All activities and submittals required by this Order shall address both on-Site and off-Site contamination resulting from the disposal of hazardous materials at the Site.

2. All activities Respondent is required to undertake under this Order are ordinary and necessary expenses for the continued operation of Respondent.

3. All activities and payments required by this Order are necessary to protect the public health or welfare or the environment and are in the public interest.

B. Respondent shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and third party data validators acceptable to the Department to perform the technical, engineering, and analytical obligations required by this Order. Respondent shall submit to the Department a summary of the experience, capabilities, and qualifications of the firms or individuals. Respondent must obtain the Department's approval of these firms or individuals before the initiation of any activities for which Respondent and such firms or individuals will be responsible. The responsibility for the performance of the professionals retained by Respondent shall rest solely with Respondent. The Department understands and agrees that any professional consultants, contractors, laboratories, and quality assurance/quality control personnel not employees of Respondent ("outside consultants") may not alter Respondent's obligations under this Order nor modify this Order.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent, and the Department also shall have the right to take its own samples. Respondent have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by the Department. Respondent and the Department shall make available to each other the results of all sampling and/or tests or other data generated with respect to implementation of this Order and shall submit these results in the progress reports required by this Order (in the case of Respondent, in the progress reports required by this Order).

D. If feasible, Respondent shall notify the Department at least ten business days in advance of any field activities to be conducted pursuant to this Order. If ten business days' advance notice is not feasible, Respondent shall provide as much advance notice to the Department as is practical under the circumstances. The Department's project manager is hereby authorized to approve any modification to an activity to be conducted under a Department-approved work plan in order to adapt the activities to be undertaken under such work plan to the conditions actually encountered in the field provided that such modification does not impair the effectiveness of the investigation or potential remediation of the Site's contamination.

E. Respondent shall obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondent's obligations under this Order. If Respondent is unable, after exhaustion of such reasonable efforts, to obtain any such permissions, the Department will exercise whatever authority is available to it, in its discretion, to obtain same. In no event will Respondent be determined to be in violation of this Order if it fails to obtain any such permissions after exhausting reasonable efforts to obtain same, or if it is unable to satisfy its requirement to file a Notice of Order pursuant to Subparagraph IX.B of this Order respecting the Glen Cove and Halesite sites. This is in recognition of the fact that, with respect to certain Sites, Respondent is not the present owner and that significant impediments may, therefore, be encountered as to Respondent's ability to obtain Site access.

F. Respondent and Respondent's officers, directors, agents, servants, employees, successors, and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondent's responsibilities under this Order. Respondent's officers, directors, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of their designated duties on behalf of Respondent.

G. Respondent shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondent with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondent or Respondent's contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the work required by this Order. Respondent shall nonetheless be responsible for

ensuring that Respondent's contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

H. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

I. 1. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order.

2. If Respondent desires that any provision of this Order be changed, Respondent shall make timely written application, signed by Respondent, to the Commissioner setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed to Mr. VanHoesen and to Mr. Sullivan.

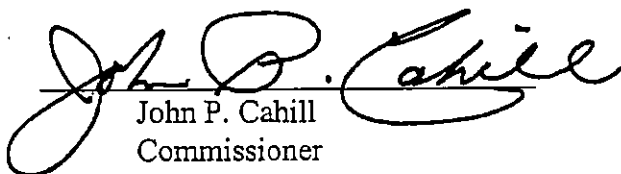
J. The effective date of this Order is the date the Commissioner or his designee signs it.

DATED:

9/30/99

New York State Department of Environmental Conservation

By:


John P. Cahill
Commissioner

CONSENT BY RESPONDENT

Respondent hereby waives its right to a hearing herein as provided by law; consents to the issuance and entry of this Order; and agrees to be bound by its terms, not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and not to contest the validity of this Order or its terms.

KeySpan Gas East Corporation d/b/a
Brooklyn Union of Long Island

By: *Anthony J. DiBrito*
Anthony J. DiBrito
Senior Vice President

Date signed: 3/30/99

STATE OF NEW YORK)
) ss.
COUNTY OF KING)

On this 30th day of March, 1999, before me personally appeared Anthony J. DiBrito, to me known, who, being duly sworn, did depose and say that he resides in Kings County; that he is Senior Vice President of KeySpan Gas East Corporation; that he executed the foregoing instrument on behalf of KeySpan Gas East Corporation; and that he signed his name thereto by like order.

Gina M. Becker
Notary Public State of New York
Registration Number: 01 BE5031734
My Commission Expires: 8/8/00

GINA M. BECKER
Notary Public, State of New York
No. 01BE5031734
Qualified in Kings County
Commission Expires Aug. 8, 20 00

Exhibit "C"

NOTICE OF ORDER

This Notice is made as of the _____ day of _____, 19-- by KeySpan Gas East Corporation, d/b/a Brooklyn Union of Long Island, the fee owner of a parcel of real property located at address; also include Tax Map Parcel No./Tax Section, block, and lot no. as more particularly described on Appendix "A" attached hereto (the "Property"); and

WHEREAS, KeySpan Gas East Corporation, d/b/a Brooklyn Union of Long Island, by authorized signature, consented to the issuance of Department Order Index No. D1-0001-98-11 (the "Order"), concerning the remediation of contamination present on the Property; and

WHEREAS, in return for the remediation of the Property pursuant to the Order to the satisfaction of the Department, the Department will provide KeySpan Gas East Corporation and Respondent's lessees and sublessees and Respondent's successors and assigns, including their respective secured creditors, with a release, covenant not to sue, and forbearance from bringing any action, proceeding, or suit related to the Site's further investigation or remediation, subject to certain reservations set forth in the Order; and

WHEREAS, pursuant to the Order, KeySpan Gas East Corporation, d/b/a Brooklyn Union of Long Island, agreed that it would give notice of the Order to all parties who may acquire any interest in the Property by filing this Notice with the --- County Clerk,

NOW, THEREFORE, KeySpan Gas East Corporation, d/b/a Brooklyn Union of Long Island, for itself and for its successors and assigns, declares that:

1. This Notice of the Order is hereby given to all parties who may acquire any interest in the Property; and that

2. This Notice shall terminate upon the filing by KeySpan Gas East Corporation, d/b/a Brooklyn Union of Long Island, or its successors and assigns, of a termination of notice of Order after having first received approval to do so from the New York State Department of Environmental Conservation.

IN WITNESS WHEREOF, KeySpan Gas East Corporation, d/b/a Brooklyn Union of Long Island, has executed this Notice of Order by its duly authorized representative.

KeySpan Gas East Corporation

Dated:

By: _____

Its: _____

[acknowledgment]

Appendix "A"

(to Exhibit "C")

Map of the Property