

RANDOLPH S. PRICE - ELECTRIC

- 1 Q. Please state your name and business address.
- 2 A. Randolph S. Price, 4 Irving Place, New York, NY 10003.
- 3 Q. By whom are you employed and in what capacity?
- 4 A. I have been employed by Consolidated Edison Company of
5 New York, Inc. ("Con Edison" or the "Company") since
6 August 2001 as Vice President for Environment, Health
7 and Safety ("EH&S").
- 8 Q. By whom were you employed prior to joining Con Edison,
9 and what positions did you hold?
- 10 A. From 1982 until 1994, I worked for the DuPont Company.
11 I started as a plant environmental coordinator and
12 subsequently worked in various positions of increasing
13 responsibility before leaving DuPont in 1994. In 1994,
14 I joined J.M. Huber Corp. as Corporate Director of
15 Environment, Health and Safety, where I stayed until
16 1996, when I joined Allied Signal (now known as
17 Honeywell International) as Director of Environmental
18 Affairs & Six Sigma.
- 19 Q. Please describe your educational background.
- 20 A. I received a Bachelor of Science Degree in Biology from
21 the State University of New York at Cortland in 1975,
22 and a Master of Science degree in Sanitary Science from
23 Syracuse University in 1982.
- 24 Q. Do you belong to any professional organizations?

RANDOLPH S. PRICE - ELECTRIC

1 A. Yes. I am one of Con Edison's representatives to the
2 Edison Electric Institute ("EEI"), serving as a member
3 of EEI's Environment Executive Advisory Committee.

4 Q. Have you previously submitted testimony to the New York
5 State Public Service Commission ("Commission")?

6 A. Yes. I have either submitted testimony or testified in
7 Con Edison Steam Rate Cases 03-S-1672, 05-S-1376 and
8 07-S-1315, Con Edison Gas Rate Cases 03-G-1671 and 06-
9 G-1332, and Con Edison Electric Rate Cases 04-E-0572
10 and 07-E-0523.

11

12

SUMMARY OF TESTIMONY

13

14 Q. Please summarize your testimony.

15 A. My testimony focuses on the following EH&S-related
16 activities and their projected costs during the rate
17 year, April 1, 2009 through March 31, 2010:

- 18 • Remediation Program expenditures that are mandated
19 by agreements, regulations, consent orders, or
20 permit requirements - in particular, I describe Con
21 Edison's program for the investigation and
22 remediation of former manufactured gas plant and
23 manufactured gas storage holder sites ("MGP Sites").

RANDOLPH S. PRICE - ELECTRIC

1 I also discuss Superfund sites for which Con Edison
2 is responsible, as well as the requirements of the
3 Appendix B section of the November 1994 Consent
4 Order between Con Edison and the New York State
5 Department of Environmental Conservation ("DEC"), as
6 modified by the December 2006 Consolidated Consent
7 Order. In addition, I address the Resource
8 Conservation and Recovery Act ("RCRA") corrective
9 action requirements of the hazardous waste
10 management facility operating permit that was
11 initially issued by the DEC in May 1994 and
12 subsequently renewed in March 2001 for the Company's
13 PCB Waste Storage Facility at its Astoria site. I
14 discuss underground storage tank ("UST") sites,
15 which the Company must address under Federal and New
16 York State regulations. In total, we expect \$55.1
17 million in O&M expenditures for these site
18 environmental investigation and remediation
19 activities ("SIR Program") during the rate year. I
20 explain the steps the Company takes to control and
21 mitigate costs for remediation efforts and I detail
22 the process for site investigation and remediation,

RANDOLPH S. PRICE - ELECTRIC

- 1 including the development of work plans as well as
2 Company and contractor staffing;
- 3 • Capital expenditures, totaling \$700,000 in rate year
4 2009 and \$300,000 in rate year 2010 for a Laboratory
5 Information Management System (LIMS) to replace the
6 Company's existing LIMS;
 - 7 • Capital expenditure of \$135,000 to purchase a
8 specially equipped vehicle to be used to locate
9 leaks of dielectric fluid from buried pipe type
10 transmission feeders;
 - 11 • Normalization adjustment of \$900,000 to reflect the
12 filling of ten currently vacant staff positions in
13 the Company's EH&S Department to provide continued
14 support for the Company's environmental, health and
15 safety compliance programs;
 - 16 • Normalization adjustment of \$50,000 for payments
17 that the Company is required to make to the DEC for
18 SPDES Fees pertaining to the East River Station;
 - 19 • Normalization adjustment of \$108,000 for New York
20 State hazardous waste generation fees;
 - 21 • Program change of \$75,000 for participating in the
22 Climate Registry; and

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1 facilities and/or operations. This program encompasses
2 the following types of sites, each of which is
3 discussed more fully below: (1) MGP Sites; (2)
4 Superfund Sites; (3) oil and dielectric fluid spill
5 sites subject to the investigation and cleanup
6 requirements of Appendix B of the 1994 Consent Order,
7 as modified by the December 2006 Consolidated Consent
8 Order, between the Company and the DEC; (4) the areas
9 of the Astoria Site subject to the RCRA corrective
10 action requirements imposed under the DEC's hazardous
11 waste management facility operating permit for the
12 Company's PCB waste storage facility at that site, and
13 (5) UST Sites.

14

MGP SITES

15

16
17 Q. Before turning to Con Edison's investigation and
18 remediation efforts for its MGP Sites, please provide a
19 brief background on the Company's and its predecessors'
20 former manufactured gas plants and manufactured gas
21 storage holder facilities.

22 A. Manufactured gas plants ("MGPs") provided energy in the
23 form of combustible gases of varying composition to

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1 municipal street lighting systems and to homes and
2 businesses in cities and towns across the more densely
3 populated regions of the United States. In the case of
4 the areas served by Con Edison and its predecessor
5 companies, MGPs operated from the late 1820s through
6 the early 1960s. The earliest of these plants produced
7 illuminating gases from whale oil and rosin. The
8 plants constructed during and after the 1830s converted
9 coal (oven gas) or a combination of coke or coal, oil
10 and water in the form of steam (carbureted water gas)
11 into a gas product that could be used for lighting,
12 cooking, and heating. There were more than 200 MGPs in
13 New York State and an estimated 3,000 to 5,000 in the
14 United States, mostly in the Northeast and Midwest,
15 prior to these plants becoming obsolete due to the
16 construction of natural gas pipelines and large
17 electric generating stations. Holder stations were
18 used for the storage of manufactured gas that had been
19 produced at MGPs. They consisted of large storage tanks
20 (holders) of varying composition and design.

21 Q. What are the present environmental concerns related to
22 MGP Sites?

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1 A. Manufactured gas production was a complex process that
2 entailed the handling and storage of significant
3 quantities of feedstock materials, by-products, and
4 residuals that contain organic and inorganic chemical
5 constituents that are now considered to be hazardous
6 substances under federal and New York State laws and
7 regulations and that, when released to soil,
8 groundwater, or waterways, may pose a threat to human
9 health or the environment. The materials of primary
10 concern at MGP Sites include carbureting oils, scrubber
11 oils, coal tar, coal tar-related emulsions and sludges,
12 and gas purification wastes. At gas storage holder
13 sites, these materials include oils (which were used in
14 hydraulic systems as lubricants or to maintain airtight
15 seals between holder tank bases, bellows and shells)
16 and coal tar (which at times condensed out of stored
17 gas or was used to maintain airtight seals between
18 holder tank bases, bellows, and shells).

19 Q. Has the DEC increased its activities regarding MGP
20 Sites?

21 A. Yes. The DEC has pressured New York State's investor-
22 owned utilities to investigate and, when necessary to
23 protect human health and the environment, to undertake

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1 remedial response actions for the sites of their former
2 manufactured gas plants. The DEC and most New York
3 State utilities have entered into administrative
4 consent orders ("ACOs") or cleanup agreements under
5 which the utilities have agreed to address their MGP
6 Sites. In some cases (such as Con Edison), these ACOs
7 or cleanup agreements cover multiple sites. Under the
8 DEC's MGP program, investigations and/or remedial
9 action work have been undertaken or are planned at more
10 than 190 former MGP sites across the State. DEC's MGP
11 program is grounded in a federal initiative to ensure
12 that former MGP sites are addressed throughout the
13 country. The New York State Department of Health
14 ("DOH"), which works with the DEC in evaluating the
15 results of MGP site investigations and determining the
16 need for remedial response actions for them, views the
17 primary goal of these investigations as assessing
18 potential human exposure to MGP-related contaminants.

19 Q. Turning to Con Edison's MGP Site investigation and
20 remediation program, can you please provide the
21 background for the program?

22 A. Yes. Con Edison and its predecessor companies formerly
23 manufactured gas and maintained storage holders for

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1 manufactured gas at MGP Sites located throughout
2 Manhattan, the Bronx, Westchester County, and western
3 Queens, New York. Many of these sites are now owned by
4 parties other than Con Edison and have been redeveloped
5 by their new owners for other uses, including schools,
6 residential and commercial developments, public parks,
7 and hospitals. The DEC is requiring the Company to
8 investigate and, if necessary, develop and implement
9 DEC and DOH-approved remedial action plans for all of
10 its and its predecessor companies' confirmed MGP Sites,
11 which presently include 34 manufactured gas plant sites
12 and 17 storage holder sites. Of these 51 sites, only
13 16 are still owned in whole or in part by the Company.

14 Q. Has a listing been prepared of the sites of the former
15 manufactured gas plants and manufactured gas storage
16 holder facilities that DEC is requiring Con Edison to
17 investigate and, if deemed necessary by DEC and/or the
18 DOH, to implement remedial action plans?

19 A. Yes, the table entitled "CONSOLIDATED EDISON COMPANY OF
20 NEW YORK, INC. MGP SITE LISTING" is a listing of those
21 sites and the current status of the Company's required
22 investigation and remediation activities for them.

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1 Q. Was this exhibit prepared under your direction or
2 supervision?

3 A. Yes, it was.

4 MARK FOR IDENTIFICATION AS EXHIBIT __ (RSP-1)

5 Q. What has contributed to the significant increase in the
6 level of activities in the Company's MGP Program?

7 A. On August 15, 2002, Con Edison entered into a cleanup
8 agreement ("MGP Agreement") with the DEC to conduct
9 investigations and, if necessary, DEC/DOH-approved
10 remediation at 45 of the 51 MGP Sites listed in Exhibit
11 __ (RSP-1). Of the remaining six sites listed in that
12 exhibit, five are covered by either individual cleanup
13 agreements with the DEC (the Tarrytown and White Plains
14 Gas Works Sites), DEC consent orders (the East 14th
15 Street Gas Works and Farrington Street Holder Station
16 Sites), or the RCRA corrective action requirements of
17 the previously discussed DEC hazardous waste management
18 facility operating permit (Astoria). The sixth site,
19 the Hastings-on-Hudson Gas Works Site, was identified
20 by the Company after it had entered into the 2002 MGP
21 Agreement. The Company and DEC modified the MGP
22 Agreement in September 2007 to add this site to the
23 initial list of 45 MGP and manufactured gas holder

RANDOLPH S. PRICE - ELECTRIC

1 station sites that Con Edison is obligated to
2 investigate and, if deemed necessary by DEC and/or the
3 DOH, remediate under the MGP Agreement.

4 Con Edison's execution of the MGP Agreement began
5 a period of significant increased activity in the
6 Company's MGP Program. Due to the large number of
7 sites covered by the MGP Agreement, the Company and the
8 DEC agreed on a prioritization strategy under which MGP
9 sites that are now the location of schools or
10 residential properties would be investigated first.
11 Other priority sites besides schools and residential
12 properties can and have surfaced primarily as a result
13 of redevelopment projects by present property owners
14 (West 45th Street and Pemart Avenue Gas Works Sites,
15 West 58th Street Holder Station Site) or subsurface
16 construction activities, such as the installation of
17 storm sewers by the NYS Department of Transportation,
18 that have unearthed MGP-related contamination (East
19 173rd Street Gas Works Site). The investigation of all
20 51 former MGP Sites will take several more years to
21 complete. The remediation work for sites at which such
22 action is deemed necessary by the DEC and DOH will take
23 longer to complete. At some sites, the remediation may

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1 not be completed until after the buildings and
2 structures present on the sites are retired and
3 demolished.

4 Q. What is the current status of Con Edison's MGP Program?

5 A. The current status of each of Con Edison's MGP Sites is
6 summarized in Exhibit ____ (RSP-1). As indicated in
7 that exhibit, Con Edison has developed site
8 characterization study ("SCS") work plans and remedial
9 investigation ("RI") work plans for sites with schools,
10 residential properties, parks, a hospital, and a New
11 York State courthouse, as well as those sites where
12 current property owners are planning redevelopment
13 projects. Through the end of March 2008, investigation
14 work plans (SCS, RI, or both) covering all or portions
15 of 46 of Con Edison's 51 MGP Sites have been submitted
16 to the DEC, and investigations of all or portions of 39
17 of those 46 sites have been started or completed. Of
18 the 39 investigations the Company has conducted, 29
19 sites have been found to require or will likely require
20 additional investigation or some level of remedial
21 action to address MGP-related contamination. Remedial
22 Action Work Plans ("RAWPs") addressing all or portions
23 of 13 of these 29 sites have been submitted to the DEC.

RANDOLPH S. PRICE - ELECTRIC

1 Remedial activities have been initiated at all or
2 portions of 11 sites, with remediation having been
3 completed at three sites.

4 The Company has received a "No Further Action"
5 determination from the DEC for nine of the 39
6 investigated sites, either because the required
7 remedial action has been completed or because the DEC
8 (with input/consent from the DOH) has determined on the
9 basis of the investigation results that remediation is
10 not required with respect to the former MGP operations.
11 Regarding the West 42nd Street Gas Works Site, the "No
12 Further Action" determination by DEC applies to the
13 properties located on the grounds of the former MGP.
14 For this site, DEC is requiring the Company to
15 investigate the extent of off-site impacts (outside the
16 boundaries of the West 42nd Street property) from the
17 historical MGP operations. In addition to these nine
18 sites, DEC has also issued "No Further Action"
19 determinations for portions of four sites either based
20 on investigation findings or the completion of DEC/DOH-
21 approved remediation programs. See Exhibit ____ (RSP-
22 1) for a summary of the status of each of the MGP
23 Sites.

RANDOLPH S. PRICE - ELECTRIC

1 Q. What specific MGP Site investigation and remediation
2 activities are expected to be conducted during the rate
3 year?

4 A. During the rate year, the Company plans to: (1) conduct
5 supplemental investigations at several sites where
6 additional information is required to characterize and
7 delineate the MGP-related or gas holder station-related
8 contamination, (2) proceed into the remediation phase
9 for those sites where investigations have found that
10 remedial action is warranted and sufficient information
11 exists to determine the appropriate remedy, and (3)
12 initiate or continue site characterization studies at
13 several sites where investigations have not yet been
14 conducted. The Company expects to complete the
15 required site remediation work at three sites and to
16 initiate or continue site remediation work at six
17 sites. In addition, some remedial action planning
18 and/or active remediation activities are expected to
19 occur at six other sites.

20 Q. Do you expect the Company to continue to conduct
21 similar MGP Site investigation and remediation
22 activities over the next five years?

1 A. Yes.

2

3

SUPERFUND SITES

4

5 Q. What types of sites are covered by Con Edison's
6 Superfund Site investigation and remediation program?

7 A. Con Edison's Superfund Program covers the following
8 categories of sites:

- 9 • Third party-owned sites to which Con Edison shipped
10 hazardous substances for treatment, storage, or
11 disposal and has been designated a potentially
12 responsible party ("PRP") for the investigation and
13 remediation of site contamination by the United
14 States Environmental Protection Agency ("EPA"), DEC,
15 or another government environmental agency pursuant
16 to the federal Comprehensive Environmental Response,
17 Compensation and Liability Act ("CERCLA") or
18 comparable state statutes, including statutes that
19 impose liability for the costs of investigating and
20 cleaning up oil spills;
- 21 • Sites formerly owned by Con Edison and for which the
22 current site owners assert claims against Con Edison

RANDOLPH S. PRICE - ELECTRIC

1 for investigation and remediation costs pursuant to
2 CERCLA or comparable state statutes; and

- 3 • Sites (whether or not owned Con Edison) at which Con
4 Edison is required to conduct cleanup work because
5 of releases of oil, dielectric fluid, PCBs, or other
6 hazardous substances from its or its predecessor
7 companies' equipment, facilities, or operations.

8 Q. Please discuss the Company's anticipated investigation
9 and remediation activities during the rate year for its
10 Superfund Sites.

11 A. The following activities are anticipated during the
12 rate year at the Company's Superfund Sites:

- 13 1. Curcio Scrap Metal, Inc. Site in Saddle Brook, New
14 Jersey: Con Edison's ACO with the EPA was modified
15 on April 27, 2005, to require Con Edison to
16 continue implementing this site's groundwater
17 monitoring program for an additional five years.
18 As required by the ACO, Con Edison has petitioned
19 the New Jersey Department of Environmental
20 Protection ("NJDEP") to establish and impose local
21 groundwater use restrictions for the site and the
22 off-site area affected by the site's groundwater
23 plume. The NJDEP is still reviewing that

1 application. During the rate year, Con Edison
2 expects to complete one round of groundwater
3 sampling at the site.

4 2. Cortese Landfill Site in Tusten, New York: Con
5 Edison is a member of a PRP steering committee
6 that is obligated under its ACO with EPA to design
7 and implement EPA's selected remedy for this site.
8 The steering committee has completed the drum
9 removal, landfill capping, and other remedial
10 construction elements of EPA's selected site
11 remedy. EPA has directed the steering committee to
12 develop the site groundwater treatment program
13 called for in EPA's selected remedy. The steering
14 committee is designing the pump and treatment
15 system called for in EPA's selected remedy, but is
16 also working with EPA to identify potential
17 alternative innovative technologies for addressing
18 the site's groundwater contamination. If such
19 innovative technologies are not developed and
20 approved by EPA for use at the site, construction
21 of the site's groundwater pump and treatment
22 system could potentially be implemented during the
23 rate year. However, because of the current

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1 uncertainties concerning the remediation
2 technology to be used, the cost projections
3 provided herein do not include any costs for this
4 site.

5 3. Maxey Flats Site in Morehead, Kentucky: Con Edison
6 is a member of a PRP steering committee that is
7 required to implement the first phase of EPA's
8 selected remedy for this former low-level
9 radiological waste land burial facility under a
10 consent decree with the United States. The
11 remedial construction elements of the phase one
12 remedy have been completed. The steering
13 committee is implementing the ten-year, post-
14 remedial construction monitoring program that it
15 is required to carry out for the site under the
16 consent decree. During the rate year, the steering
17 committee will continue implementing that program.
18 Costs for this site, which are expected to be
19 minimal, are not included in the cost projections
20 provided herein.

21 4. Metal Bank Superfund Site in Philadelphia: Con
22 Edison is a member of a PRP steering committee
23 comprised of electric utilities that shipped scrap

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1 transformers to this site during the late 1960's
2 and 1970's. EPA issued Unilateral Administrative
3 Orders compelling Con Edison, most of the other
4 steering committee members, and the current and
5 former site owners and operators to design and
6 implement EPA's selected remedy for the site and
7 the PCB-contaminated sediment in the area of the
8 Delaware River along the site's waterfront. EPA's
9 selected remedy was challenged by the current and
10 former site owners and operators in the U.S.
11 District Court for the Northern District of
12 Pennsylvania in the context of litigation in which
13 the United States sought its past site response
14 costs from them. The members of the steering
15 committee also sought contribution from the
16 current and former site owners and operators.
17 After years of negotiations, the parties entered
18 into series of settlements that resolve all claims
19 in the litigation, and consent decrees embodying
20 the settlements were approved and entered by the
21 district court on March 14, 2006. Under their
22 consent decree with the government, the steering
23 committee members are responsible for designing

RANDOLPH S. PRICE - ELECTRIC

1 and carrying out the required remediation work for
2 the site and Delaware River sediment affected by
3 the site's contamination, but are entitled to
4 contribution of approximately \$4.1 million from
5 the principals of the metal reclamation company
6 that contaminated the site with PCBs while
7 salvaging scrap transformers. The steering
8 committee members are also entitled to seek
9 reimbursement of their remediation work-related
10 costs from the \$13.2 million trust fund
11 established as part of the settlement of their
12 claims against the bankruptcy estate of the
13 corporate parent of the current site owners and
14 operators. The implementation of the remedy has
15 recently begun and is expected to be completed by
16 year end 2008. During the rate year, the Company
17 expects that the steering committee will be
18 conducting the long-term site monitoring program
19 activities required in their consent decree with
20 the government.

21 5. Arthur Kill Site: In March 2003, the DEC issued a
22 Record of Decision ("ROD") requiring the
23 remediation of the PCB-contamination caused in the

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1 site's waterfront area by the September 1998
2 transformer fire at the Arthur Kill Station. DEC
3 and Con Edison have entered into an ACO for the
4 implementation of the remedy selected in the ROD
5 for the waterfront area's contaminated soil and
6 sediment. Con Edison completed a pre-remedial
7 design investigation program and developed a
8 remedial design/remedial action work plan that was
9 approved by the DEC in February 2007. DEC approved
10 the Company's remediation design documents, plans,
11 and specifications in March 2008. The DEC has
12 informed Con Edison that sediment remediation
13 within the Arthur Kill may be performed only
14 within the period October 1 through February 1 to
15 minimize potential impacts on aquatic organisms.
16 Based on that restriction, Con Edison expects to
17 perform the required remediation work during the
18 last half of 2008 and the first quarter of 2009,
19 which constitutes the last three quarters of the
20 linking period. Costs projected for the rate year
21 are expected to be minimal.

22 6. North First Street Terminal ("NFST") Site: Con
23 Edison sued Fyn Paint in the U.S. District Court

RANDOLPH S. PRICE - ELECTRIC

1 for the Eastern District of New York seeking
2 relief under CERCLA and New York common law for
3 the solvent contamination that Fyn Paint's
4 operations on its adjoining property caused on the
5 NFST Site. Fyn Paint entered into a Voluntary
6 Cleanup Agreement ("VCA") with the DEC for the
7 investigation and remediation of the contamination
8 that its operations caused on its property and
9 adjoining properties, such as the NFST Site.
10 Based on the results of Fyn Paint's investigation,
11 the DEC approved an Interim Remedial Measures Work
12 Plan that entails the operation of a product
13 recovery system to remove the solvents and treat
14 the associated contaminated groundwater from
15 beneath Fyn Paint's property and the NFST Site.
16 The district court recently entered judgment under
17 which Fyn Paint would fund 72 percent of the costs
18 of the DEC-required investigation/remediation work
19 up to a maximum contribution of \$792,000 and Con
20 Edison would fund the remaining costs up to a
21 maximum contribution of \$3,208,000. Con Edison is
22 appealing this judgment.
23 7. Maspeth Substation Site: Con Edison began

1 remediating PCB-contaminated soil in 2005 under a
2 VCA with the DEC. The last phase of the required
3 soil remediation, removal of PCB-contaminated soil
4 from three adjacent residential properties and
5 from on-site areas adjacent to two of those
6 properties, is expected to be completed by the
7 second quarter of 2008. Thereafter, the Company is
8 required to install additional wells on and around
9 the site and to conduct quarterly groundwater
10 monitoring for at least two years. During the
11 rate year, Con Edison will be conducting the
12 groundwater monitoring activities for this site.

13 8. Flushing Creek Site:

14 In September 2007, the DEC informed Con Edison
15 that PCB contamination, which the DEC attributes
16 to Con Edison's and its predecessor companies'
17 former operations at the Company's former Flushing
18 Service Center, had been detected in the sediment
19 of a mudflat area of the Flushing Creek along the
20 former service center property's bulkhead. The
21 DEC and Con Edison recently entered into an ACO,
22 under which Con Edison is required to investigate
23 the extent of the off-site contamination caused by

1 those former operations and, if deemed necessary
2 by the DEC, remediate that contamination. Con
3 Edison is now developing for DEC approval a draft
4 remedial investigation/feasibility study ("RI/FS")
5 work plan for the mudflat area and section of the
6 Flushing Creek in the vicinity of the former
7 service center property. Con Edison anticipates
8 that it will incur expenses of \$100,000 during the
9 rate year for completing the required RI/FS and
10 that any required remediation work would be
11 performed after the rate year. This cost estimate
12 does not include costs that would be incurred if
13 the DEC requires a supplemental remedial
14 investigation.

15 9. Former Flushing Service Center Site: Con Edison
16 and the current owners of property the Company
17 sold in the 1980s have reached a settlement of the
18 current property owners' claim for the costs they
19 incurred developing and implementing DEC-approved
20 investigation and remediation programs for the PCB
21 contamination that Con Edison's and its
22 predecessor companies' former operations caused on
23 that property. I expect the Company's settlement

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1 payments to be made during the linking period.

2

3 1994 DEC CONSENT ORDER, AS AMENDED BY 2006 CONSOLIDATED

4 CONSENT ORDER, APPENDIX B SITES

5

6 Q. Please explain the requirements that the 1994 DEC
7 Consent Order, as amended by the 2006 Consolidated
8 Consent Order, imposes upon Con Edison for "Appendix B"
9 sites.

10 A. Appendix B of the 1994 DEC Consent Order, as amended by
11 the 2006 Consolidated Consent Order, addresses spills
12 and leaks of "petroleum products" from the Company's
13 fuel oil storage tanks, No. 6 fuel oil pipeline system,
14 high-pressure pipe-type electric feeders, and other
15 types of oil-filled equipment. It requires Con Edison
16 to complete an investigation and remediation process,
17 the procedures and specifics of which are set out in
18 this appendix of the Consent Order, for sites at which
19 such spills and leaks occurred. For each of those
20 sites, the first step in the process is for Con Edison
21 to identify the specific response measures that it
22 implemented at the site when it first became aware of
23 the release. If DEC is satisfied that those completed

1 measures are sufficient to support a determination on
2 its part that no further action is required under the
3 Environmental Conservation Law and Navigation Law, the
4 DEC will close out the spill. For sites for which DEC
5 is unwilling to make such a finding, Con Edison must
6 either conduct additional cleanup work, additional
7 investigation work, or both. The 2006 Consolidated
8 Consent Order streamlined the administrative aspects of
9 the Appendix B program to conform to the DEC's current
10 guidance and eliminated reference to sites that have
11 already been closed out. It did not reduce the number
12 of sites that remain to be addressed and will not
13 materially affect priorities and projected costs.

14 Q. How many sites are covered by Appendix B of the 1994
15 Consent Order?

16 A. Appendix B of the November 1994 Consent Order covered a
17 total of 84 historical oil spill sites. At DEC's
18 request, two of the 84 historical spills sites (Sites 4
19 and 7) were split into two sites each, bringing the
20 current total number of sites to 86. At many of the
21 sites, more than one spill occurred. Some of the sites
22 are Con Edison facilities, although most sites are
23 street locations where there were leaks from the

RANDOLPH S. PRICE - ELECTRIC

1 Company's fuel oil pipelines or dielectric fluid-filled
2 equipment or feeders. Thus far, 35 sites have been
3 determined by the DEC to require no further action and
4 six have been transferred with divested properties,
5 with the new owners of the affected properties assuming
6 responsibility for the required investigation/cleanup
7 work. The remaining 45 open sites are being addressed
8 in accordance with a DEC-approved Appendix B site
9 prioritization schedule, as reflected in the 2006
10 Consolidated Consent Order. Investigation and
11 remediation of the Astoria site, which is one of the
12 remaining open 45 Appendix B sites, is being performed
13 under the Astoria RCRA corrective action requirements
14 of the DEC hazardous waste management facility
15 operating permit for Con Edison's PCB Waste Storage
16 Facility on the Astoria Site.

17 Q. Please identify the 45 Appendix B sites that Con Edison
18 must still address under the 2006 Consolidated Consent
19 Order.

20 A. The 45 open Appendix B sites are listed in Exhibit __
21 (RSP-2), entitled, "CONSOLIDATED EDISON COMPANY OF NEW
22 YORK, INC. APPENDIX B SITE LISTING," which also

RANDOLPH S. PRICE - ELECTRIC

1 specifies the location, DEC-approved priority, and
2 current status of each site.

3 Q. Was that exhibit prepared under your direction or
4 supervision?

5 A. Yes, it was.

6 MARK FOR IDENTIFICATION AS EXHIBIT ___ (RSP-2)

7 Q. Please discuss the Company's anticipated investigation
8 and remediation activities during the rate year for its
9 Appendix B sites.

10 A. As indicated in Exhibit ___ (RSP-2), 17 (plus Astoria)
11 of the 45 remaining open sites are either actively
12 undergoing investigation or remediation or will have
13 investigation or remediation work started as soon as
14 the DEC approves the Company's proposed work plans for
15 those activities. The Company presently projects that
16 many of these investigations will be partially or
17 completely performed during the rate year. The most
18 significant remediation projects during the rate year
19 are expected to be for Site 10 (Astoria - which is
20 discussed in the next section of my testimony) and Site
21 14 (Hudson Avenue Station). However, the timing of
22 these and other Appendix B projects depends on the
23 findings of the on-going and planned investigations,

1 and the status of DEC review and approval of work plans
2 and reports.

3 Q. Do you expect the Company to continue to conduct
4 similar Appendix B Site investigation and remediation
5 activities over the next five years?

6 A. Yes.

7

8 DEC HAZARDOUS WASTE MANAGEMENT FACILITY OPERATING
9 PERMIT FOR THE COMPANY'S
10 ASTORIA PCB WASTE STORAGE FACILITY

11

12 Q. Please describe the nature of the investigation and
13 remediation program for the Astoria site?

14 A. On May 1, 1994, the DEC issued Con Edison a hazardous
15 waste management facility operating permit for its PCB
16 Waste Storage Facility at the Astoria site. DEC
17 subsequently issued a renewal permit on March 2, 2001.
18 One of the conditions of this permit is to investigate
19 and, if necessary, remediate, several Solid Waste
20 Management Units ("SWMUs") and Areas of Concern
21 ("AOCs") at the Astoria Site, including those with
22 potential MGP residuals. This investigation also
23 encompasses Appendix B spills at the Astoria Site,

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1 which is one of the remaining open sites identified in
2 the December 2006 Consolidated Consent Order between
3 Con Edison and the DEC and one of the sites listed in
4 Exhibit ____ (RSP-2). Since 1993, the Company has spent
5 approximately \$35.5 million investigating spills and
6 several SWMUs and AOCs at the Astoria Site (e.g.,
7 former MGP operating areas, the North Storage Yard,
8 Pipe Yard, Southwest Storm Sewer, Central Waste
9 Treatment Facility, East Yard, Eastern Parcel, and
10 Former Pond Area) and performing interim corrective
11 measures to: (1) recover oil from groundwater; (2) line
12 a brick sewer that had provided a pathway for oil to
13 enter the East River; and (3) remove wastewater and
14 sludge from two former manufactured gas holder tanks
15 that were converted into neutralization, chemical
16 precipitation, and sedimentation facilities for the
17 treatment of boiler chemical cleaning and other
18 wastewater that contained suspended solids and heavy
19 metals.

20 Q. Please discuss the Company's anticipated investigation
21 and remediation activities during the rate year at its
22 Astoria Corrective Action Site.

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1 A. During the rate year, the Company expects to do the
2 following work at the Astoria Site:

- 3 • Perform remedial planning, engineering design, and
4 implement selected remedial actions (e.g., shallow
5 excavations to be performed as interim corrective
6 measures) in various areas of the site;
- 7 • Continue to implement oil recovery interim
8 corrective measures at various SWMUs and AOCs; and
- 9 • Perform remediation of soil in the North Storage
10 Yard, which is contaminated with PCBs, lead, and
11 polycyclic aromatic hydrocarbons.

12 Q. Do you expect the Company to continue to conduct
13 similar remediation activities at the Astoria site over
14 the next five years?

15 A. Yes.

16

17 UST SITES

18

19 Q. Have you discussed the Company's UST SIR Program in
20 your testimony for previous electric rate case filings?

21 A. No, because it was considered to be a relatively small
22 component of the Company's total SIR Program.

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1 Q. Why have you now included UST Sites in your testimony
2 for the current rate case filing?

3 A. Since the UST Program is another category of
4 remediation program, it is appropriate to include
5 projected expenditures for this program in addition to
6 the remediation programs described previously in my
7 testimony.

8 Q. How much has the Company spent on the UST Program in
9 the past?

10 A. During calendar years 2003-2006, the Company spent an
11 average of about \$1.0 million per year; in 2007, this
12 rose to \$2.9 million.

13 Q. How much does the Company project it will spend on UST
14 Sites during the linking period and the rate year?

15 A. Based on current cost projections, the Company
16 anticipates that it will spend approximately \$2.4
17 million during the linking period and \$0.6 million
18 during the rate year on the investigation and
19 remediation of its UST Sites.

20 Q. Please summarize the regulatory requirements applicable
21 to the Company's UST Program.

22 A. Con Edison's underground storage tanks are regulated
23 under both EPA and DEC regulations. EPA's regulations

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1 at 40 CFR 280 ["Technical Standards and Corrective
2 Action Requirements For Owners and Operators of
3 Underground Storage Tanks (UST)"] require UST owners
4 and operators to investigate known or suspected
5 releases from their UST systems and, if necessary, to
6 remediate the contamination caused by those releases
7 under the direction of the implementing state agency
8 (the DEC in New York). New York State regulations
9 require UST owners and operators to report known or
10 suspected releases from their UST systems and to
11 address them to the DEC's satisfaction. Both EPA and
12 the DEC have issued guidance documents describing these
13 requirements. Although the Company is not under a
14 formal agreement (e.g., an ACO or VCA with the DEC) to
15 investigate/remediate these sites, it is obligated to
16 do so under these federal and New York State regulatory
17 requirements.

18 Q. How many UST sites are currently being addressed under
19 the Company's UST Program?

20 A. The Company currently has 11 UST sites that are being
21 investigated and/or remediated under the UST Program.

22 Q. Please identify these UST sites and briefly describe
23 the current status of each site.

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- 1 A. These sites are identified below, with a brief
2 description of their current status:
- 3 • 3rd Avenue Yard, Brooklyn (service center and parking
4 lot) - Remediation and groundwater monitoring on-
5 going;
 - 6 • Former AMOCO Fuel Oil Terminal, Queens - Soil
7 remediation partially completed; additional
8 investigation on-going with additional remediation
9 planned;
 - 10 • Atlantic Ave. Service Center, Brooklyn - Initial
11 investigation completed and report submitted to the
12 DEC; requires additional investigation and probably
13 remediation;
 - 14 • Bruckner Blvd. Service Center, Bronx - Remediation
15 planned for third quarter of 2008, followed by on-
16 going groundwater monitoring;
 - 17 • College Point Service Center, Queens - Investigation
18 completed; no remediation required; groundwater
19 monitoring on-going
 - 20 • Eastview Service Center, Westchester - Investigation
21 report that was submitted to the DEC recommended no

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- 1 further action except for on-going groundwater
2 monitoring;
- 3 • Gowanus Substation, Brooklyn - Groundwater
4 monitoring suspended pending remediation of last
5 open spill;
 - 6 • Rye Service Center, Westchester - Initial
7 investigation completed; additional investigation
8 and groundwater monitoring required; expect DEC to
9 require remediation;
 - 10 • Van Nest Complex, Bronx - Implemented in-situ
11 chemical oxidation batch treatment and conducting
12 follow-up monitoring to determine the treatment's
13 effectiveness;
 - 14 • Victory Blvd. Service Center, Staten Island -
15 Remediation completed; groundwater monitoring on-
16 going;
 - 17 • W. 28th St. Service Center, Manhattan - DEC approval
18 pending for a RAWP calling for the construction and
19 operation of an air sparging/soil vapor extraction
20 in-situ treatment system. Implementation of the
21 RAWP, if approved by the DEC, could be affected by
22 New Jersey Transit's and the Port Authority of New

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1 York and New Jersey's ("Port Authority") proposal to
2 use of portions of this site for the construction of
3 planned new railroad tunnels. The Company presently
4 assumes that the potential New Jersey Transit and
5 Port Authority use of the site would not prevent Con
6 Edison from implementing the DEC-approved RAWP.

7 Q. Please discuss the Company's anticipated investigation
8 and remediation activities during the rate year at its
9 UST Sites.

10 A. During the rate year, the Company currently anticipates
11 that it will primarily perform groundwater monitoring
12 and reporting. In addition, post-remediation operation
13 and maintenance of the planned air sparging/soil vapor
14 extraction system is anticipated at the W. 28th Street
15 service center site and remedial planning is
16 anticipated at the Rye service center site.

17 Q. Do you expect the Company to continue to conduct
18 similar UST Site investigation and remediation
19 activities over the next five years?

20 A. At this time, I expect the overall level of UST Program
21 activity to remain fairly constant for the two years
22 after the rate year and then to decrease by an
23 indeterminate amount. However, the level of overall

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1 activity could exceed current expectations depending on
2 the findings of on-going investigations and agency
3 decisions on the extent of remediation that is required
4 at various sites.

5

6 PROJECTED EXPENDITURES FOR MGP, SUPERFUND, APPENDIX B,
7 ASTORIA CORRECTIVE ACTION, AND UST SITES

8

9 Q. How much does the Company expect to spend during the
10 three rate years for its SIR Program?

11 A. Expenditures for the Company's SIR Program have
12 increased significantly over the past few years,
13 primarily due to the increase in the level of
14 activities of the MGP Program, as a result of the 2002
15 MGP Agreement. In calendar year 2001, the combined
16 expenditures for the various programs under the
17 Company's SIR Program totaled \$3.3 million. The total
18 increased to \$19.8 million in 2002, \$21.9 million in
19 2003, and \$42.8 million in 2004, essentially remained
20 steady (at \$40.0 million) during 2005, and increased to
21 \$44.6 million in 2006 and \$42.3 million in 2007. For
22 the 15-month period from January 2008 through March
23 2009 immediately prior to the rate year (the "linking

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1 period"), the total expenditure for these programs is
2 projected to be \$156.6 million.

3 For the first rate year ending March 31, 2010, an
4 expenditure of \$55.1 million is projected for the
5 Company's SIR Program. The projected expenditure for
6 both the second and third rate years is \$43.1 million.
7 All of these actual costs (for 2001-2007) and projected
8 costs (for the linking period and rate years) are
9 rounded to the nearest \$100,000.

10 Q. Has an exhibit entitled "CONSOLIDATED EDISON COMPANY OF
11 NEW YORK, INC. SITE INVESTIGATION AND REMEDIATION
12 EXPENDITURES (\$ X 1000) RATE YEARS BEGINNING APRIL 1 OF
13 2009 (RY1), 2010 (RY2), & 2011 (RY3)" been prepared
14 under your direction or supervision?

15 A. Yes, it has been.

16 MARK FOR IDENTIFICATION AS EXHIBIT __ (RSP-3)

17 Q. Has an exhibit entitled "CONSOLIDATED EDISON COMPANY OF
18 NEW YORK, INC. QUARTERLY PROJECTED SITE INVESTIGATION
19 AND REMEDIATION EXPENDITURES (\$ X 1000) BY SITE FOR THE
20 LINKING PERIOD (1/1/08-3/31/09) AND RY1 (4/1/09-
21 3/31/10)" been prepared under your direction or
22 supervision?

23 A. Yes, it has been.

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1 MARK FOR IDENTIFICATION AS EXHIBIT ___ (RSP-4)

2 Q. What information is presented in Exhibit ___ (RSP-4)?

3 A. This exhibit provides quarterly cost projections for
4 the linking period and rate year 1 for each remediation
5 program and site, and a brief description of the
6 projected activities for each site with projected
7 expenditures during each of these time periods.

8 Q. For sites listed in Exhibit ___ (RSP-4) that the
9 Company expects to incur expenditures of at least \$1
10 million during the linking period or rate year, has an
11 exhibit been prepared under your direction or
12 supervision providing more detailed information on the
13 basis of the forecasted expenditures?

14 A. Yes, the document entitled "CONSOLIDATED EDISON COMPANY
15 OF NEW YORK, INC. SIR COST PROJECTION ADDITIONAL
16 INFORMATION" has been prepared.

17 MARK FOR IDENTIFICATION AS EXHIBIT ___ (RSP-5)

18 Q. Please explain the increase in projected expenditures
19 during the linking period and the rate year, as
20 compared to historic spending levels.

21 A. During the linking period, the Company expects to incur
22 significant expenditures for the Pelham Gas Works Site.
23 The Company began implementing the extensive DEC-

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1 approved RAWP for this site on January 15, 2008. The
2 remedial construction activities specified in the RAWP
3 are expected to continue until at least June 2009.
4 Once the required remedial construction work is
5 completed, the long-term operations/maintenance
6 activities for the groundwater treatment, coal tar
7 collection, and soil gas depressurization/collection
8 systems specified in the DEC's selected site remedy
9 would begin. The projected expenditures for this
10 site's RAWP construction activities during the linking
11 period are expected to total \$76 million. From January
12 1, 2008 through March 31, 2008, the Company spent \$11.4
13 million for this site.

14 In addition to the Pelham Gas Works Site, other
15 MGP sites where the Company expects to incur
16 significant expenditures during the linking period due
17 to implementation of DEC-approved remediation programs
18 or significant investigation efforts include the West
19 18th Street (\$19.2 million), White Plains (\$8.9
20 million), Mount Vernon (\$5.0 million), Hunts Point
21 (\$2.3 million), East 21st Street (\$3.5 million), and
22 Ossining (\$1.7 million) Gas Works Sites. From January
23 1, 2008 through March 31, 2008, the Company incurred

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1 total SIR expenditures of \$19.1 million on its MGP
2 program. Other SIR Program sites for which significant
3 expenditures are anticipated during the linking period
4 include the Astoria Site (\$3.2 million), the Arthur
5 Kill Superfund Site (\$2.9 million), Former Flushing
6 Service Center Site (\$10.0 million), Appendix B Site
7 14/Hudson Avenue Station (\$2.0 million), and combined
8 Appendix B Site 79, which also includes four other
9 Appendix B sites in Long Island City (\$1.3 million).
10 The projected linking period expenditures for other SIR
11 Program sites are provided in Exhibit ____ (RSP-4).

12 During the rate year, the Company expects to incur
13 expenditures of \$11.5 million completing the RAWP
14 construction work for the Pelham Gas Works Site. The
15 Company also expects to incur significant costs,
16 estimated to be approximately \$36.0 million, performing
17 investigation and remediation activities at other sites
18 including the Astoria site and Mount Vernon, West 18th
19 Street, West 45th Street, White Plains, East 21st
20 Street, and Hunts Point Gas Works Sites and the Purdy
21 Street Holder Station Site. As indicated in Exhibit
22 _____ (RSP-4), during the rate year, the Company

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1 expects to incur additional costs totaling \$7.6 million
2 at various other SIR program sites.

3 Q. How did you determine the projected expenditures in
4 Exhibit __ (RSP-3) and Exhibit __ (RSP-4)?

5 A. The projections are based on forecasted spending levels
6 for the investigation or remediation related activities
7 that are expected to be required for these programs.
8 These cost projections are updated on a quarterly basis
9 to ensure that they reflect newly acquired information
10 and changes in the status of the sites.

11 The Accounting Panel's testimony explains the
12 allocation of these expenditures to the Company's
13 electric department and the amount included in the
14 Company's revenue requirement.

15 Q. Could actual expenditures differ from these estimates?

16 A. Yes. The projected expenditures represent what the
17 Company expects to spend on these programs during the
18 linking period and each of the three rate years based
19 on information that is currently available. Actual
20 expenditures could be higher or lower due to regulatory
21 agency decisions, access agreements, and new
22 information. It is important to note that each site is
23 different due to various factors (e.g., nature of the

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1 site, level of contamination, and site usage).
2 Remediation at one site may require \$100,000 in
3 expenditures, whereas another location could require
4 \$50 million or more. The Company's estimates will
5 become firmer as site investigations and remediation
6 work proceed.

7

8

SIR COST SAVING EFFORTS

9

10 Q. What is the purpose of this section of your testimony
11 concerning SIR cost saving efforts?

12 A. The purpose of this section of my testimony is to
13 describe the Company's efforts to operate a cost-
14 effective SIR program, as required by the Public
15 Service Commission in its March 25, 2008 Order for
16 Establishing Rates for Electric Service in Case 07-E-
17 0523.

18 Q. What steps has Con Edison taken to control its site
19 investigation and remediation costs and liabilities?

20 A. Con Edison has taken several actions to control its SIR
21 costs and liabilities. They include:

- 22 • When permissible under applicable laws and
23 regulations, Con Edison attempts to pursue

1 remediation requirements with regulatory agencies
2 based on the present and contemplated future use of
3 sites, so that the remedies selected by the agencies
4 are not more stringent than necessary for such uses.
5 For example, if the present and contemplated future
6 use of a site is for industrial or commercial
7 purposes, the Company attempts to negotiate
8 remediation requirements that are consistent with
9 such uses rather than the more stringent remediation
10 requirements that would apply at sites with
11 residential uses.

12 • Con Edison has staffed the Remediation Programs and
13 MGP Remediation Sections of its EH&S Department with
14 experienced and dedicated project managers. They
15 work closely with qualified consultants and
16 contractors to develop and implement the best
17 possible work plans and specifications, consistent
18 with applicable government agency requirements. Use
19 of experienced in-house staff provides Con Edison
20 with the capability to effectively handle unexpected
21 conditions or issues at its SIR Program sites. It
22 also provides Con Edison with the capability to
23 incorporate cost-effective, innovative technologies

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1 in its site remediation work, whenever possible. For
2 example, in 2006, at the former Maspeth Substation
3 Site, when post-excavation soil sampling showed
4 significant PCB contamination at greater depths than
5 anticipated, the remediation contractor proposed a
6 relatively complex sheeting and shoring system and
7 to excavate the entire area to address the localized
8 deeper contamination. However, Con Edison's
9 internal staff and Con Edison's consultant, working
10 with another contractor, developed a much less
11 expensive and intrusive plan and obtained DEC
12 approval for it. This revised plan, which was
13 implemented in 2007, saved Con Edison approximately
14 \$4 million. Another example is the constructability
15 review performed by Con Edison of the remedial
16 design specification for the Pelham MGP Site, in
17 which Con Edison determined that a slurry wall
18 barrier could be used instead of the initially
19 proposed secant pile wall barrier, with a resultant
20 cost savings of approximately \$4 million.

- 21 • Whenever feasible and acceptable to the DEC and DOH,
22 excavated soil and stone are reused as backfill at
23 remediation sites. For example, rock crushing and

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1 soil reuse saved approximately \$2 million during
2 remediation at the E. 173rd Street MGP Site (New York
3 City's Starlight Park) in the Bronx and soil reuse
4 at the Former Amoco Fuel Oil Terminal UST Site in
5 Queens) saved more than \$200,000;

- 6 • When appropriate and acceptable to the DEC, Con
7 Edison incorporates "step-out" procedures in its SCS
8 and RI work plans. These procedures allow Con
9 Edison's project manager and DEC's project manager
10 to expand the scope of an investigation while field
11 work is being performed. Broadening the scope of
12 investigation while field work is in progress helps
13 minimize the need to prepare work plans for and
14 conduct subsequent rounds of investigation.
- 15 • Con Edison actively participates in national and
16 state industry forums and research organizations,
17 such as the MGP Consortium, the Utility Solid Waste
18 Act Group ("USWAG") Remediation & Response
19 Committee, the Environmental Energy Alliance of New
20 York (EEANY), and the Electric Power Research
21 Institute so that it obtains the benefit of others'
22 experience and knowledge and its in-house staff
23 keeps abreast of technical developments in the

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1 remediation industry and innovative technologies.
2 In addition, some of these organizations (e.g.,
3 USWAG, EEANY) comment on regulatory proposals in an
4 attempt to obtain more reasonable, more flexible,
5 and less costly requirements. Examples include
6 EEANY's comments on the DEC's proposed Part 375
7 regulations, including soil cleanup objectives,
8 EEANY's discussions with the DEC on the
9 bioavailability of MGP waste constituents in
10 sediments, EEANY's development of a statewide indoor
11 air database at MGP sites to support a demonstration
12 that indoor air should not be a concern at MGP
13 sites, and USWAG's submittal of information to the
14 EPA to support continuation of the hazardous waste
15 exemption for MGP waste that fails the Toxicity
16 Characteristic Leaching Procedure ("TCLP") for
17 benzene. This hazardous waste exemption allows MGP
18 waste that fails the TCLP for benzene and does not
19 exhibit any other hazardous waste characteristic to
20 be disposed of as non-hazardous waste at thermal
21 treatment facilities instead of being disposed of as
22 hazardous waste at much more expensive hazardous
23 waste incinerators.

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- 1 • The Company competitively bids all projects, retains
2 qualified contractors, and follows its comprehensive
3 procedures, including remediation contractor
4 management protocols, so that project work is
5 performed properly and cost effectively.
- 6 • Whenever possible, Con Edison seeks to achieve cost
7 savings by coordinating remediation work that
8 requires soil excavation with the excavation work
9 being performed by site developers as part of
10 construction projects. By implementing required
11 remediation work in conjunction with property
12 owners' construction projects, Con Edison minimizes
13 its expenditures by sharing with property owners the
14 costs of activities common to both the remediation
15 work and construction work, such as
16 sheeting/shoring, excavation dewatering, excavation
17 labor, soil transportation and disposal, and back-
18 filling. Remediation work is also coordinated with
19 construction work at Company sites, where possible,
20 to minimize overall costs. Such coordination was
21 accomplished at the Third Avenue Yard (parking lot)
22 and Victory Blvd. UST Sites.

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- 1 • The Company has attempted to transition MGP sites
2 with proposed redevelopment projects to the DEC's
3 Brownfield Cleanup Program ("BCP") to take advantage
4 of the tax credits provided for under the New York
5 Tax Law for BCP sites. The DEC has allowed the
6 Company to transition two such sites into the BCP,
7 but has denied the Company's recent applications to
8 transition two sections of the West 18th Street Gas
9 Works Site into the BCP. During the linking period,
10 the Company expects to receive \$400,000 in BCP tax
11 credits under the SIR Program. Currently, the DEC
12 is subject to a 90-day moratorium on accepting BCP
13 applications while the New York State Legislature
14 considers possible revisions to the BCP statute.
- 15 • When desirable and permissible under applicable laws
16 and regulations, Con Edison attempts to negotiate
17 with regulatory agencies and third party property
18 owners remediation work plans that rely in whole or
19 in part on post-remediation engineering and/or
20 institutional controls in order to avoid more costly
21 remediation to "unrestricted use" standards.
- 22 • When appropriate, the Company performs pre-remedial
23 design investigations to fill data gaps in order to

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1 develop the best possible remediation work plans and
2 specifications for regulatory agency approval and
3 for competitive bidding. In addition, where
4 appropriate, treatability or pilot studies are
5 performed to demonstrate the applicability of
6 proposed remedies before they are designed and
7 implemented. For example, a pilot study of in-situ
8 biosparging/bioventing treatment was performed at
9 Appendix B Site 14 (Hudson Avenue Station) and a
10 pilot study of air sparging/soil vapor extraction
11 was performed at the W. 28th Street Service Center
12 UST site.

13 • Con Edison puts its excess liability insurance
14 carriers on notice of demands by the EPA and DEC
15 that the Company pay for or implement site
16 investigation and remediation work. It also pursues
17 indemnification of the costs of such work with its
18 excess liability insurance carriers and, when
19 necessary and appropriate, pursues litigation
20 against insurance carriers that deny or reserve
21 coverage for such costs. To date, the Company's
22 litigation efforts against its excess liability
23 insurance carriers (and those of other potentially

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1 responsible parties for sites) for the Company's
2 Superfund sites have resulted in settlement proceeds
3 of \$6.67 million. For MGP sites, the Company's
4 insurance litigation (which included an appeal by
5 Con Edison to the New York Court of Appeals for the
6 Tarrytown MGP site litigation) has resulted in
7 settlement proceeds of more than \$45 million.

- 8 • Con Edison attempts to identify other PRPs and, when
9 appropriate, attempts to recover investigation or
10 remediation costs from such entities. For example,
11 Con Edison instituted CERCLA response cost
12 contribution litigation against the successor in
13 interest to the United Gas Improvement Company
14 ("UGI"), the Philadelphia-based utility holding
15 company that during the late 1800's held controlling
16 interests in the local companies that operated most
17 of the MGPs in Westchester County and that operated
18 three MGPs in Yonkers during that period. The U.S.
19 District Court for the Southern District of New York
20 granted the UGI successor's summary judgment
21 dismissing the action. On appeal to the U.S. States
22 Court of Appeals for the Second Circuit, Con
23 Edison's action was reinstated with respect to the

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1 three Yonkers MGPs that UGI actually operated until
2 the formation of the Westchester Lighting Company.
3 Con Edison's appeal also resulted in new Second
4 Circuit precedent that a CERCLA PRP could maintain a
5 cost recovery action against another PRP under
6 Section 107(a) of CERCLA. Con Edison later filed an
7 amicus brief with the United States Supreme Court in
8 the United States government's challenge of a
9 similar ruling by the United States Court of Appeals
10 for the Eighth Circuit that relied largely upon the
11 Second Circuit's ruling in the Con Edison/UGI case.
12 The United States Supreme Court upheld both rulings
13 in June 2007. In sum, the Company's efforts in this
14 case will allow the Company to seek recovery of SIR
15 costs from other PRPs in appropriate cases.

- 16 • Con Edison participates in Superfund site PRP Groups
17 to encourage them to negotiate with the government
18 consent decrees and orders that equitably allocate
19 liability among all financially viable PRPs and,
20 when warranted, institute CERCLA cost contribution
21 actions against recalcitrant PRPs. Examples include
22 the cost recovery actions taken by the PRP Groups
23 for the Metal Bank Superfund Site, Maxey Flats

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1 Superfund Site, and PCB Treatment Inc. Sites. As
2 discussed previously in my testimony, the steering
3 committee for the Metal Bank Site instituted CERCLA
4 response cost contribution litigation against the
5 former and current owners and operators of the Metal
6 Bank Site. Under Consent Decrees for the site, the
7 steering committee will receive from the former and
8 present site owners and operators significant
9 contribution towards the costs of the required
10 remediation work for the site. In the case of the
11 Maxey Flats Site, the Consent Decrees that the
12 steering committee entered into with the United
13 States and the other settling PRPs required the
14 settling federal agency PRPs to pay a significant
15 share of the expenses that the steering committee
16 incurred implementing the first phase of EPA's
17 required remedial action program. The steering
18 committee also received funding from EPA from the
19 proceeds of the cash-out settlements that EPA had
20 entered into with *de-minimis* PRPs for the site. The
21 ACO that the members of the PRP steering committee
22 entered into with the EPA for the PCB Treatment Inc.
23 Sites contained comparable provisions.

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1 • To minimize the potential that it will become a PRP
2 at newly listed Superfund sites, Con Edison has
3 established a list of acceptable waste treatment,
4 storage and disposal facilities (TSDFs) and
5 periodically reevaluates that list. Con Edison's
6 procedures require that new TSDFs be approved by me
7 as the Vice President of Environment, Health &
8 Safety before they are used. Such approvals are
9 granted only after the proposed new facilities are
10 determined to be necessary (e.g., to meet increased
11 capacity needs for disposal of a particular waste
12 type or to provide significant cost savings) and
13 meet acceptance criteria (e.g., robust waste
14 acceptance procedures, solid record of compliance
15 with regulatory requirements, adequate spill/release
16 prevention systems in use, low potential for
17 groundwater/soil contamination). All proposed new
18 TSDFs are evaluated by EH&S staff, which can reject
19 the proposed new TSDF or make a recommendation to me
20 before I make the final decision. An example of a
21 new TSDF approval that is expected to result in
22 significant cost savings for remediation projects
23 involving excavation of MGP and petroleum

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1 contaminated material is the approval of a thermal
2 treatment facility that is closer to the Company's
3 service territory than other such facilities. If
4 MGP and petroleum contaminated soil meets this
5 facility's waste acceptance criteria, the use of
6 this facility could result in lower waste
7 transportation costs and could potentially increase
8 contractor productivity (and reduce costs further)
9 at remediation sites with limited capacity for on-
10 site waste storage.

- 11 • To minimize the potential that property transfers
12 might result in significant SIR costs, properties
13 for prospective sale and purchase are extensively
14 evaluated to identify potential environmental risks
15 using environmental site assessment procedures. For
16 example, the Company was considering purchasing a
17 site for a new substation in Manhattan. However,
18 based on EH&S staff review of available records, it
19 was determined that the site was a State Superfund
20 Site because of perchloroethylene releases from a
21 dry cleaner. As a result of this evaluation, the
22 Company decided not to purchase the site and thereby

1 avoided potential remediation costs.

2

3

SIR PROGRAM PROCESS

4

5 Q. What is the purpose of this section of your testimony
6 concerning the Company's SIR Program process?

7 A. The purpose of this section of my testimony is to
8 describe each step in the Company's SIR Program
9 process, from the start of investigation to the
10 implementation of remedies approved by the appropriate
11 regulatory agencies, and explain the Company's
12 management practices and bidding processes as part of
13 our efforts to operate a cost-effective SIR Program, as
14 required by the Public Service Commission in its March
15 25, 2008 Order for Establishing Rates for Electric
16 Service in Case 07-E-0523.

17 Investigation Process

18 Q. Please describe the process that Con Edison follows for
19 the investigation of its SIR Program sites.

20 A. I will begin by discussing the investigation process
21 for Con Edison's MGP Sites. The process is governed by
22 Con Edison's 2002 MGP Agreement with the DEC and the
23 VCAs, ACOs, and Brownfield Cleanup Agreements ("BCAs")

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1 that Con Edison has entered into with the DEC for sites
2 not covered by the 2002 MGP Agreement. It may include
3 multiple rounds of investigation. Each step of the
4 process is subject to the review and approval of the
5 DEC and DOH and must be conducted consistent with
6 applicable DEC regulations, guidance and policies. In
7 addition, Con Edison has prepared a DEC-approved
8 Citizen Participation Plan for its MGP Program. This
9 plan describes the procedures that Con Edison will
10 follow to communicate to interested citizens and
11 elected officials the investigation and remediation
12 activities that the Company is required to undertake
13 for its MGP Sites under its 2002 MGP Agreement, VCAs,
14 ACOs, and BCAs with the DEC.

15 The Company also performs investigation and
16 remediation projects for other types of SIR Sites.
17 For federal Superfund sites, the procedures, policies,
18 regulations, and guidance documents that the Company
19 must follow are specified in the ACOs and consent
20 decrees that the Company has entered into with the EPA.
21 For New York State Superfund sites and Appendix B
22 sites, the required process and protocol are governed
23 by Con Edison's ACOs with the DEC. For the Astoria

1 site, the procedures and protocols are governed by the
2 DEC operating permit discussed earlier in my testimony
3 and the DEC regulations implementing RCRA. For UST
4 sites, the required procedures and protocols are
5 specified in EPA and DEC regulations and guidance.

6 While there are some differences in the specific
7 investigation process for each of these types of sites,
8 the goal of the process applicable to each such site is
9 the same -- to ensure that the scope of the
10 investigation characterizes and delineates the nature
11 and extent of a site's contamination with sufficient
12 specificity to support a determination by the DEC, DOH,
13 and/or EPA as to whether remediation is necessary to
14 protect human health and/or the environment from the
15 risks posed by the contamination and, if remediation is
16 needed, to assess and determine the scope of the
17 required remediation activities.

18 The first step of the investigation process under
19 the 2002 MGP Agreement is to conduct a DEC-approved
20 SCS, which is a subsurface investigation to evaluate
21 whether there is evidence of historical MGP-related
22 contamination in the soil, soil vapor, or groundwater
23 at a site. DEC-approved SCS work plans focus on site

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1 areas that were the former locations of MGP structures
2 that produced or stored feedstock or residual materials
3 capable of causing environmental contamination, such as
4 ammonia wells, condensers, gas holders, oil and coal
5 tar storage tanks, relief holders, and tar wells. As
6 required by the DEC and DOH, a draft SCS work plan must
7 include site background information, including the
8 known/suspected locations of former gas production and
9 storage structures, prior investigation findings, if
10 any, and the proposed work scope (e.g., soil boring and
11 test pit locations, soil vapor sampling, groundwater
12 monitoring well installation, air monitoring, and
13 laboratory analytical requirements).

14 Based upon the historical information that the
15 Company has compiled for the manufactured gas
16 production and/or storage operations formerly conducted
17 at an MGP Site and the input and guidance provided by
18 the Company's EH&S site project manager, Con Edison's
19 environmental consultant prepares a draft work plan for
20 the Company's review. The Company's EH&S site project
21 managers actively communicate with DEC and DOH site
22 project managers and the Company's consultants during
23 the preparation of draft SCS work plans to ensure that

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1 the draft plans meet the DEC's and DOH's requirements
2 and the Company's expectations. After any revisions
3 based on the Company's EH&S site project manager's
4 review are made, the draft SCS work plan is submitted
5 to the DEC and DOH for their review and approval.

6 Once the draft work plan has been approved by DEC
7 and DOH, the SCS field work may begin. A fact sheet is
8 typically prepared for distribution to appropriate
9 stakeholders prior to the start of the SCS fieldwork.

10 For sites no longer owned by Con Edison, the
11 Company must obtain the property owner's consent in
12 the form of an access agreement before the SCS
13 fieldwork commences. The negotiation of access
14 agreements for these sites can be a challenging and
15 time-consuming process due to the nature of the
16 operations currently being conducted on them, such as
17 schools, hospitals, apartment building complexes,
18 public parks, and commercial businesses. Access
19 agreements for such sites typically include provisions
20 specifically developed to ensure that the SCS field
21 work does not unduly interfere with on-going site
22 operations.

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1 Upon the completion of the SCS fieldwork, a report
2 is submitted to the DEC and DOH for their review and
3 approval. Depending on the findings of the SCS, these
4 agencies will determine which of the following three
5 steps is the most appropriate for a site:

- 6 • No further action is required because there is no
7 evidence of MGP-related impacts that warrants
8 further investigation or remediation;
- 9 • Additional investigation is required to better
10 characterize and delineate the nature and extent of
11 the MGP-related impacts present on and around the
12 site; or
- 13 • Remediation is necessary to address the MGP-related
14 impacts that have been sufficiently characterized
15 and delineated, and the Company must proceed with
16 the development/evaluation of remedial alternatives.

17 A RI refers to the second and subsequent rounds of
18 investigation beyond the SCS. More than one round of
19 on-site investigation and, in some cases, off-site
20 investigation may be necessary to define the
21 contamination with a sufficient degree of certainty to
22 support the assessment of potential remedial
23 alternatives and the development of a RAWP

1 incorporating the remedial activities that the DEC and
2 DOH deem appropriate. The RI process is similar to
3 that for SCSs, with community outreach and, when the
4 work is done at a third party-owned property, access
5 agreement negotiations. RI work plans must be approved
6 by the DEC and DOH.

7 After the RI fieldwork and sample analyses are
8 completed, a draft RI report is submitted to the DEC
9 and DOH for their review and approval. Based on the
10 results of the RI, these agencies will make one of the
11 three determinations specified above in my discussion
12 of the SCS process.

13 Remediation Determinations

14 Q. Under what circumstances do the DEC and DOH typically
15 require the remediation of site contamination?

16 A. DEC and DOH require remediation when they determine
17 that the contamination present at a site presents a
18 current or potential future significant threat of harm
19 to human health and/or the environment or is necessary
20 to meet statutory or regulatory goals and objectives.
21 This determination is made on the basis of the results
22 of the SCS and/or RI for a site. With regard to
23 potential human health impacts, DOH will consider

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1 whether potential complete exposure pathways have been
2 identified at the site during the investigation work.

3 Q. Do DEC and the DOH consider economic factors in
4 determining whether remediation is required?

5 A. No. That determination is made by them solely on the
6 basis of whether remediation is required to mitigate a
7 significant threat of harm to human health and/or the
8 environment or to meet statutory/regulatory goals and
9 objectives. If such threats are found to exist or
10 remediation of the contamination is necessary to
11 achieve statutory and regulatory goals/objectives,
12 remediation must be performed.

13 Q. Do economic factors play any role in the remedy
14 selection process?

15 A. While DEC and the DOH do not consider economic impacts
16 in determining whether and to what extent remediation
17 is required, DEC's regulations and guidance documents
18 allow it to consider costs in evaluating remedial
19 alternatives. Under those regulations and guidance
20 documents, "cost effectiveness" is a secondary
21 permissible criterion for such evaluations and can be
22 considered by the DEC when it evaluates and determines
23 whether to select one of two or more remedial

1 alternatives that are consistent with applicable and
2 relevant rules, regulations, policies and guidance.
3 For example, under DEC's regulations and guidance
4 documents a goal of remediation is to restore sites to
5 their pre-contamination condition to the extent
6 technically feasible to do so. If this goal cannot be
7 met, the remediation selected must, at the minimum,
8 adequately protect human health and the environment,
9 and include technically feasible remediation measures
10 for so-called "source materials", such as free coal
11 tar, coal tar-contaminated soil, and purifier waste. If
12 two or more competing remedial alternatives are capable
13 of meeting these goals, but one alternative is expected
14 to cost less to implement, DEC can select the less
15 costly alternative.

16 Remedial Planning Process

17 Q. Please describe the remedial planning process that Con
18 Edison must follow for SIR Program Sites for which DEC
19 and the DOH or EPA have determined that remediation is
20 required.

21 A. Under the 2002 MGP Agreement (and the ACOs, VCAs, and
22 BCAs for MGP Sites not covered by that agreement, ACOs
23 for New York Superfund Sites, Appendix B of the 1994

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1 DEC Consent Order and subsequently the 2006
2 Consolidated Consent Order, and the hazardous waste
3 management facility operating permit for the Astoria
4 Site), once the DEC and DOH determine that remediation
5 is required, Con Edison is required to identify and
6 evaluate potential applicable remedial alternatives for
7 DEC's and DOH's approval. In the case of federal
8 Superfund Sites, Con Edison must identify and evaluate
9 potential applicable remedial alternatives for EPA's
10 approval.

11 Q. For sites at which remediation is required, please
12 describe the process the Company follows in its
13 development of proposed remedial alternatives.

14 A. I will focus on the specific process for MGP Sites.
15 However, the process applicable to other types of SIR
16 Program sites is similar.

17 For MGP Sites, Con Edison must prepare an
18 Alternatives Analysis Report ("AAR") for DEC and DOH
19 consideration and approval. In that report, Con Edison
20 must identify potential remedial alternatives, screen
21 them to determine which alternatives appear technically
22 feasible to implement, and then assess the feasible

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1 alternatives using the evaluation criteria discussed
2 below.

3 The first step in the AAR process is to meet with
4 DEC and DOH to discuss their views on the general
5 parameters of what they believe would comprise an
6 approvable remediation program for a site, given the
7 site's use and the extent of the contamination present.
8 For sites no longer owned by Con Edison, meetings are
9 also scheduled with the site owners to identify any
10 changes in site use being considered by them. These
11 meetings are essential to understanding the perspective
12 of the regulatory agencies and property owners, so that
13 Con Edison does not waste time and resources pursuing
14 "dead ends."

15 Pursuant to the DEC's requirements, the AAR must
16 identify potential remedial alternatives and evaluate
17 them against the following criteria in order to
18 determine which alternative is the most appropriate
19 based on all the relevant factors:

- 20 • protection of human health and the environment;
- 21 • compliance with standards, criteria, and guidance;
- 22 • long-term effectiveness;
- 23 • reduction in toxicity, mobility, or volume;

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- 1 • short-term impacts and effectiveness;
- 2 • implementability; and
- 3 • cost-effectiveness.

4 If the DEC and DOH do not find the Company's AAR to be
5 approvable, these agencies will inform the Company of
6 their reasons for disapproval and specify the revisions
7 that the Company must incorporate into the draft AAR.
8 For example, the DEC or DOH may prefer a different
9 alternative over the one recommended by the Company.
10 Once the DEC and DOH deem the AAR to be approvable, a
11 notice will be published in the State's Environmental
12 Notice Bulletin for a 30-day public comment period (45
13 days for sites in the Brownfield Cleanup Program). A
14 public meeting is held at which DEC, DOH, and Con
15 Edison present the recommended remedial alternative and
16 receive comments from the public. Con Edison will
17 distribute a Fact Sheet to stakeholders announcing the
18 availability of the AAR and the public meeting.

19 After the close of the public comment period, DEC
20 will formally approve the AAR. Depending on the
21 comments received, the AAR may have to be revised to
22 reflect the public's input. Community acceptance is one

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1 of the criteria considered by DEC in the selection of
2 an approved remedial alternative.

3 Q. Does Con Edison make the final decision on which
4 remedial alternative must actually be implemented?

5 A. No. That decision is made by the DEC (or EPA for
6 federal Superfund sites), after an opportunity for
7 public comment.

8 Q. Is the selected remedial alternative sometimes
9 implemented by third party property owners instead of
10 by the Company?

11 A. Yes. For properties undergoing redevelopment, the
12 Company and the property owner/developer may enter into
13 a cooperation agreement to coordinate remediation and
14 site redevelopment and share costs. For those sites,
15 it is often more efficient and cost effective for the
16 developer to manage both the remediation and
17 construction phases. In the case of federal Superfund
18 sites in which the Company is a member of a PRP Group,
19 the PRP Group would implement the selected remedy.

20 Q. Is agency approval of a remedial alternative the end of
21 the remediation planning process?

22 A. No. The decision documents that DEC or EPA issue when
23 they select and approve a remedial alternative for a

1 site generally contain only summary information about
2 the remedial alternative. The RAWPs that Con Edison is
3 required to prepare for DEC and DOH approval provide
4 additional detail regarding the selected remedial
5 alternative, but do not contain all information
6 necessary for the performance of the construction
7 activities needed to effectuate the selected remedial
8 alternative. Con Edison is required to augment the
9 approved AAR and RAWP for a site by developing the
10 detailed drawings, plans, and specifications needed to
11 implement the selected remedial alternative. In some
12 cases, additional studies may be required. For
13 example, if DEC or EPA require groundwater treatment to
14 meet a specified cleanup level, Con Edison must design
15 the treatment system needed to meet that objective.
16 The detailed drawings, plans, and specifications for
17 construction of the selected remedial alternative are
18 subject to DEC/DOH review and approval.

19 Remedial Construction Process

20 Q. Please describe Con Edison's remedial construction
21 process.

22 A. The Construction Management ("CM") Department within
23 Con Edison's Construction Services organization is

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1 responsible for supporting Con Edison's EH&S
2 Department's efforts to manage the remedial
3 construction phase of remediation projects. Remedial
4 design plans and specifications and engineer's cost
5 estimates are prepared by the Company's environmental
6 engineering consultants working jointly with the EH&S
7 project manager and CM. Depending on the estimated
8 cost of remediation, one of three lists of pre-
9 qualified remediation contractors will be used to
10 solicit technical proposals and bids for the
11 performance of the remedial construction work. For
12 relatively small projects, a technical proposal and
13 associated technical evaluation may not be required.

14 After the award of a Purchase Order to the
15 selected remediation contractor, CM will manage the
16 contractor's performance of the work with the EH&S
17 project manager participating as a key member of the
18 team. DEC generally has a full-time inspector assigned
19 to sites for which significant remedial construction
20 work is required to ensure that the Company complies
21 with the requirements of the approved remedy, RAWP, and
22 design specifications and to participate in project
23 team meetings. For projects entailing less significant

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1 remedial activities, the DEC inspector will visit the
2 sites periodically. In addition, the Con Edison
3 environmental engineering consultant that prepared the
4 approved design and bid specifications will be present
5 to insure that the agency-approved RAWP and design and
6 bid specifications are implemented properly, to obtain
7 information needed to prepare the remediation report
8 (sometimes referred to as the final engineering report)
9 and, in some cases, to perform air monitoring and/or
10 post-excavation soil sampling.

11 As indicated previously in my testimony, when
12 remediation is to be performed at third party sites,
13 the Company must enter into an access agreement with
14 the property owner. In addition to providing access,
15 the agreements contain commitments by the property
16 owner not to violate post-remediation institutional
17 controls required as part of the DEC-approved remedy
18 and not to interfere with the operation of any DEC-
19 required engineering controls.

20 Q. Please identify the Company's remediation contractor
21 management protocols.

22 A. These protocols include the Company's Contract
23 Administration Manual, Construction Contract Management

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1 Procedures, and the Standard Terms and Conditions of
2 Construction Contracts, which are provided as part of
3 the Company's workpapers in this proceeding.

4 Q. Please summarize the purpose of the Contract
5 Administration Manual.

6 A. The purpose of the Contract Administration Manual is to
7 provide direction for Company personnel in the
8 administration of contracts to promote the efficient
9 use of Company and contractor resources, as well as
10 compliance with all applicable laws and regulations. It
11 provides detailed guidance for the administration of
12 construction contracts, including remediation-related
13 construction work. The manual describes the Company
14 procedures for requisitioning and procurement of
15 construction contracts, establishes guidelines for
16 executing changes to labor contracts after the purchase
17 order or contract has been issued, defines the
18 procedures utilized to process payments under
19 construction contracts, and establishes a system for
20 monitoring progress of major projects against a planned
21 schedule. It also sets standards of performance for
22 field activities and provides procedures to be followed
23 in their execution and provides instructions to promote

RANDOLPH S. PRICE - ELECTRIC

1 compliance with the Company's requirement that
2 contractors working for Con Edison have fully developed
3 site/task specific Environmental, Health and Safety
4 Plans for their work.

5 Q. Please summarize the purpose of the Construction
6 Contract Management Procedures.

7 A. The Construction Contract Management Procedures contain
8 requirements for the contractor's management of
9 construction work, including remediation-related
10 construction work. The Construction Contract
11 Management Procedures establish requirements for
12 contractor performance regarding documentation, notice
13 to proceed, approval of subcontractors, schedule
14 monitoring, working hours, use of proper personal
15 protective equipment ("PPE"), adherence to safety
16 regulations, and identification of hazards encountered
17 at the job site. The Construction Contract Management
18 Procedures identify required submittals and schedule of
19 submissions for items such as shop and work drawings,
20 operating procedures, substitution of materials, and
21 as-constructed drawings. They supplement Con Edison's
22 Standard Terms and Conditions for construction
23 contracts and govern the contractor's work regarding

1 the use of qualified representatives; work permits;
2 equipment and material delivery, handling, and storage;
3 and site maintenance.

4 Q. Please summarize the purpose of the Standard Terms and
5 Conditions of Construction Contracts.

6 A. The company's Standard Terms and Conditions of
7 Construction Contracts are incorporated into its
8 contracts for construction services, including
9 remediation-related construction work. They define the
10 contractual obligations of the construction contractor
11 and Con Edison. The obligations and stipulations that
12 are addressed include, but are not limited to Contract
13 Formation; Specifications, Plans, and Drawings; Price
14 and Payment; Time for Completion; Excusable Delay;
15 Safeguards in Work; Work Conditions; Contractor's
16 Performance; Con Edison's Authority; Estimated
17 Quantities; Warranties; Changes; Claims; Codes, Laws
18 and Regulations, and Maintenance of Work.

19 Post-Remedial Construction Process

20 Q. Are there post-remediation requirements that the
21 Company must follow?

22 A. Yes. Because many of the sites in the Company's SIR
23 program are located in well-developed areas covered

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1 with existing buildings or present other logistical
2 challenges, it is frequently not feasible to remediate
3 a site to meet "unrestricted use" standards pursuant to
4 DEC regulations and guidance. At other sites, it may
5 not be cost-effective to meet "unrestricted use"
6 standards due to the background levels or depths of
7 contaminants present at the site. In such cases, Con
8 Edison may propose and the DEC and DOH may allow
9 remediation to alternative standards that protect
10 public health and the environment for certain specified
11 uses of the site. If Con Edison does not remediate a
12 site to "unrestricted use" standards, the Company must
13 comply with one or more institutional and/or
14 engineering controls at the site to address the
15 remaining contamination after completing remedial
16 construction. Examples of institutional controls
17 include environmental easements, deed restrictions, or
18 other use restrictions. Engineering controls could
19 include a containment barrier, sub-slab ventilation
20 system, or product (e.g., coal tar, gasoline, fuel oil)
21 recovery system. These controls are required in
22 perpetuity or until DEC, with DOH concurrence,
23 determines that they are no longer necessary.

1 In order to comply with these various controls,
2 the Company is required to prepare a Site Management
3 Plan ("SMP") for DEC's approval. A typical SMP
4 includes procedures to:

- 5 • operate and maintain engineering controls and/or
6 treatment systems;
- 7 • maintain compliance with institutional controls,
8 where applicable;
- 9 • inspect and evaluate site information periodically
10 to determine whether the remedy continues to be
11 effective; and
- 12 • monitor and report the performance and effectiveness
13 of the remedy, including periodic sampling.

14 Selection/Use of Contractors

15 Q. Please describe the role of outside consultants and
16 contractors in the Company's site investigation and
17 remediation program.

18 A. The Company uses environmental consultants to prepare
19 investigation work plans, perform investigations and
20 prepare reports on investigation findings, evaluate
21 remedial alternatives, prepare remedial action plans
22 and specifications, perform treatability and pilot
23 tests, as well as remediation oversight, and prepare

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1 remediation reports. In addition, the Company hires
2 remediation contractors to implement agency-approved
3 remedial action work plans and bid specifications.

4 Q. How does Con Edison select its consultants?

5 A. I will focus primarily on MGP Program consultants.
6 However, the process used by the Company to retain
7 environmental consultants for other SIR Program sites
8 is generally similar.

9 In 2002, the Company retained a team of seven
10 consultants to support its MGP Program. In 2005, when
11 the purchase orders ("POs") issued to those contractors
12 expired, Con Edison conducted a two-step selection
13 process for the issuance of second-round POs. For the
14 pre-qualification phase, 20 environmental consulting
15 firms were invited to submit responses to a
16 questionnaire jointly developed by EH&S and Con
17 Edison's Purchasing Department; 17 firms responded.
18 Because the Company's MGP Program was moving from
19 investigation to remedial planning and remediation at
20 many of the sites, remediation experience was deemed to
21 be a more important consideration in 2005 than in 2002.
22 Con Edison considered each consultant's experience in
23 innovative investigation and remediation technologies,

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1 as well as its success in negotiating with regulatory
2 agencies, particularly the DEC. The questionnaire
3 included a test problem designed to give Con Edison
4 insight into each such firm's capabilities in analyzing
5 investigation results and other relevant information to
6 develop cost-effective remedial alternatives that would
7 likely be acceptable to the DEC and DOH. Ten of the 17
8 firms were rated high enough to participate in the
9 second phase of the procurement action.

10 In the second and final phase, these ten firms
11 were invited to provide pricing information for
12 professional services and fieldwork (e.g., drilling and
13 other investigation-related activities). These rates
14 were applied to a model investigation work scope to
15 determine the reasonableness of pricing being offered
16 by each firm for a typical MGP site investigation.
17 Purchasing negotiated with the firms to reduce any
18 premiums and reached acceptable agreements with nine
19 firms. POs were awarded to those nine firms in November
20 2005 for three-year terms.

21 By retaining a team of qualified and competitively
22 priced consultants to support the investigation,
23 remedial planning, and remediation oversight activities

RANDOLPH S. PRICE - ELECTRIC

1 of the MGP Program, the Company generally avoided
2 having to conduct a separate procurement action for
3 each individual site. However, EH&S, in conjunction
4 with Purchasing, may determine that a separate PO
5 should be awarded after competitive bidding among the
6 existing nine consultants for a particular MGP site in
7 certain circumstances, such as a projected very high
8 initial investigation cost estimate developed based on
9 the investigation work plan for that site.

10 The Company's procurement process to retain
11 environmental consulting services for the other
12 programs is similar to the process described above for
13 the MGP Program. Four environmental consultants have
14 been retained to support the Appendix B Program, and
15 five environmental consultants have been retained to
16 support the UST Program. For very large and complex
17 site investigation projects (i.e., East River Appendix
18 B Site, consolidated Long Island City Site 79),
19 separate Purchase Orders were issued. Likewise,
20 separate Purchase Orders have been issued to
21 environmental consultants for State Superfund Sites
22 (e.g., former Maspeth Substation Site, Echo Avenue
23 Substation Site, former Arthur Kill Generating Station,

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1 and North First Street Terminal) that are currently
2 owned or previously owned by Con Edison. Finally,
3 Purchase Orders have been awarded to two consulting
4 firms for the Astoria RCRA Corrective Action Site, one
5 for the site-wide investigation that was initiated in
6 1993 and one for the risk assessment and remedial
7 planning for the North Storage Yard, which has PCB and
8 other contamination.

9 Q. What primary types of subcontractors do environmental
10 consultants typically use during investigations?

11 A. The Company's environmental consultants typically use
12 drilling subcontractors to perform test pits and to
13 install soil borings and monitoring wells, laboratory
14 subcontractors to perform sample analyses required by
15 agency-approved work plans, and surveyor subcontractors
16 to document the precise coordinates of test pit,
17 boring, and well locations.

18 Q. Why doesn't the Company contract directly with these
19 subcontractors?

20 A. The Company looks to the environmental consultants for
21 overall management of the investigations, including
22 oversight and coordination of the subcontractors (about
23 half a dozen in most cases). In these circumstances,

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1 it would be counterproductive and confusing the line of
2 responsibility if the Company were to contract directly
3 with the subcontractors.

4 Q. What about the option of buying the required drilling
5 equipment and using the Company's own laboratory for
6 analytical support?

7 A. There would not be sufficient regularly scheduled work
8 to justify the purchase of drilling equipment and
9 hiring of full-time operators. With respect to using
10 an in-house laboratory, although the Company has a
11 state-approved environmental laboratory, that
12 laboratory is not approved for most of the analyses
13 required under the approved investigation work plans
14 for SIR program sites, nor does it meet agency
15 requirements for analytical data validation
16 deliverables. Also, Con Edison's ACOs and consent
17 decrees with the EPA explicitly require the use of
18 independent contractors acceptable to EPA for such
19 work.

20 Q. How does Con Edison select remediation contractors?

21 A. The selection of contractors is a multi-step process.
22 The first step in Con Edison's remediation contractor
23 procurement process for its SIR Program was the

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1 development of a pre-qualified bidders list. The
2 purpose of this list is to streamline selection process
3 by establishing a short list of contractors pre-
4 qualified to bid on future MGP, as well as other,
5 remediation projects. The list obviates the need to
6 evaluate which firms should be invited to bid on each
7 remediation project.

8 A questionnaire related to the contractor's
9 experience with construction and remediation was sent
10 to 28 remediation contractors. The questionnaire was
11 developed by a team comprising of representatives from
12 Con Edison's Purchasing, CM and EH&S Departments.
13 Timely responses were received from 17 of the 28 firms.
14 They were reviewed by a team from CM and EH&S in
15 accordance with predetermined scoring criteria
16 developed to evaluate potential contractor
17 qualifications for remedial construction work. The team
18 concluded, and Purchasing concurred, that 15 of the 17
19 contractors met the Company's qualification
20 requirements. Based on their past experience,
21 including the size of the remediation projects
22 previously handled by them, the 15 firms have been
23 placed in three categories, so that the smaller firms

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1 are not invited to bid on larger, more complex
2 remediation projects.

3 The procurement process to hire a remediation
4 contractor consists of the following general steps:

- 5 • Preparation of Purchase Requisition - This is the
6 formal request to Purchasing for procurement
7 action. The Purchase Requisition is issued by CM,
8 and it includes the services requested, estimated
9 budget, recommended bidders, detailed
10 specifications and other related documents. The
11 Purchase Requisition must be approved by the
12 appropriate level within Construction Services
13 before it is sent to Purchasing.
- 14 • Issuance of bid package/Request for Proposal -
15 After Purchasing receives a Purchase Requisition, a
16 buyer is assigned to the project. The buyer works
17 with CM and EH&S to prepare a Request for Proposal
18 ("RFP") inviting the contractors to submit a
19 technical proposal and commercial proposal.
20 Depending on the scope of work and other
21 considerations, Purchasing may issue a Request for
22 Bids ("RFB") under which the contractors are
23 requested to submit a commercial proposal without a

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- 1 technical proposal. The RFP or RFB includes a
2 scheduled field visit to the site and a deadline to
3 submit the proposals.
- 4 • Field visit - The field visit is typically
5 conducted at least one week after the contractors
6 receive the RFP or RFB. This allows the contractors
7 to review the specifications prior to the field
8 visit and ask pertinent questions.
 - 9 • Review of technical proposals - The RFP requires
10 the contractors to submit separate technical and
11 commercial proposals. Technical proposals are
12 forwarded by Purchasing to CM and EH&S for their
13 review. The commercial proposals are retained by
14 Purchasing for later evaluation if the bidding
15 contractors' technical proposals are found to be
16 acceptable. Technical evaluation criteria are
17 normally established by CM and EH&S prior to the
18 issuance of the RFP, and the contractors are
19 informed of those criteria.
 - 20 • Review of commercial proposals - After receiving
21 the results of the technical evaluation from CM and
22 EH&S, Purchasing opens the commercial proposals
23 submitted by those contractors with acceptable

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1 technical scores. For projects that do not require
2 a technical proposal, the commercial evaluation
3 begins upon the receipt of the commercial
4 proposals. Purchasing works with Bid-Check
5 Estimating to evaluate the pricing information
6 submitted by the contractor with the lowest cost
7 proposal to determine if the proposed labor rates,
8 unit prices, lump sum prices, and other cost items
9 are reasonable and consistent with current market
10 conditions. A meeting with the contractor may be
11 held to avoid misunderstandings regarding the
12 required work scope.

13 • Contract award - The contractor that submitted a
14 technically acceptable proposal and the lowest cost
15 proposal based on the commercial evaluation is
16 recommended by the Purchasing buyer for award of a
17 PO to perform the remediation. The level of
18 approval required depends on the value of the PO.

19 Q. What types of subcontractors do remediation contractors
20 typically use during remediation projects?

21 A. Remediation contractors typically use engineering
22 subcontractors to prepare detailed design documents
23 (e.g., sheeting and shoring plan) and obtain building

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1 permits, environmental/safety consultants to prepare
2 environment, health and safety plans, perform air and
3 personnel monitoring, and obtain wastewater discharge
4 permits, waste transporters and waste management
5 facilities to dispose of wastes generated during the
6 remediation project, and laboratories to perform
7 analyses required by waste management facilities or for
8 other purposes. In addition, remediation contractors
9 use various material and equipment suppliers and
10 installers.

11 Q. Why doesn't the Company contract directly with these
12 subcontractors?

13 A. The Company believes it is more appropriate to place
14 responsibility for these activities on the contractor.
15 This makes the contractor accountable for all aspects
16 of the work, including work performed by
17 subcontractors. For example, if there are any delays
18 in obtaining materials (e.g., steel for sheeting),
19 delays in obtaining permits (e.g., City sewer discharge
20 permit for wastewater, City Department of Buildings
21 permits), delays in obtaining approvals from waste
22 management facilities, or the presence of off-

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1 specification material for waste disposal, the
2 contractor would be responsible.

3 Q. What about the option of buying the required
4 construction equipment or using Company employees to
5 perform some of the remediation activities?

6 A. There would not be sufficient regularly scheduled work
7 to justify the purchase of specialized construction
8 equipment and the hiring of specially trained
9 operators. Examples of specialty equipment include
10 large diameter (e.g., 30 inches) rigs for installing
11 secant piles, equipment used to install slurry walls,
12 equipment for performing in-situ chemical treatment,
13 and equipment for performing in-situ contaminant
14 stabilization.

15 Company Personnel Involved in SIR Program

16 Q. How many Con Edison employees are directly involved in
17 the Company's SIR Program on a full-time or a regular
18 basis?

19 A. The Company currently has 32 employees directly
20 involved in its SIR Program on a full-time or a regular
21 basis. This includes 15 employees in the EH&S
22 Department, 15 employees in the CM Department, and two
23 employees in Regulatory Services.

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1 Q. Please describe the role of the EH&S employees in the
2 Company's SIR Program.

3 A. The Remediation Department of EH&S has overall
4 responsibility within the Company for managing the SIR
5 Program. This department consists of a Director, two
6 Section Managers (one for the MGP program and one for
7 other remediation programs), and a total of 12 Project
8 Managers (five for the MGP program and seven for the
9 other remediation programs). Remediation staff persons
10 serve as Project Managers and Project Engineers for
11 their assigned sites under the SIR Program. Their
12 responsibilities include:

- 13 • Direct the consultants on the development of
14 investigation work plans for DEC and DOH approval;
- 15 • Coordinate with Regulatory Services, Public Affairs,
16 and property owners to complete access agreements;
- 17 • Coordinate with CM on the implementation of
18 investigation and remediation work plans;
- 19 • Review and approve the consultants' budget and
20 invoices;
- 21 • Participate in public meetings and other meetings
22 with stakeholders in connection with investigation

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- 1 findings, proposed remedies, and other project-
2 related issues;
- 3 • Coordinate with the DEC, DOH, EPA, consultants, and
4 property owners on the development of proposed
5 remedies;
 - 6 • Participate in the procurement process to select a
7 remediation contractor for each of their remediation
8 projects;
 - 9 • Participate in negotiations with property owners on
10 cooperation agreements with respect to remediation
11 responsibilities and cost sharing;
 - 12 • Prepare quarterly projections of expenditures and
13 estimates of future liability; and
 - 14 • Provide periodic reports on the status of their
15 projects to Company management.
- 16 Q. Please describe the role of the CM employees in the
17 Company's SIR Program.
- 18 A. The CM employees support EH&S in the implementation of
19 the SIR Program investigation and remediation work.
20 This includes support of fieldwork, review of bid
21 specifications, and management of remediation contracts
22 and contractors. Currently, CM has a Construction

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1 Manager, three Project Specialists, four Chief
2 Construction Inspectors, and seven inspectors primarily
3 assigned to remediation projects.

4 Q. Please describe the role of the Regulatory Services
5 employees in the Company's SIR Program.

6 A. Regulatory Services provides environmental legal
7 support, including: (1) the negotiation and preparation
8 of access and other agreements with the present owners,
9 lessees, and/or developers of the Company's and its
10 corporate predecessors' former MGP and other sites; and
11 (2) the negotiation and preparation of consent orders,
12 consent decrees, PRP group participation agreements,
13 and other agreements for Superfund sites owned by third
14 parties, and (3) when appropriate, litigation to
15 protect the Company's interests when negotiations are
16 unsuccessful in resolving important issues.

17 Q. Are there other Company employees who support the SIR
18 Program on an intermittent basis?

19 A. Yes. These include but are not limited to employees in
20 Public Affairs, Occupational Health, Real Estate, other
21 groups within EH&S, Central Field Services, and other
22 organizations as necessary.

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1 Q. What is the Company's process for the review and
2 payment of SIR consultant and contractor invoices?

3 A. Con Edison's EH&S Department manages contracts with
4 environmental consultants, while its CM Department
5 manages contracts with remediation contractors.

6 With regard to environmental consultants, the
7 following steps are generally followed by EH&S project
8 managers in their review of invoices submitted by the
9 consultants:

- 10 • Compare all unit rates in the invoices with those in
11 the consultant's purchase order. This includes
12 reconciliation of the unit rates for labor, material
13 charges, and other line items in the PO.
- 14 • Verify that all calculations for charges claimed are
15 correct and free of errors.
- 16 • Reconcile the number of units for each line
17 item/work activity claimed to have been
18 used/performed with the number of units actually
19 used/performed. This is done through a review of
20 field notes and other documentation.
- 21 • Verify that all supporting documents to the
22 consultant's invoice, such as time sheets or
23 subcontractor invoices, are consistent with the

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1 information on the consultant's invoice and that the
2 charges are billed to the correct project.

3 After completing the steps above, the project manager
4 will either approve the invoice or contact the
5 consultant to reconcile any discrepancies identified.

6 With regard to contracts with remediation
7 contractors, CM uses the following Con Edison documents
8 to format, reconcile and process payment applications
9 from such contractors: (1) Contract Administration
10 Manual; (2) Construction Contract Management
11 Procedures, and (3) Standard Terms and Conditions of
12 Construction Contracts. The purposes of these
13 documents are summarized earlier in my testimony.

14 The remediation contractor is required to submit a
15 performance statement that correlates with his/her
16 project schedule. Performance Statements are tabulated
17 summaries of the contractor's work and mirror the
18 contractor's price schedule. Lump sum, unit price and
19 change order items are listed on the Performance
20 Statement and include information on the description of
21 work, the quantity of work, the unit price of work if
22 applicable, and the total value of work. The
23 Performance Statements indicate the value of work

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1 completed to date, the value of work requested for the
2 current payment application and the total value of work
3 remaining. CM receives invoices from the contractor
4 that includes back-up information such as weight
5 tickets, survey measurements and as-built drawings that
6 are used to substantiate the accuracy of the invoice.
7 If the invoice is not approvable in its entirety, the
8 contractor is required to revise it as appropriate or
9 approval of partial payment is recommended. Once the
10 invoice is approved by the CM section that manages the
11 remediation contractor, the invoice is sent to CM's
12 Administrative Services Group, where invoice
13 reconciliation is performed again.

14 Once an invoice is approved, regardless of whether
15 it is from an environmental consultant or remediation
16 contractor, it is receipted on the Company's Accounts
17 Payable system with the appropriate account or work
18 order number. After the Accounts Payable Department
19 approves payment, a check is prepared and sent to the
20 environmental consultant or contractor.

21

22 LABORATORY INFORMATION MANAGEMENT SYSTEM (LIMS)

23

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1 Q. Please describe the Company's existing Laboratory
2 Information Management System ("LIMS").

3 A. The existing Laboratory Information Management System
4 (LIMS) is a computer application that was originally
5 purchased and licensed from Beckman & Coulter. Since
6 then, the computer application has been sold twice and
7 is currently "maintained" by Thermo Fisher Scientific.
8 LIMS currently operates under the Microsoft Windows
9 2000 operating system and uses Oracle Version 9.2 as
10 the database. This system is a critical resource in our
11 chemical laboratory and it is used to document, manage
12 and report analytical work for environmental sampling.
13 LIMS captures and stores analysis sample results
14 obtained from laboratory equipment. Data from the
15 system is used to produce reports that are transmitted
16 via email or electronically transferred to other
17 interfacing systems. Con Edison began using the LIMS
18 computer application on April 1, 2001. As of April
19 2008, there are approximately 343,000 sample records
20 stored in its database.

21 Q. Does the Company have any concerns regarding this
22 application?

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1 A. Since purchasing the LIMS system, the vendor has
2 developed a new and more robust system. As a result,
3 the vendor has informed Con Edison that it will not
4 support the current version after 2009. As Con Edison
5 moves towards new technological platforms to host its
6 computer resources, the risk of running an unsupported
7 LIMS system becomes substantial. A malfunction of the
8 current LIMS systems will affect other external systems
9 such as EMIS (Environmental Management Information
10 System), which depend on LIMS and therefore impact Con
11 Edison's Environmental regulatory compliance in a
12 timely and accurate manner. When chemical or oil spills
13 occur, the incidents are entered in EMIS. EMIS
14 automatically assigns a number to each incident for
15 tracking purposes. Samples of these spills are
16 collected and sent to the Chemical Laboratory for
17 analysis with an associated EMIS incident number. At
18 the chemical laboratory, the test results are entered
19 into LIMS and automatically transferred back into the
20 EMIS system. Without LIMS, this process would have to
21 be done manually, resulting in potential time delay and
22 transcription error. In addition, Company employees can

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1 currently search for historical sample results directly
2 into LIMS from the EH&S web portal.

3 Q. What are the alternatives for obtaining the new
4 software?

5 A. The first alternative is to develop an in-house LIMS
6 application. This will not be cost effective, because,
7 at the core, a certain level of business expertise is
8 required to analyze processes, define the functional
9 scope of work, and then develop the software
10 application. The software application must also
11 interface with existing laboratory equipment through
12 data acquisition peripherals. The other, and
13 preferred, alternative is to purchase and install a
14 vendor product. There are numerous laboratory software
15 product developers that offer expertise beyond the
16 capability of our internal software development group.
17 Replacing the existing system with an external
18 laboratory software package will allow Con Edison to
19 obtain the benefit of this expertise to meet the
20 industry standards and continue to automate the
21 laboratory's business process.

22 Q. How much is a replacement system expected to cost?

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1 A. Based on an estimate by the current vendor plus
2 additional support costs of our Information Resource
3 department, the total cost is estimated at \$1 million
4 (capital expenditures, totaling \$700,000 in 2009 and
5 \$300,000 in 2010). The total cost of the project will
6 fall within the rate year. In 2007, we received
7 Commission approval for \$300,000 in 2009 and \$300,000
8 in 2010, so of the requested program change only
9 \$400,000 is in the rate year. This increase is due to
10 the cost for additional hardware as well as internal
11 costs of configuring the vendor's package to interface
12 with existing computer applications.

13

14 PURCHASE OF PFT VAN

15

16 Q. Please describe the purpose of the PFT instrumentation.

17 A. Perfluorocarbon Tracers ("PFT") are a family of
18 compounds developed as atmospheric tracers for various
19 applications by the Tracer Technology Center at the
20 Brookhaven National Laboratory ("BNL"). PFTs are
21 liquid at room temperature but evaporate rapidly into
22 air. BNL developed instrumentation and methodology
23 capable of detecting airborne concentrations of PFTs in

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1 the parts-per-quadrillion range (1 part in
2 1,000,000,000,000,000) for atmospheric tracer testing.
3 In the mid 1990's, Con Edison teamed with the Electric
4 Power Research Institute ("EPRI") and the BNL to
5 develop instrumentation and an application methodology
6 to use PFT technology to locate leaks in underground
7 high pressure, oil-filled, electric transmission
8 cables. The result of this project was the development
9 of a one of a kind instrument that uses gas
10 chromatography to measure PFT in air that has escaped
11 from leaking underground buried transmission cables
12 injected with liquid PFTs.

13 Q. Has Con Edison purchased the PFT instrumentation?

14 A. Yes.

15 Q. Please explain why a PFT van needs to be purchased in
16 order to make use of the PFT instrumentation.

17 A. One of the many unique features of this instrument was
18 that it is designed to be mounted on a slow moving
19 vehicle, so that it can detect airborne PFT directly
20 above a leak source. PFT vans are required to house the
21 people and equipment necessary to conduct PFT Feeder
22 Leak searches. These vehicles must have sufficient
23 size to power the instrumentation, mount the

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1 instrumentation inside the vehicle, and provide a work
2 environment for two technicians to operate the
3 instruments and interpret results in the moving
4 vehicle. Our current vehicles are 10 years old, in need
5 of replacement and are not adequate to support the new
6 instruments. The new instrument is significantly
7 larger than the instrument it is replacing and requires
8 more power than the existing vehicles can readily
9 provide. New custom vehicles will be required to
10 provide sufficient counter space and power for this new
11 generation of instrument. The vehicles must be built
12 on at least a midsize diesel truck frame with an
13 integral power take-off electrical generator. A custom
14 work area must be built on the truck frame that will
15 provided sufficient laboratory counter space to
16 properly secure the instrumentation and to provide
17 sufficient work space for the technicians. The work
18 space must be climate controlled to provide a constant
19 normal room temperature for the proper operation of the
20 instrument. The work space must be built with
21 sufficient height to allow for the instrument operators
22 to stand without crouching. The work space must also
23 be designed to be able to safely secure compressed gas

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1 cylinders and must also provide for the ventilation for
2 the instrument exhaust. In addition, the work space
3 must provide for the proper storage of laboratory
4 glassware and other equipment in the moving vehicles.

5 Q. How much will the new PFT van cost?

6 A. The estimated capital cost for the customized PFT van
7 is \$135,000, which is expected to be incurred during
8 the rate year.

9

10 NORMALIZATION ADJUSTMENT FOR CORPORATE EH&S PERSONNEL

11

12 Q. Please discuss the normalization adjustment for
13 Corporate EH&S personnel.

14 A. EH&S requires \$900,000 for staffing, which is for ten
15 positions for individuals who have left EH&S before or
16 during the historic year. EH&S staffing was ten
17 employees below budget for all or a portion of the
18 historic year. As of April 23, 2008, five of these
19 vacancies have been filled and the offer to fill a
20 sixth position has been made and accepted. The Company
21 anticipates filling the remaining four positions before
22 the commencement of the rate year. While other

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1 vacancies may arise in the normal course, we intend to
2 fill these positions as soon as possible.

3

4 NORMALIZATION ADJUSTMENT FOR DEC SPDES FEES

5

6 Q. Please explain the normalization adjustment for DEC
7 SPDES fees.

8 A. The Company is required to pay the DEC a State
9 Pollutant Discharge Elimination System (SPDES) Program
10 Fee annually based on discharge levels. The 2007 DEC
11 SPDES invoice (\$50,000) for East River Generating
12 Station was not reflected in the historic year's cost.
13 The DEC invoice was sent on January 28, 2008, paid in
14 February 2008; additional amounts will be invoiced in
15 2008 and the rate year.

16

17 HAZARDOUS WASTE GENERATION FEES

18

19 Q. Please explain the additional funding required for New
20 York State hazardous waste generation fees in the rate
21 year.

22 A. A normalization adjustment of \$108,000 is required to
23 eliminate various credits received and recorded during

1 the historic year that were for one-time events and are
2 not expected to recur during the rate year.

3

4

CLIMATE REGISTRY

5

6 Q. Please explain the nature and purpose of the Climate
7 Registry.

8 A. The Climate Registry is a new non-profit organization
9 collaboration among U.S. states, Canadian provinces,
10 and Mexican states to develop and manage a voluntary
11 greenhouse gas ("GHG") emissions reporting system. The
12 Registry requires use of standardized reporting and
13 verification protocols for inventorying GHG emissions,
14 which reflect best practices developed by the World
15 Resources Institute. Annual reports are subject to
16 third-party verification at the reporting entity's
17 expense, and will be made available to the public.
18 Reporting entities agree to calculate both direct and
19 indirect GHG emissions. Direct emissions include those
20 from onsite combustion, manufacturing processes and
21 from company-owned transportation fleets. Emissions
22 associated with electricity and steam consumption are
23 the only indirect emissions required to be reported by

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1 the Registry. Reporting entities measure and report
2 emissions of carbon dioxide, methane, nitrous oxide
3 (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons
4 (PFCs), and sulfur hexafluoride (SF₆).

5 The Registry will develop a recognized platform
6 for credible and consistent greenhouse gas emissions
7 reporting. Participation in the Registry demonstrates
8 the Company's commitment to environmental excellence,
9 and will assist the Company in identifying and managing
10 its GHG risks and opportunities.

11 Q. What are the costs associated with belonging to the
12 registry?

13 A. The cost is projected to be \$75,000/year, which
14 includes the \$10,000 annual membership fee and the cost
15 of third party verification of the Company's GHG
16 emissions inventory.

17 Q. Is the Company required to belong to the registry?

18 A. Membership in the Registry is voluntary. New York
19 State is a member of the Registry and the New York
20 State Department of Environmental Conservation is
21 strongly encouraging entities to join.

22 Q. Does the Company plan to join the Registry?

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1 A. The Company joined the Registry in April 2008 as a
2 Founding Reporter. Reporters will be required to
3 submit their 2008 GHG inventories to the Registry in
4 2009.

5

6 PROCEEDS FROM SALE OF SO₂ ALLOWANCES

7

8 Q. Does the Company expect to sell SO₂ allowances in the
9 future?

10 A. Yes.

11 Q. Please explain.

12 A. The Clean Air Act Amendments of 1990 established a SO₂
13 allowance program in an attempt to reduce acid rain.
14 The program was designed to reduce SO₂ emissions in the
15 aggregate through the issuance of a limited number of
16 SO₂ allowances to major emission sources and the
17 establishment of a marketplace where such allowances
18 could be traded. Owners of affected electric
19 generation facilities are provided allowances based
20 upon their emission needs determined during a baseline
21 period. Each allowance authorizes the holder to emit
22 one ton of SO₂ each year. If a holder requires more
23 allowances to cover its SO₂ emissions than the number

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1 of allowances allocated to it, it can purchase
2 additional allowances from other holders who have
3 excess allowances for sale. Absent such purchases, the
4 holder is required to reduce its emissions of SO₂.

5 Con Edison received SO₂ allowances for its
6 generation facilities. As a result of divestiture,
7 retirement of facilities, and the use of fuels
8 containing very little sulfur at its generating
9 facilities, the Company accumulated a surplus of SO₂
10 allowances and continues to receive additional SO₂
11 allowances on an annual basis. The Company is
12 therefore in the position of a seller of SO₂
13 allowances.

14 At the beginning of 2004 the Company developed a
15 strategy to sell accumulated SO₂ allowances. Beginning
16 in the second quarter of 2004, the Company began
17 selling SO₂ allowances in the marketplace. In
18 accordance with the provisions set forth in the Order
19 in Case 90-E-1194, the Company records the proceeds
20 from these sales in PSC Account 254.

21 Q. What are the expected numbers of SO₂ allowances
22 allocable to the electric system that the Company

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1 expects to sell with regard to the 2006, 2007 and 2008
2 vintage years?

3 A. We expect to sell approximately 22,000 SO₂ allowances
4 allocable to the electric system with regard to each of
5 the 2006, 2007, and 2008 vintage years. Vintage Year
6 2006 allowances will be sold during 2008, Vintage Year
7 2007 allowances will be sold during 2009 and Vintage
8 Year 2008 allowances will be sold in 2010.

9 Q. How did you allocate the surplus SO₂ allowances between
10 steam and electric operations?

11 A. I allocated the surplus allowances by the method
12 approved by the Public Service Commission in its 2006
13 decision regarding the Company's steam rates (Case 05-
14 S-1376).

15 Q. What is your estimate of proceeds from the sale of
16 surplus SO₂ allowances allocable to the electric system
17 with regard to the 2006, 2007 and 2008 vintage years?

18 A. I estimate proceeds of approximately \$7.7 million each
19 with regard to the sale of 2006, 2007, and 2008 vintage
20 year SO₂ allowances. These amounts are based on a sale
21 price of \$350 per allowance. We plan to sell SO₂
22 allowances each quarter and the dollars are available

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1 after each quarter starting with the first quarter of
2 2008.

3

4

ENVIRONMENTAL EXCELLENCE FUND

5

6 Q. Please summarize Con Edison's proposal to establish the
7 Environmental Excellence Fund ("EEF").

8 A. Con Edison requests Commission authorization to use up
9 to \$2 million annually of the proceeds from the sale of
10 SO₂ allowances allocable to electric operations to fund
11 the establishment, administration and operation of an
12 EEF that would be used to provide grants to
13 organizations for environmental enhancement projects in
14 the Company's service territory.

15 Q. Please explain the mission and administrative aspects
16 of the EEF.

17 A. The EEF would be an extension of Con Edison's
18 environmental excellence efforts. The EEF will make
19 grants to organizations for projects dedicated to
20 increasing and enriching environmental
21 awareness/education, improving the environment and
22 promoting sustainability throughout Con Edison's
23 service area. Con Edison will use its broad based

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1 relationships with local and national organizations to
2 solicit program proposals that align with the Company's
3 environmental goals. Selections will be made based on
4 each proposal's contribution to protecting and
5 enhancing the environment and its ability to promote
6 the effective use of natural resources. Possible
7 proposals may address, but are not limited to: air and
8 water quality, waterfront preservation and restoration,
9 park restoration, resource conservation, sustainable
10 and renewable energy, alternative fuels, land use and
11 preservation, wildlife preservation and habitat
12 creation or preservation, environmental education and
13 awareness partnerships, environmental research, support
14 for environmental events, and the start-up or support
15 of environmental organizations.

16 Although any proposal will be considered, all
17 organizations that are awarded grant funding must be
18 U.S. based, and primarily non-profit organizations.
19 In order to solicit the best proposals to meet the
20 goals of the EEF, the grant funds may also be awarded
21 to multi-organizational proposals or city-wide
22 activities. Accordingly, the Company will perform due
23 diligence prior to and commensurate with the level of

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1 funding granted to an organization. The Company will
2 provide general oversight, authorize funding for
3 proposals and determine the duration of grant funding
4 provided to qualifying organizations. The EEF will
5 utilize similar processes and guidelines as those
6 presently utilized by the Company for managing its
7 grants program. In addition, the grantees of EEF grant
8 funds will be required to submit to the Company semi-
9 annual reports outlining their progress and the
10 accomplishments of their funded programs.

11 Q. Please explain why the Commission should authorize Con
12 Edison to spend a portion of the proceeds from the sale
13 of SO₂ allowances on this program.

14 A. The establishment of an EEF, using up to \$2 million
15 realized annually through the sale of sulfur dioxide
16 allowances, is in the public interest. Con Edison
17 provides electric delivery service to more than 9
18 million people in an area covering nearly all NYC and
19 Westchester County. A clean environment is important
20 to the health and well being of all of our customers.
21 Con Edison is committed to environmental excellence and
22 to working with organizations that share its concern
23 for preserving and protecting the environment through

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1 conservation and beautification projects. Furthermore,
2 Con Edison recognizes the importance of work that
3 furthers conservancy, recycling, reclamation efforts
4 and the mitigation of pollution.

5 Q. What are some of the other benefits that an EEF would
6 provide?

7 A. The development of an EEF provides an opportunity to
8 raise the environmental awareness throughout Con
9 Edison's service area. This raised environmental
10 awareness level helps ensure that environmental
11 concerns are addressed in an environmentally
12 responsible manner. Ultimately, the improved awareness
13 level helps support local government, local
14 organizations and businesses who wish to improve the
15 environmental quality of life. Selected proposals will
16 also provide realizable benefits to communities
17 throughout the Company's service area.

18 Q. How will the EEF benefit the customers?

19 A. The EEF will promote environmental improvement
20 proposals throughout Con Edison's service area. These
21 types of proposals generally improve the quality of
22 life for individuals by eliminating or mitigating the
23 impact of pollution or poor environmental practices and

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1 restoring adversely impacted areas. Moreover, these
2 types of undertakings also help to restore the balance
3 in nature that is often necessary to initiate and
4 sustain environmental stability.
5 Through the establishment and development of an EEF,
6 the public would be able to leverage the value of its
7 investment by capitalizing upon the symbiotic
8 relationship between actual environmental improvement
9 proposals and raising the environmental awareness of
10 all those that impact the environment. Providing
11 opportunities to undertake environmental proposals has
12 the potential to pay dividends through environmental
13 improvements that may positively impact the present and
14 future generations' ability to enjoy life in New York
15 City and Westchester County. The establishment of an
16 EEF and the resulting increased awareness level may
17 assist customers to make better informed decisions
18 regarding environmental situations that are encountered
19 throughout their lives.

20 The EEF is an opportunity to supplement the
21 Company's existing efforts to support sustained
22 environmental improvements and leverage resources.

23 Q. Does this conclude your testimony?

RANDOLPH S. PRICE - ELECTRIC

1 A. Yes, it does.

2

**Consolidated Edison Company of New York, Inc.
MGP Site Listing**

Exhibit ___(RSP-1)
Page 1 of 8

Site Name	Loc	Street Address	Current and Contemplated Use	Current Status of 4/15/08) (As
Purdy Street Station	Bx	St. Raymond High School for Boys 2151 St. Raymond Avenue, Bronx, NY	High School	Investigation completed; remedial planning ongoing
East 115th Street Works	M	Manhattan Center for Science and Mathematics 260 Pleasant Avenue, New York, NY	High School	Investigation completed; remedial planning ongoing
East 11th Street Works	M	Jacob Riis Houses 152 Avenue D, New York, NY	Residential Apartment Complex	Investigation of onsite areas completed; DEC requires investigation in the East River to assess impacts on sediments. Expect to start remedial planning soon.
East 11th Street Works	M	184 Avenue D, New York, NY	Sewage Pumping Station	
East 11th Street Works	M	Haven Plaza 3 188 Avenue C, New York, NY	Residential Apartment Building	
East 11th Street Works	M	St. Emeric R.C. Church and School 181 Avenue D, New York, NY	Elementary School and Church	
West 65th Street Works	M	Martin Luther King, Jr. H.S. 120 Amsterdam Ave., New York, NY	High School	No MGP impacts found; DEC has issued a No Further Action letter
West 65th Street Works	M	Con Edison 130 West End Avenue, 10023	Electric Substation	
Mt. Vernon Works	W	342-362 South 8th Avenue Mount Vernon, NY	Residential Apartment Building	Remedial planning on-going; remediation expected to start during first quarter of 2009.
Mt. Vernon Works	W	353 South 9th Avenue Mount Vernon, NY	Residential Apartment Building	
Mt. Vernon Works	W	351 South 9th Avenue Mount Vernon, NY	Residential Home	
Mt. Vernon Works	W	349 South 9th Avenue Mount Vernon, NY	Residential Home	
Mt. Vernon Works	W	401 South 9th Avenue Mount Vernon, NY	Residential Apartment Building	
Nepperhan Avenue Works	W	NYSDOT Portion of Nepperhan Avenue	Public Street	No MGP impacts found; DEC has issued a No Further Action letter
Nepperhan Avenue Works	W	City of Yonkers Vacant Land	Vacant Land	
Nepperhan Avenue Works	W	Privately-Owned Vacant Land	Vacant Land	
Central Avenue Works	W	City of Peekskill 900 Central Avenue	Parking Lot	Remedial investigation on-going
Central Avenue Works	W	Barham House Apartments 901 Main Street, Peekskill, NY	Apartment Bldg./Health Care Center	
East 111th Street Works	M	2153 1st Avenue New York, NY	Residential Apartment Building	Investigation completed; report to DEC expected in late 2008
East 111th Street Works	M	344 East 112th Street New York, NY	Store	

**Consolidated Edison Company of New York, Inc.
MGP Site Listing**

Site Name	Loc	Street Address	Current and Contemplated Use	Current Status of 4/15/08) (As
East 111th Street Works	M	340 East 112th Street New York, NY	Automobile Facility	
East 111th Street Works	M	336 East 112th Street New York, NY	Automobile Facility	
East 111th Street Works	M	2138 1st Avenue New York, NY	Commercial	
East 111th Street Works	M	FDR Drive New York, NY	Residential Apartment Building	
East 111th Street Works	M	Thomas Jefferson Park 2158 1st Avenue	Public Park	
East 111th Street Works	M	Con Edison, East 110th Street, New York, NY	Utility Service Center	
Roosevelt Street Station	M	One Madison Street New York, NY	Residential Apartment Building	No MGP impacts found; DEC has issued a No Further Action letter
East 21st Street Works	M	Peter Cooper Village 342 1st Avenue, New York, NY	Residential Apartment Building Complex	Additional round of investigation is on going per DEC's requirement
West 42nd Street Works	M	640 West 42nd Street New York, NY	Residential Apartment Building	Remediation of on-site areas completed and DEC has issued Certificate of Completion; DEC requires investigation of off-site areas, including Hudson River.
West 42nd Street Works	M	11th Avenue New York, NY	Being Redeveloped for Residential Apartment Buildings	
East 17th Street Station	M	Stuyvesant Town 492 1st Avenue, New York, NY	Residential Apartment Building Complex	Additional round of investigation is required by DEC
East 19th Street Station	M	Stuyvesant Town 492 1st Avenue, New York, NY	Residential Apartment Building Complex	Additional round of investigation is required by DEC
Broadway/ Dyckman Street Station	M	12 Dongan Place New York, NY	Residential Apartment Building	No MGP impacts found; DEC has issued a No Further Action letter
Broadway/ Dyckman Street Station	M	4700 Broadway New York, NY	Residential Apartment Building	
Broadway/ Dyckman Street Station	M	20 Dongan Place New York, NY	Residential Apartment Building	
East 108th Street Station	M	2070 1st Avenue New York, NY	Residential Apartment Building	Additional investigation required by DEC; expect completion in late 2008
York Avenue Station	M	425 East 61st Street New York, NY	Commercial Condominium	Site characterization study on-going

**Consolidated Edison Company of New York, Inc.
MGP Site Listing**

Site Name	Loc	Street Address	Current and Contemplated Use	Current Status of 4/15/08	(As
York Avenue Station	M	417 East 61st Street New York, NY	Museum		
York Avenue Station	M	1129 York Avenue New York, NY	Commercial Storage Building		
York Avenue Station	M	1143 York Avenue New York, NY	Residential Apartment Building		
York Avenue Station	M	450 East 63rd Street New York, NY	Residential Apartment Building		
Hester Street Gas Works	M	180 Centre Street New York, NY	Parking Lot	Site characterization study completed; report to DEC expected in second quarter of 2008	
Hester Street Gas Works	M	204 Hester Street New York, NY	Parking Lot		
Hester Street Gas Works	M	202 Hester Street New York, NY	Residential Apartment Building		
Hester Street Gas Works	M	200 Hester Street New York, NY	Residential Apartment Building		
Hester Street Gas Works	M	128 Baxter Street New York, NY	Residential Apartment Building		
Hester Street Gas Works	M	126 Baxter Street New York, NY	Residential Apartment Building		
Canal Street Works	M	247 Canal Street New York, NY	Vacant	Unable to obtain access from owner; performing records review in lieu of investigation	
Canal Street Works	M	243 Canal Street New York, NY	Commercial and Residential		
Canal Street Works	M	245 Canal Street New York, NY	Commercial		
West 18th Street Gas Works	M	109 10th Avenue New York, NY	High-Rise Commercial Bldg.	Remedial investigation on-going	
West 18th Street Gas Works	M	111 10th Avenue New York, NY	High-Rise Commercial Bldg.		
West 18th Street Gas Works	M	501 West 17th Street New York, NY	Parking Lot being Redeveloped for Residential/Commercial Use	Submitted proposed remedy to DEC; awaiting approval	
West 18th Street Gas Works	M	80 11th Avenue New York, NY	Being Redeveloped as Commercial Office Building	Remedial investigation on-going	
West 18th Street Gas Works	M	511 West 18th Street New York, NY	Garage Being Redeveloped for Residential Use		
West 18th Street Gas Works	M	131 10th Avenue New York, NY	Commercial Trucking Facility being Redeveloped for		
West 18th Street Gas Works	M	512 West 19th Street New York, NY	Movie Studio and Warehouse		
West 18th Street Gas Works	M	516 West 19th Street New York, NY	Commercial Office Building being Redeveloped for		No MGP impacts found; DEC has issued a No Further Action letter
West 18th Street Gas Works	M	524 West 19th Street New York, NY	Being Redeveloped for Residential and Commercial Use	Remediation on-going as part of property redevelopment	

**Consolidated Edison Company of New York, Inc.
MGP Site Listing**

Site Name	Loc	Street Address	Current and Contemplated Use	Current Status of 4/15/08) (As
West 18th Street Gas Works	M	96 11th Avenue New York, NY	Commercial Office Building	Remediation completed as part of property redevelopment
West 18th Street Gas Works	M	112 11th Avenue New York, NY	NYS Dep't of Correctional Services Prison	Remedial investigation on-going
West 18th Street Gas Works	M	100 11th Avenue New York, NY	Being Redeveloped as Residential Building	Remediation completed as part of property redevelopment
West 18th Street Gas Works	M	442 West 18th Street New York, NY	Commercial Warehouse	Remedial investigation on-going
West 18th Street Gas Works	M	Marginal Street & 11th Avenue West 16th to West 20th Streets	Highway	
Kingsbridge Station Site	Bx	233 Landing Road Bronx, NY	Commercial	No MGP impacts found; DEC has issued a No Further Action letter
Kingsbridge Station Site	Bx	Landing Road Park Bronx, NY	Public Park	
East 99th Street Works	M	Metropolitan Hospital 1880 First Avenue, New York, NY	Hospital	Remedial investigation on-going
East 99th Street Works	M	Metropolitan Hospital 1880 First Avenue, New York, NY	Hospital	
East 32nd Street Station	M	NYU Medical Center 433 East 30th Street, New York, NY	Hospital	Draft site characterization study work plan to DEC expected in second quarter of 2008
Cedar Street Works	W	47 Cedar Street New Rochelle, NY	Commercial	Site characterization study work plan approved by DEC; working with owner on obtaining site access
Unionport Works	Bx	1066 Zerega Avenue Bronx, NY	Vacant Bulk Fuel Oil Terminal	Site characterization study fieldwork recently completed; report to DEC expected in 2nd or 3rd quarter of 2008
Ossining Works	W	30 Water Street Ossining, NY	Public Works Yard / Garage	Remedial investigation report submitted to DEC in March 2008
Ossining Works	W	Con Edison Substation Central Avenue, Ossining, NY	Electric Substation	
Pemart Avenue Works	W	189 North Water Street Peekskill, NY	Commercial	Report on remedial investigation of upland areas submitted to DEC in 2007. Report of Hudson River sediments investigation submitted to DEC in March 2008
Pemart Avenue Works	W	199 North Water Street Peekskill, NY	Commercial	
Pemart Avenue Works	W	175 North Water Street Peekskill, NY	Natural Gas Regulating Station	
Pemart Avenue Works	W	190 North Water Street Peekskill, NY	Commercial	

**Consolidated Edison Company of New York, Inc.
MGP Site Listing**

Site Name	Loc	Street Address	Current and Contemplated Use	Current Status of 4/15/08) (As
Pemart Avenue Works	W	200 North Water Street Peekskill, NY	Commercial	
Pemart Avenue Works	W	Merto-North Tracks Along Western Side of 200 North Water Street	Rail Road	
Ludlow Street Works	W	162 Downing Street Yonkers, NY	Vacant Land	Investigation of this site has not commenced; draft work plan to DEC expected in late 2008
West 45th Street Gas Works	M	633 West 44th Street New York, NY	Commercial	Remedial investigation completed; report to DEC expected in second quarter of 2008
West 45th Street Gas Works	M	604 West 44th Street New York, NY	Commercial	
West 45th Street Gas Works	M	628 West 45th Street New York, NY	Commercial	
West 45th Street Gas Works	M	621 West 45th Street New York, NY	Commercial	Investigation completed; awaiting the Intrepid Foundation's plan to redevelop the parking lot
West 45th Street Gas Works	M	607 West 45th Street New York, NY	Commercial	Remedial investigation completed; report to DEC expected in second quarter of 2008
West 45th Street Gas Works	M	Portion of Joe DiMaggio Highway between W. 44th & W. 46th Streets	Highway	
Cross/Little Water St Holder Station	M	60 Centre Street New York, NY	Courthouse	Site characterization study completed; report to DEC expected in second quarter of 2008
East 137th Street Station	Bx	Rose Feis Boulevard Bronx, NY 10454	Commercial	Draft site characterization study work plan submitted to DEC in March 2008
East 137th Street Station	Bx	Rose Feis Boulevard Bronx, NY 10454	Commercial	
East 137th Street Station	Bx	900 East 138th Street Bronx, NY	Commercial	
East 138th Street Works	Bx	885 East 138th Street Bronx, NY	Factory	Draft site characterization study work plan submitted to DEC in March 2008
East 138th Street Works	Bx	865 East 138th Street Bronx, NY	Car Repair - Produce Distributor	
East 138th Street Works	Bx	275 Locust Avenue Bronx, NY	Commercial Warehouse	
East 138th Street Works	Bx	939 East 138th Street Bronx, NY	Fuel Oil Terminal	
West 58th Street Station	M	521 West 58th Street New York, NY	New John Jay College Building	No MGP impacts found; DEC has issued a No Further Action letter

**Consolidated Edison Company of New York, Inc.
MGP Site Listing**

Site Name	Loc	Street Address	Current and Contemplated Use	Current Status (As of 4/15/08)
West 132nd Street Station	M	2321 Joe DiMaggio Highway New York, NY	Bus Depot	No MGP impacts found; DEC has issued a No Further Action letter
West 132nd Street Station	M	611 West 131st Street New York, NY	Commercial Warehouse	
West 132nd Street Station	M	624 West 132nd Street New York, NY	Electric Substation	
Zerega Avenue Station	Bx	2383 Blackrock Avenue Bronx, NY	School Bus Terminal	DEC has approved the site characterization study work plan; working on obtaining access to start the investigation
Zerega Avenue Station	Bx	Watson Avenue Bronx, NY	Electric Substation	
East 175th Street Station	Bx	1805 Webster Avenue Bronx, NY	Gas Station	Awaiting DEC approval of draft site characterization study work plan
East 175th Street Station	Bx	1815 Webster Avenue Bronx, NY	Fast Food Restaurant	
East 175th Street Station	Bx	1845 Webster Avenue Bronx, NY	Gas Station	
286 Water Street Site	M	Manhattan-Side Support Tower of the Brooklyn Bridge	Bridge	Investigation of this site has not commenced; draft work plan to DEC expected in 2009 or later
Rye Gas Works	W	178 Theodore Fremd Avenue Rye, NY	Utility Service Center	Awaiting DEC approval of the draft site characterization study work plan
Farrington Street Gas Works	Q	Downing Street Flushing, NY	Parking/Equipment Laydown	Investigation of this site has not commenced; draft work plan to DEC expected in 2008
Farrington Street Gas Works	Q	133-01 Higin Street Flushing, NY	Commercial Shopping Center	
Saw Mill River Station	W	30 Worth Street Yonkers, NY	Utility Service Center	Investigation of this site has not commenced; draft work plan to DEC expected in 2008
Greenburgh Station	W	469 Tarrytown Road Greenburgh, NY	Electric Substation	Site characterization study on-going
Greenburgh Station	W	525 Tarrytown Road Greenburgh, NY	Automobile Dealer	
East 173rd Street Works	Bx	Starlight Park - East 173rd Street and Sheridan Expressway Bronx, NY	PublicPark	Remediation completed in November 2007; report to DEC expected in second quarter of 2008

**Consolidated Edison Company of New York, Inc.
MGP Site Listing**

Site Name	Loc	Street Address	Current and Contemplated Use	Current Status of 4/15/08) (As
Hunts Point Works	Bx	Hunts Point Avenue Bronx, NY	Wholesale Food Market and Vacant Land	Investigation and remediation of on-site areas are managed by NYC Economic Development Corporation under its own cleanup agreements with DEC; Con Edison is responsible for investigation and remediation, if necessary, of off-site areas; expect to submit work plan to DEC in 2009 or later
Hunts Point Works	Bx	Compressor Station Hunts Point Avenue	Gas Compressor Station	Remediation completed; DEC has issued a No Further Action letter
East 39th Street Works	M	Robert Moses Park 724 1st Avenue, New York, NY	Public Park	No MGP impacts found; DEC has issued a No Further Action letter
East 39th Street Works	M	1st Avenue, New York, NY	Mid-Town Tunnel Vent House	
Pelham Gas Works	W	847 Pelham Parkway Pelham Manor, NY	Commercial Shopping Center	The property owner has entered into a separate cleanup agreement with DEC. Con Edison is currently implementing the DEC-approved remedy on behalf of the owner. Con Edison is responsible for investigating and remediating, if necessary, off-site areas.
Pelham Gas Works	Bx	4325 Boston Post Road Bronx, NY	Commercial Shopping Center	
Woodworth Ave Works	W	119 Woodworth Avenue Yonkers, NY	Commercial	Investigation has not commenced; expect to submit draft work plan to DEC in 2008
Woodworth Ave Works	W	115 Woodworth Avenue Yonkers, NY	Commercial	
Woodworth Ave Works	W	95 Woodworth Avenue Yonkers, NY	Commercial	
Woodworth Ave Works	W	Metro-North Tracks Between Ashburton Avenue and Babcock Place	Industrial	
East 14th Street Works	M	Stuyvesant Town 492 1st Avenue, New York, NY	Residential Apartment Building	Additional round of investigation is required by DEC
East 14th Street Works	M	East River Steam Station	Industrial	Awaiting DEC's comments on the investigation report
East 14th Street Works	M	East 16th Street Service Center	Commercial	
East 14th Street Works	M	Ball Field	Recreational	DEC recently notified Con Edison that a clean cover over the existing surface of the ball fields is not required; implementation of institutional control and site management plan, including erosion control, are required.

**Consolidated Edison Company of New York, Inc.
MGP Site Listing**

**Exhibit ___(RSP-1)
Page 8 of 8**

Site Name	Loc	Street Address	Current and Contemplated Use	Current Status (As of 4/15/08)
Astoria Gas Works	Q	31-01 20th Avenue Long Island City, NY	Industrial	Awaiting DEC's comments on the investigation report
White Plains	W	12 Water Street White Plains, NY	Commercial Office Building	DEC has approved the remedy for this site; remediation is expected to start in summer of 2008
White Plains	W	9 New Street White Plains, NY	Con Edison Electric Substation	
Farrington Street Holder Station	Q	Farrington Street and 32nd Avenue Flushing, NY	Industrial	Interim remedial measures were completed; post-remediation groundwater monitoring is on-going
Tarrytown	W	129 West Main Street Tarrytown, NY	Mixed Commercial/Residential	Remediation completed; DEC has issued a Certificate of Completion
Tarrytown	W	217 West Main Street Tarrytown, NY	Mixed Commercial/Residential	
Hastings on Hudson Gas Works	W	6-8 Washington Avenue Hastings on Hudson, NY	Residential Apartment Building	Site characterization study on-going
Hastings on Hudson Gas Works	W	10 Washington Avenue Hastings on Hudson, NY	Commercial	
Hastings on Hudson Gas Works	W	12 Washington Avenue Hastings on Hudson, NY	Commercial/Residential	

Consolidated Edison Company of New York, Inc.
Appendix B Site Listing

Site	Priority*	Site Name	Location	Con Ed Facility?	Status
1	Medium	10th St./ 37-38th Ave.	QN	No	Investigation Work Plan approved; field investigation ongoing (combined w/Site 79).
2	**	East River Complex	MN	Partially	Initial investigation completed; investigation report under DEC review; a supplemental investigation and some remediation will be required.
4	High	38th-39th Ave./ 21st St.	QN	No	Investigation Work Plan approved; field investigation ongoing (combined w/Site 79).
4a	**	LIC Subway/12th St. & 41st Ave.	QN	No	On going groundwater monitoring.
7a	High	Pipeline 2/E71st St.	MN	No	Investigation Work Plan approved; field investigation pending. Will be addressed in conjunction with pipeline closure activities
9	Medium	Astoria Blvd/ 78th Street	QN	No	***
10	**	Astoria Site	QN	Yes	Investigation and remediation ongoing. Addressed separately under hazardous waste permit.
12	High	Farragut Substation & Vicinity	BK	Partially	Initial investigation completed; investigation report submitted to DEC; supplemental investigation and some remediation will be required.
14	**	Hudson Avenue Station	BK	Yes	Investigation completed; remediation required. Pre-design pilot studies completed; report to be submitted.
19	Medium	12th Ave./ 40th St - W49th St. Substation	MN	Partially	Dielectric fluid related to an historic spill encountered during feeder repair; recovery system design for interim remedial measure submitted to DEC and installation pending; additional investigation required.
20	**	Hellgate Substation/Locust Ave./132nd St/133rd St.	BX	Partially	Groundwater monitoring ongoing.
22	Low	Westchester Ave/ St. Ann's Ave.	BX	No	***
23	Medium	E 25th St./ FDR	MN	No	***
26	**	54-08 Vernon Boulevard	QN	No	Investigation Work Plan approved; field investigation ongoing (combined w/Site 79).
28	Medium	W 54th St./ 11th Ave.	MN	No	***
30	Low	Meeker Avenue/ Leonard Street	BK	No	***
33	Low	79th St./ 3rd Avenue	BK	No	***
35	Low	Park Place/ New York Ave.	BK	No	***
36	Medium	Vernon Substation	QN	Yes	***
38	Low	52nd St/ 1st. Ave.	BK	No	***
39	Low	108th St./ 64th Rd.	QN	No	***
40	**	21st St and 46th Road.	QN	No	Investigation Work Plan approved; field investigation ongoing (combined w/Site 79).
49	Low	141st Street/ Brook Avenue	BX	No	***
56	High	Broadway/141st St./142nd St.	MN	No	Initial investigation completed; investigation report submitted to DEC; supplemental investigation and some remediation will be required.
57	Medium	4th Ave. and Garfield St./ 6th street	BK	No	***
59	Medium	Jay and Concord Street	BK	No	***
60	Medium	11th Street Conduit	BK	No	***
61	Low	Classon And Flushing	BK	No	***
63	Medium	Wythe Avenue and N13th Street	BK	No	***
64	Low	St. James btw Gates and Fulton	BK	No	***
65	Low	E 189th Street and Webster Avenue	BK	No	***
66	Low	E 233 Street and Webster	BX	No	***
67	High	E 180th Street and Morris Park Ave.	BX	No	Field investigation completed; investigation report submitted to DEC; supplemental investigation and some remediation will be required.
68	Low	Parkchester-Tremont S/S	BX	No	***
69	High	Broadway south of W. 116th St.	MN	No	Field investigation completed; investigation report under DEC review. Periodic remediation in subway tunnel when oil is found there.
70	Medium	Worth N/O Centre St.	MN	No	***
71	Medium	W 59th Street and 5th Avenue	MN	No	***
72	Medium	E Broadway E/O Grand Street	MN	No	***
73	Medium	W 67th Street w/o Broadway	MN	No	***
76	Low	Ave A and E 6th Street	MN	No	***
78	Low	11th Avenue and 29th Street	MN	No	***

**Consolidated Edison Company of New York, Inc.
Appendix B Site Listing**

Site	Priority*	Site Name	Location	Con Ed Facility?	Status
79	High	Vernon Boulevard & 45th Ave/11th St. & 46th Ave.	QN	No	This investigation is combined with portions of Sites 1, 4, 26, and 40. Investigation Work Plan approved; field investigation ongoing.
80	Low	Cooper Avenue and 73rd Place	QN	No	***
83	**	Dunwoodie Substation	WE	Yes	Investigation completed; groundwater monitoring & some product recovery ongoing.
84	**	Elmsford Substation	WE	Yes	Investigation and remediation completed; remediation report has been submitted and is awaiting DEC approval.

* Per the DEC-approved Site Prioritization Report.

** Not addressed in Site Prioritization Report, since investigation already started or planned.

*** The site will be addressed in the order prescribed in the Site Prioritization Report.

Consolidated Edison Company of New York, Inc.
Site Investigation and Remediation Expenditures (\$ x 1000)
Rate Years Beginning April 1 of 2009 (RY1), 2010 (RY2), & 2011 (RY3)

	<u>RY1</u>	<u>RY2</u>	<u>RY3</u>	<u>Total</u>
MGP	\$ 44,800	\$ 36,300	\$ 36,300	\$ 117,400
Superfund	680	2,100	2,100	4,880
Appendix B	2,800	2,100	2,100	7,000
Astoria	6,300	2,000	2,000	10,300
UST	550	600	600	1,750
Total	<u>55,130</u>	<u>43,100</u>	<u>43,100</u>	<u>141,330</u>

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1		1Q08	2Q08	3Q08	4Q08	1Q09	Total Linking Period	Linking Period Projected Activities	2Q09	3Q09	4Q09	1Q10	Total RY1	RY1 Projected Activities	
2	Investigation/Remediation Astoria A-10 Dock Area	0	1073	0	0	0	1073	Reimburse US Power Gen (Astoria) for incremental costs associated with their remediation of A-10 dock area during reconstruction of the dock they lease from Con Edison.	0	0	0	0	0	0	
37															
38	MGP Sites	250	1338	585	315	715	3183		2515	2515	615	615	6260	(rounded to 6300)	
39	Farrington Holder	7	7	7	7	7	35	Post-remediation long term monitoring	7	7	7	7	28	Post-remediation long term monitoring	
40	White Plains MGP	500	2183	2183	2183	1888	8937	Remedial planning and remediation	1288	318	318	128	2052	Remediation	
41	Hunts Point Compressor Station	4	0	0	0	4	8	Post-remediation long term monitoring	0	0	0	4	4	Post-remediation long term monitoring	
42	Hunts Point EDC site	331	331	331	331	1000	2324	Investigation and remediation managed by NYCEDC	1000	1000	1000	1000	4000	Investigation and remediation managed by NYCEDC	
43	Tarrytown	0	0	0	0	0	0	Post-remediation long term monitoring	0	200	0	0	200	Post-remediation long term monitoring	
44	173rd Street MGP (Starlight Park)	2500	25	25	25	25	2600	Post-remediation long term monitoring	25	25	25	25	100	Post-remediation long term monitoring	
45	Purdy Street Station	100	5	5	25	100	235	Remedial planning	100	25	2700	25	2850	Remedial planning and remediation	
46	W. 42nd Street Gas Works	1500	450	25	100	25	2100	Additional soil excavation for transformer vault, sediment investigation	25	25	25	25	100	Post-remediation long term monitoring	
47	W. 45th Street Gas Works	100	50	50	25	50	275	Investigation of Operable Unit 1	4900	2800	1700	25	9425	Remedial planning and remediation of Intrepid parking lot	
48	W. 18th Street	3200	3000	5000	5000	3000	19200	Complete remediation of West Chelsea and HECA parcels and begin remediation of HLP parcel	2000	1000	10	20	3030	Remediation of HLP parcel	
49	E. 9th Street Works	0	0	200	0	700	900	Investigation and reimbursement to MTA for soil disposal associated with Second Ave Subway construction	0	0	0	0	0	0	Remedial planning
50	E. 32nd Street Station	30	0	150	200	50	430	Investigation	0	0	0	0	0	0	
51	Cedar St. Works	70	80	0	0	0	160	Investigation	0	0	0	0	0	0	
52	Unionport Works	200	100	0	0	0	300	Investigation	0	0	0	0	0	0	
53	Ossining Works - Ossining	50	1500	50	50	50	1700	Harbor Square settlement, investigation and remedial planning	50	10	300	25	385	Remedial planning	
54	Pennart Ave Works - Peekskill	50	100	50	50	10	260	Investigation and remedial planning	10	10	10	10	40	Remedial planning	
55	Ludlow Street Works - Yonkers	0	0	0	25	125	150	Investigation	125	125	0	0	250	Investigation	
56	Cross/Little Water St. Holder Station	250	50	0	0	0	300	Investigation	0	0	0	0	0	0	
57	E. 137th Street Station	25	25	100	125	75	350	Investigation	25	5	10	0	40	Investigation	
58	E. 138th Street Works	25	50	125	200	100	500	Investigation	50	5	10	0	65	Investigation	
59	E. 11 Street Works	0	200	200	0	0	400	Remedial planning	0	1000	400	0	1400	Sediment investigation and remedial planning	
60															
61	E. 14th Street Works - East River	50	150	0	50	1950	2200	Remedial planning, and remediation	0	0	0	0	0	0	
62	E. 14St., E. 17 St. & E. 19th St. (Sluy Town)	200	50	0	25	25	300	Investigation	25	25	25	0	75	Remedial planning	
63	E. 21st Street (PCV)	300	2200	100	865	50	3515	Investigation; reimbursement to owner for costs associated with water valve replacement project due to MGP contamination	50	150	50	2500	2750	Remedial planning and remediation	
64	Mt. Vernon Works	500	500	500	1500	2000	5000	Remedial planning and remediation	3000	2300	100	100	5500	Remediation	
65	Central Ave - Peekskill	100	50	50	10	10	220	Investigation and remedial planning	10	10	10	10	40	Remedial planning	
66	Hester Street Gas Works	50	0	0	0	0	50	Investigation	0	0	0	0	0	0	
67	E. 115th Street MGP	70	70	55	45	45	285	Remedial planning	25	20	20	30	95	Remedial planning	
68	E. 108th Street MGP	0	0	100	0	0	100	Investigation	0	0	0	0	0	0	
69	E. 111th Street MGP	50	0	0	0	0	50	Investigation	0	0	0	0	0	0	
70	York Ave Station	0	0	50	0	0	50	Investigation	0	0	0	0	0	0	
71	Zeraga Avenue Station	0	150	150	150	0	300	Investigation	0	0	0	0	0	0	
72	E. 175th Street Station	0	125	125	125	0	375	Investigation	0	0	0	0	0	0	
73	Rye Gas Works - Rye	0	200	200	0	0	400	Investigation	0	0	0	0	0	0	

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: Appendix B Site 14 (Hudson Ave.)

- Cost Projection for Linking Period: \$2.0 million
- Cost Projection for Rate Year 1: \$0.42 million
- Basis for Cost Projections:

The Hudson Avenue Station is located in Brooklyn, New York. Based on the results of a remedial investigation, several areas of contamination have been identified. In order to develop final remedial plans for submittal to and approval by the NYSDEC and to prepare remediation specifications, a NYSDEC-approved pre-design investigation (PDI) and pilot program were performed during 2Q07-3Q07. A report describing the results of the PDI and pilot program, a Remedial Action Work Plan, and remediation specifications are presently being prepared. Based on the results of the remedial investigation, PDI and pilot program and an evaluation of alternatives by an environmental consultant, the remedial actions outlined below are anticipated. The remedial actions are expected to begin during the Linking Period and continue into Rate Year 1. In addition to planning and implementation of these large-scale remedial activities, on-going product recovery, groundwater monitoring, and reporting will continue to be performed.

Anticipated Large-Scale Remediation

- There is No. 6 fuel oil contamination both within the soil-filled moat structure that surrounds the storage tanks at the tank farm and outside of the moat structure. The remediation of this contamination will be difficult due to the configuration of the moat structure and tank farm and the complexity of underground utilities in the area. Therefore, in lieu of excavating the contamination, our consultant is proposing to isolate the contamination within the moat structure by lowering the water level within that structure. Lowering the water level present within the moat structure would decrease the possibility of the oil contamination migrating from the moat structure. The water in the moat would be lowered by installing recovery wells and pumping out water from the moat structure for subsequent storage and on-site treatment prior to discharge. It is estimated that initially 10,000 gallons/day of water will be pumped from the moat structure.
- In-situ biosparging/bioventing to reduce levels of oil contamination in the Transformer GT 1-2 Area/Kerosene/No. 2 Fuel Oil Storage Area. This area, which is located west of the No. 6 fuel oil tank farm, includes kerosene and No. 2 fuel oil contamination in an area roughly 140 ft. by 150 ft.
- Soil remediation in Transformer GT 1-2 Area/Kerosene/No. 2 Fuel Oil Storage Area. It is estimated that ~260 cubic yards of lead hazardous soil will be removed using vacuum excavation (due to numerous underground utilities) and shipped off-site for disposal as hazardous waste. This work is expected to be performed during the Linking Period.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: Appendix B Site 79 (Vernon Blvd/Queens Combined Site – Includes Appendix B Sites 1, 4, 26, 40 & 79)

- Cost Projection for Linking Period: \$1.3 million
- Cost Projection for Rate Year 1: \$0.15 million
- Basis for Cost Projections:

Appendix B Site 79 includes a total of five (5) Appendix B sites, all at street locations in the Long Island City area of Queens. The NYSDEC has approved the investigation work plan for this combined site, and field work for the investigation began in January 2008. The approved work plan requires Con Edison to investigate 75 spills (mostly dielectric fluid) for the combined Site 79. The selected consultant estimated that it would cost ~\$1.35 million to implement the approved work plan and to prepare investigation reports. Based on the anticipated schedule, Con Edison assumes that the investigation would be performed during the Linking Period and of groundwater monitoring would then be performed later in Rate Year 1. Although some contamination has been found thus far during the investigation, it is not known at this time whether and to what extent remediation would be required. Therefore, the cost projections for this site assume that supplemental investigations and remediation will not be required.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: Appendix B Medium Priority Sites

- Cost Projection for Linking Period: \$0.85 million
- Cost Projection for Rate Year 1: \$1.45 million
- Basis for Cost Projections:

As of February 29, 2008, there are 11 Medium Priority Appendix B sites (numbers 9, 19, 23, 28, 36, 57, 59, 60, and 70-73) for which investigation work plans have not been prepared. It is estimated that investigation (including work plan preparation and investigation reporting) will cost an average of approximately \$240,000 for each such Medium Priority site. Because investigation work plans have not yet been developed or approved by the NYSDEC for these sites, detailed engineering estimates are not available for them. Therefore, the estimated average cost for investigating the Medium Priority Appendix B sites has been extrapolated from cost information available for the High Priority Appendix B sites for which investigations have been completed. Because the number of spills that occurred and the quantities of fuel oil/dielectric fluid that were released at Medium Priority sites are generally less than for High Priority sites, downward adjustments were made in the cost information from High Priority sites to develop the estimated investigation costs for Medium Priority sites.

The cost projections for the Linking Period and Rate Year 1 assume that work plan development will begin during the first half of 2008 and that field investigations will begin in 3Q08, following NYSDEC approval of the first work plans. Work is projected to continue through the Linking Period and Rate Year 1 and to be completed in 2010 or 2011. Because investigation information regarding the extent of any residual contamination is not yet available, the cost projections assume that no remediation will be required at these sites.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: Arthur Kill Operable Unit (OU) 2 Superfund Site

- Cost Projection for Linking Period: \$2.9 million
- Cost Projection for Rate Year 1: \$0.025 million
- Basis for Cost Projections:

Remediation at this site will involve excavation and off-site disposal of PCB-contaminated soil and sediment, treatment of wastewater associated with the excavation, remedial oversight, and reporting. The NYSDEC has approved the 100% design report, and procurement of a remediation contractor is underway. It is anticipated that a contract for the required remediation will be awarded during 2Q08, during which the selected contractor would develop site-specific plans and acquire and mobilize resources. Fieldwork is expected to occur from 3Q08 through 1Q09, followed by preparation of a remediation report for NYSDEC approval. The anticipated implementation period for the remediation field work is based on the fact that regulatory agencies limit construction activities within the Arthur Kill estuary to the period October 1 - February 1, although upland work can be performed before/after that period. Con Edison's consultant has developed the remediation cost estimate (\$2.9 million without contingencies) based on the 100% remedial design. The balance of the projected costs for the Linking Period and Rate Year 1 are for remedial planning and reporting. The cost projections may change based on the selected contractor's bid.



Arthur Kill Eng Cost
Est (Rev 5).xls

Cost Code	Task	Lbr Mhr	Unit	W-2 Labor Cost	Labor Cost	T&L Cost	Rental Cost	Material Cost	Sub Cost	Total
1a	Mobilization/Site Preparation									
1a	Contractor Supervision	1	LS	\$ 103,138	\$ 179,108	\$ -	\$ 39,852	\$ 4,885	\$ -	\$ 233,755
1b	Submittals & Mobilization Items	1	LS	\$ 10,080	\$ 17,530	\$ -	\$ -	\$ 1,287	\$ -	\$ 18,817
1c	Mobilization and Site Preparation	1	LS	\$ 11,521	\$ 20,077	\$ -	\$ 28,089	\$ 5,568	\$ -	\$ 63,873
1d	Initial Stockpile Area	1	LS	\$ 3,220	\$ 5,894	\$ -	\$ 825	\$ 10,304	\$ 12,870	\$ 29,684
1e	Initial and Oper. Decon Pad	1	LS	\$ 6,542	\$ 11,387	\$ -	\$ 1,297	\$ 4,547	\$ 1,931	\$ 19,242
1f	Temporary Fencing	1	LS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,397	\$ 3,397
1g	Cleaning and Grubbing	1	LS	\$ 2,045	\$ 3,553	\$ -	\$ 662	\$ 777	\$ -	\$ 4,992
2	Surveying	1	LS	\$ 12,609	\$ 21,908	\$ -	\$ 1,770	\$ -	\$ -	\$ 23,677
3	Environmental Controls									
3a	Silt Curtain	1	LS	\$ 3,337	\$ 5,708	\$ -	\$ 1,488	\$ 15,890	\$ -	\$ 23,178
3b	Wave Attenuation Barrier	1	LS	\$ 2,584	\$ 4,490	\$ -	\$ 79,982	\$ 6,975	\$ 244,530	\$ 295,977
3c	Turbidity Monitoring	1	LS	\$ -	\$ -	\$ -	\$ -	\$ 67,568	\$ -	\$ 67,568
4	Excavation & Dewatering									
4-1a	Dredge Sediment	1	LS	\$ 13,195	\$ 22,825	\$ -	\$ 11,475	\$ 4,758	\$ -	\$ 38,158
4-1b	Construct Temp. Access	1	LS	\$ 1,978	\$ 3,433	\$ -	\$ 390	\$ 5,888	\$ -	\$ 9,691
4-1c	Excavate Tidal Sediment	1	LS	\$ 11,463	\$ 19,916	\$ -	\$ 3,295	\$ 1,441	\$ -	\$ 24,552
4-2a	Excavate Inland Sediment	1	LS	\$ 18,868	\$ 32,778	\$ -	\$ 6,905	\$ 2,372	\$ -	\$ 42,065
4-2b	Excavate Inland Sediment	1	LS	\$ 6,103	\$ 10,904	\$ -	\$ 1,464	\$ 528	\$ -	\$ 12,695
4-3	Material Solidification	1	LS	\$ 13,508	\$ 23,485	\$ -	\$ 7,291	\$ 31,515	\$ -	\$ 62,271
5	Disposal									
5a	Load Decanted Material	5a	LS	\$ 8,148	\$ 14,157	\$ -	\$ 4,399	\$ 1,579	\$ -	\$ 20,135
5b	Material Transportation	1	LS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 556,711	\$ 556,711
5c	Material Disposal	1	LS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 454,017	\$ 454,017
6	Construction Water Treatment	1	LS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 151,250	\$ 151,250
7	Restoration									
7-1a	Backfill (Open Water)	1	LS	\$ 5,808	\$ 10,091	\$ -	\$ 3,541	\$ 36,575	\$ -	\$ 50,207
7-1b	Backfill (Inland)	1	LS	\$ 19,570	\$ 34,002	\$ -	\$ 7,289	\$ 132,712	\$ -	\$ 174,003
7-2a	Rip Rap	1	LS	\$ 3,830	\$ 6,306	\$ -	\$ 1,207	\$ 22,365	\$ -	\$ 29,878
7-2b	Restore Disturbed Areas	1	LS	\$ 2,158	\$ 3,745	\$ -	\$ 428	\$ 10,182	\$ -	\$ 14,333
7-2c	Plantings	1	LS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,200	\$ 24,200
7-2d	Remove and Replace Fence	1	LS	\$ 4,245	\$ 7,376	\$ -	\$ 234	\$ 133	\$ -	\$ 15,084
8	Demobilization	1	LS	\$ 3,794	\$ 6,892	\$ -	\$ 28,411	\$ -	\$ -	\$ 35,002
9	Retaining for 3 Year Plantings Weir.	1	LS	\$ 1,328	\$ -	\$ 12,100	\$ -	\$ -	\$ -	\$ 12,100
10	Wave Attenuation Barrier Rental	6	Mo	\$ -	\$ -	\$ -	\$ 242,550	\$ -	\$ -	\$ 242,550
	Project Summary			\$ 269,873	\$ 464,647	\$ 12,100	\$ 472,639	\$ 367,907	\$ 1,456,215	\$ 2,773,708
	Direct Cost w/o Contingency:									\$ 2,773,708
	10% Contingency			\$ 26,987	\$ 46,465	\$ 1,210	\$ 47,264	\$ 36,791	\$ 145,022	\$ 277,371
	Direct Cost w/Contingency:			\$ 296,761	\$ 511,331	\$ 13,310	\$ 519,903	\$ 404,698	\$ 1,601,337	\$ 3,051,079

Order of Magnitude Cost Est 8/10/2007	Order of Magnitude Cost Est Updated 12/7/07
\$ 140,000	\$ 140,000
\$ 20,000	\$ 20,000
\$ 35,473	\$ 35,473
\$ 3,000	\$ 3,000
\$ 20,000	\$ 20,000
\$ 6,000	\$ 6,000
\$ 4,000	\$ 4,000
\$ 30,000	\$ 30,000
\$ 25,000	\$ 25,000
\$ 295,000	\$ 295,000
\$ 62,500	\$ 62,500
\$ 35,000	\$ 35,000
\$ 10,000	\$ 10,000
\$ 125,000	\$ 125,000
\$ 34,250	\$ 34,250
\$ 33,550	\$ 33,550
\$ 15,000	\$ 15,000
\$ 25,000	\$ 25,000
\$ 3,500	\$ 3,500
\$ 10,000	\$ 10,000
\$ 10,000	\$ 10,000
\$ 10,000	\$ 10,000
\$ 1,077,664	\$ 2,323,232
\$ 133,550	\$ 341,145
\$ 2,055,230	\$ 2,677,212

Order of Magnitude Cost Est 8/10/2007	Order of Magnitude Cost Est Updated 12/7/07
\$ 140,000	\$ 140,000
\$ 20,000	\$ 20,000
\$ 35,473	\$ 35,473
\$ 3,000	\$ 3,000
\$ 20,000	\$ 20,000
\$ 6,000	\$ 6,000
\$ 4,000	\$ 4,000
\$ 30,000	\$ 30,000
\$ 25,000	\$ 25,000
\$ 295,000	\$ 295,000
\$ 62,500	\$ 62,500
\$ 35,000	\$ 35,000
\$ 10,000	\$ 10,000
\$ 125,000	\$ 125,000
\$ 34,250	\$ 34,250
\$ 33,550	\$ 33,550
\$ 15,000	\$ 15,000
\$ 25,000	\$ 25,000
\$ 3,500	\$ 3,500
\$ 10,000	\$ 10,000
\$ 10,000	\$ 10,000
\$ 10,000	\$ 10,000
\$ 1,077,664	\$ 2,323,232
\$ 133,550	\$ 341,145
\$ 2,055,230	\$ 2,677,212

Engineer Costs	PO Budget	PO Budget
E1 Construction Man. OC H+S	\$ 110,000	\$ 110,000
E2 Contingency Sampling	\$ 22,200	\$ 22,200
E3 Community Air Monitoring	\$ 30,000	\$ 30,000
Cost w/o Contingency:	\$ 162,200	\$ 162,200
10% Contingency	\$ 16,220	\$ 16,220
Cost w/Contingency:	\$ 178,420	\$ 178,420
Total Cost w/o Contingency	\$ 2,909,480	\$ 2,909,480
Total Cost w/10% Contingency	\$ 3,197,285	\$ 3,197,285

Table 1
Con Edison
Arthur Kill OU2
Estimate

1a	Contractor Supervision	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Administrative Assistant	170	HR	28.00							4,941	0	0	0	4,941
	Project Manager	261	HR	87.00						24,426	0	0	0	0	24,426
	Superintendent	505	HR	87.00						43,910	0	0	0	0	43,910
	H&S Officer	490	HR	61.00						29,861	0	0	0	0	29,861
	Pickup Truck	563	HR			8				0	0	4,343	0	0	4,343
	Toilets	2	MO			175				0	0	350	0	0	350
	Radios	4	MO			50				0	0	200	0	0	200
	Cell Phone	4	MO			100				0	0	400	0	0	400
	DR-4000 Area Dust Monitor	2	DA			10				0	0	20	0	0	20
	pDR Personal Data Ram	2	DA			75				0	0	150	0	0	150
	Mercury Vapor Analyzer	0	DA			100				0	0	0	0	0	0
	Trailer	9	MO			600				0	0	5,400	0	0	5,400
	Trailer Mob	9	EA			1,000				0	0	9,000	0	0	9,000
	Furniture	9	MO			400				0	0	3,600	0	0	3,600
	Copier	9	MO			40				0	0	360	0	0	360
	Generator	3	MO			1,429				0	0	4,287	0	0	4,287
	Fuel	1,085	GA					3.50		0	0	3,796	0	0	3,796
	Two Land Line /Mo.	9	MO			300				0	0	2,700	0	0	2,700
	Water Meter Permit	0	EA					100		0	0	0	0	0	0
	material	0						0		0	0	0	0	0	0
	material	0						0		0	0	0	0	0	0
	material	0						0		0	0	0	0	0	0
	subcontractor	0						0		0	0	0	0	0	0
	subcontractor	0						0		0	0	0	0	0	0
	subcontractor	0						0		0	0	0	0	0	0
	TOTAL									103,138		30,809	3,796	0	137,744
	Labor Burien/Taxes									36,095					36,095
	Overhead/(Insurance facilities)									23,670		5,238	645	0	29,553
	Profit									18,291		9,695	444	0	28,430
	TOTAL									173,198		39,832	4,885	0	223,735

1a Contractor Supervision
Basis of Estimate:

Table 1
Con Edison
Arthur Kill OU2
Estimate

	start	finish	wks
Pre-Construction			2
Direct Construction			7.04
Closeout			2
TOTAL			11.04 WKS

Title	Pre-Construction		Direct Constr.		Closeout		Total	
	Weeks	HRS	Weeks	HRS	Weeks	HRS	Weeks	HRS
Administrative Assistant	20	40	10	110.38	10	20	170	
Project Manager	20	40	20	220.76	10	20	281	
Superintendent	0	0	45	496.71	4	8	505	
H&S Officer	20	40	40	441.52	4	8	490	

Equipment	Number	Hrs/wk	Wks	Quant.	Unit
Pickup Truck	2	40	7.04	563	HR
Toilets	1		7.04	2	MO
Radios	2		7.04	4	MO
Cell Phone	2		7.04	4	MO
DR-4000 Area Dust Monitc	1		7.04	2	MO
pDR Personal Data Ram	1		7.04	2	MO
Mercury Vapor Analyzer	0		7.04	0	MO
Trailer	3		9.04	9	MO
Trailer Mob	3		9.04	9	EA
Furniture	3		9.04	9	MO
Copier	3		9.04	9	MO
Generator	1	40	9.04	3	MO
Two Land Line /Mo.	3		9.04	9	MO

Table 1
 Con Edison
 Arthur Kill OU2
 Estimate

1b	Submittals & Mobilization Items	30	HR	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Project Manager	30	HR	87.00							2,610	0	0	0	2,610
	Engineer	45	HR	50.75							2,284	0	0	0	2,284
	Administrative Assistant	24	HR	29.00							696	0	0	0	696
	CIH	60	HR	75.00							4,500	0	0	0	4,500
	labor			0.00							0	0	0	0	0
	labor			0.00							0	0	0	0	0
	labor			0.00							0	0	0	0	0
	equipment					0					0	0	0	0	0
	Copying and Binding	5	Doc				200				0	0	1,000	0	1,000
	material						0				0	0	0	0	0
	subcontractor										0	0	0	0	0
	TOTAL	30	HR								10,090	0	1,000	0	11,090
	Labor Burden/Taxes										3,531				3,531
	Overhead (insurances, facilities)										2,316				2,316
	Profit										1,594				1,594
	TOTAL										17,530		1,297		18,827

Basis of Estimate:

	Work Plan	H&S Plan	CAMP	Total
Project Manager	10	10	10	30
Engineer	20	20	5	45
Administrative Assistant	8	8	8	24
CIH	0	30	30	60

Table 1
Con Edison
Arthur Kill OU2
Estimate

1d	Install Stockpile Area	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	16	HR	70.33							1,134	0	0	0	1,134
	Laborer	32	HR	45.90							1,481	0	0	0	1,481
	Foreman	8	HR	75.00							605	0	0	0	605
	Loader JD 644	8	HR			30.78					0	248	0	0	248
	Excavator JD 330	8	HR			48.75					0	393	0	0	393
	Fuel	81	GA				3.50				0	0	282	0	282
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	Fill Sand (Delivered)	175	CY				44.14				0	7,724	0	0	7,724
	Geomembrane	5,000	SF								0	0	0	10,000	10,000
	TOTAL										3,220	641	8,008	10,000	21,867
	Labor Burden/Taxes										1,127				1,127
	Overhead (Insurance/Facilities)										739	0	1,361	1,700	3,909
	Profit										509	0	897	1,170	2,990
	TOTAL										5,594	828	10,304	12,870	28,594

Basis of Estimate:

Install Berms and 20 mil Liner

Stockpile Area: 5,000 SF
 Production Rate: 620.00 SF/HR
 Duration: 8 HRS
 1.01 DAYS

NOTES:
 Assume clean fill material for berms
 Assume 175 Tons of Struct. Material for Berms
 Assume higher Sub-contractor mark-up for items under \$10,000

	Number	HRS
Operator	2	16
Laborer	4	32
Foreman	1	8

	Number	HRS
Loader JD 644	1	8
Excavator JD 330	1	8

Table 1
 Con Edison
 Arthur Kill OU2
 Estimate

1e	Install and Oper. Decon Pad	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	4	HR	70.33							284	0	0	0	284
	Laborer	131	HR	45.90							5,997	0	0	0	5,997
	Foreman	4	HR	75.00							281	0	0	0	281
	Excavator JD 330	4	HR			48.75					0	183	0	0	183
	Pressure Washer	127	HR			6.50					0	825	0	0	825
	Fuel	653	GA				3.50				0	2,287	0	0	2,287
	material	0					0.00				0	0	0	0	0
	material	0					0.00				0	0	0	0	0
	material	0					0.00				0	0	0	0	0
	Fill Sand (Delivered)	30	CY				44.14				0	1,324	0	0	1,324
	Geomembrane	750	SF								2	0	0	0	1,500
	TOTAL										6,542	1,008	3,611	1,500	12,661
	Labor Burden/Taxes										2,280				2,280
	Overhead (insurance, facilities)										1,501	171	814	258	2,542
	Profit										1,933	118	422	175	2,749
	TOTAL										11,867	1,297	4,947	1,931	19,242

Basis of Estimate:

Place berm material and liner.

Pad Area: 750 SF
 Set-up Production Rate: 200.00 SF/HR
 Duration: 4 HRS
 Operation Duration: 0.47 DAYS
 126.92 HRS
 15.86 DAYS

NOTES: Assume duration of equipment decon to be equal to excavation
 Assume 30 Ton of Berm Material
 Assume higher Sub-contractor mark-up for items under \$10,000

	Number	HRS
Operator	1	4
Laborer	1	131
Foreman	1	4

	Number	HRS
Excavator JD 330	1	4
Pressure Washer	1	127

Table 1
Con Edison
Arthur Kill OU2
Estimate

1g	Clearing and Grubbing	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	9	HR	70.33							607	0	0	0	607
	Laborer	17	HR	45.90							792	0	0	0	792
	Foreman	9	HR	75.00							647	0	0	0	647
	Teamster	0	HR	50.89							0	0	0	0	0
	Loader JD 644	9	HR			30.78					0	285	0	0	285
	Chainsaw	17	HR			4.85					0	84	0	0	84
	Excavator JD 330	0	HR			48.75					0	0	0	0	0
	12" Brush Chipper	9	HR			19.13					0	165	0	0	165
	Fuel	173	GA					3.50			0	604	0	0	604
	material	0						0.00			0	0	0	0	0
	material	0						0.00			0	0	0	0	0
	material	0						0.00			0	0	0	0	0
	material	0						0.00			0	0	0	0	0
	subcontractor								0.00		0	0	0	0	0
	TOTAL										2,045	514	604	0	3,163
	Labor Burden/Taxes										718				718
	Overhead (Instruments, facilities)										169	87	103	0	659
	Profit										323	80	71	0	454
	TOTAL										3,553	882	777	0	4,882

Basis of Estimate:

Clear, Grub, Chip and dispose of Vegetation.

Area to be cleared: 3,450 SF
 Production Rate: 400.00 SF/HR
 Duration: 9 HRS
 1.08 DAYS

NOTES:
 Assume all stumps and trees to be chipped
 Assume chips to be disposed of w/ sediment

	Number	HRS
Operator	1	9
Laborer	2	17
Foreman	1	9
Teamster	0	0

	Number	HRS
Loader JD 644	1	9
Chainsaw	2	17
Excavator JD 330	0	0
12" Brush Chipper	1	9

Table 1
Con Edison
Arthur Kill OUZ
Estimate

3a	Silt Curtain	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	9	HR	70.33							607	0	0	0	607
	Laborer	45	HR	45.90						2,084	0	0	0	0	2,084
	Foreman	9	HR	75.00						647	0	0	0	0	647
	Small Boat	37	HR			20.00				0	736	0	0	0	736
	Excavator JD 330	9	HR			48.75				0	420	0	0	0	420
	Fuel	227	GA				3.50			0	0	795	0	0	795
	Silt Curtain	400	LF				28.88			0	0	11,552	0	0	11,552
	material	0					0.00			0	0	0	0	0	0
	material	0					0.00			0	0	0	0	0	0
	material	0					0.00			0	0	0	0	0	0
	subcontractor	0							0.00	0	0	0	0	0	0
	TOTAL									3,337	1,156	12,347	0	0	16,840
	Labor Burden/Taxes									1,168					1,168
	Overhead (insurance, facilities)									766	197	2,099	0	0	3,081
	Profit									52	135	1,445	0	0	2,107
	TOTAL									5,798	1,488	15,890	0	0	23,176

Basis of Estimate:

Install and Maintain Silt Curtain Around Excavation.

Length of Silt Curtain: 400 LF
 Installation Production Rate: 50.00 LF/HR
 Duration: 8 HRS
 Maintenance Duration: 7.04 DAYS
 1.00 DAYS
 7.04 WKS

NOTES: Assume excavator to assist in unloading and placement
 Assume 2 laborers devoting 4 hours/week
 during the direct construction duration for maintenance.

	Number	HRS
Operator	1	9
Laborer	2	45
Foreman	1	9

	Number	HRS
Small Boat	1	37
Excavator JD 330	1	9

Table 1
Con Edison
Arthur Kill OU2
Estimate

3b	Wave Attenuation Barrier	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Laborer	56	HR	45.90							2,584	0	0	0	2,584
	Small Boat	28	HR			20.00					0	563	0	0	563
	Wave Attenuator Barge(400lf)	282	HR			218.75					0	61,583	0	0	61,583
	Fuel	1,548	GA				3.50				0	5,419	0	0	5,419
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	Wave Attenuator Mob and Set-up	1	LS					190,000			0	0	0	0	190,000
	TOTAL										2,584	62,146	5,419	190,000	260,150
	Labor Burden Taxes										904				904
	Overhead (insurance, facilities)										593	10,585	921	32,300	44,379
	Profit										408	7,271	634	22,230	30,543
	TOTAL										4,490	78,882	6,975	244,530	335,877

Basis of Estimate:

Mobilize, Set-up and Rental of Wave attenuator Set-Up.

Rental Duration: 282 HRS
 Maintenance Duration: 28 HRS
 35.19 DAYS
 7.04 WEEKS

NOTES: Assume 2 laborers devoting 4 hours/ week during excavation and backfill for maintenance. 10% G&A, 5% Profit applied to subcontractor cost

	Number	HRS
Laborer	2	56

	Number	HRS
Small Boat	1	28
Wave Attenuator Barge(400lf)	1	282

Table 1
Con Edison
Arthur Kill OU2
Estimate

4-1a	Dredge Sediment	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	85	HR	70.33							5,943	0	0	0	5,943
	Laborer	42	HR	45.90							1,939	0	0	0	1,939
	Foreman	42	HR	75.00							3,169	0	0	0	3,169
	Engineer	42	HR	50.75							2,144	0	0	0	2,144
	Cat 330 Long-reach excavator	42	HR			66.25					0	2,799	0	0	2,799
	Flexfloats	127	HR			25.97					0	3,291	0	0	3,291
	Site Truck	42	HR			53.13					0	2,245	0	0	2,245
	GPS unit	42	HR			13.75					0	581	0	0	581
	Fill Sand (Delivered)	0	CY				44.14				0	0	0	0	0
	Fuel	1,056	GA				3.50				0	3,697	0	0	3,697
	material	0									0	0	0	0	0
	material	0									0	0	0	0	0
	material	0									0	0	0	0	0
	material	0									0	0	0	0	0
	subcontractor	0									0	0	0	0	0
	TOTAL										13,195	8,916	3,697	0	25,808
	Labor, Burden/Taxes										4,618				4,618
	Overhead (insurances, facilities)										3,028	0	1,619	0	5,772
	Profit										2,084	0	1,043	0	3,560
	TOTAL										22,928	11,476	4,758	0	39,158

Basis of Estimate:

Excavate Sediment in open water area

Volume of Excavation: 525 CY
 production rate: 20 CY/HR
 duration: 26.3 HRS
 Set-up Duration: 16.0 HRS
 Total Duration: 42.3 HRS
 5.3 DAYS

NOTES: Assume low production with poor access and close grade control.
 Assume 2 set-ups due to 2 separate excavation areas

	Number	HRS
Operator	2	85
Laborer	1	42
Foreman	1	42
Engineer	1	42

	Number	HRS
Cat 330 Long-reach excavator	1	42
Flexfloats	3	127
Site Truck	1	42
GPS unit	1	42
Clam Shell Bucket	1	42

Table 1
 Con Edison
 Arthur Kill OU2
 Estimate

4-1b	Construct Temp. Access	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	8	HR	70.33							566	0	0	0	566
	Laborer	17	HR	45.90							765	0	0	0	765
	Foreman	8	HR	75.00							625	0	0	0	625
	Dozer JD 450 G	8	HR			26.37					0	220	0	0	220
	Dynapac 3 Ton Roller	8	HR			10.00					0	83	0	0	83
	equipment	0				0.00					0	0	0	0	0
	Fuel	83	GA				3.50				0	0	292	0	292
	Geotextile	167	SY				1.21				0	0	202	0	202
	3/4" Stone	200	TN				20.33				0	0	4,066	0	4,066
	subcontractor									0	0	0	0	0	0
	TOTAL									1,976	303	4,559	0	0	6,838
	Labor Burden/Taxes									13,632					682
	Overhead (insurance, facilities)									454	52	775	0	0	1,280
	Profit									912	35	533	0	0	861
	TOTAL									3,433	390	5,868	0	0	9,691

Basis of Estimate:
 Place, grade and compact Access Road- Load and Re-use:
 Assume geo-textile installed prior to Placement
 Assume 100 x 15
 Assume 2 foot road depth
 Assume 20 % material loss during road set ups

Road Area: 1500 SF
 Volume of Backfill: 167 TN
 Total Volume with loss: 200 TN
 production rate: 20 TN/HR
 duration: 8 HRS

Number	HRS
Dozer JD 450 G	1
Dynapac 3 Ton Roller	1

Number	HRS
Operator	1
Laborer	2
Foreman	1

Table 1
Con Edison
Arthur Kill OU2
Estimate

4-1a	Excavate Tidal Sediment	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	64	HR	70.33							4,501	0	0	0	4,501
	Laborer	64	HR	45.90							2,937	0	0	0	2,937
	Foreman	32	HR	75.00							2,400	0	0	0	2,400
	Engineer	32	HR	50.75							1,624	0	0	0	1,624
	Cat 330 Long-reach excavator	32	HR			66.25					0	2,120	0	0	2,120
	GPS unit	32	HR			13.75					0	440	0	0	440
	equipment	0				0					0	0	0	0	0
	Fuel	320	GA			0					0	0	1,120	0	1,120
	material	0				3.50					0	0	0	0	0
	material	0				0					0	0	0	0	0
	subcontractor	0				0					0	0	0	0	0
	TOTAL										11,463	2,560	1,120	0	15,143
	Labor Burden/Taxes										4,012				4,012
	Overhead (insurance, facilities)										2,631	435	180	0	3,246
	Profit										1,811	300	131	0	2,241
	TOTAL										19,916	3,295	1,441	0	24,652

Basis of Estimate:

Excavate Sediment in Tidal Area

Volume of Excavation: 800 CY
 production rate: 25 CY/HR
 duration: 32.0 HRS

NOTES: Assume low production with poor access and close grade control.

Tidal constraints leave 5-6 hours of excavation per day

	Number	HRS
Operator	2	64
Laborer	2	64
Foreman	1	32
Engineer	1	32

	Number	HRS
Cat 330 Long-reach excavator	1	32
Site Truck	1	32
GPS unit	1	32

31

Table 1
Con Edison
Arthur Kill OU2
Estimate

4-2b	Excavate Inland Sediment	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	105	HR	70.33							7,408	0	0	0	7,408
	Laborer	105	HR	45.90							4,835	0	0	0	4,835
	Foreman	53	HR	75.00							3,950	0	0	0	3,950
	Engineer	53	HR	50.75							2,673	0	0	0	2,673
	Excavator JD 330	53	HR			48.75					0	2,568	0	0	2,568
	Site Truck	53	HR			53.13					0	2,798	0	0	2,798
	GPS unit	0	HR			13.75					0	0	0	0	0
	equipment	0				0.00					0	0	0	0	0
	Fuel	527	GA								0	0	1,843	0	1,843
	material	0									0	0	0	0	0
	material	0									0	0	0	0	0
	material	0									0	0	0	0	0
	material	0									0	0	0	0	0
	subcontractor	0									0	0	0	0	0
	TOTAL										18,866	5,365	1,843	0	26,074
	Labor Burden/Fees										6,803				6,803
	Overhead (insurance, facilities)										4,330	912	313	0	5,555
	Profit										2,980	1,828	216	0	3,823
	TOTAL										33,776	6,905	2,372	0	42,058

Basis of Estimate:

Excavate Sediment in Upland Areas.

Volume of Excavation: 1580 CY
 production rate: 30 CY/HR
 duration: 52.7 HRS

NOTES: Assume low production with poor access and close grade control.

	Number	HRS
Operator	2	105
Laborer	2	105
Foreman	1	53
Engineer	1	53

	Number	HRS
Excavator JD 330	1	53
Site Truck	1	53
GPS unit	1	53
	0	0

Table 1
Con Edison
Arthur Kill OU2
Estimate

4-2c	Boulder & Debris Excavation	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	47	HR	70.33							3,282	0	0	0	3,282
	Laborer	23	HR	45.90							1,071	0	0	0	1,071
	Foreman	23	HR	75.00							1,750	0	0	0	1,750
	Excavator JD 330	23	HR			48.75					0	1,138	0	0	1,138
	Site Truck	0	HR			53.13					0	0	0	0	0
	Fuel	117	GA				3.50				0	0	408	0	408
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	subcontractor	0					0				0	0	0	0	0
	TOTAL									6,103	1,138	408	0	0	7,649
	Labor/Burden/Taxes									2,138					2,138
	Overhead (insurance, facilities)									4,401	193	68	0	0	4,662
	Profit									984	133	48	0	0	1,145
	TOTAL									10,904	1,464	526	0	0	12,593

Basis of Estimate:

Remove and separate boulders and Debris from Exc. Areas

Volume of Excavation: 350 CY
 production rate: 15 CY/HR
 duration: 23.3 HRS

NOTES: Assume low production with large boulders and selective excavation
 Assume that wood and concrete debris will be separated.

	Number	HRS
Operator	2	47
Laborer	1	23
Foreman	1	23
		0

	Number	HRS
Excavator JD 330	1	23
Site Truck	1	23

Table 1
Con Edison
Arthur Kill OU2
Estimate

4-3	Material Solidification	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	116	HR	70.33							8,172	0	0	0	8,172
	Laborer	116	HR	45.90							5,333	0	0	0	5,333
	Foreman	0	HR	75.00							0	0	0	0	0
	labor	0		0.00							0	0	0	0	0
	Excavator JD 330	116	HR			48.75					0	5,665	0	0	5,665
	equipment	0				0.00					0	0	0	0	0
	Fuel	581	GA				3.50				0	2,034	0	0	2,034
	Lime Kiln Dust	436	TN				51.50				0	22,454	0	0	22,454
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	material	0					0				0	0	0	0	0
	subcontractor	0					0				0	0	0	0	0
	TOTAL										13,506	5,665	24,488	0	43,658
	Labor Burden/Taxes										4,727				4,727
	Overhead (insurance, facilities)										3,100	863	4,163	0	8,225
	Profit										2,153	663	2,815	0	5,651
	TOTAL										23,465	7,281	31,515	0	62,271

Basis of Estimate:
Mix Portland Cement with wet material in Stockpile

NOTES: Assume 1 excavator to manage pile, mix and load out disposal trucks
Assume disposal trucks are scheduled in cycles.
Assume Pile to be covered nightly

Total Excavation Volume: 2905 CY
Mixing Production Rate: 25 CY/HR
duration: 116.2 HRS

	Number	HRS
Operator	1	116
Laborer	1	116
Foreman	0	0

	Number	HRS
Excavator JD 330	1	116

Table 1
Con Edison
Arthur Kill OU2
Estimate

5a	Load Decanted Material	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	70	HR	70.33							4,931	0	0	0	4,931
	Laborer	70	HR	45.90							3,218	0	0	0	3,218
	Foreman	0	HR	75.00							0	0	0	0	0
	Excavator JD 330	70	HR			48.75					0	3,418	0	0	3,418
	equipment	0				0.00					0	0	0	0	0
	equipment	0				0.00					0	0	0	0	0
	Fuel	351	GA				3.50				0	0	1,227	0	1,227
	material	0					0.00				0	0	0	0	0
	material	0	SY				1.21				0	0	0	0	0
	subcontractor	0							0		0	0	0	0	0
	TOTAL										8,148	3,418	1,227	0	12,793
	Labor Burden/Taxes										2,852				2,852
	Overhead (insurance, facilities)										1,870	581	209	0	2,660
	Profit										287	400	144	0	1,830
	TOTAL										14,157	4,399	1,579	0	20,135

Basis of Estimate:

Contractor to Load Trucks for Disposal

NOTES: Assume stockpile/ mixing Excavator to load trucks
Assume 6 trucks/ day at 25 ton/ truck w/ 20 minute load time

Excavated Material: 5258 TN
Volume Per Day: 175 TN/DAY
1 Truck Load Duration: 20.00 MINUTES
Loads Per Day: 7.00 EA
Daily Load Out Duration: 2.33 HRS
duration: 30 DAYS
Hourly Total Duration: 70 HRS

	Number	HRS
Operator	1	70
Laborer	1	70
Foreman	0	0

	Number	HRS
Excavator JD 330	1	70
	0	0

Table 1
Con Edison
Arthur Kill OU2
Estimate

6b	Material Transportation	1	LS	Unit Prices				Cost						
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL
	Operator	0	HR	70.33							0	0	0	0
	Laborer	0	HR	45.90							0	0	0	0
	equipment	0				0					0	0	0	0
	equipment	0				0					0	0	0	0
	Fuel	0	GA				3.50				0	0	0	0
	material	0					0				0	0	0	0
	material	0	SY				1.21				0	0	0	0
	PCB Sediment Transport-Arth. Kill	5,258	TN					91.67			0	482,001	0	482,001
	TOTAL													482,001
	LABOR BURDEN/FIXES													0
	Overhead (insurance, facilities)											48,200	0	48,200
	T&D Profit											26,510	0	26,510
	TOTAL													556,711

Basis of Estimate:
Subcontractor to Haul Material to Disposal Site

NOTES: All permitting to be handled by Transporter

	Number	HRS
Operator	0	0
Laborer	0	0

	Number	HRS
Operator	0	0
Laborer	0	0

Table 1
Con Edison
Arthur Kill OU2
Estimate

6c	Material Disposal	1	LS	Unit Prices				Cost				TOTAL		
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment		Materials	Subcont
	Operator	0	HR	70.33							0	0	0	0
	Laborer	0	HR	45.90							0	0	0	0
	equipment	0				0					0	0	0	0
	equipment	0				0					0	0	0	0
	Fuel	0	GA				3.50				0	0	0	0
	material	0					0				0	0	0	0
	material	0	SY				1.21				0	0	0	0
	PCB Sediment Disposal- Arth. Kill	5,258	TN					74.76			0	393,088	0	393,088
	TOTAL										0	393,088	0	393,088
	Labor Burden/Taxes										0			0
	Overhead (Insurances, facilities)										0	39,309	0	39,309
	T&D Profit										0	21,920	0	21,920
	TOTAL										0	454,017	0	454,017

Basis of Estimate:

NOTES:

	Number	HRS	Number	HRS
Operator	0	0	0	0
Laborer	0	0	0	0
	0	0		

Table 1
Con Edison
Arthur Kill OU2
Estimate

7-1a	Backfill (Open Water)	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	53	HR	70.33								3,692	0	0	3,692
	Laborer	18	HR	45.90								803	0	0	803
	Foreman	18	HR	75.00								1,313	0	0	1,313
	Cat 330 Long-reach excavator	18	HR			66.25						1,159	0	0	1,159
	Loader JD 644	18	HR			30.78						539	0	0	539
	Site Truck	18	HR			53.13						930	0	0	930
	Clam Shell Bucket	18	HR			7.08						124	0	0	124
	Fuel	175	GA				3.50					0	613	0	613
	Backfill (Concrete Sand)	525	CY				52.97					0	27,807	0	27,807
	subcontractor										0	0	0	0	0
	TOTAL										5,808	2,751	28,419	0	36,978
	Labor Burden/Taxes										2,753				2,053
	Overhead/Insurance/Facilities										1,333	468	1,831	0	8,882
	Profit										39,17	325	3,325	0	4,584
	TOTAL										10,981	3,541	36,575	0	50,207

Basis of Estimate:

Place Backfill in water column.

NOTES: Assume site truck to deliver material from on-site stockpile
Assume close grade control

Volume of Backfill: 525 CY
production rate: 30 CY/HR
duration: 18 HRS

	Number	HRS
Operator	3	53
Laborer	1	18
Foreman	1	18
Engineer	1	18

	Number	HRS
Cat 330 Long-reach excavator	1	18
Loader JD 644	1	18
Site Truck	1	18
Clam Shell Bucket	1	18

Table 1
Con Edison
Arthur Kill OU2
Estimate

7-1b	Backfill (Inland)	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	137	HR	70.33							9,635	0	0	0	9,635
	Laborer	91	HR	45.90							4,192	0	0	0	4,192
	Foreman	46	HR	75.00							3,425	0	0	0	3,425
	Engineer	46	HR	50.75							2,318	0	0	0	2,318
	Dozer JD 450 G	46	HR	26.37							1,204	0	0	0	1,204
	Site Truck	46	HR	53.13							2,426	0	0	0	2,426
	Loader JD 644	46	HR	30.78							1,406	0	0	0	1,406
	GPS unit	46	HR	13.75							628	0	0	0	628
	Fuel	457	GA			3.50					1,598	0	0	0	1,598
	Backfill (Concrete Sand)	1,775	CY			52.97					94,013	0	0	0	94,013
	Topsoil subcontractor	305	CY			24.61					7,506	0	0	0	7,506
	TOTAL										19,570	5,664	103,117	0	128,351
	Labor Burden/Taxes										15,849				15,849
	Overhead (insurance, facilities)										4,491	0	17,530	0	22,021
	Profit										3,091	0	12,065	0	15,156
	TOTAL										34,992	5,664	132,712	0	174,003

Basis of Estimate:

Place and grade sand and topsoil.

Sand Volume: 1775 CY
 Topsoil Volume: 305 CY
 sand production rate: 50 CY/HR
 sand duration: 36 HRS
 Topsoil production rate: 30 CY/HR
 Topsoil Duration: 10 HRS
 Total Duration: 46 HRS

NOTES: Assume small dozer to place sand and topsoil delivered by Site truck

	Number	HRS
Operator	3	137
Laborer	2	91
Foreman	1	46
Engineer	1	46

	Number	HRS
Dozer JD 450 G	1	46
Site Truck	1	46
Loader JD 644	1	46
GPS unit	1	46

Table 1
Con Edison
Arthur Kill OU2
Estimate

7-2a	Rip Rap	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	15	HR	70.33							1,055	0	0	0	1,055
	Laborer	15	HR	45.90							688	0	0	0	688
	Foreman	15	HR	75.00							1,125	0	0	0	1,125
	Engineer	15	HR	50.75							761	0	0	0	761
	Excavator JD 330	15	HR	48.75							731	0	0	0	731
	GPS unit	15	HR	13.75							206	0	0	0	206
	equipment	0		0.00							0	0	0	0	0
	Fuel	150	GA				3.50				0	0	525	0	525
	8" Rip Rap	300	CY				56.18				0	0	16,853	0	16,853
	material	0	SY				1.21				0	0	0	0	0
	subcontractor									0	0	0	0	0	0
	TOTAL									3,630	938	17,378	0	0	21,945
	Labor Burden/Taxes									1,270					1,270
	Overhead (insurance, facilities)									853					853
	Profit									3,578					3,578
	TOTAL									6,306	1,207	22,985	0	0	28,878

Basis of Estimate:

Place, grade and compact backfill.

NOTES: Assume excavator to place rip rap
Assume direct dump to excavator. - no double handling

Rip Rap Volume: 300 CY
production rate: 20 CY/HR
duration: 15 HRS

	Number	HRS
Operator	1	15
Laborer	1	15
Foreman	1	15
Engineer	1	15

	Number	HRS
Excavator JD 330	1	15
GPS unit	1	15

Table 1
Con Edison
Arthur Kill OUIZ
Estimate

7-2b	Restore Disturbed Area	1	LS	Unit Prices				Cost								
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL		
	Operator	9	HR	70.33						639				0	0	639
	Laborer	18	HR	45.90						835				0	0	835
	Foreman	9	HR	75.00						682				0	0	682
	Dozer JD 450 G	9	HR			26.37				0	240			0	0	240
	Dynapac 3 Ton Roller	9	HR			10.00				0	91			0	0	91
	equipment	0	HR			0.00				0	0			0	0	0
	Fuel	91	GA			3.50				0	318			0	0	318
	Topsoil	10	CY			24.61				0	246			0	0	246
	Erosion Control Fabric -1	8,187	SF			0.20				0	1,637			0	0	1,637
	Erosion Control Fabric -2	9,210	SF			0.60				0	5,526			0	0	5,526
	Goose (snow) Fence subcontractor	700	LF			0.24				0	168			0	0	168
	TOTAL									2,156	331	7,896	0	0	0	10,382
	Labor Burden/Taxes									764						764
	Overhead (insurance, facilities)									495	56	1,342	0	0	0	1,893
	Profit									340	39	924	0	0	0	1,303
	TOTAL									3,745	426	10,182	0	0	0	14,333

Basis of Estimate: Restoration and clean-up of areas disturbed by construction activities

Area : 1000 SF
Production Rate: 110 SF/HR
Duration: 9.09 HRS

Number	HRS
Operator	1
Laborer	2
Foreman	1

NOTES: Includes restoration of areas that fall outside the contract excavation zones and any area otherwise impacted to construction.
Estimate 10 Cys of topsoil for touch-up

Number	HRS
Dozer JD 450 G	1
Dynapac 3 Ton Roller	1

Table 1
Con Edison
Arthur Kill OU2
Estimate

7-2d	Remove and Replace Fence	1	LS	Unit Prices				Cost							
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL	
	Operator	15	HR	70.33							1,055	0	0	0	1,055
	Laborer	45	HR	45.90							2,065	0	0	0	2,065
	Foreman	15	HR	75.00							1,125	0	0	0	1,125
	Loader JD 644	6	HR			30.78					182	0	0	0	182
	equipment	0				0.00					0	0	0	0	0
	equipment	0				0.00					0	0	0	0	0
	Fuel	30	GA				3.50				0	0	104	0	104
	material	0					0.00				0	0	0	0	0
	material	0	SY				1.21				0	0	0	0	0
	6' High Chain link Fence w/ B. Wire	355	LF								0	0	0	5,680	5,680
	TOTAL										4,245	182	104	5,680	10,211
	Labor Burden/Taxes										1,488				1,488
	Overhead (insurances, facilities)										874	0	0	0	874
	Profit										671	0	0	0	671
	TOTAL										376	0	0	0	376
	TOTAL										376	234	139	7,910	15,084

Basis of Estimate:

Remove and dispose of existing fence, Replace w/ New.

NOTES: 10% G&A, 5% Profit applied to subcontractor cost

Length to Remove: 355 LF
production rate: 60 SF/HR
duration: 6 HRS

	Number	HRS
Operator	1	15
Laborer	3	45
Foreman	1	15

	Number	HRS
Loader JD 644	1	6
	0	0

Table 1
 Con Edison
 Arthur Kill OU2
 Estimate

10	Wave Attenuation Barrier Rental	1	LS	Unit Prices				Cost								
				Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL		
	Wave Attenuator Barge(400lf)	960	HR			219					210,000				0	210,000
	Fuel	0	GA				3.50				0				0	0
	subcontractor										0				0	0
	subcontractor										0				0	0
	TOTAL										210,000				0	210,000
	Labor Burden/Faxes										0				0	0
	Overhead (insurance, facilities)										0				0	21,000
	Profit										0				0	11,550
	TOTAL										222,550				0	242,550

Basis of Estimate:

Additional duration of Wave Barrier.

NOTES: months of additional rental:

6

Table 1
Con Edison
Arthur Kill OU2
Estimate

E1	Construction Man., QC, H+S	HR	Unit Prices				Cost						
			Labor	T&L	Equipment	Materials	Subcont	Labor	T&L	Equipment	Materials	Subcont	TOTAL
	Program manager	0	96.79				0				0		0
	Design Manager	10	93.32				933				0		933
	Construction Manager	512	73.89				37,826				0		37,826
	Design Engineer	0	49.30				0				0		0
	H&S Manager	0	68.88				0				0		0
	H&S Officer	0	61.00				0				0		0
	QA Officer	0	46.62				0				0		0
	Scheduler	8	66.37				523				0		523
	Procurement	20	48.26				965				0		965
	Equipment Manager	20	43.15				863				0		863
	Administrative Assistant	58	29.00				1,686				0		1,686
	labor	0	0.00				0				0		0
	labor	0	0.00				0				0		0
	Pickup Truck	282			7.71		0		2,171		0		2,171
	Cell Phone	2			100		0		200		0		200
	equipment	0			0		0		0		0		0
	material	0			0		0		0		0		0
	material	0			0		0		0		0		0
	material	0			0		0		0		0		0
	material	0			0		0		0		0		0
	material	0			0		0		0		0		0
	material	0			0		0		0		0		0
	Security	0			30		0		0		0		0
	TOTAL						42,796		2,371		0		45,168
	Labor Burden/Taxes						14,979						14,979
	Overhead (insurance, facilities)						8,822		403				9,225
	Profit						6,769		277				7,037
	TOTAL						44,356		3,052				77,408

Table 1
Con Edison
Arthur Kill OU2
Estimate

E1 Construction Man., QC, H+S
 Basis of Estimate:

Pre-Construction start finish wks
 Construction 2
 Closeout 7.04
 TOTAL 2
 11.04 WKS

Assume 1 Parsons Oversight Manager

Title	Pre-Construction		Construction		Closeout		Total
	Weeks	HRS	Weeks	HRS	Weeks	HRS	
Program Manager	0	0	0	0.00	0	0	0
Design Manager	5	10	0	0.00	0	0	10
Construction Manager	40	80	50	351.80	40	80	512
Design Engineer	0	0	0	0.00	0	0	0
H&S Oversight	0	0	0	0.00	0	0	0
H&S Officer	0	0	0	0.00	0	0	0
QA Officer	0	0	0	0.00	0	0	0
Scheduler	4	8	0	0.00	0	0	8
Procurement	10	20	0	0.00	0	0	20
Equipment Manager	10	20	0	0.00	0	0	20
Administrative Assistant	5	10	4	28.15	10	20	58

Equipment	Number	Hrs/wk	Wks	Quant.	Unit
Pickup Truck	1	40	7	282	HR
Cell Phone	1	40	7	2	MO

**Table 2
Con Edison
Arthur Kill OU2
Crews**

Sheeting Crew

	Number	HRS
Foreman	1	0
Operator	1	0
Laborer	0	0
Teamster	0	0
Piledriver	2	0

	Number	HRS
200 ton Crane	1	0
Telescope Lift JLG 600	1	0
Pile Hammer	1	0
Crane Mats	5	0
Crane Mats	5	0
Small Boat	1	0

Stg. 1 Excavation (A+B)

	Number	HRS
Foreman	1	0
Operator	2	0
Laborer	0	0
Teamster	0	0
Engineer	1	0

	Number	HRS
Cat 330 Long-reach excavator	1	0
WaterTruck, 2000 gal	1	0
Loader JD 644	1	0
GPS unit	1	0
Crane Mats	10	0

Stg. 1 Fill (A+B)

	Number	HRS
Foreman	1	0
Operator	2	0
Laborer	0	0
Teamster	0	0
Engineer	1	0

	Number	HRS
Cat 330 Long-reach excavator	1	0
WaterTruck, 2000 gal	1	0
Loader JD 644	1	0
GPS unit	1	0

Stg. 2 Excavation (A+B)

	Number	HRS
Foreman	1	0
Operator	2	0
Laborer	0	0
Teamster	0	0

	Number	HRS
Cat 330 Long-reach excavator	1	0
WaterTruck, 2000 gal	1	0
Loader JD 644	1	0
GPS unit	1	0
Crane Mats	10	0

Stg. 2 Fill (A+B)

	Number	HRS
Foreman	1	0
Operator	2	0
Laborer	0	0
Teamster	0	0

	Number	HRS
Dozer JD 650	1	0
WaterTruck, 2000 gal	1	0
Loader JD 644	1	0

Shore Line Support/Operations (A)

	Number	HRS
Foreman	1	0
Operator	2	0
Laborer	0	0
Teamster	0	0

	Number	HRS
Dozer JD 650	1	0
WaterTruck, 2000 gal	1	0
Loader JD 644	1	0

Table 3
 Con Edison
 Arthur Kill OU2
 Labor

Exhibit (RSP-5)

Page 40 of 112

Item	Unit	W2 Wage Plus Fringe	Source	Quantity	Cost
labor					
Labor Contingency	%	10%	calc	0	0
Construction Manager	HR	73.89	Parsons equivalent	0	0
H&S Manager	HR	68.88	Parsons equivalent	0	0
Design Engineer	HR	49.30	Parsons equivalent	0	0
Design Manager	HR	93.32	Parsons equivalent	0	0
QA Officer	HR	46.62	Parsons equivalent	0	0
Scheduler	HR	65.37	Parsons equivalent	0	0
Equipment Manager	HR	43.15	Parsons equivalent	0	0
Procurement	HR	48.26	Parsons equivalent	0	0
Program Manager	HR	98.79	Parsons equivalent	0	0
Project Manager	HR	87.00	DDS	10	870
Superintendent	HR	87.00	MW- 20% + Syracuse Rates	512	44,536
Lead Foreman	HR	65.00	DDS	0	0
H&S Officer	HR	61.00	MW- 20% + Syracuse Rates	0	0
H&S Technician	HR	48.00	MW- 20% + Syracuse Rates	0	0
Engineer	HR	50.75	DDS	0	0
QC Engineer	HR	50.75	DDS	0	0
Administrative Assistant	HR	29.00	DDS	0	0
CIH	HR	75.00	DDS	0	0
Sr. Survey Engineer	HR	70.00	Bryant Surveying	0	0
CADD Technician	HR	45.00	Bryant Surveying	0	0
Party Chief (Bldg Const)	HR	61.08	Con Edison T&E Rates, July 2007, Revision #2 (\$106.13/hr)	0	0
Rodman (Bldg Const)	HR	40.01	Con Edison T&E Rates, July 2007, Revision #2 (\$69.52/hr)	0	0
Foreman	HR	75.00	DDS	0	0
Operator	HR	70.33	Con Edison T&E Rates, July 2007, Revision #2 (\$122.20/hr)	0	0
Laborer	HR	45.90	Con Edison T&E Rates, July 2007, Revision #2 (\$83.58/hr)	0	0
Teamster	HR	50.89	Con Edison T&E Rates, July 2007, Revision #2 (\$88.41/hr)	0	0
Captain	HR	43.27	07 wage determination, Class C, Operating Engineer - Marine Construction	0	0
Piledriver	HR	47.90	07 wage determination, Carpenter - Heavy & Highway	0	0
Diver	HR	89.01	07 wage determination, Carpenter - Heavy & Highway	0	0
Welder	HR	49.89	07 wage determination, Carpenter - Heavy & Highway	0	0
				0	45,406

0 45,406

Table 4
 Con Edison
 Arthur Kill OU2
 T&L

Exhibit (RSP-5)
 Page 41 of 112

Item	Unit	Unit Cost	Source	Quantity	Cost	Explanation
T&L		0		0		
Per Diem	DY	45	DDS	0	0	wage * fringe @ 30%
T&L Contingency	%	10%	calc	0	0	
				0	0	
				0	0	
Total:					0	

Table 5
Con Edison
Arthur Kill OU2
Equipment

Item	Unit	Unit Cost	Source	Quantity	Cost
Equipment		0.00		0	0
Equipment Contingency	%	0.10	Peak	0	0
Pickup Truck	HR	7.71	Hertz 050517	563	4,343
Trailer	MO	600.00	Parsons Procurement	9	5,400
Trailer Mob	EA	1,000.00	Parsons Procurement	9	9,000
Furniture	MO	400.00	DDS	9	3,600
Toilets	MO	175.00	DDS	2	350
Radios	MO	50.00	DDS	4	200
Computers	MO	200.00	DDS	0	0
Printer	MO	100.00	DDS	0	0
Copier	MO	40.00	DDS	9	360
Fax	MO	20.00	DDS	0	0
PID	DA	10.00	estimated purchase price for	0	0
DR-4000 Area Dust Monitor	DA	10.00	estimated purchase price for	2	20
pDR Personal Data Ram	DA	75.00	Miller email, 050428	2	150
Mercury Vapor Analyzer	DA	100.00	Miller email, 050428	0	0
Generator	MO	1,428.90	Hertz 050517	3	4,287
Cell Phone	MO	100.00	DDS	4	400
Two Land Line/Mo.	MO	300.00	W. Long Price Sheet	0	0
Loader JD 844, mob or demob	EA	500.00	DDS	1	500
Dozer JD 650, mob or demob	EA	500.00	DDS	0	0
Excavator JD 80, mob or demob	EA	800.00	DDS	0	0
Excavator JD 330, mob or demob	EA	800.00	DDS	1	800
Long reach excavator, mob or demob	EA	800.00	DDS	0	0
Site Truck, Mob or Demob	EA	800.00	DDS	0	0
Telescope Lift ULG 600, mob or demob	EA	600.00	DDS	0	0
Compressor IRXP375, mob or demob	EA	100.00	DDS	0	0
Pump, Trash, 3", mob or demob	EA	50.00	DDS	0	0
Crane, mob or demob	EA	5,000.00	DDS	0	0
Crane Barge, mob or demob	EA	1,000.00	DDS	0	0
Pressure Washer, mob or demob	EA	50.00	DDS	3	150
4" Pump, mob or demob	EA	50.00	DDS	0	0
4" hose, 100 ft, mob or demob	EA	50.00	DDS	0	0
Crane Mat, mob or demob	EA	100.00	DDS	0	0
Plate Hammer, mob or demob	EA	1,000.00	MW 1/29/07, ICE Equip	0	0
Water Truck, 2000 gal, mob or demob	EA	500.00	DDS	0	0
Small Boat, mob or demob	EA	100.00	DDS	1	100
Cat 330 Long reach excavator, mob or demob	EA	600.00		0	0
Dynapac 3 Ton Roller, mob or demob	EA	400.00		0	0
Steel Barge, mob or demob	EA	5,000.00	MW 1/29/07	0	0
Hopper row, mob or demob	EA	5,000.00	MW 1/29/07	0	0
Truck, mob or demob	EA	5,000.00	MW 1/29/07	0	0
GPS unit, mob or demob	EA	100.00	DDS	0	0
Smooth Drum IR 8D100, mob or demob	EA	100.00	DDS	0	0
Flexfloats, mob or demob	EA	6,625.00	Peak, 2/12/07	3	19,875
Shearoff Platform, mob or demob	EA	1,000.00	MW Maxmillan	0	0
200 ton Crane, mob or demob	EA	8,000.00	MW Maxmillan	0	0
Dozer JD 450 G, mob or demob	EA	100.00	MW	1	100
6" diesel Pump, mob or demob	EA	100.00	MW	0	0
6" cutter head dredger, mob or demob	EA	15,000.00	MW, Callahan Ind. Truck re	0	0
12" Asphalt Paver, mob or demob	EA	200.00	MW, Callahan Ind. Truck re	0	0
Morbark Model 1300 Tub Grinder, MOB	EA	1,000.00	L.C. Whitford	0	0
Loader JD 844	HR	30.78	Hertz 061231	80	2,458
Dozer JD 650	HR	20.47	Hertz 061231	0	0
Excavator JD 80	HR	8.38	Hertz 061231	0	0
Excavator JD 330	HR	48.75	Hertz 061231	298	14,515
Water Truck, 2000 gal	HR	16.84	Hertz 061231	0	0
12" Asphalt Paver	HR	184.00	RS MEANS 2007-Daily Rate	0	0
Telescope Lift ULG 600	HR	19.13	Hertz 061231	0	0
Compressor IRXP375	HR	4.81	Hertz 061231	0	0
Pump, Trash, 3"	HR	2.34	Hertz 061231	0	0
Crane Barge	HR	50.00	MW 1/29/07-Kalvan Corp	0	0
Wave Attenuator Barge(400ft)	HR	218.75	Seaway	0	0
Turb	HR	246.50	MW 1/29/07-Kalvan Corp	0	0
200 ton Crane	HR	177.67	MW, R.S. Means	0	0
100 TN Crane	HR	103.13	MW 1/29/07-Marino Crane	0	0
Plate Hammer	HR	90.83	MW 1/29/07, ICE Equip (ICE	0	0
21,000 gal tank	HR	4.18	Rain for Rent 1/12/07	0	0
4" Pump	HR	6.22	Rain for Rent 1/12/07	0	0
4" hose, 100 ft	HR	1.25	Rain for Rent 1/12/07	0	0
Small Boat	HR	20.00	DDS	65	1,299
Site Truck	HR	53.13	Hertz 061231	166	8,398
Welding Machine	HR	7.18	MW 1/29/07-United Rentals	0	0
Cutting Torch 25ft	HR	7.18	MW 1/29/07-United Rentals	0	0
Cat 330 Long-reach excavator	HR	66.25	L.C. Whitford Equip	92	6,078
Clam Shell Bucket	HR	7.06	MW 1/29/08	18	124
Hopper row	HR	50.00	MW 1/29/07-Kalvan Corp	0	0
Pressure Washer	HR	6.50	MW 1/29/07-united rental	127	825
Crane Mat	HR	8.00	MW 1/29/07	0	0
Steel Barge	HR	50.00	MW 1/29/07-Kalvan Corp	0	0
Smooth Drum IR 8D100	HR	20.63	Hertz 061231	0	0
Dynapac 3 Ton Roller	HR	10.00	Machinery Trader, 2007	0	0
Flexfloats	HR	25.97	Peak, 2/12/07	127	3,281
GPS unit	HR	13.75	MW 1/29/07-J.C. Smith Inst	235	3,230
8x18 Trinch Box	HR	5.63	Rezer Equipment	0	0
Shearoff Platform	HR	3.00	MW, Maxmillan	0	0
Paver	HR	64.73	MW, NYSDOT stand-by rate	0	0
Chainsaw	HR	4.85	Mike Broschart-2004 est.	17	84
12" Brush Chipper	HR	19.13	R.S. Means 2007	0	0
6" diesel Pump	HR	30.00	MW-Elts Environmental	0	0
Dozer JD 450 G	HR	26.37	MW, Hertz	63	1,664
40,000 lb. road grader	HR	96.00	RS MEANS 2007-Daily Rate	0	0
Morbark Model 1300 Tub Grinder	HR	125.00	L.C. Whitford (\$20,000/MO)	0	0
Tri-Axle	HR	84.00	Riceall rental rates 2007	0	0
20,000 Gallon Tanker Truck	HR	90.00	MW, Callahan Ind. Truck re	0	0
6" cutter head dredger	HR	150.00	MW, Callahan Ind. Truck re	0	0
Tractor 800 HOPE Fusion Unit	HR	195.00	DDS 2004	0	0
Tommel Screen	HR	12.00	DDS 2004	0	0
1200 LB. Hydraulic Hyram	HR	19.00	DDS 2004	0	0
Total:					91,300

Legend:
MW = Matt Warren
DDS = David Steele

Table 6
Con Edison
Arthur Kill OU2
Materials

Exhibit (RSP-5)
Page 43 of 112

Item	Unit	Unit Cost	Source	Quantity	Cost	Cost w/o Tax
material						
Materials Contingency	%	0.10	calc	0	0	0
Copying and Binding	Doc	200	DDS	5	1,000	200
Posters	EA	150	DDS	0	0	150
Geotextile	SY	1.21	AH Harris, 1/7	167	202	0.13
Fill Sand (Delivered)	CY	44.14	Braen Stone	205	9,048	7 (\$27.50/ton + 7% tax) x 1.5 tons per cy
Backfill (Concrete Sand)	CY	52.97	Braen Stone	2,300	121,820	7 (\$33.00/ton + 7% tax) x 1.5 tons per cy
Fuel	GA	3.50	DDS	8,873	31,057	2,3148.15
Office Supplies	MO	100	DDS	0	0	92,592.59
Portable Eyewash	EA	229.47	Hudson FS	0	0	212,472.2
Hard Hats	EA	8.45	Hudson FS	0	0	7,824.074
Safety Glasses	EA	6.11	Hudson FS	0	0	5,857.407
Face Shields	EA	6.55	Hudson FS	0	0	7,919.067
Coveralls, Tyvek, Case of 25	EA	189.68	Hudson FS	0	0	175,029.6
Boot Covers, Tyvek, Bag of 10	EA	13.38	Hudson FS	0	0	12,388.89
Gloves, Latex, Box of 100	EA	15.23	Hudson FS	0	0	14.1
Gloves, PVC, Pack of 12	EA	65.03	Hudson FS	0	0	60.21
Sampling Supplies	WK	200	DDS	0	0	185,185.2
Freight	LS	1000	DDS	0	0	925,925.9
Silt Fence	LF	0.34	DDS	300	102	23,148.15
Construction Fence	LF	0.24	DDS	100	24	25
Water Meter Permit	EA	100	DDS	0	0	92,592.59
Grout	CY	162	DDS	0	0	159
24" ADS Pipe	LF	16.2	Hanco, 1/7	0	0	15
18" ADS Pipe	LF	18.2	Hanco, 1/7	0	0	18
60" ADS Pipe	LF	.80	Hanco, 1/7	0	0	5
Concrete	CY	103.14	Saunders, 1/7	0	0	89.3
Arabic	EA	572.4	Par-West Corrosion, 1/7	0	0	630
Settlement Plate	EA	540	DDS	0	0	1,500
Geogrid	SF	0.22	AH Harris, 1/7	0	0	0.22
Stage 1 Fill	CY	18.88	Saunders, 1/07, Concrete Sand	0	0	10
Perforated Drainage Pipes	LF	2.41	Prescott, 1/7	0	0	1.66
Stage 2 Fill	CY	12.49	Saunders, 1/07, Bank Run Sand	0	0	10
Stage 3 Fill	CY	12.49	Saunders, 1/07, Bank Run Sand	0	0	10
Stage 4 Fill	CY	12.49	Saunders, 1/07, Bank Run Sand	0	0	10
Stage 5 Fill	CY	12.49	Saunders, 1/07, Bank Run Sand	0	0	10
Rice Pressure Monitors	EA	4,278.80	Par Northstar's NTE, Shallow Piezometers, D50925	0	0	3980
Lime Kin Dust	TN	51.50	Corbett Mgmt Svcs (CMS)			
Deflection Monitors	EA	540	DDS	0	0	500
EM trench Backfill	CY	10.8	DDS	0	0	10
Turbidity Monitoring Equip	LS	52,500.00	YSI Environmental -2007			10
Fiberglass Pipe, solid	LF	10.8	DDS	0	0	10
Fiberglass Pipe, slotted	LF	10.8	DDS	0	0	10
Silt Curtain	LF	28.88	American Marine/Elastec	400	11,552	15
Clay Cap	TN	16.2	DDS	0	0	15
Topsoil	CY	24.61	Almasi Company	315	7,752	
Erosion Control Fabric -1	SF	0.20	North Am Green S150BN			
Erosion Control Fabric -2	SF	0.60	SKB India CF-700			
Goose (snow) Fence	LF	0.24	Home Depot			16
3/4" Stone	TN	20.33	Almasi Company	200	4,066	1875
Bump	EA	2025	Kasinger Concrete, 1/7	0	0	1875
22" Manhole	EA	9000	Kistner Concrete, 1/7	0	0	11.3
8" Rip Rap	CY	56.18	Braen Stone	300	16,853	24 (\$35.00/ton + 7% tax) x 1.5 tons per cy
Waterlock	SE	25.62	MRCE	0	0	24
Cell Sheeting	CWT	7.59.5	Skyline Steel (MW), 2/17/07	0	0	24
Diaphragm Area Barrier Wall	CWT	7.5	Skyline Steel 020222	0	0	24
Anchor Wall	CWT	59.5	Skyline Steel (MW), 2/17/07	0	0	24
Tie Rod Steel	TN	2040	D. Good Email 070125	0	0	24
Whalers	TN	1529	D. Good Email 070125, coating (from Skyline) spread over tons	0	0	24
Joint Welding	LF	7.5	Skyline Steel (MW), 2/17/07	0	0	24
Steel Coating	LF	17.93	Skyline Steel (MW), 2/17/07	0	0	24
Sealant	LF	10	Skyline Steel (MW), 2/9/07	0	0	24
Washed crushed gravel	TN	43.25	Saunders D5/07	0	0	24
Asphalt (Binder Course)	TN	47.50	Callanan Industries 2006	0	0	24
Asphalt (Top Course)	TN	55	RS MEANS 2007	0	0	24
Asphalt Emulsion (Taco Coat)	SY	1.21		0	0	24
Frank and Limer Mobe	EA	950	Modutank 2006	0	0	24
Equalization Tanks	EA	136,855	Modutank 2007	0	0	24
6" SDR 7 HDPE pipe	LF	13	Lee Supply, 2007	0	0	24
					203,475	

**Table 7
Con Edison
Arthur Kill OU2
Subcontractor**

Exhibit (RSP-5)

Page 44 of 112

Item	Unit	Unit Cost	Source	Quantity	Cost
subcontractor		0		0	
Subcontractor Contingency	%	0.10	calc	0	0
Geosyntec	LS	1	Estimated on each task	0	0
Compaction Tester	HR	38.70	PW Labs	0	0
Surveyor	HR	102.50	C.N.Y Land Surveying, 050526	0	0
Temporary Fence	LF	3.00	W. Long Price sheet	880	2,639
Two Phone Line Install	EA	250.00	W. Long Price sheet (Per Mo. Rent)		
Shallow Piezometers	LS	3,960	Per Northstar's NTE, Shallow Piezo	0	0
Deep Piezometers	EA	13,600	Per Northstar's NTE, Shallow Piezo	0	0
Deep Recovery Wells	EA	13,600	Per Northstar's NTE, Shallow Piezo	0	0
DNAPL Recovery Wells	EA	10,000	DDS	0	0
Geomembrane	SF	2	DDS	5,750	11,500
Vibration Monitor Technician	HR	85.00	DDS	0	0
Electrical: Breakers	EA	5,200.00	OBG Bid Sheet 061222.xls from Semet	0	0
Electrical: Pumps in Sumps	LS	92,650.00	OBG Bid Sheet 061222.xls from Semet	0	0
Electrical: Underground Conduit	LF	48.00	OBG Bid Sheet 061222.xls from Semet	0	0
Debris Disposal	TN	10.00	fs	0	0
PCB Sediment Transport- Arth. Kill	TN	91.67	Chem Waste Man. -2007		
PCB Sediment Disposal- Arth. Kill	TN	74.76	Chem Waste Man. -2008		
Connect Trailers to Power and Phone	LS	3,000.00	Merit Elect. Semet Costs	0	0
Wick Drain	SE	1.50	DGI-Menard, 040115	0	0
Site Plantings + restoration	LS	20,000.00	QEA- 2007		
6' High Chain link Fence w/ B. Wire	LF	16.00	W. Long Quote		
Concrete around Force mains	LS	400,000.00	Concrete Estimate 070112	0	0
Demo Causeway	LS	465,325.00	Causeway Estimate 060205	0	0
Construction Water Disposal	GAL	0.40	9 Mile FS	0	0
Material Solidification	CY	30.00	9 Mile FS	1	30
Wave Attenuator Mob and Set-up	LS	190,000.00	Seaway		
Arthur Kill Water Treatment	GAL	0.50	W. Long- Arthur Kill Estimate		
Onsite Water Treatment	LS	263,762	LCP- Compass Quote	0	0
Land Rental	MO	1,000	MW	0	0
Off-site Disposal	TN	426.00	Dan Hoffner-Parsons	0	0
Security	HR	30.00	MW-Previous Semet IRM Estimate	0	0
Confirmatory Samples	LS	22,260.00	Chem Tech- 2007	0	0
TCLP Analysis	EA				
TCL/TAL Analysis	EA				
Sand Removal System	HR	50.00	MW-Del Tank- Lake Estimate	0	0
Trommel Screen	HR	12.00	MW-Screen USA-Lake estimate	0	0

14,169

14,169

**Table 8
Con Edison
Arthur Kill OU2
Markups**

Exhibit__(RSP-5)
Page 45 of 112

Labor Burden/Taxes	35%
Overhead (insurances, facilities)	17%
Profit	10%
T&D Profit	5%
ODC Rate	6.5%
Labor Contingency	10%
T&L Contingency	10%
Equipment Contingency	10%
Materials Contingency	10%
Subcontractor Contingency	10%

**Table 9
Con Edison
Arthur Kill OU2
Volumes**

Exhibit __ (RSP-5)
Page 46 of 112

Dredge Excavation	525	CY	
Tidal Excavation	800	CY	
Inland Excavation	1580	CY	
Oversize and Debris Exc.	350	CY	
<hr/>			
Open Water Sand	525	CY	
Inland and Tidal Sand	1775	CY	
Tidal Topsoil	0	CY	
Inland Topsoil	305	CY	
Rip Rap	300	CY	
<hr/>			
Total Excavation	2905	CY	4357.5
Total Disposal	5258	TON	
Stockpile Area	5000	SF	
Decon Pad Area	750	SF	
Fence Removal	355	LF	
Fence Replacement	355	LF	
Temporary Fence	500	LF	
Silt Curtain	400	LF	
Est. Treated Water	250000	GALLONS	25.04666667

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: Astoria Site

- Cost Projection for Linking Period: \$3.183 million
- Cost Projection for Rate Year 1: \$6.26 million
- Basis for Cost Projections:

The Astoria Site is being addressed under the RCRA Corrective Action module of the site's NYSDEC-issued hazardous waste storage permit and under Appendix B of the Consolidated Consent Order with the NYSDEC. The site investigation phase has been completed, although some additional investigation work is anticipated after NYSDEC completes its review of the manufactured gas plant site characterization report. A report describing all of the investigation work on the site from 1994-2007 was submitted in February 2008 for NYSDEC review. After NYSDEC completes its review, Con Edison will perform a Corrective Measures Study and risk assessment in order to make recommendations to the NYSDEC as to whether remediation or no further action is necessary for the many solid waste management units, areas of concern, and open spills addressed in the investigation. It is estimated that the costs associated with supplemental investigations, risk assessments and corrective measures studies will be \$0.76 million, all anticipated to be incurred in the Linking Period.

During the Linking Period, the Company has finalized a settlement with US Power Gen/Astoria Generating to reimburse them \$1.073 million for the investigation and remediation work they performed in connection with the reconstruction of the A-10 dock. Detailed information concerning this anticipated payment is provided below:

On August 20, 1999, when Astoria Generating Company, L.P. ("Astoria Generating") purchased the Astoria Generating Station, Con Edison licensed to Astoria Generating certain land, dock and appurtenances known collectively as the "A-10 Dock" for an initial term of twenty years. The A-10 Dock is used by Astoria Generating to receive fuel oil shipments for the Astoria Station. Under the A-10 Dock license agreement, Astoria Generating is responsible for maintenance and repair of the A-10 Dock, as well as for the investigation/remediation of environmental contamination arising out of its use of the A-10 Dock. The Company remains responsible for the investigation and remediation of environmental contamination that existed at the A-10 Dock prior to the commencement of the license agreement term in August 1999.

Following substantial damage to the A-10 Dock in 2002, Astoria Generating prepared plans for the reconstruction of that facility. Astoria Generating had the sediments/soils in and around the A-10 Dock area tested to pre-characterize them for either off-site disposal or re-use during the re-construction phase. The results of the testing indicated that the sediments in this area were contaminated with petroleum products (i.e., fuel oils #2, #4, and #6), which Astoria Generating contended were attributable to the Company's former operations. Astoria Generating has submitted information in support of its request for reimbursement of the incremental charges from third parties it incurred in connection with the re-construction of the A-10 Dock due to the

pre-license term contamination. These charges fall into two general categories: (1) investigation work (which includes the collection and analysis of samples and the determination of the pre-characterized impacted areas) and (2) remedial action work (which includes the actual excavation and off-site disposal of contaminated sediment/soil). Con Edison has determined and advised Astoria Generating that it believes only a portion of the investigation-related charges should be reimbursed because the balance of the investigation expenses would have been incurred by Astoria Generating regardless of whether historical petroleum contamination was present. Accordingly, the amount for environmental investigation and remediation work in connection with the reconstruction of the A-10 Dock for which Con Edison is prepared to reimburse Astoria Generating is approximately \$1.073 million. The Company has recently finalized a settlement of these charges during the linking period.

The primary remediation costs projected for the Astoria site during the Linking Period and Rate Year 1 are associated with the North Storage Yard, in which oil-filled transformers and PCB waste are currently stored. The yard is contaminated with PCBs, polycyclic aromatic hydrocarbons and heavy metals, and the NYSDEC has determined that this yard requires remediation. A conceptual remediation plan has been developed. It includes soil excavation (to 2 ft. in most of the yard and to greater depths around hot spots) and off-site disposal, installation of additional groundwater monitoring wells and five years of monitoring, and institutional controls. The USEPA is also involved in discussions concerning the appropriate remediation requirements in the North Storage Yard because of the presence of PCBs. The USEPA has required Con Edison to perform a risk assessment, which has been completed and is awaiting USEPA's approval. The costs associated with the North Storage Yard remediation were estimated by our consultant based on the conceptual remediation plan described above. The estimated costs for the North Storage Yard remediation and required follow-up activities total ~\$4.8 million, as detailed in the attached cost breakdown. Con Edison estimates that the work associated with the North Storage Yard remediation would cost \$0.575 million during the Linking Period (risk assessment and remedial planning) and \$4.2 million in Rate Year 1 (remediation, reporting). Based on the results of the risk assessment and negotiations with the NYSDEC and USEPA, the remedial strategy and associated cost estimates may be revised.

Based on the investigation findings thus far, it is assumed that various interim corrective measures will be designed and implemented in the latter part of the Linking Period and Rate Year 1. It is assumed that these interim corrective measures will primarily involve excavation and off-site disposal of contaminated soil and sediment not associated with the North Storage Yard, which is addressed above. Although specific areas for interim corrective measures have not yet been identified, it is assumed that \$0.5 million will be incurred during the Linking Period and \$2 million will be incurred during Rate Year 1. In addition, it has been assumed that costs of \$15,000 per quarter will continue to be incurred for on-going interim corrective measures, which involve gauging and recovery of free product (oil) in several wells located at the site.



Table B-5
Preliminary Cost Estimate - Option 5
Excavation to 2 feet, Permeable Cover

Task	Unit Cost	Quantity	Cost	Notes
Design and Permitting	\$150,000	1	\$150,000	
Contracting	\$50,000	1	\$50,000	
Mobilization and Site Prep.	\$100,000	1	\$100,000	
Excavation 0-2 feet	\$50/ton*	13,800 ton	\$690,000	excavation rate of 100 ton/day, \$5,000 per day
Transport	\$57/ton***	13,800 ton	\$786,600	dump trailer at \$1,250 each, 22 ton capacity
Disposal 0-2 feet	\$172/ton**	13,800 ton	\$2,373,600	13/19 samples over 200 ppm Pb (assume fail TCLP)
Lab analysis for disposal	\$500/sample	92 samples	\$46,000	one sample per 100 cy or 1 per 150 ton
Backfill, common borrow	\$25/CY	4,400 CY	\$110,000	1 foot thick, delivered, placed, compacted
Subbase, crushed stone	\$30/CY	4,400 CY	\$132,000	1 foot thick, delivered, placed, compacted
Storm Water Upgrades	\$10,000	1	\$10,000	
Construction Oversight	\$1,200/day	158 days	\$188,600	10 day site prep, 138 day excav, 10 extra day cover
Final Report	\$75,000	1	\$75,000	
Institutional Controls	\$20,000	1	\$20,000	Legal costs, deed restrictions, signs
Groundwater Monitoring	\$20,000	5 events	\$100,000	Once a year for five years, includes installing 3 new wells and sampling 8 wells per event (VOC, SVOC, PCB, Lead)
Cover maintenance	\$250	30 years	\$7,500	
Total			\$4,839,300	

Notes:

- * Excavation cost of \$5,000/day includes excavator, loader, vector truck, operators, foreman, PPE and associated costs.
 - ** Based on estimates provided by CWM Chemical Services \$225/ton PCBs and fail TCLP for lead and \$60/ton PCBs only.
 - *** Based on cost provided by CWM Chemical Services, assumes 22 tons per dump trailer, \$1250 per trailer.
- Costs are calculated on a prorated basis assuming a certain percent will fail TCLP. However, all samples may pass TCLP.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION
Site: Flushing Creek Site

- Cost Projection for Linking Period: \$0.4 million
- Cost Projection for Rate Year 1: \$0.1 million
- Basis for Cost Projections:

The former Flushing Service Center site is an approximate 13.5 acre site located on the northwest corner of College Point Avenue and 40th Road in Flushing, Queens. Con Edison purchased the majority of the property from Atlas Cereal Company, Inc. (acting for Remington Typewriter) in 1923 and later acquired several row houses in the southeastern portion of the property in the 1950s. The property was utilized by Con Edison as a service center from 1923 until its sale on February 24, 1989. As such, it was used to store oil-filled electrical equipment and transformer oil, as well as motor fuels.

A limited sediment investigation performed by the current site owner indicates some PCB contamination in the property's mudflat parcel sediment, which is located in Flushing Creek and is exposed at low tide, and in nearby sediments in Flushing Creek. During a September 2007 meeting, the DEC informed Con Edison that it considers the Company to be the responsible party for the contamination in the mudflat parcel and would require the Company to investigate and, if necessary, remediate contamination that emanated from the upland areas of concern to the mudflat parcel and off-site areas, including Flushing Creek.

On April 9, 2008, the Company and the DEC entered into a Consent Order under which Con Edison is responsible for investigating and, if appropriate, remediating (1) sediment in the mudflat parcel of the Company's former Flushing Service Center, (2) sediment in Flushing Creek outside the mudflat parcel, and (3) any other properties that may have been affected by contamination that emanated from the upland parcels of the Company's former service center site that the DEC determined presented a significant threat to health or the environment. The Company has procured an environmental consultant to perform the investigation and subsequent phases of the remedial process that will be required under the Consent Order. In addition to implementing anticipated Consent Order requirements, the Company will require the selected consultant to identify other potential sources of PCB contamination in Flushing Creek.

The cost projections for the linking period and RY1 are for the preparation and implementation of an investigation work plan (including a citizen participation plan) and for reporting the results. Although some level of remediation will almost certainly be required, remedial design and remediation costs are not anticipated until after RY1.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION
Site: "Site X"

- Cost Projection for Linking Period: \$9.95 million
- Cost Projection for Rate Year 1: \$0
- Basis for Cost Projections:

This site is referred to as "SITE X" to maintain the confidentiality of the site name and current site owner pending a final settlement agreement between Con Edison and the current owner concerning the allocation of responsibilities and liabilities associated with on-site and off-site contamination that was caused or may have been caused by operations at the site. Under the tentative agreement, Con Edison would be responsible for PCB contamination that migrated from the site to "off-site" areas.

The cost projection in the linking period is based on the tentative settlement agreement, under which the Company would pay the current owner a total of \$9.95 million. It is anticipated that these payments will be made during the second quarter of 2008.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: Bruckner Operations Center UST Site

- Cost Projection for Linking Period: \$0.95 million
- Cost Projection for Rate Year 1: \$0.065
- Basis for Cost Projections:

Remediation at this site will involve excavation and off-site disposal of petroleum impacted soil, dewatering associated with the excavation, remedial oversight, and reporting. The NYSDEC approved a Remedial Action Work Plan (RAWP) and subsequent RAWP. Most of the fieldwork is expected to occur in 3Q08, followed by preparation of a remediation report for NYSDEC approval, and groundwater monitoring. Con Edison's consultant has developed the remediation cost estimate (approx. \$0.685 million without contingencies) based on the RAWP scope. The balance of the projected costs for the Linking Period and Rate Year 1 are for remedial oversight and reporting (\$0.17 million), and groundwater monitoring and reporting. The remedial cost estimate prepared by the Company consultant and consultant oversight cost are attached.

PDF

Adobe

Adobe Acrobat
Document

Price Schedule						
Pay Item No.	Pay Item Description	Unit	Estimated Quantity	Unit or Lump Sum Price (Written in Words)	Extended Price (Written in Figures)	Unit Rates
1 Pre-Construction Activities						
1.1	Permits	Lump Sum	1	_____ Dollars and _____ Cents Lump Sum	\$7,000	N/A
1.2	Work Plans	Lump Sum	1	_____ Dollars and _____ Cents Lump Sum	\$35,200	N/A
2 Mobilization and Site Facilities						
2.1	Mobilization	Lump Sum	1	_____ Dollars and _____ Cents Lump Sum	\$34,700	N/A
2.2	Site Management	Lump Sum	1	_____ Dollars and _____ Cents Lump Sum	\$103,900	N/A
2.3	Stormwater, Sediment, and Erosion Controls	Lump Sum	1	_____ Dollars and _____ Cents Lump Sum	\$2,100	N/A
3 Excavation						
3.1	Excavation Activities	Lump Sum	1	_____ Dollars and _____ Cents per Lump Sum	\$30,000	N/A
3.2	Excavation Dewatering	Calendar Days	10	_____ Dollars and _____ Cents per Calendar Day	\$12,000	\$1,200
3.3	Excavation, Stabilization, and Loading of Soil	Lump Sum	1	_____ Dollars and _____ Cents per Lump Sum	\$63,400	N/A
3.4	Clean Backfill Placement and Compaction	Tons	801	_____ Dollars and _____ Cents per Ton	\$63,400	\$79.17
3.5	Excavation Sheet Piling and Bracing, Installed	Lump Sum	1	_____ Dollars and _____ Cents Lump Sum	\$188,000	N/A
4 Off-Site Transportation and Disposal						
4.1	Pavement Transportation and Disposal	Ton	37	_____ Dollars and _____ Cents per Ton	\$2,400	\$65.45
4.2	Subsurface Pipes and Associated Structures, and Shallow Sheet Piling Transportation and Disposal	Ton	17	_____ Dollars and _____ Cents per Ton	\$1,100	\$65.32
4.3	Non-Hazardous Soil Transportation and Disposal	Ton	1008	_____ Dollars and _____ Cents per Ton	\$95,760	\$95.00
4.4	Hazardous Soil Transportation and Disposal	Ton	10	_____ Dollars and _____ Cents per Ton	\$7,920	\$380.00
4.5	Non-Hazardous Groundwater Transportation and Disposal	Gallon	16000	_____ Dollars and _____ Cents per Gallon	\$15,600	\$0.78
5 Site Restoration						
5.1	Paving	Square Foot	1000	_____ Dollars and _____ Cents per Square Foot	\$11,100	\$11.10
5.2	18-inch Diameter Cast Iron Sewer Pipe and 4-inch Diameter Cast Iron Sewer Pipe, Installed	Lump Sum	1	_____ Dollars and _____ Cents per Lump Sum	\$17,500	N/A
5.3	Demobilization	Lump Sum	1	_____ Dollars and _____ Cents Lump Sum	\$14,700	N/A
6 Project Closeout						
6.1	Final Documents	Lump Sum	1	_____ Dollars and _____ Cents Lump Sum	\$10,000	N/A

Total: \$684,100

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION
Site: White Plains MGP Site

- Cost Projection for Linking Period: \$8.937 million
- Cost Projection for Rate Year 1: \$2.052 million
- Basis for Cost Projections:

The NYSDEC approved the Remedial Alternative Selection Reports and Remedial Action Work Plans for Operable Unit 1 (St. John's Church) and Operable Unit 2 (Substation and 12 Water Street office building) of this site on February 22, 2008. It is anticipated that implementation of the approved remedies will begin in mid-2008 with completion expected during Rate Year 1.

Based on the preliminary cost estimates prepared by the Company's consultant, the cost to remediate both Operable Units is estimated to be approximately \$8 million (see attached files). Additional expenses during the Linking Period and Rate Year 1 include remedial planning (pre-design investigation and remedial design), groundwater monitoring and lease payments for the 12 Water Street office building. Con Edison also expects to incur costs with respect to compensating the St. John's Church to accept NYSDEC-imposed institutional controls on its property (restrictions on redevelopment without NYSDEC consent) due to the MGP contamination that has migrated there. The compensation to St. John's Church is expected to be \$990,000.



MGP White Plains St
John Alter...



White Plains OU2
Cost Est (12-...

St. John the Evangelist R.C. Church and Elementary School - Con Edison
White Plains, New York
Order of Magnitude Cost Estimate⁽¹⁾
MNA Alternative
November 2005

Item	Cost Item/Description	Notes	Unit	Quantity	Unit Cost	Total Cost
1	Well Point Sampling Survey	2	LS	1	\$200,000	\$200,000
2	Design/Permits/Surveys/Project Management/Work Plan	-	LS	1	\$50,000	\$50,000
3	Well Installation	3	LS	1	\$30,000	\$30,000
4	Long Term Groundwater Monitoring	4	Year	30	\$30,000	\$900,000

Subtotal	\$1,200,000
Engineering/Oversight (15%)	\$200,000
Contingency (25%)	\$300,000
Subtotal	\$1,700,000
 Total Estimate	 \$1,700,000

Notes:

1. Preliminary estimate for comparative screening of alternatives only.
2. A well point survey would be conducted to determine locations for the installation of monitoring wells.
3. Assumes upgradient, source, plume and sentinel wells would be installed.
4. Assumes long term groundwater monitoring would be required.

**St. John the Evangelist R.C. Church and Elementary School - Con Edison
White Plains, New York
Order of Magnitude Cost Estimate⁽¹⁾
SSEB Alternative
November 2005**

Item	Cost Item/Description	Notes	Unit	Quantity	Unit Cost	Total Cost
1	Pre-Design Investigation/Bench Scale/Pilot Scale Testing	2	LS	1	\$350,000	\$350,000
2	Design/Permits/Surveys/Project Management/Work Plan	-	LS	1	\$250,000	\$250,000
3	Well and Equipment Installation	3	LS	1	\$420,000	\$420,000
4	Chemical Costs	4	LS	1	\$770,000	\$770,000
5	Laboratory Costs	-	LS	1	\$200,000	\$200,000
6	Earthwork and Restoration Costs	5	LS	1	\$70,000	\$70,000
7	Operation and Maintenance Costs/Performance Monitoring	6	LS	1	\$900,000	\$900,000
8	Post-Remediation Groundwater Monitoring	7	Year	5	\$30,000	\$150,000

Subtotal	\$3,200,000
Engineering/Oversight (15%)	\$500,000
Contingency (25%)	\$800,000
Subtotal	\$4,500,000
 Total Estimate	 \$4,500,000

Notes:

1. Preliminary estimate for comparative screening of alternatives only.
2. Pre-Design investigations activities including geotechnical investigations, pumping test, etc. would be required. Bench scale and pilot scale testing would also be required.
3. Assumes approximately 95 well points would be installed. Includes estimated blower and compressor equipment/installation costs.
4. Based on multiple assumptions which would be revised following the pre-design investigation, bench scale testing, and pilot scale testing. Refer to SSEB supplemental table for assumptions.
5. Assumes extensive trenching network between wells would be required and that areas would be restored to pre-installation conditions.
6. Assumes that O&M activities including labor, materials, project management would be equivalent to one full time employee over a period of five years and performance monitoring at a cost of \$30,000/year.
7. Assumes groundwater monitoring may be discontinued within five years of the completion of the SSEB Process.

SSEB Supplemental Table

	<i>Units</i>	<i>Value</i>	<i>Notes</i>
Treatment Area	ft ²	18,100	Estimated
Treatment Depth	ft bgs	50	Estimated
Soil Density	lb / ft ³	125	Assumed
Porosity	%	40%	Assumed
Mass of Soil	tons	56,563	Estimated
Volume of Groundwater	gal	1,624,656	Estimated (Assumes 30' Saturated Thickness)
Average Groundwater COD	mg/L	10,000	Assumed
<u><i>Nutrients & Solvent Surfactant Costs</i></u>			
Surfactant Dose Requirements	g/L	15	Assume 1.5% dose
Solvent Dose Requirement	g/L	60	6% as the estimate for ethanol equivalent
Total Required Surfactant	tons	110	100% basis
Total Required Solvent	tons	210	3% by weight basis
Transportation & Handling Cost	\$	58,000	Assumes \$180/ton
Ethanol Cost @ \$1.50 / gal	\$	115,000	Includes 20% for onsite storage / make-down costs
Surfactant Cost @ \$1.5/lb	\$	330,000	Estimated cost
Nutrient (N,P,K, Fe, acids and Caustic soda	\$	260,000	Assume nutrients costs are 20% higher than BCB
Estimated Chemical Cost	\$	763,000	

St. John the Evangelist R.C. Church and Elementary School - Con Edison
White Plains, New York
Order of Magnitude Cost Estimate⁽¹⁾
BCB Alternative
November 2005

Item	Cost Item/Description	Notes	Unit	Quantity	Unit Cost	Total Cost
1	Pre-Design Investigation/Bench Scale/Pilot Scale Testing	2	LS	1	\$350,000	\$350,000
2	Design/Permits/Surveys/Project Management/Work Plan	-	LS	1	\$250,000	\$250,000
3	Well and Equipment Installation	3	LS	1	\$420,000	\$420,000
4	Chemical Costs	4	LS	1	\$720,000	\$720,000
5	Laboratory Costs	-	LS	1	\$200,000	\$200,000
6	Earthwork and Restoration Costs	5	LS	1	\$70,000	\$70,000
7	Operation and Maintenance Costs/Performance Monitoring	6	LS	1	\$540,000	\$540,000
8	Post-Remediation Groundwater Monitoring	7	Year	5	\$30,000	\$150,000

Subtotal	\$2,700,000
Engineering/Oversight (15%)	\$400,000
Contingency (25%)	\$700,000
Subtotal	\$3,800,000

Total Estimate **\$3,800,000**

Notes:

1. Preliminary estimate for comparative screening of alternatives only.
2. Pre-Design investigations activities including geotechnical investigations, pumping test, etc. would be required. Bench scale and pilot scale testing would also be required.
3. Assumes approximately 95 well points would be installed. Includes estimated blower and compressor equipment/installation costs.
4. Based on multiple assumptions which would be revised following the pre-design investigation, bench scale testing, and pilot scale testing. Refer to BCB supplemental table for assumptions.
5. Assumes extensive trenching network between wells would be required and that areas would be restored to pre-installation conditions.
6. Assumes that O&M activities including labor, materials, project management would be equivalent to one full time employee over a period of three years and performance monitoring at a cost of \$30,000/year.
7. Assumes groundwater monitoring may be discontinued within five years of the completion of the BCB Process.

BCB Supplemental Table

	<i>Units</i>	<i>Value</i>	<i>Notes</i>
Treatment Area	ft ²	18,100	Estimated
Treatment Depth	ft bgs	50	Estimated
Soil Density	lb / ft ³	125	Assumed
Porosity	%	40%	Assumed
Mass of Soil	tons	56,563	Estimated
Volume of Groundwater	gal	1,624,656	Estimated (Assumes 30' Saturated Thickness)
Average Groundwater COD	mg/L	10,000	Assumed
<i>Nutrients & Hydrogen Peroxide</i>			
Dose Requirements	g/L	40	Assume 2.0 g H ₂ O ₂ / g COD and 50% efficiency
Total Required	tons	280	100% pure
Total Shipped to site	tons	560	Shipped at 50% dilution
Transportation & Handling Cost	\$	101,000	Based on transportation from Birmingham, AL (Assumes \$180/ton).
Cost @ \$0.30 / lb (50% basis)	\$	404,000	Includes 20% for onsite storage / make-down costs
Nutrient (N,P,K, Fe, acids and Caustic soda	\$	210,000	Assume nutrients and some pH adjustments are likely
Estimated Chemical Cost	\$	715,000	

**St. John the Evangelist R.C. Church and Elementary School - Con Edison
White Plains, New York
Order of Magnitude Cost Estimate⁽¹⁾
TCO Alternative
November 2005**

Item	Cost Item/Description	Notes	Unit	Quantity	Unit Cost	Total Cost
1	Pre-Design Investigation/Bench Scale/Pilot Scale Testing	2	LS	1	\$400,000	\$400,000
2	Design/Permits/Surveys/Project Management/Work Plan	3	LS	1	\$400,000	\$400,000
3	Well, Electrode and Equipment Installation	4	LS	1	\$380,000	\$380,000
4	Electrical Equipment	-	LS	1	\$100,000	\$100,000
5	Consumable Chemical/Electric Costs	5	LS	1	\$3,100,000	\$3,100,000
6	Laboratory Costs	-	LS	1	\$200,000	\$200,000
7	Earthwork and Restoration Costs	6	LS	1	\$70,000	\$70,000
8	Operation and Maintenance Costs/Performance Monitoring	7	LS	1	\$1,100,000	\$1,100,000
9	Post-Remediation Groundwater Monitoring	8	Year	5	\$30,000	\$150,000

Subtotal	\$5,900,000
Engineering/Oversight (15%)	\$900,000
Contingency (25%)	\$1,500,000
Subtotal	\$8,300,000
 Total Estimate	 \$8,300,000

Notes:

1. Preliminary estimate for comparative screening of alternatives only.
2. Pre-Design investigations activities including geotechnical investigations, pumping test, etc. would be required. Bench scale and pilot scale testing would also be required.
3. Extensive utility surveys would be required. Permitting requirements would be significant.
4. Assumes one electrode per 400 sf of area and approximately 40 well points.
5. Based on multiple assumptions which would be revised following the pre-design investigation, bench scale testing, and pilot scale testing. Refer to TCO supplemental table for assumptions.
6. Assumes trenching network between wells would be required and that areas would be restored to pre-installation conditions.
7. Assumes that O&M activities including labor, materials, project management would be equivalent to two full time employees over a period of three years and performance monitoring at a cost of \$30,000/year.
8. Assumes groundwater monitoring may be discontinued within five years of the completion of the TCO Process.

TCO Supplemental Table

	<i>Units</i>	<i>Value</i>	<i>Notes</i>
Treatment Area	ft ²	18,100	Estimated
Treatment Depth	ft bgs	50	Estimated
Soil Density	lb / ft ³	125	Assumed
Porosity	%	40%	Assumed
Mass of Soil	tons	56,563	Estimated
Volume of Groundwater	gal	1,624,656	Estimated (Assumes 30' Saturated Thickness)
Average Groundwater COD	mg/L	10,000	Assumed, remains same throughout the thermal treatment
Estimated Mass of COC in smear zone and at the bottom	tons	1020	Estimated 1,700 cy of COC impacted soil.
Estimated Mass of COCs removed during the thermal treatment	tons	77	Assumed to be 7.5% of the COC mass (BTEX and naphthalene)
Estimated Carbon required to Capture undestroyed portion of COCs	tons	460	Assumed to be a ratio of 6:1 for carbon:benzene and higher for naphthalene
Estimated Electricity Requirement @200kw/hr/ton	Kw/hr	6,787,500	This is based on rough estimate from McMillan-Mcgee (M-M) for ES TDP
<u><i>Oxidant Cost, Carbon & Electricity Costs</i></u>			
Persulfate Dose Requirements	g/L	30	Assumed
Total Required for GW Treatment	tons	210	Estimated
Transportation & Handling Cost	\$	38,000	Includes transportation from Birmingham, AL. (\$180/ton)
Persulfate Cost @ \$1.0 / lb	\$	510,000	Includes 20% for onsite storage and make-down costs
Cost of Activated Carbon Management @\$2/lb	\$	1,840,000	M-M estimate
Electricity Cost @\$0.08/kw/hr	\$	543,000	M-M estimate
Electrical Consumable Items	\$	100,000	
Estimated Cost	\$	3,031,000	Estimates W/ disposal

**St. John the Evangelist R.C. Church and Elementary School - Con Edison
White Plains, New York
Order of Magnitude Cost Estimate⁽¹⁾
Excavation Alternative
November 2005**

Item	Cost Item/Description	Notes	Unit	Quantity	Unit Cost	Total Cost
1	Pre-Design Investigation/Permits/Surveys	2	LS	1	\$800,000	\$800,000
2	Mobilization/Site Preparation	3	LS	1	\$300,000	\$300,000
3	Gymnasium Demolition	-	LS	1	\$100,000	\$100,000
4	Phase I Excavation Support System (sheetpile, bracing, etc.)	4	VSF	32,000	\$50	\$1,600,000
5	Phase I Construction Water Management	5	Gal	45,000,000	\$0.25	\$11,300,000
6	Phase I Soil Excavation/Material Handling	6	CY	14,000	\$25	\$400,000
7	Disposal	7	Ton	1,700	\$111	\$200,000
8	Phase I Backfilling	8	CY	14,000	\$25	\$400,000
9	Construction of New School/Gymnasium	9	LS	1	\$10,000,000	\$10,000,000
10	Demolition of School	-	LS	1	\$300,000	\$300,000
11	Phase II Excavation Support System (sheetpile, bracing, etc.)	10	VSF	22,800	\$50	\$1,100,000
12	Phase II Construction Water Management	5	Gal	58,000,000	\$0.25	\$14,500,000
13	Phase II Soil Excavation/Material Handling	11	CY	18,000	\$25	\$500,000
14	Disposal	7	Ton	2,300	\$111	\$300,000
15	Phase II Backfilling	8	CY	18,000	\$25	\$500,000
16	Site Restoration/Demobilization	-	LS	1	\$300,000	\$300,000

Subtotal	\$42,600,000
Engineering/Oversight (15%)	\$6,400,000
Contingency (25%)	\$10,700,000
Subtotal	\$60,000,000
 Total Estimate	 \$60,000,000

Notes:

1. Preliminary estimate for comparative screening of alternatives only.
2. Pre-Design investigations activities including geotechnical investigations, pumping test, etc. would be required. Extensive utility surveys and surveys/understanding of the structures on and around the site would also be required.
3. Assumes a sprung structure to mitigate dust/odor emissions would not be required.
4. Assumes 400 linear feet of sheetpile installed to an average depth of 80 feet below ground surface. Extensive bracing systems would be required. Sealed joint sheetpile may be required to reduce construction water.
5. Assumes average flow rate of 300 gallons per minute and construction 10 hours per day. Estimate based on hydraulic conductivities observed at the substation. Given the high volumes of construction water based on this estimate, significant consideration would be given during design to minimizing the volume of construction water via alternative means (e.g. grout curtain, etc.).
6. Assumes an excavation area of 7,500 square feet and removal to a depth of 50 feet. Assumes NAPL saturated soil would be disposed of offsite.
7. Assumes waste is RCRA exempt, only exhibits the toxicity characteristic for benzene (i.e. not hazardous for lead, etc.), and will be disposed of in a landfill. Additional costs may apply if waste is RCRA exempt and requires incineration or if the waste is RCRA non-exempt.
8. Assumes site soil can be staged onsite and reused as backfill if not saturated with NAPL. However, due to space restrictions, stockpiling all reusable soil onsite may not be feasible.
9. Assumes the new school/gymnasium will have approximately the same square footage as the existing buildings combined.
10. Assumes 285 linear feet of sheetpile installed to an average depth of 80 feet below ground surface. Extensive bracing systems would be required. Sealed joint sheetpile may be required to reduce construction water.
11. Assumes an excavation area of 10,600 square feet and removal to a depth of 45 feet. Only NAPL saturated soil would offsite disposal.

**St. John the Evangelist R.C. Church and Elementary School - Con Edison
White Plains, New York
Order of Magnitude Cost Estimate⁽¹⁾
Excavation Alternative (24/7 Construction Schedule)
November 2005**

Item	Cost Item/Description	Notes	Unit	Quantity	Unit Cost	Total Cost
1	Pre-Design Investigation/Permits/Surveys	2	LS	1	\$1,000,000	\$1,000,000
2	Mobilization/Site Preparation	3	LS	1	\$500,000	\$500,000
3	Gymnasium Demolition	-	LS	1	\$100,000	\$100,000
4	Phase I Excavation Support System (sheetpile, bracing, etc.)	4	VSF	32,000	\$50	\$1,600,000
5	Phase I Construction Water Management	5	Gal	20,000,000	\$0.25	\$5,000,000
6	Phase I Soil Excavation/Material Handling	6	CY	14,000	\$25	\$400,000
7	Disposal	7	Ton	1,700	\$111	\$200,000
8	Phase I Backfilling	8	CY	14,000	\$25	\$400,000
9	Construction of New School/Gymnasium	9	LS	1	\$10,000,000	\$10,000,000
10	Demolition of School	-	LS	1	\$300,000	\$300,000
11	Phase II Excavation Support System (sheetpile, bracing, etc.)	10	VSF	22,800	\$50	\$1,100,000
12	Phase II Construction Water Management	5	Gal	25,000,000	\$0.25	\$6,300,000
13	Phase II Soil Excavation/Material Handling	11	CY	18,000	\$25	\$500,000
14	Disposal	7	Ton	2,300	\$111	\$300,000
15	Phase II Backfilling	8	CY	18,000	\$25	\$500,000
16	Site Restoration/Demobilization	-	LS	1	\$500,000	\$500,000

Subtotal	\$28,700,000
Engineering/Oversight (15%)	\$4,300,000
Contingency (25%)	\$7,200,000
Subtotal	\$40,000,000
 Total Estimate	 \$40,000,000

Notes:

- Preliminary estimate for comparative screening of alternatives only.
- Pre-Design investigations activities including geotechnical investigations, pumping test, etc. would be required. Extensive utility surveys and surveys/understanding of the structures on and around the site would also be required.
- Assumes a sprung structure to mitigate dust/odor emissions would not be required.
- Assumes 400 linear feet of sheetpile installed to an average depth of 80 feet below ground surface. Extensive bracing systems would be required. Sealed joint sheetpile may be required to reduce construction water.
- Assumes average flow rate of 300 gallons per minute and construction 24 hours per day. Estimate based on hydraulic conductivities observed at the substation. Given the high volumes of construction water based on this estimate, significant consideration would be given during design to minimizing the volume of construction water via alternative means (e.g. grout curtain, etc.).
- Assumes an excavation area of 7,500 square feet and removal to a depth of 50 feet. Assumes NAPL saturated soil would be disposed of offsite.
- Assumes waste is RCRA exempt, only exhibits the toxicity characteristic for benzene (i.e. not hazardous for lead, etc.), and will be disposed of in a landfill. Additional costs may apply if waste is RCRA exempt and requires incineration or if the waste is RCRA non-exempt.
- Assumes site soil can be staged onsite and reused as backfill if not saturated with NAPL. However, due to space restrictions, stockpiling all reusable soil onsite may not be feasible.
- Assumes the new school/gymnasium will have approximately the same square footage as the existing buildings combined.
- Assumes 285 linear feet of sheetpile installed to an average depth of 80 feet below ground surface. Extensive bracing systems would be required. Sealed joint sheetpile may be required to reduce construction water.
- Assumes an excavation area of 10,600 square feet and removal to a depth of 45 feet. Only NAPL saturated soil would offsite disposal.

Minimum Estimated ISS Cost (\$140/cy)

Item	Unit	Quantity	Unit Cost	Total Cost	
1 Mobilization/Site Preparation					
Methods Statement	LS	1	\$ 10,000	\$ 10,000	
Health & Safety Plan	LS	1	\$ 10,000	\$ 10,000	
Office Trailers (Use 12 Water Street Building)	Months	6	\$ -	\$ -	
Office Furnishings and Equipment (Total of 3)	Months	6	\$ 3,300	\$ 19,800	
Site Utilities (electric, phone, port-a-johns, water coolers)	Months	6	\$ 2,500	\$ 15,000	
Equipment Mobilization	LS	1	\$ 30,000	\$ 30,000	
Decontamination Pad Installation	LS	1	\$ 2,000	\$ 2,000	
Decontamination Pad Operation (1 laborer @ 10 hrs/week)	Months	4	\$ 3,000	\$ 12,000	
Fence removal & disposal	LF	120	\$ 8	\$ 960	
Landscaping Removal (light bolards, trees, shrubs, curbing)	LS	1	\$ -	\$ -	
Temporary Fencing	LF	200	\$ 5	\$ 1,000	
Code 753 Utility Markout & Geophysical Survey	LS	1	\$ 3,500	\$ 3,500	
				\$ 104,260	
2 Contractor Site Management					
Superintendent (\$125/hr)	Months	6	\$ 22,000	\$ 132,000	
Health & Safety Officer (\$75/hr)	Months	6	\$ 13,200	\$ 79,200	
				\$ 211,200	
3 Surveying	LS	1	\$ 20,000	\$ 20,000	
4 Utility Removal/Replacement (Drawing C003)					
Telecom & Roof Drain (C001, Note 5) - Protect	LS	1	\$ 3,500	\$ 3,500	
Water (C003, Notes 2, 2a & 7) (8", 165 LF, remove & replace)	LS	1	\$ 10,000	\$ 10,000	
Electric (C003, Notes 3a-3g and 5)	LS	1	\$ 1,000	\$ 1,000	
Gas (C003, Note 4) - Remove	LS	1	\$ -	\$ -	
Site Light (C003, Note 6) - Remove	LS	1	\$ -	\$ -	
				\$ 14,500	
5 Demolition/Foundation Removal (Drawing C004)					
5-1 Demolition - Asphalt Paving (4")	SY	1,500	\$ 2	\$ 3,000	
5-2 Demolition - Concrete (SOG and foundations walls @ 12" thick)	CY	650	\$ 60	\$ 39,000	
5-3 Demolition - Asbestos (Transit Conduit)				\$ 10,000	
Stockpile soil and reuse as backfill	CY	3,450	\$ 5	\$ 17,250	
				\$ 59,250	
6 In Situ Soil Stabilization/Solidification (ISS) (Drawing C005)					
6-1 Pre- & Post-Condition Survey	LS				
6-2 Instrumentation & Monitoring	LS				
6-3a Soil Treatment - ISS	CY	24,550	\$ 140	\$ 3,437,000	62%
6-3b Soil Treatment - Jet Grouting	CY	1,000	\$ 450	\$ 450,000	8%
				\$ 3,887,000	
7 Excavation/stockpiling (30% of ISS volume)	CY	6,300	\$ 5	\$ 31,500	
8 Transportation and Offsite Disposal					
Truck Loading	CY	6,300	\$ 2	\$ 12,600	
8-1 Disposal - Hazardous Soil (20% of total @ 1.5 tons/cy)	Tons	1,890	\$ 175	\$ 330,750	6%
8-2 Disposal - Non-Hazardous Soil (80% of total @ 1.5tons/cy)	Tons	7,560	\$ 75	\$ 567,000	10%
8-3 Disposal - Asphalt (recycle facility @ 1.3 tons/cy)	Tons	24	\$ 30	\$ 722	
8-4 Disposal - Concrete (non-haz facility @ 2 tons/cy)	Tons	1300	\$ 75	\$ 97,500	
8-5 Disposal - Asbestos (non-haz facility @ 2 tons/cy)	Tons	1300	\$ 75	\$ 97,500	
8-6 Construction Water Management	LS				
				\$ 1,106,072	
9 Odor Control	LS	1	\$ -	\$ -	
10 Site Restoration (Drawing C008)					
Stone subbase (6")	SF	18,700	\$ 2	\$ 37,400	
Asphalt paving (4")	SF	18,700	\$ 3	\$ 56,100	
Site Lighting	LS	1	\$ -	\$ -	
Drainage (100 lf trench drain; 200 lf solid 6" HDPE pipe)	LS	1	\$ -	\$ -	
Fencing	LF		\$ -	\$ -	
Misc Improvements (curbing, asphalt striping, landscaping)	LS	1	\$ 20,000	\$ 20,000	
				\$ 113,500	
11 Demobilization/Project Closeout	LS	1	\$ 20,000	\$ 20,000	
Subtotal Cost				\$ 5,535,782	
Engineering, Design, & Construction Oversight (10% of subtotal less transport and disposal costs)				\$ 444,231	
Bond (1.5% of subtotal less transport and disposal costs)				\$ 86,635	
TOTAL COSTS (w/o contingency)				\$ 6,066,648	

Notes:

- Cost estimate assumes union or Davis-Bacon wage rates:
 Laborers (Heavy) = \$33.59 wages + \$18.69 fringes + 45% markup = \$75.80/hr
 Operators (Heavy Groups 2 & 4) = \$53.28 wages + \$21.60 fringes + 45% markup = \$108.58/hr
- Costs based on RASR
- Estimated ISS cost ranges from \$140 to \$175/cy

or Supplied Items

E1 Community Air Monitoring (CAMP)	Months	4	\$ 10,000	\$ 40,000	
E2 ISS Testing (Unconfined Compressive Strength)					

Engineer's Cost Estimate (Order of Magnitude)

White Plains OU-2 Site
December 11, 2007

Exhibit (RSP-5)

Page 65 of 112

Maximum Estimated ISS Cost (\$175/cy)

Item	Unit	Quantity	Unit Cost	Total Cost
1 Mobilization/Site Preparation				
Methods Statement	LS	1	\$ 10,000	\$ 10,000
Health & Safety Plan	LS	1	\$ 10,000	\$ 10,000
Office Trailers (Use 12 Water Street Building)	Months	6	\$ -	\$ -
Office Furnishings and Equipment (Total of 3)	Months	6	\$ 3,300	\$ 19,800
Site Utilities (electric, phone, port-a-johns, water coolers)	Months	6	\$ 2,500	\$ 15,000
Equipment Mobilization	LS	1	\$ 30,000	\$ 30,000
Decontamination Pad Installation	LS	1	\$ 2,000	\$ 2,000
Decontamination Pad Operation (1 laborer @ 10 hrs/week)	Months	4	\$ 3,000	\$ 12,000
Fence removal & disposal	LF	120	\$ 8	\$ 960
Landscaping Removal (light bolards, trees, shrubs, curbing)	LS	1	\$ -	\$ -
Temporary Fencing	LF	200	\$ 5	\$ 1,000
Code 753 Utility Markout & Geophysical Survey	LS	1	\$ 3,500	\$ 3,500
				\$ 104,260
2 Contractor Site Management				
Superintendent (\$125/hr)	Months	6	\$ 22,000	\$ 132,000
Health & Safety Officer (\$75/hr)	Months	6	\$ 13,200	\$ 79,200
				\$ 211,200
3 Surveying	LS	1	\$ 20,000	\$ 20,000
4 Utility Removal/Replacement (Drawing C003)				
Telecom & Roof Drain (C001, Note 5) - Protect	LS	1	\$ 3,500	\$ 3,500
Water (C003, Notes 2, 2a & 7) (6", 165 LF, remove & replace)	LS	1	\$ 10,000	\$ 10,000
Electric (C003, Notes 3a-3g and 5)	LS	1	\$ 1,000	\$ 1,000
Gas (C003, Note 4) - Remove	LS	1	\$ -	\$ -
Site Light (C003, Note 6) - Remove	LS	1	\$ -	\$ -
				\$ 14,500
5 Demolition/Foundation Removal (Drawing C004)				
5-1 Demolition - Asphalt Paving (4")	SY	1,500	\$ 2	\$ 3,000
5-2 Demolition - Concrete (SOG and foundations walls @ 12" thick)	CY	650	\$ 60	\$ 39,000
5-3 Demolition - Asbestos (transite panels)	LS	1	\$ 10,000	\$ 10,000
Stockpile soil and reuse as backfill	CY	3,450	\$ 5	\$ 17,250
				\$ 59,250
6 In Situ Soil Stabilization/Solidification (ISS) (Drawing C005)				
6-1 Pre- & Post-Condition Survey				
6-2 Instrumentation & Monitoring				
6-3a Soil Treatment - ISS	CY	24,550	\$ 178	\$ 4,296,250
6-3b Soil Treatment - Jet Grouting	CY	1,000	\$ 450	\$ 450,000
				\$ 4,746,250
7 Excavation/stockpiling (30% of ISS volume)	CY	6,300	\$ 5	\$ 31,500
8 Transportation and Offsite Disposal				
Truck Loading	CY	6,300	\$ 2	\$ 12,600
8-1 Disposal - Hazardous Soil (20% of total @ 1.5 tons/cy)	Tons	1,890	\$ 175	\$ 330,750
8-2 Disposal - Non-Hazardous Soil (80% of total @ 1.5 tons/cy)	Tons	7,560	\$ 75	\$ 567,000
8-3 Disposal - Asphalt (recycle facility @ 1.3 tons/cy)	Tons	24	\$ 30	\$ 722
8-4 Disposal - Concrete (non-haz facility @ 2 tons/cy)	Tons	1300	\$ 75	\$ 97,500
8-5 Disposal - Asbestos (non-haz facility @ 2 tons/cy)	Tons	1300	\$ 75	\$ 97,500
8-6 Construction Water Management	LS	1	\$ -	\$ -
				\$ 1,106,072
9 Odor Control	LS	1	\$ -	\$ -
10 Site Restoration (Drawing C008)				
Stone subbase (6")	SF	18,700	\$ 2	\$ 37,400
Asphalt paving (4")	SF	18,700	\$ 3	\$ 56,100
Site Lighting	LS	1	\$ -	\$ -
Drainage (100 lf trench drain; 200 lf solid 6" HDPE pipe)	LS	1	\$ -	\$ -
Fencing	LF	\$ -	\$ -	\$ -
Misc improvements (curbing, asphalt striping, landscaping)	LS	1	\$ 20,000	\$ 20,000
				\$ 113,500
11 Demobilization/Project Closeout	LS	1	\$ 20,000	\$ 20,000
Subtotal Cost				\$ 6,395,032
Engineering, Design, & Construction Oversight (10% of subtotal less transport and disposal costs)				\$ 530,156
Bond (1.5% of subtotal less transport and disposal costs)				\$ 79,523
TOTAL COSTS (w/o contingency)				\$ 7,000,000

Notes:

- Cost estimate assumes union or Davis-Bacon wage rates:
Laborers (Heavy) = \$33.59 wages + \$18.69 fringes + 45% markup = \$75.80/hr
Operators (Heavy Groups 2 & 4) = \$53.28 wages + \$21.60 fringes + 45% markup = \$108.58/hr
- Costs based on RASR
- Estimated ISS cost ranges from \$140 to \$175/cy

Engineer Supplied Items

E1	Community Air Monitoring (CAMP)	Months	4	\$ 10,000	\$ 40,000
E2	ISS Testing (Unconfined Compressive Strength)				

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC

SIR COST PROJECTION

ADDITION INFORMATION

Site: Hunts Point EDC MGP Site

- Cost Projection for Linking Period: \$2.324 million
- Cost Projection for Rate Year 1: \$4.0 million
- Basis for Cost Projections:

This site is currently the Hunts Point Cooperative Market, which is owned by the City of New York. The MGP investigation and remediation activities at this site are being managed on the City's behalf by the New York City Economic Development Corporation (EDC). In March 2000, Con Edison entered into a Memorandum of Agreement (MOA) under which Con Edison agreed to reimburse the City for up to \$14.247 million of the costs it incurred implementing NYSDEC-approved MGP investigation and remediation programs for parcels A, B, C, E and the Perimeter section of the Hunt Pont Site under its Voluntary Cleanup Agreements (VCAs) with the NYSDEC.

EDC has found MGP contamination on parcels D, F and E-OU3 within the Hunts Point site and has entered into VCAs with the NYSDEC under which EDC will investigate and remediate the these parcels over the next few years. The cost projections for the Linking Period and Rate Year 1 represent estimated payments to EDC for: (1) reimbursement of remediation costs for parcels A, B, C, E and the Perimeter section under the existing MOA (Con Edison has reimbursed the City \$13.033 million under the MOA and is responsible for an additional \$1.214 million under the MOA) between Con Edison and EDC; and (2) reimbursement payments to the EDC for the City's costs of implementing DEC-approved investigation/remediation programs for new parcels D, F and E-OU3 that will be covered under a separate cooperation/settlement agreement between the City and Con Edison. Payments for the new parcels are projected based on EDC's preliminary schedule and cost estimates and Con Edison's experience reimbursing EDC's remedial expenditures under the existing MOA.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC**SIR COST PROJECTION****ADDITION INFORMATION****Site: 173rd Street MGP Site (Starlight Park)**

- Cost Projection for Linking Period: \$2.6 million
- Cost Projection for Rate Year 1: \$0.1 million
- Basis for Cost Projections:

Remediation fieldwork at this site was completed in November 2007. The actual expenditures during the Linking Period totaled \$2.161 million to date (from January 2008 through March 2008). Remaining activities during the Linking Period include preparation of the final engineering report and coordination with DEC and the Parks Department. Rate Year 1 expenditures are costs associated with post-remediation institutional and engineering controls.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: W. 42nd Street Gas Works MGP Site

- Cost Projection for Linking Period: \$2.1 million
- Cost Projection for Rate Year 1: \$0.1 million
- Basis for Cost Projections:

A portion of this site is being redeveloped from a parking lot to high-rise apartment buildings. Remediation at this site has been completed. Several new transformers that will serve the new buildings must be installed in an underground vault below the sidewalk. The installation of the vault requires localized changes to the containment barrier wall surrounding the property that is a component of the NYSDEC-approved remedy for the site.

The costs projected for the Linking Period include Con Edison's share of the cost of containment barrier wall modification work to accommodate the transformer vault installation as well as the cost of conducting an investigation in the Hudson River, pursuant to NYSDEC's requirement, to determine whether MGP contamination from the former MGP operations at the site has impacted sediments in the river. The cost projection for Rate Year 1 reflects the cost of post-remediation institutional and engineering controls at the site.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: W. 45th Street Gas Works MGP Site

- Cost Projection for Linking Period: \$0.275 million
- Cost Projection for Rate Year 1: \$9.425 million
- Basis for Cost Projections:

This site has been divided into two Operable Units by the NYSDEC. The Intrepid Museum parking lot is designated as Operable Unit 2 (OU-2) and the rest of the site is designated as OU-1. The investigation of OU-1 was recently completed with no significant MGP impacts found. OU-2 was investigated and subsequently paved for use as a parking lot. Unless NYSDEC requires the MGP contamination on OU-2 to be remediated independent of future redevelopment of this parking lot, the Company plans to wait until the Intrepid Foundation proceeds with its plan to construct a building on the parcel.

The cost projection for the Linking Period is for the completion of the remedial investigation at OU-1. With respect to the \$9.425 million forecasted expenditure for Rate Year 1, it assumes the Intrepid Foundation will proceed with redevelopment of the parking lot and remediation of OU-2 will commence during Rate Year 1.

Attached is a preliminary cost estimate to remediate OU-2 prepared by the Company's consultant in 2003.



RemCostEst.xls (49
KB)

**Consolidated Edison Company of New York
W. 45th Street Former Gas Works
Rough Order of Magnitude Construction (only) Cost Estimate**

Excavation and Off-Site Disposal of Impacted Soil

Item	Cost Item/Description	Unit	Quantity	Unit Cost	Total Cost
1.0	Project Documents				
1.1	Prepare Documents & Plans including Permits	ls	1	\$20,000	\$20,000
1.2	Storm Water Management Plan & Implementation	ls	1	15,000	15,000
	Task Subtotal				35,000
2.0	Mobilization/Demobilization				
2.1	Temporary Trailers	mo	5	2,000	10,000
2.2	Construction Survey	ls	1	10,000	10,000
2.3	Equipment Mob/Demob	ls	1	50,000	50,000
2.4	Site Utilities	mo	5	2,000	10,000
2.5	Temporary Truck Scale	mo	5	5,000	25,000
2.6	Dust/Odor/Sediment/Erosion Control	ls	1	100,000	100,000
2.7	Temporary Soil Staging Area	ls	1	10,000	10,000
	Task Subtotal				215,000
3.0	Decontamination				
3.1	Decontamination Trailer	mo	5	2,000	10,000
3.2	Temporary Decon Pad	ls	1	5,000	5,000
3.3	Decon Water	gal	8,000	0.20	1,600
3.4	Decon/Clean Water Storage Tanks (6,000 and 4,000 gal.)	mo	5	1,400	7,000
3.5	PPE (8p*5 days*16 weeks)	days	640	30	19,200
3.6	Disposal of Decontamination Waste	mo	5	4,500	22,500
3.7	Decon Labor (2p*5 days*8 wks)	days	100	500	50,000
	Task Subtotal				115,300
4.0	Excavation, Disposal, and Backfill				
4.1	Pavement Removal & Disposal	cy	1,900	40	76,000
4.2	Soil Excavation	cy	16,700	25	417,500
4.3	Soil Disposal, Hazardous (1.7 tons/cy)	tons	7,100	250	1,775,000
4.4	Soil Disposal, Non-Hazardous (1.7 tons/cy)	tons	21,300	120	2,556,000
4.5	C&D Debris Disposal, (2 tons/cy)	tons	2,290	120	274,800
4.6	Construction Water Management	ls	1	25,000	25,000
4.7	Contaminated Construction Water Disposal	gal	250,000	1	250,000
4.8	Post-Excavation Confirmatory Sampling	ea	85	600	51,000
4.9	Characterization Sampling, disposal purposes (1 sample/500 cy)	ea	35	1,200	42,000
4.10	Sheet Piling/Bracing (install/remove)	sf	35,000	35	1,225,000
4.11	Groundwater Management for Sheet Piling	mo	2	25,000	50,000
4.12	Health & Safety Officer/Air Monitoring	mo	5	15,000	75,000
4.13	Common Fill	cy	16,700	25	417,500
4.14	Geotextile Demarcation Barrier, 10oz, non-woven	sy	630	4.50	2,835
	Task Subtotal				7,234,800
5.0	Monitoring Wells				
5.1	Monitoring Well Abandonment	lf	100	50	5,000
5.2	Monitoring Well Replacement	lf	100	100	10,000
	Task Subtotal				15,000
	Subtotal				7,615,100
	Contingency (20%)				1,523,020
	Subtotal				9,138,120
	Construction Management (\$25,000/mo oversight)				125,000
	Total Cost				\$9,263,000

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION
Site: W. 18th Street MGP Site

- Cost Projection for Linking Period: \$19.2 million
- Cost Projection for Rate Year 1: \$3.03 million
- Basis for Cost Projections:

The W. 18th Street MGP site is comprised of 10 separate parcels. Because the area in which this site is located has been rezoned to permit certain types of commercial and high-rise residential developments, several properties located on the grounds of the former MGP are being redeveloped. For one such property (524 West 19th Street owned by HEEA Development LLC), the NYSDEC-approved MGP remediation program is currently being implemented by its owner under a cooperation agreement with the Company. At a second property (535 West 19th Street owned by West Chelsea Development Partners), remediation activities were completed by its owner in February 2008, also under a cooperation agreement with the Company. The agreement for the 535 West 19th Street property caps Con Edison's responsibility for remediation costs at \$9.45 million. Con Edison has submitted a draft Remedial Alternatives Analysis Report to NYSDEC for a third parcel (76 Eleventh Avenue owned by HLP Properties LLC) and, upon NYSDEC's approval of the proposed remedy, the property owner is expected to implement the remedy also pursuant to a cooperation agreement with the Company.

Con Edison's share of the remediation costs for the three properties are estimated to be about:

- \$9.45 million (535 West 19th Street)
- \$3.5 million (524 West 19th Street)
- \$15 million (76 Eleventh Avenue), although Con Edison and HLP have not agreed to the terms of a cooperation agreement

Remediation at the 524 West 19th Street property should be completed during the Linking Period. Remediation of the 76 Eleventh Avenue property is expected to begin during the Linking Period and be completed during Rate Year 1.

Attached are cost estimates for the remediation of the 524 West 19th Street and 76 Eleventh Avenue parcels without cost sharing.



Cost Estimate for
HEEA.pdf (20...



Cost Estimate for
HLP Remed.pdf...

524 WEST 19TH STREET
APPROVED REMEDIATION PLAN IMPLEMENTATION BUDGET
EXHIBIT A - BUDGET
11 JULY 2007

CATEGORY	VENDOR	DOCUMENT	PRICE
Remediation/Excavation/Foundation	Posillico	3 July 2007 proposal	\$4,400,000
Payment and Performance Bond	Posillico	3 July 2007 proposal	44,000
Proposal to obtain sewer permit	Langan	7 June 2007 proposal	20,000
Allowance for DOT, other permits	HEEA	None	20,000
Perimeter fencing Incl removal	HEEA	None	30,000
Geotechnical consulting during construction	Langan	6 July 2007 Proposal	35,000
Environmental consulting during construction	Langan	6 July 2007 Proposal	172,500
Full time safety coordinator	HEEA	None	75,000
		SUBTOTAL	\$4,796,500
General Conditions and Fee at 12%	HEEA	None	\$575,580
		TOTAL	\$5,372,080

Table 6-7

Cost Estimate for Property-Wide Remedial Alternative VIII - Cap with Institutional/Engineering Controls, Containment of NAPL-impacted Soils in Area of Cribbing, ISS of Remaining NAPL-Impacted Soil Along 17th Street, ISCO of Hot Spot Under High Line, and Passive NAPL Recovery in Areas With Cribbing

Item #	Description	Estimated Quantity	Unit	Unit Price (materials and labor)	Estimated Amount
CAPITAL COSTS					
1	Bench Scale Testing/Pilot Testing	1	LS	\$70,000	\$70,000
2	Chemical Optimization Testing	1	LS	\$50,000	\$50,000
3	Pre-design Soil Boring Program	1	LS	\$200,000	\$200,000
4	Treatability Study	1	LS	\$35,000	\$35,000
5	Institutional/Engineering Controls	1	LS	\$250,000	\$250,000
6	Mobilization/Demobilization	1	LS	\$300,000	\$300,000
7	Construct and Remove Decontamination Pad	1	LS	\$25,000	\$25,000
8	Construction and Maintenance of Soil Staging Area	1	LS	\$20,000	\$20,000
9	Installation of Slurry Wall	5,000	VSF	\$70	\$350,000
10	Secant Pile for Containment	11,300	VSF	\$200	\$2,260,000
11	Jet Grouting for Containment	2,900	VSF	\$325	\$942,500
12	In-Situ Stabilization	4,500	CY	\$120	\$540,000
13	Soil Excavation/Stabilization/Handling	11,900	CY	\$150	\$1,785,000
14	Vapor/Odor Control	1	LS	\$15,000	\$15,000
15	Waste Characterization	99	Each	\$1,000	\$98,754
16	Solid Waste Transportation and Disposal	24,700	Ton	\$120	\$2,964,000
17	Backfill	4,300	CY	\$40	\$172,000
18	6" Concrete/Bentonite Mud Slab	76,300	SF	\$6	\$457,800
19	Installation of DNAPL Collection System	1	LS	\$80,000	\$80,000
20	Chemical Injection	1,100	Tons	\$310	\$341,000
21	Provide Water	500,000	Gallons	\$0.10	\$50,000
22	Install Monitoring Network	75	VLF	\$200	\$15,000
23	Install Extraction Wells	60	VLF	\$200	\$12,000
24	Confirmatory Sampling	1	LS	\$10,000	\$10,000
25	Miscellaneous Waste Disposal	1	LS	\$50,000	\$50,000
26	Quality Control Testing	1	LS	\$50,000	\$50,000
27	NAPL Collection Activities	12	EVENTS	\$4,500	\$54,000
28	Transportation and Disposal of NAPL	12	DRUMS	\$500	\$6,000
29	Miscellaneous Waste Disposal	1	LS	\$1,000	\$1,000
30	Annual Monitoring	1	EVENT	\$3,000	\$3,000
Total Capital Cost					\$11,207,054
Administration and Engineering (15%)					\$1,681,058
Construction Management (20%)					\$2,241,411
Contingency (25%)					\$2,801,763
Subtotal Cost					\$17,931,286
ANNUAL OPERATION AND MAINTENANCE (O&M) COSTS - ENGINEERING CONTROLS					
31	Operation & Maintenance Labor (Field)	48	Hours	\$60	\$2,880
32	Operation & Maintenance Labor (Office)	12	Hours	\$80	\$960
33	Semiannual Reporting	1	LS	\$10,000	\$10,000
34	Operation & Maintenance Utilities	1	LS	\$500	\$500
Annual O&M Cost Subtotal					\$14,340
Spare Parts and Non-Routine Maintenance (10%)					\$1,434
Contingency (25%)					\$3,585
Subtotal Annual O&M Cost					\$19,359
30-Year Present Worth Cost of O&M					\$240,245
Total Estimated Cost					\$18,171,531
Rounded to					\$18,200,000

General Notes:

1. Cost estimate is based on ARCADIS of New York, Inc.'s (ARCADIS BBL's) past experience and vendor estimates using 2007 Dollars.
2. This cost estimate has been prepared for the purposes of evaluating a combination of excavation, containment, in-situ stabilization, capping with institutional/engineering controls, passive NAPL recovery and in-situ chemical oxidation for remediation. The information in this cost estimate is based on the information available to ARCADIS BBL regarding the site investigation and the anticipated scope of the subject property remedy. Changes in cost elements are likely to occur as a result of new information and data collected during the pre-design, treatability study and design activities. This cost estimate is expected to be within 30% to 50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. ARCADIS BBL is not licensed to provide financial or legal consulting services; as such, this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.

Assumptions:

1. Bench scale testing/pilot testing cost estimate includes labor, equipment, and materials necessary to conduct bench scale tests/pilot test to determine appropriate stabilization reagents and design mix for site soils.
2. Chemical optimization testing cost estimate includes labor, equipment, and materials necessary for chemical optimization testing prior to chemical injection.
3. Pre-design soil boring program cost estimate includes labor, equipment, and materials necessary to complete soil borings to the depth of the confining layer (average depth 25 feet). Cost assumes that one boring would be completed every 20 linear feet at the proposed location of the containment barrier to assess the presence of subsurface obstructions and fill material. Cost includes drilling crew, onsite observation, and geotechnical testing (standard penetration testing and soil grain size analysis).
4. Treatability study cost estimate includes labor, equipment, and materials necessary to conduct bench-scale testing of a cement-bentonite mixture. Cost assumes that the bench-scale testing will evaluate the CB slurry wall technology using site-specific NAPL-impacted soil, and various types and amounts of additives (including cement, boiler furnace slag and bentonite) will be added to the NAPL-impacted soil to test the permeability and strength of the mixtures for potential use as a CB slurry wall. The laboratory testing program would be used to assess the potential attainable permeability and compatibility of a CB mixture with impacted site groundwater.
5. Institutional controls cost estimate includes labor, equipment, and materials necessary to set in place environmental easements and/or deed restrictions. Engineering controls cost estimate includes labor, equipment, and materials necessary to install a subslab depressurization system, including a vapor barrier.
6. Mobilization/Demobilization cost estimate includes mobilization and demobilization of all labor, equipment, and materials necessary for soil excavation and backfill, containment, in-situ stabilization, installation of a concrete bentonite cap, and performing in-situ chemical oxidation.
7. Construct and remove decontamination pad cost estimate includes labor, equipment, and materials necessary to construct and remove a decontamination pad and appurtenances.
8. Construction and maintenance of soil staging area cost estimate includes labor, equipment, and materials necessary to construct and maintain a soil staging area.
9. Installation of slurry wall cost estimate includes labor, equipment, and materials necessary to install a CB slurry wall around the NAPL-impacted areas west of the Highline. Costs are provided on an installed per foot basis assuming a slurry wall 185 feet long by 27 feet deep (depth from bottom of cap excavation to clay layer).
10. Secant piles for containment cost estimate includes labor, equipment, and materials necessary to install secant piling as means of containment in the areas assumed to have cribbing. Cost estimate assumes approximately 410 linear feet of secant piling ranging in depth from approximately 16 feet to 46 feet below grade.
11. Jet grouting for containment cost estimate includes labor, equipment, and materials necessary to perform jet-grouting in the areas assumed to have cribbing where secant piles cannot be installed due to obstructions. Cost estimate assume approximately 100 linear feet of jet grouting 29 feet deep (from bottom of cap excavation to clay layer).

12. *In-situ stabilization cost estimate includes labor, equipment, and materials necessary to perform in-situ stabilization in the NAPL-impacted area along 17th Avenue where cribbing is not present. Approximately 4,500 cubic yards of soil will be stabilized.*
13. *Soil excavation/stabilization/handling cost estimate includes labor, equipment, and materials necessary to excavate approximately 11,900 in-place cubic yards of material. Soils in the area located west of the Highline will be excavated to 4 feet below ground surface, east of the High Line to 3 feet bgs, and in the areas of ISS, 25% of the soil volume will be removed to account for "fluff" during ISS. Costs also include soil handling (i.e., transferring soil material to the material staging area) and stabilization (e.g., addition and mixing of lime, Portland cement, or dry soil) of the excavated materials to facilitate transportation for offsite disposal.*
14. *Vapor/odor control cost estimate includes labor, equipment, and materials necessary to apply odor suppressant to the soil staging area. Cost estimate assumes that up to 20 drums of foam suppressant at a cost of \$425 per 55-gallon drum would be used on the soil staging area during the course of excavation activities.*
15. *Waste characterization cost estimate includes costs for the analysis of soil samples for PCBs, TCLP VOCs, TCLP SVOCs, TCLP metals, ignitability, comosivity, and reactivity. Cost assumes that waste characterization samples would be collected at a frequency of one sample per every 250 tons of material destined for offsite treatment/disposal.*
16. *Solid waste transportation and disposal cost estimate includes labor, equipment, and materials necessary to transport (using rolloff containers) and dispose of excavated soils as nonhazardous waste at a permitted disposal facility. The weight of the material was calculated assuming 1.5 tons per cubic yard plus approximately 25% of the weight additional for soil stabilization materials. Estimate assumes material will be transported to a Subtitle D landfill for disposal. Cost estimate assumes waste will include 11,900 cy of excavated soils and 1,300 cy of spoils from secant piling activities.*
17. *Backfill cost estimate include labor, equipment, and material necessary to provide, place, grade, and compact 18" of clean soil fill in the footprint of the cap.*
18. *6" concrete/bentonite mud slab cost estimate includes labor, equipment, and materials necessary to place 6" of concrete/bentonite over the clean fill material in the excavation footprint. A spray-on vapor barrier will be installed on top of the mud slab.*
19. *Installation of DNAPL collection system cost estimate includes labor, equipment, and materials necessary to install collection wells in areas known to have NAPL and located in the areas of cribbing. For cost estimating purposes, it has been assumed that up to 8 collection wells with a maximum depth of 31 feet will be installed. A remediation pump with bottom draw will be furnished for NAPL removal.*
20. *Chemical injection cost estimate includes labor, equipment, and materials necessary for chemical injection in the hotspot located under the Highline. Based on a preliminary cost estimate of \$2,200,000 from Verutek for treating 7102 tons of impacted material located in the northwest portion of the site, a unit cost of \$310 per ton of treated soil was calculated. A total tonnage of material to be treated in the hotspot located under the Highline was calculated to be 1,100 tons. The unit cost includes chemicals and operation of the injection system.*
21. *Provide water cost estimate includes the cost for providing mix water that would be used during chemical injection activities and slurry wall construction. Cost assumes that the water would be obtained from an onsite municipal water supply. The quantity of water to be used for chemical oxidation was calculated based on the preliminary estimate furnished by Verutek for treating 7102 tons of impacted material.*
22. *Install monitoring network cost estimate includes labor, equipment, and materials necessary to install a monitoring network to monitor performance and progress of chemical oxidation. Cost estimate assumes that 5 wells up to 15 feet deep will be installed. Cost estimate assumes that one set of wells at the perimeter of the treated area will be sufficient to monitor required parameters.*
23. *Install extraction wells cost estimate includes labor, equipment, and material necessary to install up to 4 extraction wells x 15 feet deep to establish hydraulic control (if needed).*
24. *Confirmatory sampling cost estimate includes labor, equipment, and materials necessary to collect samples within the treated area (hotspot under the Highline) to confirm the results of chemical oxidation activities. Cost estimate assumes that up to 2 soil samples will be collected. Sample locations to be collocated with previous sample locations where possible. Samples will be analyzed for VOCs, SVOCs, and metals.*

25. Miscellaneous waste disposal cost estimate includes labor, equipment and material necessary to dispose of PPE, staging area, and decontamination pad materials, and disposable equipment and material at a facility permitted to accept the waste.
26. Quality control testing cost estimate includes labor, equipment, and materials necessary to perform quality control testing of In-situ stabilized soil to verify the achievement of performance criteria.
27. NAPL collection activities cost estimate includes labor, equipment, and materials necessary to conduct monthly collection activities. Cost estimate assumes that NAPL collection activities will require two technicians for up to 16 hours/each per event to perform removal of DNAPL from the collection wells using the remediation pump. Recovered DNAPL/water will be containerized in 55-gallon steel drums and staged onsite.
28. Transportation and disposal of NAPL cost estimate includes labor, equipment, material, and services required for the transportation and disposal of NAPL. Cost estimate assumes that each hand-bailing event will generate one 55-gallon drum of NAPL/water. Cost estimate assumes that NAPL will be staged onsite and removed annually and that NAPL will be disposed of as nonhazardous. Disposal cost is based on a disposal cost of \$200 per drum plus a transportation cost of \$1800 per truckload plus 45% for surcharges and taxes.
29. Miscellaneous waste disposal cost estimate is based on disposal of PPE and disposable equipment and materials at a facility permitted to accept the waste.
30. Annual monitoring cost estimate includes labor, equipment, and materials necessary to conduct an annual monitoring event to assess the presence/absence of NAPL in the collection wells. Cost estimate assumes that the monitoring event would require two technicians for up to 10 hours/each.
31. Operation and maintenance labor (field) cost includes all labor necessary to provide operator coverage for quarterly monitoring of the system (including monitoring system pressure gauge and monitoring/sealing of cracks). Cost assumes 12 hours per quarter.
32. Operation and maintenance labor (office) cost includes all labor necessary to coordinate with field personnel to maintain the mitigation system. Cost assumes office-based coordination requires 3 hours per quarter.
33. Semiannual reporting cost includes preparing two mitigation system summary reports per year for submittal to the NYSDEC. Cost assumes completion of each report includes report preparation and submittal of semiannual reports to Con Edison and the NYSDEC.
34. Operation and maintenance utilities cost includes costs for electrical utility service for the fans associated with the mitigation systems. Cost assumes the fans are 1/3 horsepower fans.
35. Present worth is estimated based on a 7% beginning-of-year discount rate (adjusted for inflation) in accordance with OSWER Directive 9355.3-20 "Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis" (USEPA, 1993). It is assumed that year zero is 2007.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC

SIR COST PROJECTION

ADDITION INFORMATION

Site: E. 11th Street Works MGP Site

- Cost Projection for Linking Period: \$0.4 million
- Cost Projection for Rate Year 1: \$1.4 million
- Basis for Cost Projections:

Con Edison conducted a second round of investigation at this site in early 2007, and a report summarizing the MGP impacts detected during the investigation was submitted to the NYSDEC in November 2007. In March 2008, NYSDEC approved the investigation report and required the Company to conduct an investigation of sediments in the East River to determine if the MGP contamination from this site has migrated into the river.

Although the Company has not performed a comprehensive evaluation of remedial alternatives for this site, a preliminary cost estimate was prepared assuming at a minimum a containment barrier wall will be installed to prevent the migration of free-phase coal tar to the East. The wall would be about 1,200 feet long and 50 feet deep built along the East River. This preliminary cost estimate is attached.

For the purpose of cost projection, it is assumed that a proposed remedy for the land portion of this site would be developed and submitted to NYSDEC during the 4th quarter of 2008. Sediment investigation in the East River and implementation of the remedy for the land portion of this site is forecasted to commence during Rate Year 1. Because the projected expenditure of \$1.4 million during Rate Year 1 represents a minimum remediation program consisting solely of containment, the remedy eventually approved by NYSDEC for this site will likely be more extensive and costly. The contaminated properties at the site include portions of a New York City Housing Authority apartment building complex, the grounds of a church and school, a City-owned park, and a privately-owned apartment building complex.



Future
ibility304.xls (20 KB)

E.11th Street Works Future Liability - 3/28/05

**Containment - Sheet pile or slurry wall for E. 11th Street to
E.13th Street. 50 feet deep. With 10 product recovery wells.**

Length - 1,200 feet

Depth - 50 feet

Unit Cost - \$30/ sf.

Cost = \$1,800,000.00

Wells - 10

Depth - 50 feet

Unit Cost - \$10,000/well

Cost= \$100,000.00

TOTAL COST = \$1,900,000.00

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: E. 14th Street Works – East River MGP Site

- Cost Projection for Linking Period: \$2.2 million
- Cost Projection for Rate Year 1: \$0 million
- Basis for Cost Projections:

The NYSDEC has divided this site into two Operable Units – the generating station and the ball fields. Con Edison has completed a remedial investigation for the ball fields area. Based on the results of the investigation, NYSDEC is requiring the implementation of a Site Management Plan that includes the maintenance of an acceptable cover for the fields as well as compliance with institutional controls to address the minor MGP impacts found there during the investigation.

The cost projections for the Linking Period and Rate Year 1 assume the Company will submit a draft Site Management Plan to NYSDEC during the Linking Period and, after obtaining NYSDEC approval, install synthetic turf in the ball fields to meet the requirement for an acceptable cover. Attached is a preliminary cost estimate showing the cost of installing the synthetic turf to be \$710K. The attached cost estimate includes other activities, such as soil excavation and back fill, most of which are no longer applicable because it was prepared before NYSDEC decided that a new clean soil cover would not be required.



Environmental
Reserve

From: Hughes, Christopher F
Sent: Monday, March 26, 2007 6:19 AM
To: Louie, Eddy
Subject: Environmental Reserve

Attachments: Ball field2007-02-26 Cost Est.xls

East River Ball Fields:

Excavation of 1 ft. of soil -	\$450,000
Install 1 ft. clean fill -	\$210,000
Restore as synthetic turf ball field -	\$710,000 (see attached)
Design and construction oversite -	\$140,000
Remedial action report -	\$ 40,000
Air monitoring during remediation -	\$ 60,000
Con Ed CM	\$110,000

Total \$1,720,000

Existing reserve \$ 400,000

Increase \$1,320,000



Ball field2007-02-26
Cost Est....

COST ESTIMATE SHEET		Cost Estimate Natural Turf Baseball Fields			Cost Estimate Synthetic Turf Baseball Fields		
ITEM NO.	DESCRIPTION	APPROX. QTY	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	
1	Fine Grading Prior to final turf establishment (natural turf only)	1	L.S.	\$25,000.00	\$0.00	\$0.00	
2	Baseball Backstop	2	UNIT	\$18,500.00	\$18,500.00	\$37,000.00	
3	Foul Pole	4	UNIT	\$3,500.00	\$3,500.00	\$14,000.00	
4	Players Bench, 2 at each dugout area	8	UNIT	\$2,000.00	\$16,000.00	\$16,000.00	
5	Breakaway Bases	6	UNIT	\$550.00	\$3,300.00	\$3,300.00	
6	Home Plate	2	UNIT	\$300.00	\$600.00	\$600.00	
7	Pitchers Plate	2	#REF!	\$350.00	\$700.00	\$700.00	
8	Movable Bleachers	4	UNIT	\$7,000.00	\$28,000.00	\$28,000.00	
9	Chain Link Fencing, 6' high, PVC Coated (Including all gates, etc)	1800	L.F.	\$60.00	\$108,000.00	\$108,000.00	
10	Topsoil, 6" Thick (imported material)	10000	S.Y.	\$18.00	\$180,000.00	\$0.00	
11	Infield Mix For Natural Turf Fields	950	S.Y.	\$60.00	\$57,000.00	\$0.00	
12	Infield Mix For Base Areas at Synthetic Turf Fields	100	S.Y.	\$0.00	\$0.00	\$6,000.00	
13	Sodding (For Natural Turf Fields)	10000	S.Y.	\$8.00	\$80,000.00	\$0.00	
14	Irrigation System w/ connection to potable water	1	L.S.	\$75,000.00	\$0.00	\$0.00	
15	Underdrain Stormwater Collection System	90000	S.F.	\$0.00	\$0.00	\$90,000.00	
16	Synthetic Turf Infill System with infill material, turf and 6" stone subbase	90000	S.F.	\$0.00	\$0.00	\$540,000.00	
17	Subgrade Stormwater Treatment Chamber (if required by NYDEC)	1	L.S.	\$0.00	\$0.00	\$225,000.00	
18	Site Drainage Facility Improvements	1	L.S.	\$20,000.00	\$20,000.00	\$20,000.00	

TOTAL	\$644,600.00	\$1,088,600.00
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This estimate does not include costs for the removal of existing soils or materials from the site in order to meet environmental requirements.
 This estimate does not include costs for engineering or permit fees, site investigations, environmental studies, or remediation work.
 A construction contingency of approximately 10 - 15% should be added to the total estimated construction estimate.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: E. 21st Street (Peter Cooper Village) MGP Site

- Cost Projection for Linking Period: \$3.515 million
- Cost Projection for Rate Year 1: \$2.75 million
- Basis for Cost Projections:

Two rounds of investigation have been conducted at this site, in 2004 and 2006. The NYSDEC has determined that additional investigation is required for the site, the area east of the site, and the East River.

The owner of Peter Cooper Village has demanded payment from Con Edison for some of the costs incurred by the owner in connection with a capital maintenance project involving soil excavation for the replacement of water service valves for the apartment buildings at the site. The property owner claims that it incurred an incremental cost of \$2.1 million due solely to the MGP contamination at Peter Cooper Village. An agreement has been reached between the Company and the owner under which the Company reimbursed the owner \$1.897 million.

The cost projection for the Linking Period includes the settlement payment and the cost of conducting the additional investigations required by the NYSDEC. Activities during Rate Year 1 include remedial planning and the start of remediation. The budget for the additional investigations is approximately \$2 million. See the attached cost estimates from the consultant. .



East 21st Street
Operable Unit...



East 21st Street
Operable Unit...



East 21st Street
OU3 Budget 01...



East 21st Street
Operable Unit...

January 24, 2007

Mr. Chris Hughes
Consolidated Edison
Bldg. 136, 2nd floor
3101 20th Avenue
Long Island City, NY 11105

**Subject: East 21st Street Works Operable Unit 1 Supplemental Remediation Investigation
Implementation Budget**

Dear Chris,

ENSR Corporation is pleased to provide the following budgetary estimate to implement the Operable Unit 1 (OU1) portion of the supplemental remedial investigation work at the Consolidated Edison (Con Edison) Former East 21st Street Works in Manhattan, NY. The scope of work is to implement supplemental remedial investigation activities per the Draft Supplemental Remedial Investigation Work Plan (dated Nov. 15, 2007) currently being reviewed by the New York State Department of Environmental Conservation. The proposed scope of work breaks down as follows:

Task 100 - Project management: This task includes contractor communications, client communications; staffing, standard site staff responsibility lists, meeting formats and draft agendas, readiness planning, risk management planning, and a budgeted amount for general consulting.

Task 224 - Mobilization: This task includes labor and materials associated with a code 753 mark-out, procurement of four permits, and creating and maintaining a secure lay down area/support services for a period of three months.

Task 726 - Drilling: This task includes labor and materials associated with installation of nine groundwater monitoring wells, and six soil borings, soil sampling, residual waste management, and sewer/oily under drain investigation.

Task 727 - CAMP monitoring: This task includes labor and materials associated with implementing a community air monitoring program (CAMP) for five weeks.

Task 729 - Reporting and Data validation: This task includes data reduction, data validation, and production of draft and final report to Con Edison. .

The scope of work for these tasks will comply with the site specific health and safety plan and the quality assurance project plan.

The budget for these tasks is detailed in the attached Table 1 and assumptions are presented in Attachment 1. This work will be billed on a unit price/time and materials basis as per the terms of Con Edison PO# 523747.

If this budget is acceptable to you, please return a signed copy of this letter indicating your authorization.

Chris Hughes
Page 2

ENSR
Exhibit__ (RSP-5)
Page 84 of 112

ENSR appreciates the continued work on this and other projects. If you have any questions please contact us at 845-348-1520. Thank you.

Regards,

Dave Work, PE
Project Manager
dwork@ensr.aecom.com

Roger Hathaway, PE
Vice President
rhathaway@ensr.aecom.com

Attachments: 2

cc: Anna Sullivan - RETEC/ENSR
Roger Hathaway - RETEC/ENSR
File - 01869154-221

Signature: _____

Date: _____

Printed Name: _____
Consolidated Edison, Inc.

Merged with ENSR in 2007



C:\Documents and Settings\dwork\Desktop\OU1 and OU2
Budgets Sent to Chris 012408\East 21st Street Operable Unit 1
B4862008.doc

Attachment: 1

Assumptions used in the preparation of this budget:

1. Drilling costs include the use of a non-union crew to advance soil borings using Rotasonic drilling and perform utility clearances with one mobilization and one de-mobilization each. To prevent labor conflicts on the site, all other work will utilize non-union labor.
2. Drilling rate is a minimum of fifty linear feet per day (ten hour days), contractors will be managed to increase as appropriate.
3. Site restoration other than reseeded is not included.
4. Utility pre-clearance test pit rate is a minimum of two locations per day.
5. Previous lay down area under FDR Drive is available.
6. Time for mobilization includes procurement and site setup including lay down area.
7. The OU1 and OU2 work will run contiguously.
8. Permit acquisition to be performed by ENSR.
9. Sewer research, opening manholes, video inspection - non-union crew.
10. Final RI document production costs include five (5) draft copies and twenty (20) final copies.
11. All unit price and time/materials charges will be billed under the terms of Consolidated Edison

purchase order #523747.

January 24, 2008

Mr. Chris Hughes
Consolidated Edison
Bldg. 136, 2nd floor
3101 20th Avenue
Long Island City, NY 11105

**Subject: East 21st Street Works Operable Unit 2 Supplemental Remediation Investigation
Implementation Budget**

Dear Chris,

ENSR Corporation is pleased to provide the following budgetary estimate to implement the Operable Unit 2 (OU2) portion of the supplemental remedial investigation work at the Consolidated Edison (Con Edison) Former East 21st Street Works in Manhattan, NY. The scope of work is to implement supplemental remedial investigation activities per the Draft Supplemental Remedial Investigation Work Plan (dated Nov. 15, 2007) currently being reviewed by the New York State Department of Environmental Conservation. The proposed scope of work breaks down as follows:

Task 100 - Project management: This task includes contractor communications, client communications; staffing, standard site staff responsibility lists, meeting formats and draft agendas, readiness planning, risk management planning, and a budgeted amount for general consulting.

Task 224 - Mobilization: This task includes labor and materials associated with a code 753 mark-out, procurement of four permits, and creating and maintaining a secure lay down area/support services for a period of three months.

Task 826 - Drilling: This task includes labor and materials associated with installation of nine groundwater monitoring wells, and six soil borings, soil sampling, residual waste management, and sewer/oily under drain investigation.

Task 827 - CAMP monitoring: This task includes labor and materials associated with implementing a community air monitoring program (CAMP) for five weeks.

Task 828 - Groundwater monitoring : This task includes labor and materials associated with low flow sampling of 54 wells for volatile organic compound (VOC) and semi volatile organic compound (SVOC) analysis. Samples to be collected from 38 monitoring wells will be analyzed for monitored natural attenuation (MNA) parameters.

Task 829 - Reporting and Data validation: This task includes data reduction, data validation, and production of draft and final report to Con Edison. .

The scope of work for these tasks will comply with the site specific health and safety plan and the quality assurance project plan.

Chris Hughes

ENSR
Exhibit__ (RSP-5)
Page 90 of 112

The budget for these tasks is detailed in the attached Table 1 and assumptions are presented in Attachment 1. This work will be billed on a unit price/time and materials basis as per the terms of Con Edison PO# 523747.

If this budget is acceptable to you, please return a signed copy of this letter indicating your authorization.

ENSR appreciates the continued work on this and other projects. If you have any questions please contact us at 845-348-1520. Thank you.

Regards,

Dave Work, PE
Project Manager
dwork@ensr.aecom.com

Roger Hathaway, PE
Vice President
rhathaway@ensr.aecom.com

Attachments: 2

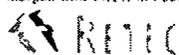
cc: Anna Sullivan - RETEC/ENSR
Roger Hathaway - RETEC/ENSR
File - 01869154-221

Signature: _____

Date: _____

Printed Name: _____
Consolidated Edison, Inc.

Merged with CHS-F in 2007



C:\\Documents and Settings\\dwork\\Desktop\\OU1 and OU2
Budgets Sent to Chris 012408\\East 21st Street Operable Unit 2
B1062008.doc

Attachment: 1

Assumptions used in the preparation of this budget:

1. Drilling costs include the use of a non-union crew to advance soil borings using Rotasonic drilling and perform utility clearances with one mobilization and one de-mobilization each. To prevent labor conflicts on the site, all other work will utilized non-union labor.
2. Drilling rate is a minimum of fifty linear feet per day (ten hour days), contractors will be managed to increase as appropriate.
3. Utility pre-clearance test pit rate is a minimum of two locations per day.
4. Site restoration other than reseeded is not included.
5. Previous lay down area under FDR Drive is available.
6. Time for mobilization includes procurement and site setup including lay down area.
7. The OU1 and OU2 work will run contiguously.
8. Permit acquisition to be performed by ENSR.
9. Sewer research, opening manholes, video inspection - non-union crew.
10. Final RI document production costs include five (5) draft copies and twenty (20) final copies.
11. All unit price and time/materials charges will be billed under the terms of Consolidated Edison purchase order #523747.

January 24, 2008

Mr. Chris Hughes
Consolidated Edison
Bldg. 136, 2nd floor
3101 20th Avenue
Astoria, NY 11105

Subject: East 21st Street Works Operable Unit 3 (Bedrock) Supplemental Remedial Investigation Implementation Budget

Dear Chris,

ENSR Corporation is pleased to provide the following budgetary estimate to implement the Operable Unit 3 (OU3) portion of the supplemental remedial investigation work at the Consolidated Edison (Con Edison) Former East 21st Street Works in Manhattan, NY. The scope of work is to implement supplemental remedial investigation activities per the Draft Supplemental Remedial Investigation Work Plan (dated Nov. 15, 2007) recently approved by the New York State Department of Environmental Conservation. The proposed scope of work breaks down as follows:

Task 0100 - Project management: This task includes contractor communications, client communications; staffing, standard site staff responsibility lists, meeting formats and draft agendas, readiness planning, risk management planning, and a budgeted amount for general consulting.

Task 0224 - Mobilization/Demobilization: This task includes labor and materials associated with a code 753 mark-out and creating and maintaining a secure lay down area/support services for a period of two months.

Task 0233 - Drilling and FLUTETM installation: This task includes labor and materials associated with locating underground utilities, the advancement of bedrock borings and collection of bedrock cores, and lining the bedrock boreholes with fluid liner underground technologies (FLUTETM) nonaqueous phase liquid (NAPL) liners.

Task 0234 - Community Air Monitoring Program: This task includes labor and materials associated with implementing a community air monitoring program (CAMP) for approximately five weeks during invasive drilling activities.

Task 0235 - Geophysical survey: This task includes labor and materials associated with performing down hole geophysics on seven locations.

Task 0236 - Reporting and data reduction: This task includes data reduction, and production of draft and final report to Con Edison.

The scope of work for these tasks will comply with the site specific health and safety plan (HASP) and the quality assurance project plan (QAPP).

Chris Hughes
Page 2

ENSR
Exhibit__ (RSP-5)
Page 96 of 112

The budget for these tasks is detailed in the attached Table 1 and assumptions are presented in Attachment 1. This work will be billed on a unit price/time and materials basis as per the terms of Con Edison PO # 523747.

If this budget is acceptable to you, please return a signed copy of this letter indicating your authorization.

ENSR appreciates the continued work on this and other projects. If you have any questions please contact us at 845-348-1520.

Thank you.

Regards,

Dave Work, PE
Project Manager
dwork@ensr.aecom.com

Roger Hathaway, PE
Vice President
rhathaway@ensr.aecom.com

Attachments: 2

cc: Anna Sullivan - RETEC/ENSR
Roger Hathaway - RETEC/ENSR
File - 01869154-222

Signature: _____

Date: _____

Printed Name: _____

Consolidated Edison, Inc.

Metped with ENSR in 2007



C:\Documents and Settings\dwork\Desktop\East 21st Street
Budgets Sent to Chris 012408\OU3\East 21st Street OU3 Budget
012408.doc

Attachment: 1

Assumptions used in the preparation of this budget:

1. Drilling costs include the use of a non-union crew to advance soil borings using Rotasonic drilling and perform utility clearances with one mobilization and one de-mobilization each. To prevent labor conflicts on the site, all other work will utilize non-union labor.
2. Overburden drilling rate is a minimum of fifty linear feet per day (ten hour days), contractors will be managed to increase as appropriate.
3. Utility pre-clearance test pit rate is a minimum of two locations per day.
4. Site restoration other than reseeded is not included.
5. Time for mobilization includes procurement and site setup including lay down area.
6. Previous lay down area under FDR Drive is available.
7. Final RI document production costs include five (5) draft copies and twenty (20) final copies.
8. All unit price and time/materials charges will be billed under the terms of Consolidated Edison Purchase Order # 523747.

January 28, 2008

Mr. Chris Hughes
Consolidated Edison
Bldg. 136, 2nd floor
3101 20th Avenue
Long Island City, NY 11105

Subject: East 21st Street Works Operable Unit 2 East River (Sediment) Supplemental Remediation Investigation Implementation Budget

Dear Chris,

ENSR Corporation is pleased to provide the following budgetary estimate to implement the Operable Unit 2 (OU2) portion of the supplemental remedial investigation work in the East River, adjacent to the Consolidated Edison (Con Edison) Former East 21st Street Works in Manhattan, NY. The scope of work is to implement supplemental remedial investigation activities per the Supplemental Remedial Investigation Work Plan (dated January 16, 2007) previously approved by the New York State Department of Environmental Conservation. The proposed scope of work breaks down as follows:

Task 410 - Planning and logistics: This task includes contractor and client communications; staff scheduling, draft agendas, readiness planning, risk management planning, research location of barge dock, research bulkhead construction, a budgeted amount for general consulting, and project management.

Task 420 - Sonar Survey and River Mapping: This task includes labor and materials associated with locating subsurface utilities and other obstructions within the East River in the investigation area to be conducted by Ocean Surveys, Inc.

Task 430 - Permitting: This task includes labor and materials associated with procurement and approval of permits from the United States Army Corps of Engineers and the New York State Department of Environmental Conservation (NYSDEC).

Task 440 - Sediment sampling and analysis: This task includes labor and materials associated with subsurface sediment sampling and analysis using sonic drilling techniques from a spud barge to delineate the eastern extent of the lower fill/natural soil MGP-related impacts. This task also includes the sampling and analysis of surface sediment samples to evaluate if the sediment adjacent to Stuyvesant Cove Park has been impacted by the former MGP operations. The evaluation will include collecting and analyzing background reference samples. This evaluation will establish a sediment quality baseline for comparison with the data collected adjacent to the site. Management of the investigation derived waste (IDW) will be conducted by ENSR. Surveying/GPS tie-ins for all the new sampling locations will also be conducted by ENSR.

Task 450 - Supplemental remedial investigation report: This task includes labor and materials associated with summarization of the field activities, data validation and tabulation of laboratory results, generation of plan view and cross section maps based on field data, creation of a site conceptual model based on the field observations and laboratory results, and development of a qualitative exposure assessment.

Chris Hughes

The scope of work for these tasks will comply with the site specific health and safety plan (HASP) and the quality assurance project plan (QAPP).

The budget for these tasks is detailed in the attached Table 1 and assumptions are presented in Attachment 1. This work will be billed on a unit price/time and materials basis as per the terms of Con Edison PO# 523747.

If this budget is acceptable to you, please return a signed copy of this letter indicating your authorization.

ENSR appreciates the continued work on this and other projects. If you have any questions please contact us at 845-348-1520.

Thank you.

Regards,

Dave Work, PE
Project Manager
dwork@ensr.aecom.com

Roger Hathaway, PE
Vice President
rhathaway@ensr.aecom.com

Attachments: 2

cc: Anna Sullivan - ENSR
Eleanor Vivaudou - ENSR
File - 01869154-400

Signature: _____

Date: _____

Printed Name: _____
Consolidated Edison, Inc.

Attachment: 1

Assumptions used in the preparation of this budget:

1. Drilling costs include the use of a non-union crew to advance sediment borings using Rotasonic drilling and perform utility clearances with one mobilization and one demobilization each. To prevent labor conflicts on the site, all other work will utilize non-union labor.
2. Drilling rate is 1 boring location per 1.5 day (ten hour days including equipment decontamination and relocation).
3. Four (4) borings will be completed via pontoon boat along the bulkhead.
4. Previous lay down area under FDR Drive is available.
5. Permit acquisition to be performed by ENSR.
6. Draft/Final Supplemental Remedial Investigation report production costs include five (5) draft copies and twenty (20) final copies.
7. All unit price and time/materials charges will be billed under the terms of Consolidated Edison purchase order #523747.

Table 1
Cost Estimate for Environmental Consulting Services
East 21st Works O&J submittal
Prepared for Consolidated Edison, Inc.

Contract Billing Reference	Miscellaneous Component Prices	Unit of Price	Rate	410 Planning and logistics		419 Sewer survey and floor sampling		429 Permitting		438 Sampling, analysis and analysis		439 Supplemental remedial investigation report		448		449		458		
				Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty
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2.02 52 Water Pump - boiler 25		per day	7,000																	
2.03 52 Water Pump - boiler 25		per day	7,000																	
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CONSOLIDATED EDISON COMPANY OF NEW YORK, INC
SIR COST PROJECTION
ADDITION INFORMATION

Site: Mt. Vernon Works MGP Site

- Cost Projection for Linking Period: \$5.0 million
- Cost Projection for Rate Year 1: \$5.5 million
- Basis for Cost Projections:

A draft Remedial Alternative Selection Report (RASR) evaluating several remedial options along with a recommended alternative was submitted to NYSDEC in 2007 and both NYSDEC and NYSDOH have deemed the report to be approvable. The RASR is expected to be approved by the second or third quarter of 2008. It is anticipated that implementation of the remediation program will begin by the end of 2008 with completion expected in late 2009. Because this site is located in a residential area with several apartment buildings immediately adjacent to areas from which free coal tar and coal-tar contaminated soil and MGP structures will be excavated, the Company plans to relocate some of the residents during the remediation of those areas.

The cost of relocation services, which include planning, temporary housing, moving, and other related expenses has not been finalized but is estimated to be well in excess of \$2 million. The cost of remediation, exclusive of remedial design and the installation of sub-slab soil vapor intrusion mitigation systems, is estimated to be about \$7.6 million (see attachment).



Mt Vernon Remed
Cost Estimate....



Excavation of Subsurface Structures- Sprung Structure Around Deep Excavation

By: L Warren 1/16/2005

Rev Date:

Task ID	Task Descr.	Unit	Quantity	Bare Cost	RETEC MU	Contingency	Total Cost	Unit Rate	%
Prime Contractor Costs									
1	Mobilization - Excavation	LS	1	\$53,000	\$5,300	\$10,600	\$68,900	\$68,900	1%
2	Temporary Facilities and Controls	MO	7	\$53,740	\$5,374	\$10,748	\$69,862	\$9,980	1%
3	Clearing	LS	1	\$4,630	\$463	\$926	\$6,019	\$6,019	0%
4	Fencing & E&S Control	LS	1	\$2,800	\$280	\$560	\$3,640	\$3,640	0%
5	Sprung Structure	LS	1	\$163,900	\$16,390	\$32,780	\$213,070	\$213,070	4%
6	Sheetpile Installation	LF	800	\$1,080,000	\$108,000	\$216,000	\$1,404,000	\$1,755	29%
7	Construction Dewatering-100 gpm syser	LS	1	\$97,220	\$9,722	\$19,444	\$126,386	\$126,386	3%
8	Excavation-10' Tar ammonia wells	CY	650	\$19,200	\$1,920	\$3,840	\$24,960	\$38	1%
9	Excavation-13' Former building area	CY	2,383	\$79,479	\$7,948	\$15,896	\$103,323	\$43	2%
10	Excavation-17' Gas Holder Area	CY	5,177	\$188,516	\$18,852	\$37,703	\$245,071	\$47	5%
11	Fill Placement-Land	CY	9,210	\$164,200	\$16,420	\$32,840	\$213,460	\$26	4%
12	Odor Control Foam Consumables	Day	100	\$4,250	\$4,250	\$8,500	\$55,250	\$553	1%
13	Air Monitoring	LS	5	\$230,000	\$23,000	\$46,000	\$299,000	\$59,800	6%
14	Site Restoration	LS	1	\$42,831	\$4,283	\$8,566	\$55,681	\$55,681	1%
15	Additional 10' Excavation and Surface So	LS	1	\$249,645	\$24,965	\$49,929	\$324,539	\$324,539	7%
16	In-Situ Oxidation of NAPL-8th St	LS	1	\$1,070,594	\$107,059	\$214,119	\$1,391,772	\$1,391,772	29%
17	ISOC Installation-12 Well Points	LS	1	\$119,151	\$11,915	\$23,830	\$154,896	\$154,896	3%
				\$3,661,406	\$366,141	\$732,281	\$4,759,828		100%
Other Contracts & Purchases									
1	Waste Disposal	Unit	12,835	\$1,404,684	\$140,468	\$280,937	\$1,826,089	\$142	100%
				\$1,404,684	\$140,468	\$280,937	\$1,826,089		100%
RETEC Costs									
1	Temporary Facilities	MO	7	\$42,750	\$4,275	\$8,550	\$55,575	\$7,939	5%
2	Temp. Fac. and Control-Add'l Excavation	LS	1	\$10,500	\$1,050	\$2,100	\$13,650	\$13,650	1%
3	Personnel	Man Hours	3,480	\$818,500	\$0	\$163,700	\$982,200	\$282	93%
				\$871,750	\$5,325	\$174,350	\$1,051,425		100%
Grand Total							\$7,637,342		

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC**SIR COST PROJECTION****ADDITION INFORMATION****Site: Pelham Gas Works MGP Site**

- Cost Projection for Linking Period: \$76 million
- Cost Projection for Rate Year 1: \$11.5 million
- Basis for Cost Projections:

Remediation of this site, which is currently an active shopping center, began in January 2008. Due to the extensive soil excavation that is part of the remedy, all but two of the stores in the shopping center will be closed for at least nine months out of the estimated 18-month duration of remediation. Con Edison is compensating the store owners for their lost profit and for those fixed expenses they will still incur, such as rent and insurance, during store closure.

The anticipated costs during the Linking Period and Rate Year 1 include the following:

- Remediation Contractor – A purchase order (draft copy of cover page attached) for \$49.4 million has been awarded. This amount is based on the specifications used for the procurement in the second quarter of 2007. Since then, there have been several changes to the work scope that will increase the cost of the remediation work significantly. These changes include a more expensive containment barrier wall system recently required by NYSDEC, installation of new landscaping and lighting in the parking lot recently required by the Village of Pelham, and other requirements by the Village. Because this is not a lump sum contract, further cost increases due to unanticipated conditions in the field are possible.
- Compensation to Shopping Center Owner and Tenants – Separate agreements with the shopping center owner and the individual tenants have been reached. The total cost is at least \$15 million and could be higher if remediation cannot be completed per the agreed upon timeframe.
- Consultant Field Oversight and Community Air Monitoring – Estimated to be \$1.3 million
- Reimbursement to Shopping Center Owner – Under the cooperation agreement between Con Edison and the property owner, the Company is required to reimburse the owner for expenses incurred associated with the investigation and remediation of MGP contamination at the site. This includes legal, environmental consulting, and maintenance expenses due solely to the site's MGP contamination.





DRAFT

****PURCHASE ORDER DRAFT****

PAGE 1

TO: **CONTI SERVICES, LLC**
1 CRISTWOOD ROAD
SOUTH PLAINFIELD, N.J 07086

CURRENT DATE 11/14/07
 PURCHASE ORDER NUMBER 731727
 PURCHASE ORDER DATE 10/24/07
 PURCHASE REQ. NUMBER 357-7-0068
 VENDOR CODE CE717
 AUTHORIZED DOLLARS \$49427530
 FUNDING ORDER
 ACCOUNT NUMBER VARIOUS
 STATISTICS 1/2

SHIP TO:
 CON EDISON
 875 PELHAM PARKWAY 731727
 PELHAM MANOR NY 10803
 JEFFREY ROTOWSKI

MAIL ORIGINAL INVOICES TO
 CON EDISON ACCOUNTS PAYABLE
 P.O. BOX 799
 COOPER STATION
 NEW YORK N.Y. 10276
 (212) 460-3510

THIS PURCHASE ORDER REQUIRES PAYMENT CERTIFICATES
 FOR INVOICE STATUS, CLICK ON "VENDOR INFORMATION" AT WWW.CONED.COM
 BUYER: JAMES GOMEZ 212-460-3624 022ps

ITEM	QUANTITY	DELIVERY DATE	UNIT PRICE	UNIT	INSP CODE
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THIS IS A TERM ORDER WITH START DATE 01/15/08 AND END DATE 06/15/09.

1 0
 -CONED-E- - CON EDISON USE \$0.00000 EA
 ONLY.
 (NOTE: THE ABOVE DATES ARE FOR CON EDISON'S INTERNAL USE ONLY.)

2 0
 -CONED-R- - CON EDISON USE \$10.00000 EA
 ONLY

3 0 \$0.00000 EA
 FURNISH THE NECESSARY SUPERVISION, LABOR, EQUIPMENT AND MATERIALS TO
 PERFORM THE EXCAVATION, CONSTRUCTION OF CONTAINMENT BARRIERS
 AND GROUNDWATER TREATMENT SYSTEM, OFF-SITE DISPOSAL OF SOIL AND
 BACKFILL OF REMEDIAL EXCAVATION AND ALL OTHER ASSOCIATED WORK
 REQUIRED FOR THE REMEDIATION OF THE PELHAM MANUFACTURED GAS PLANT (MGP)
 SITE IN THE PELHAM MANOR, NEW YORK.

EXPENDITURE LIMITATION: THE MAXIMUM EXPENDITURE AUTHORIZED UNDER THIS
 PURCHASE ORDER IS \$49,427,520. CON EDISON WILL NOT BE OBLIGATED TO MAKE
 PAYMENT HEREUNDER IN EXCESS OF THE EXPENDITURE LIMITATION AND CONTRACTOR
 SHALL NOT BE OBLIGATED TO CONTINUE PERFORMANCE UNLESS AND UNTIL AN
 INCREASE HAS BEEN AUTHORIZED BY MEANS OF A DULY EXECUTED MODIFICATION TO
 THIS PURCHASE ORDER.

CONSTRUCTION SCHEDULE: PROJECT COMPLETION BY JUNE 15, 2009

THIS PURCHASE ORDER WILL BE PERFORMED IN ACCORDANCE WITH THE AND
 INCORPORATES BY REFERENCE THE FOLLOWING:

- CON EDISON'S REQUEST FOR PROPOSAL (EVENT 11654)
- CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. STANDARD TERMS AND

SUBJECT TO THE CONDITIONS ON THE REVERSE SIDE HEREOF

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC

SIR COST PROJECTION

ADDITION INFORMATION

Site: Ossining Gas Works MGP Site

- Cost Projection for Linking Period: \$1.7 million
- Cost Projection for Rate Year 1: \$0.385 million
- Basis for Cost Projections:

The developer of a property (Harbor Square) located downgradient from this site notified the Company in 2007 that it found MGP coal tar that apparently had migrated from the former MGP site onto its property. Based on available evidence, the developer demanded reimbursement and compensation from Con Edison for costs it already incurred and expected to incur due to the MGP contamination.

In response to the notification from the Harbor Square developer and the NYSDEC regarding the alleged migration of coal tar from the Ossining MGP site, the Company conducted an investigation both at the MGP site and the Harbor Square property. The results showed that the coal tar at the Harbor Square property likely migrated from the former MGP site. The Company is currently negotiating with the developer on a settlement to the claim, which may be in excess of \$1.5 million.

The projected cost of \$1.7 million for the Linking Period includes a portion of the cost of the investigation and payment of compensation to Harbor Square in anticipation of a settlement. The Rate Year 1 projection is for remedial planning.