THE CITY OF NEW YORK

OFFICE OF THE COMPTROLLER

POLICIES AND PROCEDURES MANUAL FOR IMPLEMENTATION OF GOVERNMENTAL ACCOUNTING STANDARDS BOARD STATEMENT NO. 49 – ACCOUNTING AND FINANCIAL REPORTING FOR POLLUTION REMEDIATION OBLIGATIONS

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I. Introduction and Background

Overview

The Financial Accounting Foundation established the Governmental Accounting Standards Board (GASB) in 1984 as an independent organization responsible for providing accounting and financial reporting standards for state and local governments. The GASB mission is to increase governmental accountability over the use of public resources in order to protect the interests of financial statement users.

The GASB standard setting process begins with appointing a task force committee consisting of outside experts related to the topic in question. Extensive research is performed using existing literature. Additionally, discussion forums are held in order to encourage public participation in the standard setting process. Finally, an exposure draft is posted to solicit public feedback and comments will be taken into consideration prior to publishing a final pronouncement.

Established GASB standards are generally accepted by governments, the accounting industry, and the capital markets, although they are not enforceable by federal law. There are, however, many states and auditing entities that do enforce governmental compliance with GASB standards in an effort to promote accurate and consistent financial disclosures.

This policies and procedures manual sets forth the City of New York's (the City's) accounting and financial reporting requirements for pollution remediation obligations as required by GASB Statement No. 49 – Accounting and Financial Reporting for Pollution Remediation Obligations (GASB 49).

GASB 49 specifies that costs incurred for the remediation of pollution, except for in certain circumstances, may not be afforded capital treatment for accounting purposes. Pollution remediation obligations are those obligations which are or will be incurred to address the current or potential detrimental effects of *existing* pollution by participating in pollution remediation activities.

The guidelines contained within this manual are consistent with those of the GASB, the organization responsible for promulgating generally accepted accounting principles (GAAP) for governments. Additional guidance specific to the City's existing and relevant policies are also incorporated herein.

The objectives of this policies and procedures manual are summarized below.

- Provide City agencies with an understanding of pollution remediation activities.
- Provide guidance for City agencies in identifying and tracking pollution remediation activities.
- Provide guidance on the technical requirements associated with evaluating and measuring obligations.

- Provide agencies with an understanding as to when and how to report pollution remediation activities and related costs to the Comptroller's Office for financial reporting purposes.

Background

The New York State Financial Emergency Act for the City of New York (the "Act") and the City Charter require that the City prepare financial statements in accordance with GAAP. Therefore, GASB 49 requires that most pollution remediation costs now be accounted for within the City's financial statements as expense items, rather than capital items as some were previously reflected.

In April 2008, at the request of the Mayor, the Financial Control Board for the City of New York ("FCB") authorized the City to continue to include in its capital budget (as distinguished from its financial statements), and to finance with the proceeds of bonds, pollution remediation costs associated with capital projects authorized in whole or in part in a City bond resolution prior to July 1, 2010. Therefore, although the City may continue to include pollution remediation costs associated with capital projects in its capital budget through fiscal year 2010 and to finance such costs with the proceeds of bonds, such costs must be accounted for as expense items in its financial statements. The City is seeking legislation that would permit the FCB to act to allow such costs to be included in the capital budget, and financed with the proceeds of bonds, after fiscal year 2010, however such legislation has not yet been passed.

Important Note on Eligibility of Pollution Remediation Costs for Financial Reporting Purposes vs. Treatment of Such Costs for Capital Financing Purposes

Please note that this manual addresses pollution remediation costs only with respect to their treatment for accounting purposes. Such costs will continue to be eligible for capital financing purposes for capital projects authorized prior to July 1, 2010. If the City does not obtain the legislation described above (or the FCB does not act to permit on-going financing), the pollution remediation costs that are identified by agencies to be treated as expense items for reporting purposes in accordance with the policies and procedures outlined in this manual would be precluded from inclusion in the City's Capital Budget and from bond financing if not authorized in a bond resolution prior to July 1, 2010.

Effective Date

The effective date for the accounting and financial reporting requirements contained within this manual with regard to the City's financial statements is for the City's fiscal year that commenced July 1, 2008.

As noted above, the FCB has delayed implementation of GASB 49 to allow the inclusion of pollution remediation items in the City's capital budget if the project has been included in a proceed directive prior to July 1, 2010. In addition, the City will report twice each year to the FCB on the progress made in complying with GASB 49.

II. Identification of Pollution Remediation Obligations

What are Pollution Remediation Obligations?

The City and its agencies represent a diverse and complex entity with an array of operations. As a result, the City is exposed to pollution remediation obligations of various types and significant costs. A pollution remediation obligation is an obligation to address the current or potential detrimental effects of **existing** pollution by undertaking pollution remediation activities.

Pollution, as defined within GASB 49, is based on the definition used by the U.S. Environmental Protection Agency:

> *"Generally, the presence of a substance in the environment that because of its chemical composition or quantity prevents the functioning of natural processes and produces undesirable environmental and health effects. Under the Clean Water Act, for example, the term has been defined as the man-made or man-induced alteration of the physical, biological, chemical, and radiological integrity of water and other media."*

Common Types of Pollution

Although the broad definition under GASB 49 will ultimately leave an infinite number of possible pollution types, the most common examples of pollution categories currently identified within the City include:

- Asbestos;
- Lead paint; and
- Contaminated soil.

Asbestos

Asbestos is the name given to a group of naturally occurring minerals used in certain products, such as building materials, to resist heat and corrosion. Asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, and any of these materials that have been chemically treated or altered.

Friable asbestos is a term used to describe any asbestos-containing material that when dry, can be easily crumbled or pulverized to powder by hand. Material that contains more than just 1% asbestos and is friable is considered to be Regulated Asbestos-Containing Material (RACM). When asbestos is crushed it disperses a dusting of microscopic fibers in the air that can remain for very long periods of time. These fibers can be unknowingly inhaled. Inhaling the fibers has been linked to serious health problems.

Some common examples of friable asbestos are acoustic ceilings and tiles, many types of plasters, wallboard joint compound or "mud" and thermal insulation for water heaters and pipes. The use of asbestos in these products was banned in the late 1970's, however those already in the

marketplace remained on the shelves and were used in construction for many years thereafter. These products are still commonly found in residential and commercial facilities today.

Non-friable asbestos-containing material (ACM) is not regulated because it contains a binder or hardening agent such as cement, asphalt or vinyl. Examples of ACM are asphalt roofing shingles, vinyl asbestos floor tiles and transite siding made with cement. ACM products are still being manufactured today. The danger with this type of material is that it can pose the same hazard as friable asbestos during remodeling, repairs or other construction. Burning ACM also creates friable asbestos.

Lead Paint

Lead Paint is paint containing lead, a heavy metal, which is used as a pigment, with lead chromate (chrome yellow) and lead carbonate (white lead) being the most common. Lead is added to paint to speed drying, increase durability, retain a fresh appearance, and resist moisture that causes corrosion. Paint with significant lead content is still used in industry and by the military. Examples of lead paint use include roadways, parking lot lines, exterior windows/buildings and bridge protective coating.

Soil Contamination

Soil contamination is the presence of man-made chemicals or other alteration in the natural soil environment. This type of contamination typically arises from the rupture of underground storage tanks, application of pesticides, and percolation of contaminated surface water to subsurface strata, oil and fuel dumping, leaching of wastes from landfills or direct discharge of industrial wastes to the soil. The most common chemicals involved are petroleum hydrocarbons, solvents, pesticides, lead and other heavy metals. The occurrence of this phenomenon is correlated to the degree of industrialization and intensity of chemical usage.

Pollution Remediation Activities

Pollution remediation activities can include the following:

- Pre-cleanup activities, such as the performance of a site assessment, site investigation, corrective measures feasibility study, and the design of a remediation plan.

- Cleanup activities, such as neutralization, containment, or removal and disposal of pollutants, and site restoration.

- External government oversight and enforcement-related activities, such as work performed by an environmental regulatory authority dealing with the site and chargeable to the government.

- Operation and maintenance of the remedy, including required monitoring of the remediation effort (postremediation monitoring).

Not all pollution remediation obligations will involve all of the above activities. For example, asbestos removal typically will not involve postremediation monitoring. City agencies must include all direct outlays and may include estimated IFA charges for all pollution remediation activities as part of the estimated and/or actual costs of pollution remediation reported to the Comptroller's Office and OMB in accordance with this Manual.

Exclusion Criteria

The requirements within this manual and said policies, exclude those activities related to *pollution prevention and pollution control* obligations with respect to current operations, and future pollution remediation activities that are required upon retirement of an asset, such as landfill closure and post-closure care and nuclear power plant decommissioning. Examples of pollution prevention or control activities include: installation of smokestack scrubbers (for prevention of air pollution), or use of environment-friendly products—for example, low-sodium road salts (to prevent water pollution).

Identification of Pollution

City agencies are not required to search out and identify pollution. However, once the agency has been made aware of pollution affecting the agency or the City, this information should be reported by the agency as a potential pollution remediation obligation. Pollution can be identified through a variety of methods, including site evaluations/investigations conducted prior to site acquisition or during a construction or renovation project, litigation, imminent endangerment to City employees or its constituents, or public knowledge. Identified pollution should be included in the *"Pollution Remediation Obligation Reporting Template"* (the "Template") located in **Appendix D**.

The identification of pollution does not immediately obligate the agency/City to commence remediation or to record a liability. City agencies will need to evaluate the identified pollution to determine whether any obligating events have occurred and whether costs are measurable. Obligating events will be discussed in detail in **Section III** and cost measurement is discussed in detail in **Section V**. Only forthcoming pollution remediation for which there has been an obligating event is reported as a liability by the City under GASB 49. However, all pollution remediation expected to be undertaken has a potential City Expense Budget impact if it cannot be bond financed, and therefore it must be identified by agencies and reported in the Template.

Stand-Alone Remediation Projects

Pollution remediation activities can be segregated into two categories, stand-alone projects or embedded projects.

A project initiated for the sole purpose of remediating pollution is considered to be a stand-alone pollution remediation project. Even prior to GASB 49, this type of work was not reflected as a capital item in the City's financial statements, except for lead paint and asbestos abatement programs which were expressly authorized.

Examples of stand-alone pollution remediation projects include the following:

Example No. 1 Asbestos Abatement – An agency identifies that there is crumbling asbestos wrapping on a pipe in a City-owned building. As the situation has become an imminent endangerment to the public, the agency promptly contracts with a licensed professional to remove and dispose of the crumbled asbestos. The primary purpose of the project is to remediate pollution (remove crumbled asbestos) and all costs associated with the project are attributed to pollution remediation efforts. This project should be reported by the responsible agency.

Example No. 2 Soil/Water Remediation – The City was named by the EPA as the sole responsible party to remediate a City-owned fueling station, which has leaked gasoline into a nearby stream. The remediation project has various phases, all of which are attributed to the remediation effort. The primary purpose of the project is to remediate pollution associated with the gasoline leak. This project should be reported by the responsible agency.

Embedded Projects

Pollution remediation activities that are conducted as part of larger construction, renovation and development projects are considered embedded pollution remediation projects. The characteristics of embedded pollution remediation projects generally include:

- The primary purpose of the project is not pollution remediation.
- Pollution remediation costs are a component of the overall project's cost.
- The remediation work is identified as necessary because the City agency will voluntarily commence construction, renovation or development of land or property.

Examples of embedded pollution remediation projects include the following:

Example No. 3 Building Renovation – An agency commences a renovation project on a City-owned building for the purpose of creating additional office space. As part of the renovation project, a site assessment is performed and various types of asbestos containing material and lead paint are identified, which require special treatment and handling. The portion of the project related to asbestos and lead paint removal represent pollution remediation activities and the project should be reported by the responsible agency.

Example No. 4 Park Development – An agency intends to develop a park on a piece of land with contaminated soil. As part of the park development project, the contaminated soil will need to be identified and removed. The portion of the park development project related to the identification and removal of contaminated soil is a pollution remediation activity and should be reported by the responsible agency.

<Note> Examples 1-4 are running examples and will be continued through the remaining sections of this manual.

III. Obligating Events

The identification of existing pollution does not by itself require the City agency to commence pollution remediation activities or measure and report the costs associated with the pollution as an obligation. The City will report pollution as an obligation only if an obligating event has occurred and if costs are measurable in accordance with **Section V, Cost Measurement**. (However, as previously noted, all pollution remediation expected to be undertaken has a potential City Expense Budget impact if it cannot be bond financed, and therefore it must be identified by agencies and reported in the Template.) Obligating events requiring the City agency to measure and report pollution remediation obligations and expenses include being:

1) **Compelled by imminent endangerment –** The City is compelled to take remediation action because pollution creates an imminent endangerment to public health or welfare or the environment, leaving it little or no discretion to avoid remediation action;

2) **In violation of a pollution prevention-related permit or license –** The City is in violation of a pollution prevention–related permit or license, such as a Resource Conservation and Recovery Act (RCRA) permit or similar permits under state law;

3) **Named by a regulator as a potentially responsible party –** The City is named, or evidence indicates that it will be named, by a regulator as a responsible party or potentially responsible party (PRP) for remediation, or as a government responsible for sharing costs;

4) **Named in a lawsuit –** The City is named, or evidence indicates that it will be named, in a lawsuit to compel the City to participate in remediation; or

5) **Voluntarily commencing or legally obligating itself –** The City commences, or legally obligates itself to commence cleanup activities or monitoring, or operation and maintenance of the remediation effort. If these activities are voluntarily commenced and none of the other obligating events have occurred relative to the entire site, the amount recognized should be based on the portion of the remediation project that the government has initiated and is legally required to complete.

Consider the assessment of obligating events described in our continuing examples.

Example No. 1 Asbestos Abatement – In this example, the City agency discovered crumbling asbestos in a City-owned building and had very little discretion in evaluating whether to commence pollution remediation activities. The identified pollution represented an imminent endangerment to the public and the City agency was compelled to commence remediation activities. The costs associated with this project should be measured in accordance with **Section V, Cost Measurement**, and reported as an obligation and expense.

Example No. 2 Soil/Water Remediation – In this example, the City was named by the EPA as a responsible party in pollution caused by an underground storage tank, which leaked into a nearby stream. The reporting of a pollution remediation obligation was triggered by the EPA's (a regulatory agency) requirement to report the pollution. As a result, the City will be required to measure the costs associated with this remediation project in accordance with **Section V, Cost Measurement**, and report these costs as an obligation and expense.

Example No. 3 Building Renovation – In this example, the City agency commenced renovation activities on a City-owned building for the purposes of creating additional office space. The City's voluntary commencement of the renovation has resulted in an obligation to perform pollution remediation activities as it relates to the removal and disposal of asbestos, lead paint and any other materials considered to be "pollution" as defined in **Section II**. The costs associated with completing the pollution remediation activities should be measured by the agency in accordance with **Section V, Cost Measurement**, and reported by the agency as an obligation and expense.

Example No. 4 Park Project – In this example, the City agency intends to develop a park on a piece of land which is known to contain contaminated soil. Currently, the land is fenced off to prevent the public from exposure to the contaminated soil and therefore does not represent an imminent endangerment. In addition, the City has not commenced the park renovation project and therefore is not required to remediate the contaminated soil. None of the other triggering events have occurred. The City agency is not required to measure the cost of the remediation project or report an obligation and expense as no triggering event has occurred. However, as the City agency intends to develop a park, the remediation of the contaminated soil must be reported in the Template to enable estimation of the potential expense budget impact if the remediation cannot be financed with bond proceeds.

If the City agency commences the park development project and begins the process of remediating the contaminated soil, the City agency has voluntarily commenced pollution remediation activities and should measure and report an obligation and expense.

IV. Capitalization Criteria

Costs of pollution remediation activities generally do not qualify to be reported as capital assets ("capitalized"). As previously discussed, pollution remediation activities must be measured and recorded as an obligation and current expense. As pollution remediation expenditures are paid, the obligation is reduced.

Except as provided below, incremental outlays attributable to pollution remediation activities (outlays that would not be incurred absent pollution) of embedded projects should be reported as an expense when a pollution remediation liability is recognized.

Pollution remediation outlays could be capitally eligible and capitalized when goods and services are acquired in any of the following circumstances:

1) *To prepare property in anticipation of a sale*. In this circumstance, only amounts that would result in the carrying amount of the property not exceeding its estimated fair value upon completion of the remediation should be capitalized. The City does not permit the capitalization of costs incurred for assets not expected to be held by the City for at least five years, except in the case of certain statutorily authorized programs such as housing or urban renewal. <u>As such, this circumstance most likely will not apply to City agencies</u>.

2) *To prepare property for use when the property was acquired with known or suspected pollution that was expected to be remediated*. In this circumstance, only those pollution remediation outlays expected to be necessary to place the asset into its intended location and condition for use should be capitalized.

   In determining outlays expected to be necessary to place an asset into its intended location and condition for use, an agency should consider that not all increases in expected outlays may be considered necessary. In certain circumstances, the outlays originally expected to be incurred may be indicative of the amount necessary to place the asset into its intended location and condition for use. For example, if a pollution remediation project would not have been initiated had anticipated outlays been as high as those actually incurred, all of the outlays may not be eligible for capitalization.

For outlays under criteria 1 and 2, capitalization is appropriate only if the outlays take place within a reasonable period, as defined by the City's Comptroller's Office up to five years, prior to the expected sale or following acquisition of the property, respectively, or are delayed, but the delay is beyond the City's control. Further, costs incurred above the original estimates that exceed 110% of the original estimate should not be considered eligible for capitalization.

3) *To perform pollution remediation that restores a pollution-caused decline in service utility that was recognized as an asset impairment.* In this circumstance, only those pollution remediation outlays expected to be necessary to place the asset into its intended location and condition for use should be capitalized. City agencies should be certain that the pollution remediation activities restore service utility. For example, remediation of soil contamination in land may restore lost service utility, while the removal of asbestos insulation in preparation for replacement with non-toxic insulation may not restore lost service utility.

   In the case of restoration of an impaired asset, the outlays necessary to obtain a similar unimpaired asset, less the book value of the impaired asset, may be indicative of the amount necessary to place the asset into its intended location and condition for use.

   City agencies should consult the Office of the Comptroller Directive 30, when evaluating asset impairment. Further, costs incurred exceeding 110% of the original estimate should not be considered eligible for capitalization.

4) *To acquire property, plant, and equipment that has a future alternative use*. In this circumstance, outlays should be capitalized only to the extent of the estimated service utility that will exist after pollution remediation activities uses have ceased.

Consider the capitalization criteria for examples in **Sections II & III**.

Example No. 1 Asbestos Abatement – The City is required to abate asbestos within a City-owned building as the asbestos (pollution) represents an imminent endangerment to the public. The City agency evaluated the capitalization criteria as follows:

- The City does not intend to sell the building in the near future and as such these pollution remediation costs are not eligible for capital treatment under criteria 1.

- The building was not recently purchased by the City with known or suspected pollution. The remediation costs are not eligible for capital treatment under criteria 2.

- The building's service utility was not significantly affected by the identified pollution and therefore the agency did not record an asset impairment to the building. The remediation costs are not eligible for capital treatment under criteria 3.

- The remediation activities were contracted out to appropriately licensed contractors and the agency did not acquire property, plant and/or equipment to accomplish the remediation effort. The remediation costs are not eligible for capital treatment under criteria 4.

Example No. 2 Soil/Water Remediation – The City agency is required to remediate contaminated soil and water as mandated by the EPA. The City agency evaluated the capitalization criteria as follows:

- The City agency does not intend to sell the land in the near future, and as such, these pollution remediation costs are not eligible for capital treatment under criteria 1.

- The land was not recently purchased by the City agency with known or suspected pollution. The remediation costs are not eligible for capital treatment under criteria 2.

- The service utility of the land was significantly affected by the identified pollution. After consideration of the Office of the Comptroller's (Comptroller's) Directive No. 30, and consultation with Comptroller personnel, the agency recorded an impairment of $100,000 to the land asset. This impairment was calculated using a "restoration cost approach" which is based on the estimate of costs to be incurred to restore the asset to its previous service utility. Remediation outlays necessary to restore the land's service utility would qualify for capital treatment under criteria 3.

Example No. 3 Building Renovation – The City agency commenced renovation activities on a City-owned building for the purposes of creating additional office space. The City agency evaluated the capitalization criteria as follows:

- The City agency does not intend to sell the property in the near future, and as such, these pollution remediation costs are not eligible for capital treatment under criteria 1.

- The City agency purchased the property with known pollution (asbestos and lead paint) and as such the project would be eligible for capital treatment. When the agency purchased the building, they expected to incur approximately $100,000 in pollution remediation outlays as part of their renovation project. During the renovation, the City agency identified additional pollution that was not initially considered during the building's acquisition. The additional pollution remediation costs approximate $50,000. The City agency, in consultation with the Comptroller's Office Bureau of Accountancy and the Office of Management & Budget must evaluate the appropriate amount of pollution remediation outlays to capitalize.

  For example, the initial pollution remediation estimate of $100,000 was a factor in deciding the purchase price of the building; therefore, this amount may be indicative of the appropriate amount to capitalize under criteria 2. However, the additional $50,000 should be partially expensed as the new estimate exceeds 110% of the original estimate. As such $10,000 of the additional $50,000 would be capitalized, while $40,000 should be expensed.

Example No. 4 Park Project – The City agency intends to build a park on land which has contaminated soil. No obligating (triggering) events have occurred and therefore the agency is not required to measure and report a pollution remediation obligation. Although the City is not required to report a pollution remediation obligation, consider the following scenarios:

Scenario 1 –

- The City agency purchased the land from a private industrial company. As part of the acquisition the agency performed Phase I and II site assessments, which identified and quantified the contaminated soil. The agency intends to build a Park on the newly acquired land and is in the process of preparing a development plan. This project is potentially eligible for capital treatment.

Scenario 2 –

- The City agency Y transferred the land to City agency X. City agency X would like to build a Park on the land and performs a Phase I and II site assessment, which identified and quantified contaminated soil. This project is not eligible for capital treatment under criteria 2, as the land was not acquired by the City with known or suspected pollution. City agency X has evaluated this project for the remaining capitalization criteria and determined that none were applicable. If City agency X plans to proceed with the park renovation project, the incremental cost of the remediation that would not have been incurred absent pollution should be measured and reported in the Template as planned pollution remediation, and reported as an expense when incurred. If agency X commences but does not complete remediation work during a fiscal year, such that an obligating (triggering) event has occurred but the obligation has not been fulfilled as of fiscal year end, the remaining remediation costs should be measured and reported as a pollution remediation obligation and expense in that fiscal year.

V. Cost Measurement Guidance

City agencies must capture all direct and may include estimated IFA charges that will be incurred as part of remediation efforts. As described in **Section II,** pollution remediation activities can include the following:

- Pre-cleanup activities;
- Cleanup activities;
- External government oversight and enforcement-related activities; or
- Operation and maintenance of the remedy.

Direct costs incurred by the City agency as part of remediation efforts will generally relate to service providers/contractors hired by the City agency. Additional consideration should be given by a City agency when their employees spend a portion or all of their time working on pollution remediation efforts. In these cases the employees' payroll and benefits should be considered in the measurement of the pollution remediation obligation. Depending upon the level of an agency's involvement in pollution remediation efforts, consideration should also be given to indirect costs as part of that agency's measurement of pollution remediation obligations.

For example, City agencies that currently participate in the Interfund Agreement (IFA) for funding of capital-eligible costs initially charged to their expense budgets may use IFA rates to estimate indirect costs

Exclusion Criteria

The requirements within this manual and said policies, exclude those activities related to *pollution prevention or control* obligations with respect to current operations, and future pollution remediation activities that are required upon retirement of an asset.

Measurement of Pollution Remediation Costs

City agencies should measure costs for identified pollution that have met obligating events and are not eligible for inclusion as capital in the City's financial statements. Such costs should be reported when they are reasonably estimable. An agency may become aware of pollution that they are obligated to remediate, however due to insufficient information an obligation might not be reasonably estimated. An agency should consider their past experiences when estimating pollution remediation that is routine. For example, a City agency that is involved with building renovations should have an understanding of the costs to remediate asbestos, contaminated soil and lead paint based on their historical experience.

When completing the Reporting Template provided in Appendix D, an agency should use its best estimate at the time that the estimate is reported and estimates should be updated as appropriate for each reporting period.

Certain projects will be unique to the agency and therefore prior experience may not be a good basis for estimating pollution remediation obligations. In addition, although an agency may have the requisite experience to estimate routine pollution activities, insufficient information may exist (such as quantity or level of contamination), which would prevent the agency from reasonably estimating the costs. In these instances a City agency should report the components of the pollution remediation project as they become known and measurable.

For pollution remediation projects that are not common or that are dissimilar from past experiences, certain standards should be considered by the agency in evaluating whether the obligation can be reasonably estimated.

- Site Assessment Investigation – After completion of a site assessment or investigation, the responsible agency should have an understanding of types of pollution and levels of contamination. Preliminary estimates should be refined based on the results of the site assessment/investigation in light of new information gained. If no estimate had been prepared, the agency should consider whether they have incurred similar pollution remediation activities in the past and if so develop an estimate. In very few cases, if sufficient information still does not exist to prepare a preliminary estimate, no obligation would be reported. At a minimum, the agency would report any unpaid costs related to the site assessment/investigation as an obligation as of the reporting period.

- Design of Corrective Measures – After the completion of a corrective measures feasibility study (a remediation plan), the City agency should have a strong understanding of the scope and cost of remediation activities. Previous estimates should be refined based on the results of the study. If the City agency has not previously estimated all of the components of the remediation liability, recognition should not be delayed past this point.

- Implementation of Corrective Measures (Remediation Plan) – As the City agency implements the remediation plan, further modification to the liability may be needed. The City agency should periodically evaluate the reasonableness of the liability to the extent any additional information becomes available.

- Post-Remediation Monitoring – Following completion of corrective measures any site previously designated as contaminated may be required to undertake appropriate monitoring of applicable metrics. Throughout the monitoring process it is possible that information may become available at various points that may cause the City to refine an estimate of its liability as this additional information becomes available.

Other Cost Measurement Considerations include:

Current Value

City agencies should report obligations at their current value. Certain remediation projects may span several years. In these cases, the agency's estimate of current value should be based on reasonable assumptions about future events. The reasonableness of remediation liabilities should

be reassessed as new information becomes available and at a minimum estimates should be updated for each reporting period.

Costs Incurred

When possible, an agency should report actual remediation costs incurred. In instances when actual cost incurred is not reasonably attainable, it may be feasible for agencies to report estimated costs incurred. If cost estimation is exercised, each agency on an individual basis should consider their past experiences in pollution remediation and only estimate if the work is considered routine. Estimates should be based on a methodology of historical information and data. If estimation of costs incurred is elected by an agency, the methodology in determining costs incurred should be documented and retained for reference. Furthermore, on a periodic basis (i.e. every two to three years) the estimation methodology including historical data should be reevaluated to help ensure estimates are reasonably accurate.

Expected Cash Flow Technique

City agencies should not apply Statement of Financial Accounting Standards No. 5 – Accounting for Contingencies, which requires the measurement of loss contingencies (liabilities) when considered probable. City agencies must apply the expected cash flow technique, which is a probability weighted approach.

For example, a City agency identifies a pollution remediation project with three possible cost scenarios. Based on the agency's experience, they estimate a 30% chance the remediation project will cost $200, a 50% chance the remediation project will cost $300 and a 20% chance the project will cost $400. Under the expected cash flow technique, the City agencies liability would be calculated as follows:

	Probability	**Cost**	**(Probability x Cost)**	
Scenario 1	30%	$ 200	$ 60	
Scenario 2	50%	$ 300	$ 150	
Scenario 3	20%	$ 400	$ 80	
	100%		$ 290	**Probability-Weighted Cost**

The City agency would record a pollution remediation liability and related expense of $290.

Under the expected cash flow technique a City agency would be required to accrue a liability equal to the expected probability. For example, if the City agency were sued and the potential likelihood of the City agency incurring a $1,000 pollution remediation obligation were 20%, the City agency would accrue a liability of $200 ($1,000 x 20%).

Accounting for Recoveries

The measurement of pollution remediation liabilities should include all remediation work for which an obligating event has occurred, including work to be performed for other responsible parties or potentially responsible parties. For example, in certain instances a City agency may be the lead participant in a multi-participant pollution remediation project. As the lead agency, the City is responsible for designing and implementing the pollution remediation plan. The City should measure the costs for the remediation plan as it would if the City agency were the sole participant. In these cases, the City agency should estimate the amount of money expected to be recovered. Expected recoveries, whether from other parties in a multi-participant project or insurance that indemnifies the agency for its pollution remediation obligations, should be considered in the measurement of the pollution remediation obligation as indicated below.

Recoveries that are realized or realizable should be recorded separate from the remeditiation obligation as a receivable or cash. Realized recoveries are those which have been collected.

The following are examples of unrealized recoveries.

- Expected recoveries that the agency has fully negotiated with the other responsible parties, or that have been acknowledged by the agency's insurance company, are considered realizable.

- An insurance recovery is generally realizable when the insurer admits or acknowledges coverage, potentially before outlays take place.

Expected recoveries that are not realized or realizable as of June 30 should be reported as a reduction of the pollution remediation obligation, rather than as a separate asset (receivable or cash). For example:

- In certain instances the agency might expect to collect recoveries from other responsible parties or their insurance carrier, however, these recoveries have not been fully negotiated or settled. The recoveries are not considered realized or realizable and should be estimated and reported as a reduction of the pollution remediation obligation.

If recoveries become realizable after the liability has been paid, the recovery should be recorded as a revenue and receivable/cash. If recoveries become realizable prior to the liquidation of the liability, the recovery should no longer be an offset to the remediation obligation as it would be recorded as a receivable.

Consistent with the City agency's requirement to remeasure the pollution remediation obligation when new information becomes available, the City agency should periodically reassess the expected value and realizability of recoveries from other responsible parties and grant revenues.

Accounting for Grants

An agency may be awarded or receive grant funds specifically for remediation activities associated with a project, or generally for a project which includes remediation activities without restriction as to whether the grant funds may be used for the remediation activities. For

remediation activities that are reimbursable by a grant – just as for all grant revenues – the grant revenue should be recognized as earned when all eligibility requirements, including where applicable the incurrence of an eligible expenditure, have been met.

- If the grant funds have not yet been earned (i.e., all applicable grant eligibility requirements have not yet been met so the revenue has not been recognized), the total amount of future grant revenues expected to be earned should reduce the remediation obligation.
- Once the grant revenues have been earned, the grant should no longer be an offset to the remediation obligation, as the grant funds would be recognized as assets (cash and/or receivables).

Consider the cost measurement guidance for the examples in **Sections II, III and IV**.

Example No. 1 Asbestos Abatement – The City is required to abate asbestos within a City-owned building as the pollution represents an imminent endangerment to the public. The City evaluated capitalization criteria for this project and determined that it is not eligible for inclusion as capital in the City's financial statements. As such, the City agency must measure the costs associated with this project and record a liability and expense.

The City agency has determined that no remediation costs related to external government oversight or operating and monitoring the remedy will be incurred. In addition, the City agency has determined that there are no other potentially responsible parties and therefore no recoveries exist. However, the agency has applied for and been awarded an economic development grant that would cover 25% of the cleanup costs. The grant funds cannot be claimed until the City pays its share of the project's costs. The remediation obligation should be reduced by the amount of the unrealized grant revenue expected to be earned in a future period. The total pollution remediation costs measured by the City agency represent the current value they expect to incur as part of this project, net of the expected grant. A liability for the net amount should be reported in the pollution remediation tracking worksheet.

The City agency reviewed the cost measurement guidance and determined the following costs would be applicable to this remediation project:

Pre-Cleanup Activities		
Site Assessment –	To determine the quantity of asbestos abatement required *(These costs are composed of City agency salary and overhead incurred in performing the site assessment.)*	$ 10,000
Cleanup Activities		
Abatement (Implementation of Corrective Measures) –	Costs associated with a licensed contractor to remove and dispose of asbestos *(Estimate is based on the site assessment performed and provided to the external contractor. Actual costs may vary.)*	$ 500,000 $ 510,000
Unearned Grant Revenue	*Grant can be claimed for 25% of cleanup costs once the City pays its share*	$ (125,000)
Net Obligation at Period End		**$ 385,000**

Example No. 2 Soil/Water Remediation – The City agency is required to remediate contaminated soil and water as mandated by the EPA. It was determined by the City agency, with the assistance of the Comptroller's office, that the service utility of the land had been impaired. As a result, an impairment of $100,000 was recorded as this was the anticipated outlay necessary to restore the impaired asset to its intended condition and use.

As part of the remediation process, the City agency contracts to have a site assessment and a corrective measures feasibility study (Design of Corrective Measures) performed to determine the severity of the pollution and the remediation plan. The corrective measures feasibility study develops three possible remediation plans which unexpectedly cost $250,000, $280,000 and $290,000, respectively. Based on the facts available to the City agency, there is an equal opportunity for each possible plan to be selected. To date, the total cost of the remediation project is estimated as follows:

Pre-cleanup Activities				
Site Assessment				$ 5,000
Design of Corrective Measures Feasibility Study				$ 25,000
Total Pre-cleanup Activities				$ 30,000
Cleanup Activities				
Remediation Plan A (Imp. of Corrective Measures)	33.33%	$ 250,000	$ 83,325	
Remediation Plan B (Imp. of Corrective Measures)	33.33%	$ 280,000	$ 93,324	
Remediation Plan C (Imp. of Corrective Measures)	33.33%	$ 290,000	$ 96,657	
Total Cleanup Activities				$ 273,306
Total Cost of the Remediation				$ 303,306
Asset Impairment				$ 100,000
Pollution Remediation Obligation				$ 203,306

The City's $100,000 capitalization threshold is predicated upon the fact that the original asset impairment was based on the estimated costs to restore the land at that point in time and remediation activities were initiated within a reasonable period of time. Capitalization beyond $100,000 would result in an asset with greater value than historical cost. The total project costs estimated by the City agency exceed the estimated costs to restore the asset to its intended condition for use (the amount of the asset impairment) by $203,306. The City agency should not capitalize the excess project costs as they significantly exceeded the original impairment amount and the original book value of the asset.

The City agency would report a liability and expense of $203,306 to account for the outlays in excess of the original asset impairment. The remaining $100,000 of pollution remediation outlays would be eligible for capitalization.

If project costs fell below the amount of the impairment, all project costs would be capitally eligible; however, no modifications to the impairment should be made. Also note that the City's policy to limit capitalizable costs to 110% of the original estimate does not apply to situations involving asset impairment.

Example No. 3 Building Renovation – The City agency commenced renovation activities on a City-owned building for the purpose of creating additional office space. The City agency purchased the building with known pollution, which was a factor in the purchase price. At the time of purchase, the City agency estimated pollution remediation costs to be $100,000.

During the renovation process the City agency identified an additional $50,000 in pollution remediation activities that were not originally included in the City's projections. The City agency would not capitalize the pollution remediation outlays beyond 110% of the original estimate as this was the basis for their purchase price.

The City agency would record a liability and expense in the amount of $40,000 to account for the additional pollution remediation expenses that exceed the 110% limit.

Example No. 4 Park Project – The City agency intends to build a park on land which has contaminated soil. No obligating events have occurred and therefore the City is not required to report a pollution remediation obligation. In **Section IV**, two potential scenarios were considered:

- Scenario 1 – In this scenario the City purchased the land from an unrelated industrial company. During the acquisition the City agency performed site assessments which identified and quantified contaminated soil. It was determined that the costs incurred to remediate the soil would be eligible for capitalization so long as they do not exceed the City agency's initial budgeted pollution remediation costs as projected during their acquisition.

- Scenario 2 – In this scenario the City agency X received a piece of land from City agency Y. City agency X would like to build a park on the donated land. City agency X determines that the land contains contaminated soil based on the results of a site assessment. City agency X has determined that this project does not meet any of the other capitalization criteria. The estimated incremental cost of the remediation portion of the planned park construction project would be reported by agency X in the Template to be used for budgetary estimates and reported as an expense when incurred. When agency X commences the project and triggers an obligation, the remaining incremental costs attributed to pollution remediation will need to be measured and recorded as a liability and expense at fiscal year end.

The City agency decides to commence the Park development project. Site assessments have been performed that identified and quantified the amount of contaminated soil. These project costs will not be eligible for capital treatment and should be recorded as an expense. The City performs a corrective measures feasibility study to determine their remediation approach. Based on the results of this study, the City agency estimates their pollution remediation obligation upon commencement to be as follows:

Pre-cleanup Activities	
Site Assessment	$ 50,000
Design of Corrective Measures (Feasibility Study)	$ 100,000
Total Pre-cleanup Activities	$ 150,000
Cleanup Activities	
Remediation Plan – Imp. of Corrective Measures	$ 500,000
Operating and Monitoring Activities	
Soil Sample Testing 15 Years	$ 100,000
External Cost of the Remediation	$ 750,000
Internal Direct and Indirect Costs	$ 187,500 *
Pollution Remediation Obligation	$ 937,500

* The City agency incurred internal direct (payroll, materials) and various indirect costs (overhead) as part of the Park renovation project. Estimate payroll, benefits and overhead using applicable IFA rates.

As of the fiscal year end, the City agency has already paid for the pre-cleanup costs and expended $100,000 on the pollution remediation activities (based on the itemized invoices provided by the Contractor). The City agency has evaluated the original estimate and concluded that no reassessment is considered necessary. Additionally, the City agency has become aware of a responsible party and as such, believes there are potential recoveries. No negotiation or settlement has been reached as of period end, however, $10,000 in legal fees has been incurred and the potential recoveries are estimated to be $100,000. An additional $15,000 in legal fees is expected to be incurred to negotiate and settle the recoveries in the next fiscal year.

The City agency calculates their reporting period obligation as follows:

Beginning Pollution Remediation Obligation	**$**	**937,500**
Additional costs not included in previous estimate:		
Legal Fees	$	25,000
Costs Paid to Date (including IFA)		
Pre-cleanup	$	(150,000)
Cleanup	$	(100,000)
Legal Fees	$	(10,000)
Recoveries Not Realized or Realizable		
Estimated recovery from responsible party	$	(100,000)
Ending Pollution Remediation Obligation	**$**	**602,500**

APPENDIX A – Glossary

Current Value

The amount that would be paid if all equipment, facilities, and services included in the estimate were acquired during the current period.

Expected Cash Flow Technique

A technique that measures a liability as the sum of probability-weighted amounts in a range of possible estimated amounts—the estimated mean or average. This technique uses all expectations about possible cash flows.

Hazardous Wastes/Hazardous Substances

Wastes and substances that are toxic, corrosive, ignitable, explosive, or chemically reactive, or appear on special U.S. Environmental Protection Agency lists. This includes wastes and substances listed in 33 U.S.C. §2701(23), and 42 U.S.C. §6903(5) and §9601(14). The definition of hazardous *substance* under the Superfund law is broader than the definition of hazardous *wastes* under RCRA. As used in this Statement, the terms *hazardous waste* and *hazardous substance* also include materials designated by state environmental regulators.

Outlays

Expenses, expenditures, and capital acquisitions, as appropriate.

Pollution

The U.S. Environmental Protection Agency provides the following discussion of the term *pollution* on its website: "Generally, the presence of a substance in the environment that because of its chemical composition or quantity prevents the functioning of natural processes and produces undesirable environmental and health effects. Under the Clean Water Act, for example, the term has been defined as the man-made or man-induced alteration of the physical, biological, chemical, and radiological integrity of water and other media."

Pollution Remediation Obligation

An obligation to address the current or potential detrimental effects of existing pollution by participating in pollution remediation activities. For example, obligations to clean up spills of hazardous wastes or hazardous substances and obligations to remove contamination such as asbestos are pollution remediation obligations.

Potentially Responsible Party (PRP)

An individual or entity—including owners, operators, transporters, or generators—that is held potentially responsible for pollution at a site. As used in this Statement, the term refers to a party that is held by law as potentially responsible for pollution at any site. It is not limited to parties associated with Superfund sites.

Realized and Realizable

Recoveries from third parties (i.e. insurance carriers and other responsible parties) are considered to be realized or realizable at the time when the insurer or other party admits or acknowledges coverage or signs an agreement agreeing to pay certain amounts attributable to the pollution remediation. Recoveries are considered realized when cash is received.

Remedial Investigation and Feasibility Study (RI/FS)

Extensive technical studies to investigate the scope of site impacts (RI) and determine the remedial alternatives (FS) that, consistent with the National Contingency Plan provisions of the federal Superfund law or similar state laws, may be implemented at a polluted site. An RI/FS may include a variety of on- and off-site activities, such as monitoring, sampling, and analysis.

Resource Conservation and Recovery Act (RCRA)

A federal law that provides comprehensive regulation of hazardous wastes from point of generation to final disposal. All generators of hazardous waste, transporters of hazardous waste, and owners and operators of hazardous waste treatment, storage, or disposal facilities must comply with the applicable requirements of the statute.

Site Assessment

A site-specific baseline risk assessment that identifies hazards, assesses exposure to the hazards and their toxicity, and characterizes and quantifies the potential risks posed by the site. A site assessment may be noninvasive, involving inquiry into previous uses of a site, site reconnaissance, and interviews (a Phase I site assessment), or may involve invasive testing for pollution (a Phase II site assessment).

Superfund

A federal law (the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [CERCLA], as amended by the Superfund Amendments and Reauthorization Act of 1986 [SARA], which together are referred to as Superfund) that provides the U.S. Environmental Protection Agency with broad authority to order liable parties to remediate polluted sites or use Superfund money to remediate them and then seek to recover its costs and additional damages.

APPENDIX B – Examples to Illustrate the Reporting Template

The following examples are provided to further illustrate scenarios that are common to New York City agencies. The following is intended to supplement the aforementioned examples provided throughout the policy and procedures manual; they are not continuations of nor do they build upon the prior examples of the same number in the body of the manual. In addition, *Appendix D – 2009 Pollution Remediation Reporting Template* and *2010 Pollution Remediation Reporting Template* is provided to further demonstrate how to report the information and details provided in the examples provided below.

Example B.1 – Building and Property Renovation for Reuse

Assumptions

As part of the City's neighborhood revitalization plan, a City agency periodically purchases vacant buildings and properties and renovates the property for City use. The City agency is often required to remediate pollution as part of their renovation activities. Regulatory law states that the owner of polluted property is responsible for pollution remediation.

The City agency identified a property with a building it intends to acquire and in May 2008, the City agency completed a site assessment and concluded that pollution on the property could be remediated for an estimated cost of $230,000. In late June 2008, the City agency purchased the property and building for $2,000,000 and estimates an additional $600,000 will be incurred to renovate the building. In June 2008, the City agency issued a request for proposal (RFP) for the renovation work and selected a bid of $550,000 based on cost and qualifications. The City agency reviewed the cost proposal and identified $230,000 that related to pollution remediation. This amount represents the "incremental portion" of outlays that would not have been incurred absent pollution. The pollution on the property consisted of asbestos and lead paint in the building and some contaminated soil within the property. The remaining portion of the proposed cost is directly attributed to the property and building renovation. The remediation work will commence in February 2009 and will be completed in October 2009.

Regulatory laws governing the City agency required notification to the regulatory body regarding the property and building transfer. Based on the results of the site assessment, the City agency was aware of the pollution at the time the property was acquired. Additionally, the regulatory body will require the City agency to perform remediation activity as it is now the owner of the property and building.

Reporting

Fiscal Year 2008

Within the above example, the City agency has identified the following obligating event:

- Regulatory body requirement of owners of polluted property to remediate.

As of June 30, 2008, the City agency recorded the acquisition of land and property. Even though an obligating event has occurred, the City agency purchased the property and building with known pollution and therefore up to 110% of the originally estimated remediation outlays should qualify for capital funding and accounting treatment.

Fiscal Year 2009

In May 2009, the City agency's total expected outlays for renovation increased to $570,000 as the contractor has received approved change orders totaling $20,000 which directly relate to additional, unforeseen remediation efforts. As noted above, remediation costs of up to 110% of the original remediation estimate for this project qualify for capital treatment as the property and building were purchased with known pollution. The original estimate for remediation was $230,000, the adjusted estimated is now $250,000 ($230,000 + remediation change orders of $20,000). The adjusted estimate does not exceed 110% of the original estimate, therefore no liability or operating expense should be recorded for these additional remediation costs.

As of June 30, 2009, the City agency has paid approximately 50% of the pollution remediation and renovation expenses. Based on the status of the project, the City agency is not aware of any other matters that would significantly alter their contractor's initial cost projection and no additional change orders related to remediation activities have been received from the contractor.

As of June 30, 2009, the City agency does not have a reportable pollution remediation obligation related to this project, as it qualifies for capital treatment. The City agency expects to complete the project in Fall of 2009, at which point all outlays will have been made.

Example B.1(a) – Building and Property Renovation for Reuse (110% Capitalization Limit)

Assumptions

As part of the City's neighborhood revitalization plan, a City agency periodically purchases vacant buildings and properties and renovates the property for City use. The City agency is often required to remediate pollution as part of their renovation activities. Regulatory law states that the owner of polluted property is responsible for pollution remediation.

The City agency identified a property with a building it intends to acquire and in May 2008, the City agency completed a site assessment and concluded that pollution on the property could be remediated for an estimated cost of $230,000. In late June of 2008, the City agency purchased the property and building for $2,000,000 and estimates an additional $600,000 will be incurred to renovate the building. In June 2008, the City agency issued a request for proposal (RFP) for the renovation work and selected a bid of $550,000 based on cost and qualifications. The City agency reviewed the cost proposal and identified $230,000 that related to pollution remediation. This amount represents the "incremental portion" of outlays that would not have been incurred absent pollution. The pollution on the property consisted of asbestos and lead paint in the building and some contaminated soil within the property. The remaining portion of the proposed cost is directly attributed to the property and building renovation. The remediation work will commence in February 2009 and will be completed in October 2009.

Regulatory laws governing the City agency required notification to the regulatory body regarding the property and building transfer. Based on the results of the site assessment, the City agency was aware of the pollution at the time the property was acquired. Additionally, the regulatory body will require the City agency to perform remediation activity as it is now the owner of the property and building.

Reporting

Fiscal Year 2008

Within the above example, the City agency has identified that the regulatory body's requirement of owners of polluted property to remediate polluted property is an obligating event.

As of June 30, 2008, the City agency recorded the acquisition of land and property. Even though an obligating event has occurred, the City agency purchased the property and building with known pollution and therefore up to 110% of the originally estimated remediation outlays should qualify for capital funding and accounting treatment.

Fiscal Year 2009

In May 2009, the City agency's total expected outlay for renovations increased to $650,000 as the contractor has received approved change orders totaling $100,000 which directly relate to

additional, unforeseen remediation efforts. This project qualifies for capital treatment of up to 110% of the original estimate of $230,000 as the property and building were purchased with known pollution. Only the amount of these additional remediation costs which exceed the capitalization limit (110%) should be recorded as a remediation obligation and operating expense. Therefore, there is a $77,000 liability/expense that cannot be capitalized, the difference between 110% of the original estimate, $253,000 and the adjusted estimate $330,000.

As of June 30, 2009, the City agency has paid approximately 80% of the pollution remediation and renovation costs and 80% of the remediation/renovation has been completed. Based on the status of the project, the City agency is not aware of any other matters that would significantly alter their contractor's initial cost projection and no additional change orders related to remediation activities have been received from the contractor.

As of June 30, 2009, only a portion of the expenditures for remediation to date and for the current fiscal year qualify for capitalization. $264,000 ($330,000 * 80%) has been expended for remediation in FY 09 and this amount exceeds the capitalization limit (110%/$253,000) by $11,000. This amount, $11,000, cannot be capitalized and must be reported as an operating expense. The remaining remediation costs of $66,000 will not be capitalizable either, as the capitalization limit has already been exceeded. As of June 30, 2009, the remaining estimated remediation costs should also be reported as a remediation obligation.

Example B.2 – Leaking Underground Storage Tanks

Assumptions

A City agency owns a property with a building that was acquired and developed in 1999. The property and building are used for general City office space. The City paid $10,000,000 for the property and building, which was its approximate fair market value at the time.

In 2009, the City agency becomes aware of four underground storage tanks (USTs) on the property that they suspect have been leaking oil into the surrounding soil.

The City agency performs a site assessment to determine the level of pollution. The costs associated with the site assessment are not considered eligible for capital funding or accounting treatment as the costs would not have been incurred absent suspected pollution. The site assessment confirms the City agency's suspicion that the USTs have been leaking oil into the surrounding soil.

Due to the pollution, the City-owned property and building were evacuated and the property was no longer considered useable as general office space. The pollution at the property is evidence that physical damage has occurred. As a result, the City agency performs an impairment analysis to determine whether impairment should be recorded.

The City agency has concluded the following after performing the impairment analysis:

- The magnitude of the service utility was significant, as the property can no longer be used for its intended purpose.
- The decline in service utility was unexpected by the City.

The building and property are fenced off from the public and do not represent imminent endangerment to the public or environment.

Based on experience with similar sites, City engineers believe a reasonable estimate of the range to restore the property to be $1,500,000 to $2,000,000. Neither end of the range appeared to be more appropriate than the other. The book value of the property and building were approximately $7,500,000 as of June 30, 2009.

Reporting

Fiscal Year 2009

The City has taken the precautionary measures to fence off the polluted property from the general public. As a result, the pollution was not considered to be an imminent endangerment.

The City agency should treat the cost of the site assessment as well as the costs associated with fencing off the property and building as an operating expense.

In addition, the City agency has determined the property to be impaired due to physical damage. In accordance with Comptroller's Directive 30 and professional authoritative literature, the City agency has estimated the impairment expense to be $1,750,000 using the restoration approach.

The City agency does not have a pollution remediation obligation as of June 30, 2009. Note: even if there had been an obligating event in Fiscal Year 2009, no remediation obligation would exist at year end as the asset was deemed impaired.

Fiscal Year 2010

In 2010, the City decides to convert the polluted property and building to a school. The City selects a bid of $5,000,000 to renovate the property and building to prepare it for use. Included within this bid were pollution remediation costs of $1,900,000. Renovation of the property and building commenced in September 2009 and were completed in June 2010.

Commencement of pollution remediation activities is generally a triggering event. However, as the pollution remediation for this project restored a pollution-caused decline in service utility that was recognized as asset impairment, these outlays can be afforded capital treatment – up to the impairment expense. The final cost of the project, including the pollution remediation component exceeded the original estimate. The portion of pollution remediation costs that exceeded the impairment expense ($1,900,000-$1,750,000) would not be eligible for capitalization and would be reported as an operating expense.

Example B.3 – Remediation of Water Pollution from Hazardous Materials

Assumptions

In 2008, routine testing of lake water in a large City park uncovers the presence of certain toxic substances. The State Department of Environmental Conservation (DEC) searches for the source of the pollution and discovers that hazardous materials have been abandoned and dumped into the lake. The State notifies the City of its responsibility to perform pollution remediation at the waste site. In the interim, based on the advice of legal counsel, the City closes the lake and immediate surrounding areas to all recreational activity and public access.

The City agency does not intend to challenge the State's determination that it is responsible for the entire remediation effort. Further, the City agency believes that it will be able to partially recover remediation outlays from the responsible party or parties that have been identified. The City will incur outlays for outside legal services in connection with the remediation effort (such legal services will be outsourced by Corporation Counsel). Based on limited information provided by the State, the City cannot reasonably estimate remediation outlays but speculates that outlays to eventually clean the site to be several million dollars excluding legal fees and has estimated $1,500,000 as the amount to be recovered from the responsible party. The City agency's environmental engineering department estimates that outlays to conduct a site assessment and to complete a corrective measures feasibility study will range from $200,000 to $400,000. Either end of this range was considered to be equally likely.

Reporting

Fiscal Year 2008

Notification by the State that the City agency is responsible for pollution remediation is an obligating event. Upon notification, the City agency should commence recognition of those components of the remediation obligation that are reasonably estimable - $300,000 for the expected outlay for the site assessment and the corrective measures feasibility study (($200,000 x 50%) + ($400,000 x 50%)) and estimated legal fees of $50,000.

Although the City agency speculated that outlays to eventually clean the site to be several million dollars, they could not reasonably estimate the range of cleanup outlays because it had not yet completed a site assessment.

As the unrealized/unrealizable recoveries are currently estimated to be greater than the currently estimable costs, therefore no net liability exists as of year end.

Fiscal Year 2009

In 2009, the City agency contracts for the performance of the site assessment and feasibility study for $325,000. The contractor recommends, and the State accepts, a corrective measures plan calling for removal of the waste to a hazardous materials landfill and installation of a pump-and-treat system to be operated and monitored for 10 years. The City agency estimates that outlays to remove and properly dispose of the waste will range from $1,250,000 to

$1,500,000. No amounts within this range were considered to be better estimates than any other amounts. The most likely outlay to purchase and install fixed equipment for pumping and treating groundwater is estimated to be $2,000,000, at 70% likelihood, but could be as high as $2,500,000 or as low as $1,800,000. This equipment has no alternative future use and will have no salvage value at the end of the 10 year period. These high and low amounts were considered to be equally likely. The current value of outlays for operating and monitoring the pump-and-treat system for 10 years is estimated as $200,000 to $300,000 ($5,000 to $7,500 per quarter), including labor, overhead, and electricity. No amounts within this range were considered to be better estimates than any other amounts.

During FY09, outside legal counsel continued negotiation of recoveries from the responsible party, but a settlement has not yet been reached. The original estimate of $1,500,000 is still considered the best estimate. The actual fees paid to outside counsel in Fiscal Year 2009 were $30,000.

During FY09, the City agency would reduce the liability by $300,000 as services for the site assessment and corrective measures feasibility study were completed and paid for in full. The remediation expense in 2009, which would be non-capital, would include the $25,000 to reflect the actual cost of the site assessments and corrective measures feasibility study as well as the $30,000 for outside legal fees.

The completion of the corrective measures plan is a measurement benchmark requiring the City agency to accrue additional components of the remediation liability no later than when the State accepts the plan. The remediation liability and expense would include the fixed equipment for the pump-and-treat system because it does not meet any of the criteria for capitalization.

The estimated liability at June 30, 2009 would be calculated as follows:

Scenario	%	Cost	Estimate	Subtotals
Waste Removal				
Scenario A	50%	$ 1,250,000	$ 625,000	
Scenario B	50%	$ 1,500,000	$ 750,000	
				$ 1,375,000
Pump and Treat				
Scenario A	70%	$ 2,000,000	$ 1,400,000	
Scenario B	15%	$ 2,500,000	$ 375,000	
Scenario C	15%	$ 1,800,000	$ 270,000	
				$ 2,045,000
Operation and Monitoring				
Scenario A	50%	$ 200,000	$ 100,000	
Scenario B	50%	$ 300,000	$ 150,000	$ 250,000
Legal Fees (Remaining Estimated)				$ 20,000
Recoveries Not Realized/Realizable				$ (1,500,000)
Net Remediation Obligation				**$ 2,190,000**

Fiscal Year 2010

As of March 31, 2010, the waste was removed and the pump-and-treat system installed for outlays of $1,300,000 and $1,600,000 respectively. The recoveries were also negotiated in the amount of $1,500,000. Operation and monitoring of the completed system began on April 1, 2010. Actual outlays for operating and monitoring the completed system for the last fiscal quarter of 2010 were $5,000 (the low end of the estimated range).

The City agency would reduce the liability for remediation goods and services completed and paid for prior to June 30, 2010 and the recovery (now realizable) would be recorded as a receivable. The liability and remediation expense would be reduced by an additional $145,000 to reflect that the accrual of estimated outlays for waste removal and the pump-and-treat system exceeded actual outlays ($3,045,000 – $2,900,000). The City agency would also reduce the liability for the remaining periods for operation and monitoring services to the low end of the range ($5,000/quarter) based on the actual costs incurred for the first quarter. In future years, the liability would be adjusted as operation and monitoring services occur. As such, the remediation obligation at June 30, 2010 would be $195,000 for the 39 remaining quarters of operation and monitoring.

Example B.4 – Bridge Protective Coating Project

Assumptions

In an effort to extend the useful lives of the City's bridges, a City agency plans to commence a protective coating project on a major bridge in September 2009. The protective coating project first requires the City agency to remove previous applications prior to applying a new application of protective coating. Prior to commencing the project, City officials tested the contents of previous coating applications and determined the presence of lead, which is considered a pollutant.

The two-year project plan is scheduled to begin in September 2009 and conclude in September 2011. The project includes the removal of the previous protective coatings via sandblasting, containment of the removed debris through the use of encapsulation, and disposal of the debris at an appropriate waste site.

The City's contractor provided a detailed estimate of the project outlays totaling $10,000,000 over a two year period.

Reporting

Fiscal Year 2008

As of June 30, 2008, no triggering events have occurred, which would require the City agency to measure and report pollution remediation obligation.

Using historical experience, the City agency has quantified the "incremental costs" associated with this project that would <u>not</u> have been incurred absent pollution. The City agency has determined that the majority of the procedures, including encapsulation, incurred during a protective bridge coating containing pollution (lead/asbestos) would be incurred in order to contain paint dust, even if the protective coating did not contain lead. Through review of similar historical projects, the City agency has determined the incremental cost attributed to pollution for a standard protective coating project to be 2.3% of total project costs. These incremental costs are generally incurred for the safe handling and disposal of previous coating applications.

Fiscal Year 2009

In June 2009, the City agency voluntarily commenced the bridge protective coating project. The commencement of the project has created an obligating event, and the City should record a remediation obligation for the expected outlay of completing the pollution remediation work that has been initiated, $230,000 ($10,000,000 * 2.3%).

Fiscal Year 2010

At June 30, 2010, the City agency has removed and disposed of approximately 40% of the previous protective coating. The overall protective coating project is approximately 30%

complete. As of June 30, 2010, the remaining pollution remediation cost should be reported as a remediation obligation in the amount of $138,000 (60%).

Example B.5 – Asbestos Removal-Voluntary Commencement

Assumptions

In 2008, the City agency revised its Five Year Capital Plan for 2009-2013 and added a project to renovate PS1 (a public school). The renovation plan includes the removal of asbestos ceiling and floor tiles, to be completed in two phases over two summers. Environmental laws require asbestos to be removed when it becomes friable. The asbestos at the school had not reached that point of deterioration. The agency's Architecture and Engineering Department provided a detailed estimate of remodeling outlays, including an estimate of asbestos remediation outlays ranging from $250,000 to $300,000. This was based on a standard contingency estimate for asbestos remediation activities of 10% of the total project costs, which were estimated to range from $2,500,000 to $3,000,000.

In 2009, the remodeling contract was let for bid and the winning bid of $3,000,000 included an itemized amount for asbestos remediation of $240,000 (or 8% of total project costs bid).

Based on actual, historical costs for asbestos remediation in similar projects over the past three years, the agency's Finance Office had determined that asbestos remediation costs average approximately 6% of total project costs. The Finance Department believes that a lower cost (6% or $180,000) is more likely (75% likely) to be incurred, based on historical data.

Reporting

Fiscal Year 2008

In 2008, there are no obligating events as the asbestos within the school building is not required to be removed as it is not friable. In addition, the City agency has not yet voluntarily commenced the renovation project (including remediation activities).

Fiscal Year 2009

In July-August 2008, the removal of the tiles causes the asbestos to become friable. Thus, the commencement of asbestos removal in Fiscal Year 2009 has created an obligating event, and the City should record a liability for the expected outlay of completing that portion of the removal work that has been initiated. The agency does not have a legal obligation to remove the rest of the tile as it remains untouched and has not become friable; the remediation of remaining tiles is scheduled for the summer of 2010.

The expected outlay for the remediation effort was $120,000 in Fiscal Year 2009 and the same in 2010 ($240,000/2). The City does not need to record a liability because all remediation work commenced was completed in the same year at an actual cost of $95,000. This amount should be reported as an operating expense.

Because no liability existed at year end, the City agency had no remediation obligation to report. In addition, based on the actual cost incurred in 2009, the agency has determined that its original estimate is still materially accurate.

Fiscal Year 2010

In March 2010, the agency discovered that approximately 50% of the remaining asbestos had become friable. The change in condition of the remaining asbestos created an obligating event and the City should record a liability for the remaining pollution remediation activities, which are estimated at $60,000 ($120,000 x 50% based on the contactors original estimate).

Due to the continuing use of the school through year end, the remediation will begin while the adjacent classrooms/floors continue to be used for school purposes. As such, all work performed on weekdays must be conducted between 6PM and 7AM, when the school is not in use. The contractor submits a change order for $30,000 due to the increased cost of labor that will be incurred for working evening and night hours through the end of the school year. This increases the total remaining estimate for remediation to $150,000 ($120,000 + $30,000). The portion of the remaining costs associated with remediation of asbestos that has become friable is $90,000 ($120,000*50% + $30,000).

On June 30, 2010, the remediation effort related to the friable asbestos is 75% complete and actual costs incurred and paid through June 30, 2010 were $75,000 ($60,000*75% + $30,000), resulting in a liability of $15,000 ($60,000 * 25%) at year end. As remediation efforts are not scheduled to begin until mid-July for the remaining asbestos that has not become friable, no liability exists at year end for that portion of the project. The remediation costs incurred should be reported as an operating expense.

Example B.6 – Asbestos Abatement with Expected Grant Reimbursement

Assumptions

The City is required to abate asbestos within a City-owned building as the pollution represents an imminent endangerment to the public (an obligating event). The City evaluated capitalization criteria for this project and determined that it is not eligible for inclusion as capital in the City's financial statements. As such, the City agency must measure the costs associated with this project and record a liability and expense.

The City agency has determined that no remediation costs related to external government oversight or operating and monitoring the remedy will be incurred. In addition, the City agency has determined that there are no other potentially responsible parties and therefore no recoveries exist. However, the agency has applied for and been awarded an economic development grant that would cover 25% of the cleanup costs. The grant funds cannot be claimed until the City pays its share of the project's costs.

Reporting

Fiscal Year 2009

The City agency performed the site assessment in April 2009 and estimates that the cost of assessment (comprised of the salary and overhead to be incurred) was $10,000. In June 2009, a contract was awarded for the clean up activities for $500,000 and work is expected to begin in October 2009. Based on the contracted cost for cleanup, the agency expected to be able to claim $125,000 under the grant that has been awarded (25% of cleanup costs).

Based on the above, the following summary represents the components of the remediation obligation at year end.

Pre-Cleanup Activities		
Site Assessment –	To determine the quantity of asbestos abatement required *(These costs are composed of City agency salary and overhead incurred in performing the site assessment.)*	$ 10,000
Cleanup Activities		
Abatement (Implementation of Corrective Measures) –	Costs associated with a licensed contractor to remove and dispose of asbestos *(Estimate is based on the site assessment performed and provided to the external contractor. Actual costs may vary.)*	$ 500,000 $ 510,000
Payments and Recoveries		
Amounts Expended	*Amount already incurred/expended for assessment*	$ (10,000)
Unearned Grant Revenue	*Grant can be claimed for 25% of cleanup costs once the City pays its share*	$ (125,000)
Net Obligation at Period End		**$ 375,000**

The remediation obligation should be reduced by the amount of the unrealized grant revenue expected to be earned in a future period. The total pollution remediation costs measured by the City agency represent the current value they expect to incur as part of this project.

APPENDIX C - Frequently Asked Questions

1) What constitutes "pollution" per GASB 49?

Answer: Pollution, as defined within GASB 49, is based on the definition used by the U.S. Environmental Protection Agency:

"Generally, the presence of a substance in the environment that because of its chemical composition or quantity prevents the functioning of natural processes and produces undesirable environmental and health effects. Under the Clean Water Act, for example, the term has been defined as the man-made or man-induced alteration of the physical, biological, chemical, and radiological integrity of water and other media."

2) What constitutes "remediation" per GASB 49?

Answer: City agencies are not required to search out and identify pollution. However, once the agency has been made aware of pollution affecting the agency or the City, this information should be reported by the agency as a potential pollution remediation obligation. Pollution can be identified through a variety of methods, including site evaluations/investigations conducted prior to site acquisition or during a construction or renovation project, litigation, imminent endangerment to City employees or its constituents, or public knowledge.

The identification of pollution does not immediately obligate the agency/City to commence remediation or to record a liability. City agencies will need to evaluate the identified pollution to determine whether any obligating events have occurred and whether costs are measurable. (See Section III of the Policies and Procedures Manual for more detailed information related to obligating events).

However, as the City has thus far been granted only temporary permission to continue to include the pollution remediation components of projects within its capital budget and to continue to pay for the remediation with bond proceeds, for budgetary planning purposes agencies must estimate and report all expected pollution remediation costs – even those for which there is no obligation – to the Comptroller's Office and the Office of Management and Budget. This is accomplished by reporting all expected pollution remediation costs in the Template illustrated in Appendix D.

3) What is a pollution remediation obligation?

Answer: A pollution remediation obligation is a commitment to address the current or potential negative effects of existing pollution by completing pollution remediation activities. For example, a commitment to clean up spills of hazardous wastes and commitments to remove contamination such as asbestos are pollution remediation obligations.

4) When will NYC implement Statement 49?

Answer: The effective date for the related financial reporting requirements for the City of New York is the fiscal year that commenced on July 1, 2008.

For budgetary purposes, the City has been granted permission from the Financial Control Board (FCB) to continue to include in its capital budget and to fund with bond proceeds pollution remediation costs associated with capital projects which have been authorized in whole or in part in a City bond resolution prior to July 1, 2010. The City is seeking legislation that would permit the FCB to act to allow such costs to be included in the capital budget and financed with bond proceeds indefinitely.

5) What happens if my pollution remediation project spans the effective date of this pronouncement?

Answer: Agencies should apply the provisions of Statement 49 as of the fiscal year that commenced on July 1, 2008. Pollution remediation liabilities should be measured at the beginning of that period so that beginning net assets can be restated. For an ongoing project, remediation costs that have not been incurred on or before June 30, 2008 should be included in the agency's estimated liability as of July 1, 2008, assuming a triggering event has also occurred on or before July 1, 2008.

Additionally, all capital budget expenditures for pollution remediation made subsequent to June 30, 2008 will need to be identified for the Comptroller's Office Bureau of Accountancy to be reported as operating (rather than capital) expenditures and excluded from the value of fixed assets reported by the City. Thus remediation costs are to be excluded from the asset value when agencies process Fixed Asset Acquisition (FA), Fixed Asset Betterment (FB) and Fixed Asset Modification (FC) documents in FMS.

6) How does Statement 49 impact remediation efforts?

Answer: The Statement only requires governmental agencies to report their environmental remediation obligations once certain criteria for recognition are met. The Statement does not require more or less remediation activity to be completed.

Specifically for NYC agencies, for the pollution remediation portions of capital projects not authorized prior to July 1, 2010, the Statement will require City agencies to use their expense budgets as the source of funding for remediation activities, unless new State legislation and FCB actions permit on-going use of bond proceeds. Thus GASB 49 may impact an agency's ability to perform such activities if non-capital funding sources are not available.

7) Is my City agency required to search for and identify all pollution?

Answer: No, City agencies are not required to search for and identify all pollution in order for the City to properly report an obligation. The standard requires governments to evaluate pollution that is identified through the normal course of business or made known through oversight agencies (regulators).

However, agencies must identify expected pollution remediation costs within planned projects for budgetary planning purposes and must identify actual pollution remediation expenditures from the Capital budget to permit proper reporting of those costs as operating (rather than capital) expenditures by the Comptroller's Office.

8) What are the key triggers in which the City will now be required to report a liability related to pollution remediation?

Answer: According to the standard, an agency will now have to estimate its expected outlays for pollution remediation if any of the following recognition triggers occur:

a) Pollution poses an imminent danger to the public or environment and the City has little or no discretion to avoid fixing the problem.
b) The City has violated a pollution prevention-related permit or license.
c) A regulator has identified (or evidence indicates a regulator will do so) the City as responsible (or potentially responsible) for cleaning up pollution, or for paying all or some of the cost of the clean up.
d) The City is named in a lawsuit (or evidence indicates that it will be) to compel it to address the pollution.
e) The City begins to clean up pollution or conducts related remediation activities to the extent that the government is legally obligated to complete those activities.

9) Do all pollution remediation activities result in liabilities?

Answer: Most pollution remediation obligations result in liabilities. However, pollution remediation expenditures can be capitalized (reported as contributing to the value of assets) in a limited number of situations. For example, certain outlays to prepare property for use when the property was acquired with known or suspected pollution that, at the time of acquisition by the City (not the agency), was expected to be remediated and the estimated cost of that remediation was considered in the decision to acquire the property.

10) When can pollution remediation outlays be capitalized?

Answer: Certain pollution remediation outlays may be eligible to be capitalized if pollution remediation outlays are incurred under any one of the following criteria.

a) To prepare property for use when the property was acquired with known or suspected pollution and the expectation at the time of acquisition by the City was to perform remediation;
b) To perform pollution remediation that restores a pollution-caused decline in service utility that was recognized as an asset impairment;
c) To acquire property, plant, and equipment that has a future alternative use other than remediation efforts; or

d) For certain economic development and housing programs specified in New York State Law, certain outlays to prepare property in anticipation of a sale.

11) Do estimated remediation costs associated with a future capital project that is not currently included in the Agency's capital plan and budget need to be reported as pollution remediation liabilities?

Answer: Only if an obligating event has also occurred.

However, agencies should identify and include in the Template all expected pollution remediation costs within planned projects for budgetary planning purposes, even if the projects are not yet included in its capital plan or budget.

12) How do you define incremental costs?

Answer: Incremental costs relating to Statement 49 are the outlays that would not be incurred absent pollution. For example, the cost of performing ceiling work with Asbestos Containing Material (ACM) is $25.00 per square foot. The same ceiling work without ACM is $20.00 per square foot. The incremental cost is $5.00 per square foot. Essentially, a City agency should ask is: "what would the same project outcome cost if the pollution was not present?" Any cost above that amount is the incremental cost of pollution remediation for that project.

13) How do recoveries from another party affect liability?

Answer: In certain instances a City agency may be the lead participant in a multi-participant pollution remediation project. As the lead agency, the City is responsible for designing and implementing the pollution remediation plan. The City should measure the costs for the remediation plan as it would if the City agency were the sole participant. In these cases, the City agency should measure the amount of money expected to be recovered from the other responsible parties.

Expected recoveries that the agency has negotiated with the other responsible parties, or that have been acknowledged by the agency's insurance company, are considered realized or realizable. Expected recoveries that are realized or realizable should be recorded separate from the obligation as a receivable or cash.

14) Does Statement 49 include landfill remediation projects?

Answer: Statement 49 is intended to address only pollution remediation obligations of responsible parties and potentially responsible parties (PRPs) at Superfund and non-Superfund sites. Statement 49 does not include asset retirement obligations that involve pollution, such as obligations to decommission and decontaminate a landfill. This issue represents a different set of accounting issues and is excluded from the scope of Statement 49. Accounting for asset retirement obligations however, may need to be disclosed in the summary of significant accounting policies.

GASB 18 addresses closure and post-closure costs for certain landfills.

15) Does Statement 49 include pollution prevention projects and pollution control activities?

Answer: Statement 49 is intended to address only pollution remediation obligations of responsible parties and potentially responsible parties (PRPs) at Superfund and non-Superfund sites. Statement 49 does not include any projects that are intended to prevent pollution (i.e. smoke stack scrubbers, using low sodium road salt, or switching (at a higher cost presumably) to biodegradable products to prevent pollution). Pollution prevention measures represent a different set of accounting issues and are more likely to result in projects that will be capitally eligible.

16) Are there standard percentages that can be used to calculate the costs related to direct or indirect outlays (i.e. general overhead)?

Answer: Pollution remediation outlays should include all direct outlays attributable to pollution remediation activities and may include costs incorporated into IFA rates.

17) Are there materiality thresholds to be considered when reporting pollution remediation obligations?

Answer: Any questions about potentially insignificant costs and whether they should be reported should be directed to the Comptroller's Office.

18) Can leasehold pollution remediation costs qualify for capital treatment?

Answer: Yes, if the City agency enters into a capital lease arrangement whereby pollution is known to exist, remediation efforts have been estimated and the agency intends to remediate pollution to prepare the property for its intended use, resulting in a leasehold improvement, these costs could be capitalized in accordance with Comptroller's Directives 10 and 30, GASB Statement 49 and this manual.

19) What must be disclosed in future financial statements?

Answer: Statement 49 requires that the City disclose a general description of the nature of pollution remediation activities and the associated liability at the beginning and end of the accounting period.

20) What should be considered in a methodology of cost estimation?

Answer: If cost estimation is utilized, each agency on an individual basis should consider their past experiences in pollution remediation and only use cost estimation if the pollution remediation costs are considered routine and homogenous in nature. Estimates should be based on a methodology of historical information and data. In addition, on a periodic basis (i.e., every two to three years) the estimation methodology, including historical data on

costs and proportions, should be reevaluated to help ensure estimates are reasonably accurate. Items to consider when documenting and reevaluating cost estimation methodology may include the following: industry regulations, legislation, current economic environment and materiality.

21) Are there additional considerations if "green" materials are utilized on a project?

Answer: No, the statement requires governmental agencies to report their environmental remediation obligations once certain criteria for recognition are met. The Statement does not include any consideration to the use of "green" materials