



New Jersey Department of Environmental Protection Site Remediation Program

REMEDIAL ACTION PERMITS FOR SOILS GUIDANCE

This guidance is developed to assist the Licensed Site Remediation Professional in determining when and if a Remedial Action Permit is needed. This guidance is not intended to supersede any rule or regulation.

I. Soil

During a site investigation, it is documented that soil contaminants exceed the New Jersey remediation standards (N.J.A.C. 7:26D). The next step would be to remove the source material and delineate the site and off-site contaminants. The remediating party would work with their LSRP to determine the appropriate remedial action such as removal of all contaminants and remediate the site to an unrestricted level. If, based upon the environmental data collected, the remediating party and their LSRP decide to perform a restricted use remediation or limited restricted use remediation and use engineering and/or institutional controls as a remedy for soil contamination and obtain a remedial action permit.

II. When to apply for the permit

The engineering control, if required, and deed notice must be in place before one applies for the soil remedial action permit. The person conducting the remediation and their LSRP will need to determine the appropriate engineering control (cap, fence...) that will be protective of human health and the environment. Once the control(s) are in place, and the deed notice is filed with the appropriate local government agency, the person responsible for the remediation and their LSRP can then apply for the remedial action soil permit.

If an engineering control is used, the person responsible for the remediation will need to establish financial assurance for the engineering control. The financial assurance mechanism must be in place prior to filing the permit application. The financial assurance must be for the duration of the engineering control is in place. If it is determined that the control will be all ways be required, this equates to a 30-year period that financial assurance will be required.

III. Remedial Action Soil Permits

Deed Notice without an engineering control

In situations where only a deed notice (institutional control) is needed, the LSRP would have filed the deed notice and the person(s) responsible for the remediation would complete the permit application for a remedial action permit for soils.

Deed Notice with an engineering control

The person responsible for the remediation will need to obtain the necessary permits (construction permits from the municipality) that are needed to construct and design the engineering control. The Department will issue a Remedial Action permit once the system has been installed and deed notice has been filed.

IV. Permit Actions

Initial Permit

The person responsible for the remediation will apply for the initial permit when the conditions in II above are achieved.

Permit Modifications

The person responsible for the remediation will be required to obtain a permit modification should any of the following conditions occur. The following are considered major modification and will require a modification to the remedial action soil permit:

1. Any changes to the exhibits in the deed notice occur.
2. Any change in land use that will impact the engineering control. Examples are construction of a building on top of an engineered cap.

The following activities are considered minor modifications, and do not require a modification to the remedial action soil permit.

For activities that will not require a permit modification, the permittee will provide notice of the activity in next protectiveness survey.

1. Temporary disruption of the cap to run utilities through. These should be noted in the biennial certification.
2. Any temporary disturbance that does not result in changes to the exhibits in the deed notice.

Permit Transfers

The person responsible for the remediation will always be a co-permittee; their name and address will remain on the permit for the life of the engineering and institutional control. Property owners who are not the person responsible for the remediation must notify the Department of any changes in ownership. The new property owner must sign on as a co-permittee before the former owner is removed from the permit. Any financial assurance that was established as the former property owner will not be released until a new form is established and in place.

V. Financial Assurance

Financial Assurance is required whenever a Remedial Action Permit has an Engineering Control. An Engineering Control is defined in N.J.A.C. 7:26E-1.8. "Engineering controls" means any physical mechanism to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls.

The LSRP will certify the costs for financial assurance.

The following forms are acceptable as financial assurance

Financial Assurance for Engineering Controls

Remediation Trust Funding Sources	Acceptable as Financial Assurance for an Engineering Control?
1. A remediation trust fund agreement in accordance with N.J.A.C. 7:26C-5.4	Yes
2. An environmental insurance policy in accordance with N.J.A.C. 7:26C-5.5	Yes
3. A line of credit agreement in accordance with N.J.A.C. 7:26C-5.6	Yes
4. A letter of credit in accordance with N.J.A.C. 7:26C-5.7	Yes
5. A self-guarantee in accordance with N.J.A.C. 7:26C-5.8	No

Calculating Financial Assurance

The LSRP will determine the amount of funds needed to maintain the engineering control as long as the control is needed, up to 30 years. The calculation is based on the yearly cost of maintaining the system including labor, power, sampling parameters, permit costs based on present value. That value is multiplied out over the duration that the engineering control will be in place up to 30 years. See attachment C for calculating the amount of financial assurance.

Commercially available software systems that can be used to calculate financial assurance.

- Cost Pro
- RACER (Remedial Action Cost Engineering and Requirements)
- Other commercially available engineering cost projection software that can develop cost projections for the maintenance of an engineering control.

The LSRP can develop independently the amount of financial assurance required by providing all costs related to the monitoring and maintenance of the engineering control for its life-time. The LSRP will need to provide a list and how the costs were derived as part of the cost estimated for financial assurance.

Homeowner and Condominium associations with engineering controls

The Department recognizes that homeowner and condominium association's annual budget includes common elements related to the engineering control(s). In these situations, the Association may use their budget instead of the 30-year financial assurance requirement. The Association needs to provide the Department as part of the annual or biennial reporting requirements, the budgeted amounts for the common elements related to the engineering control.

Exemptions for establishing financial assurance for engineering controls.

N.J.A.C. 7:26C-7.7(b) identifies those persons who do not have an obligation to establish financial assurance.

(b) The following persons are not required to comply with this section:

1. A government entity;
2. A person who is not otherwise liable for cleanup and removal costs pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11, who purchased a contaminated site prior to May 7, 2009, and is remediating, or has remediated, the contaminated site pursuant to N.J.S.A. 58:10-23.11g.d;
3. A person who undertakes remediation at that person's primary or secondary residence;
4. The owner or operator of a child care center licensed pursuant to N.J.S.A.30: 5B-1 et seq. who performs remediation at the licensed child care center;
5. The person responsible for performing remediation at a public school or private school as defined in N.J.S.A. 18A: 1-1, or a charter school established pursuant to N.J.S.A. 18A: 36A-1 et seq.; and
6. The owner or operator of a small business who is responsible for performing a remediation at his or her business property.

N.J.A.C. 7:26C-1.3 provides the definition of a small business. "Small business" means a business entity that does not acquire property for development or redevelopment, and that, during the prior three tax years, employed not more than 50 full-time employees or the equivalent thereof, and qualifies as a small business concern within the meaning of the federal "Small Business Act," 15 U.S.C. section 631 et seq.

VI. Who has the obligation as Permittees

The following persons must comply with the Remedial Action Permit issued by the Department. N.J.A.C. 7:26C-7.2 identifies those persons who must comply with a Remedial Action Permit issued by the Department. The following persons are required by statute to become permittees should a remedial action permit be required.

- Each owner and operator of an underground storage tank facility – who is liable for the remediation pursuant to the Underground Storage of Hazardous Substances Act, N.J.S.A. 58:10A-21 et seq.
- Each owner and operator of an industrial establishment who is liable for the remediation pursuant to the Industrial Site Remediation Act, N.J.S.A. 13:1K-6 et seq.
- Any person in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq.

ⁱ "Common elements" means all portions of the common interest real property other than the units and any other interests in real estate for the benefit of unit owners which are subject to the master deed.

- Any person who is remediating a site,
- Persons due to their position as owners, operators, or tenants of the property that is being, or has been remediation, including the following.
 - i. Each owner of the property, where the discharge occurred, at the time of implementation of the remedial action that includes an engineering or institutional control or operation and maintenance requirements for the remedial action; and
 - ii. Each subsequent owner, operator and tenant of the property of the discharge during that person's ownership or operation.
- If there is more than one person responsible for compliance with a remedial action permit pursuant to (a) above, each such person, as a co-permittee, is jointly and severally liable for:
 1. Compliance with the conditions of a remedial action permits pursuant to this subchapter;
 2. Payments of all remedial action permit fees pursuant to N.J.A.C. 7:26C-4;
 3. Payment of penalties for violations of a remedial action permit pursuant to N.J.A.C. 7:26C- 9; and
 4. Maintenance of financial assurance for engineering controls pursuant to N.J.A.C. 7:26C- 7.8.

VII. Establishing Monitoring & Reporting Schedules in Remedial Action Permits

Monitoring Parameters of the Engineering Control

The LSRP will determine based upon their professional judgment what monitoring is necessary to ensure the engineering control remains protective of human health and the environment. At a minimum, the LSRP should determine the frequency that an engineering control needs to be inspected or monitored. The LSRP and person responsible for the remediation can determine the monitoring parameters, frequency and schedule. The Department recommends the following. At a minimum, all engineering controls shall be monitored on an annual basis and report on a biennial basis.

Monitoring Schedule

The LSRP will determine based upon their professional judgment what frequency the engineering control should be monitored. The LSRP and person responsible for the remediation can determine the monitoring parameters, frequency and schedule. The Department recommends the following.

Monitoring Schedule	Situation
Monthly	Sensitive populations are within 0 - 100' of the engineering control. This excludes engineering controls with asphalt caps.
Quarterly	Sensitive populations are within 101' - 500' of the engineering control. This excludes engineering controls with asphalt caps.
Semi Annual	Engineering controls consisting of fencing, or soil or vegetative caps.
Annual	Engineering controls consisting of asphalt/concrete or impervious material.

Reporting Schedule

The LSRP will determine based upon their professional judgment when the monitoring information will be submitted to the Department. At a minimum, all permits shall report on a biennial basis to the Department as to the protectiveness of the engineering and institutional controls.

Reporting Schedule	Situation
Semi Annual	Sensitive populations are within 100' – 500' of the engineering control. This excludes engineering controls with asphalt caps.
Annual	Engineering controls consisting of fencing, or soil or vegetative caps.
Biennial	Engineering controls consisting of asphalt/concrete or impervious material.

VIII. Remedial Action Soil Permit Fees – N.J.A.C. 7:26C-4.4

Remedial Action Permit Fees

Activity	Fee
Permit Application	\$1,840
Permit Modification	\$1,220
Permit Termination	\$1,840
Change in Ownership/Transfer of Permit	\$815
Annual Permit Fee*	\$400

1. How will the Department apply the Remedial Action Permit fees?

Response: A remediating party applies for a Soil Remedial Action Permit after January 15, 2010. The permittee completes the permit application and submits the initial permit fee. At the end of the first year and every year after, the permittee(s) will pay an annual permit fee.

Every two years, the permittee(s) is required to complete and submit a Remedial Action Protectiveness/Biennial Certification Form at no cost.

2. What happens if I do not pay the fee(s)?

Response: The Permittee(s) would be subject to the assessment of penalties which would include the fee plus 20% of the outstanding amount; \$1000 minimum.

IV. Permits and Final Remediation Documents

Remedial Action Permits and Response Action Outcome

Action	Post – 1/15/10
Contamination has been remediated and a remedial action permit containing engineering and/or institutional controls has been issued by the Department	LSRP will issue a RAO once the remedial action permit is in place.

* Note: Annual permit fees will start one year after the initial permit fee is paid

ATTACHMENTS

ATTACHMENT A

APPENDIX E from Technical Requirements for Site Remediation (N.J.A.C. 7:26E)

Model Deed Notice

The model document in this appendix contains blanks and matter in brackets []. These blanks shall be replaced with the appropriate information prior to submission to the Department for approval. The model document in this appendix is not subject to the variance provisions of N.J.A.C. 7:26E-1.6.

Matter bracketed [] is not intended for deletion, but rather is intended to be descriptive of the variable information that may be contained in the final document.

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____

Signature: _____

Print name: _____

Recorded by: _____

Signature, Officer of County Recording Office: _____

Print name: _____

DEED NOTICE

This Deed Notice is made as of the _____ day of _____, _____, by [Insert the full legal name and address of each current property owner] (together with his/her/its/their successors and assigns, collectively "Owner").

1. THE PROPERTY. [Insert the full legal name and address of each current property owner] [Insert as appropriate: "is", or "are"] the owner in fee simple of certain real property designated as Block(s)____Lot(s)_____, on the tax map of the [Insert, as appropriate: City/Borough/Township/Town] of [Insert the name of municipality], [Insert the name of county] County; the New Jersey Department of Environmental Protection Program Interest Number (Preferred ID) for the contaminated site which includes this property is [Insert the Program Interest Number (Preferred ID)]; and the property is more particularly described in Exhibit A, which is attached hereto and made a part hereof (the "Property").

2. DEPARTMENT'S ASSIGNED BUREAU. The [insert name of Bureau] was the New Jersey Department of Environmental Protection program that was responsible for the oversight of the remediation of the Property. The matter was Case No. [insert Program Interest Number (Preferred ID)].

3. SOIL CONTAMINATION. [Insert the full legal name of the person that was responsible for conducting the remediation] has remediated contaminated soil at the Property, and the New Jersey Department of Environmental Protection approved a remedial action on [Insert date of Department's approval], such that soil contamination remains in certain areas of the Property which contains contaminants in concentrations that do not allow for the unrestricted use of the Property; this soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. As a result, there is a statutory requirement for this Deed Notice [include if appropriate: and engineering controls] in accordance with N.J.S.A. 58:10B-13.

4. CONSIDERATION. In accordance with the New Jersey Department of Environmental Protection's approval of the remedial action work plan for the remediation of the site which included the Property, and in consideration of the terms and conditions of that approval, and other good and valuable consideration, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of these contaminants, the Owner has agreed, as part of the remedial action for the Property, to restrict the use of certain parts of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. The Owner has also agreed to maintain a list of these restrictions on site for inspection by governmental enforcement officials.

[Insert the following paragraph when engineering controls are also implemented at the site:]

5B. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls on the Property; a narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C.]

6A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. Except as provided in Paragraph 6B, below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property without first obtaining the express written consent of the Department of Environmental Protection. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration. To request the consent of the Department of Environmental Protection, contact:

Department of Environmental Protection
Bureau of Operation, Maintenance, and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

ii. Notwithstanding subparagraph 6A.i., above, the Department of Environmental Protection's express written consent is not required for any alteration, improvement, or disturbance provided that the owner, lessee or operator:

(A) Notifies the Department of Environmental Protection of the activity by calling the DEP Hotline, at 1-877- WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance;

(B) Restores any disturbance of an engineering control to pre-disturbance conditions within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance;

(C) Ensures that all applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration;

(D) Ensures that exposure to contamination in excess of the applicable remediation standards does not occur;

(E) Submits a written report, describing the alteration, improvement, or disturbance, to the Department of Environmental Protection within sixty (60) calendar days after the end of each alteration, improvement, or disturbance. The owner, lessee or operator shall include in the report the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description

of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure. The owner, lessee, or operator shall submit the report to:

Department of Environmental Protection
Bureau of Operation, Maintenance, and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

[Insert the following paragraph when engineering controls are also implemented at the site:]

6B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, any person may temporarily breach any engineering control provided that that person complies with each of the following:

- i. Immediately notifies the Department of Environmental Protection of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337;
- ii. Limits both the actual disturbance and the time needed for the disturbance to the minimum reasonably necessary to adequately respond to the emergency;
- iii. Implements all measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination;
- iv. Notifies the Department of Environmental Protection when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337;
- v. Restores the engineering control to the pre-emergency conditions as soon as possible, and provides a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent reoccurrence of such conditions in the future. The owner, lessee, or operator shall submit the report to:

Department of Environmental Protection
Bureau of Operation, Maintenance, and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

7A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION

The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice, and certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. The specific obligations to monitor and maintain the deed notice shall include all of the following:

- i. Monitoring and maintaining this Deed Notice according to the requirements in Exhibit C, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment;
- ii. Conducting any additional remedial investigations and implement any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the site prior to the date that the certification is due to the Department pursuant to iii, below, in order to ensure that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment.
- iii. Certify to the Department of Environmental Protection as to the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the deed notice that indicates when the deed notice was recorded;

[Insert the following paragraph if the soil remedial action included any engineering controls at the site:

7B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION.

The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the person responsible for conducting the remediation, and, the Owner, and the subsequent owners, lessees, and operators, shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. The specific obligations to monitor and maintain the engineering controls shall include the following:

- i. Monitoring and maintaining each engineering control according to the requirements in Exhibit C, to ensure that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment;
- ii. Conducting any additional remedial investigations and implement any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, in order to ensure that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment.
- iii. Certify to the Department of Environmental Protection as to the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the deed notice that indicates when the deed notice was recorded.

8. ACCESS.

The Owner and the subsequent owners, lessees and operators agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 7, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring that all holders thereof provide such access to the Department.

9. NOTICES.

- i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions

of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Owner and all subsequent owners and lessees shall notify any person intending to conduct invasive work or excavate within the Restricted Areas at the Property, including, without limitation, tenants, employees of tenants, and contractors of the nature and location of contamination in the Restricted Areas, and, of the precautions necessary to minimize potential human exposure to contaminants.

iii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Restricted Area.

iv. The Owner and the subsequent owners shall provide written notice to the Department within thirty (30) calendar days following the owner's petition for or filing of any document initiating a rezoning of the Property. The Owner and the subsequent owners shall submit the written notice to:

Department of Environmental Protection
Bureau of Operation, Maintenance, and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

10. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this site.

ii. The restrictions provided herein may be enforceable solely by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11u and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11g

11. SEVERABILITY.

If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as though the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

12. SUCCESSORS AND ASSIGNS.

This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees and operators while each is an owner, lessee, or operator of the Property.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. This Deed Notice may be revised or terminated only upon filing of an instrument, executed by the Department, in the office of the [*Insert as appropriate the County Clerk/Register of Deeds and Mortgages*] of [*Insert the name of the County*] County, New Jersey, expressly modifying or terminating this Deed Notice.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

- i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property (for example, Hagstrom County Maps);
- ii. Exhibit A-2: Metes and Bounds Description - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property;
- iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; and the Property Map shall include diagrams of major surface topographical features such as buildings, roads, and parking lots.

14B. EXHIBIT B.

Exhibit B includes the following descriptions of the Restricted Areas:

- i. Exhibit B-1: Restricted Area Map - A separate map for each restricted area that includes:
 - (A) As-built diagrams of each engineering control, including caps, fences, slurry walls, ground water monitoring wells, and ground water pumping system;
 - (B) As-built diagrams of any buildings, roads, parking lots and other structures that function as engineering controls; and
 - (C) Designation of all soil and sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described in the following paragraph.
- ii. Exhibit B-2: Restricted Area Data Table - A separate table for each restricted area that includes:
 - (A) Sample location designation from Restricted Area map (Exhibit B-1);
 - (B) Sample elevation based upon mean sea level;
 - (C) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;
 - (D) The restricted and unrestricted use standards for each contaminant in the table; and
 - (E) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C.

Exhibit C includes narrative descriptions of the institutional controls [*Insert as appropriate:* and engineering controls] as follows:

- i. Exhibit C-1: Deed Notice as Institutional Control: Exhibit C-1 includes a narrative description of the restriction and obligations of this Deed Notice that are in addition to those describe above, as follows:

(A) General Description of this Deed Notice:

- (1) Description and estimated size of the Restricted Areas as described above;
- (2) Description of the restrictions on the Property by operation of this Deed Notice; and
- (3) The objective of the restrictions.

(B) Description of the monitoring necessary to determine whether:

- (1) Any disturbances of the soil in the Restricted Areas did not result in the unacceptable exposure to the soil contamination;
- (2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;
- (3) The current land use on the Property is consistent with the restrictions in this Deed Notice;
- (4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and
- (5) Any new standards, regulations, or laws apply to the site that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

- (1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;
- (2) Land use at the Property is consistent with the restrictions in this Deed Notice; and
- (3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

[Insert the following if engineering controls are part of the remedial action for the site:]

- i. Exhibit C-2: *[Insert the name of the first engineering control]*: Exhibit C-2 includes a narrative description of *[Insert the name of the first engineering control]* as follows:

(A) General Description of the engineering control:

- (1) Description of the engineering control;
- (2) The objective of the engineering control; and
- (3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:

- (1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;
- (2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;
- (3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;
- (4) This engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;
- (5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of this engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/ performance of this engineering control; and
- (6) Any new standards, regulations, or laws apply to the site that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

STATE OF [State where document is executed]_____SS.:_____
COUNTY OF [County where document is executed]

I certify that on_____, 20 , [Name of person executing document on behalf of Owner] personally came before me, and this person acknowledged under oath, to my satisfaction, that:

- (a) this person is the [secretary/assistant secretary] of [Owner], the corporation named in this document;
(b) this person is the attesting witness to the signing of this document by the proper corporate officer who is the [president/vice president] of the corporation;
(c) this document was signed and delivered by the corporation as its voluntary act and was duly authorized;
(d) this person knows the proper seal of the corporation which was affixed to this document; and
(e) this person signed this proof to attest to the truth of these facts.

[Signature]

[Print name and title of attesting witness]

Signed and sworn before me on_____, 20__

_____, Notary Public

[Print name and title]

[If Owner is a partnership]

STATE OF [State where document is executed] SS.:
COUNTY OF [County where document is executed]

I certify that on_____, 20__, [Name of person executing document on behalf of Owner] personally came before me, and this person acknowledged under oath, to my satisfaction, that this person:

- (a) is a general partner of [Owner], the partnership named in this document;
(b) signed, sealed and delivered this document as his or her act and deed in his capacity as a general partner of [owner]; and

(c) this document was signed and delivered by such partnership as its voluntary act, duly authorized.

[Signature]

_____, General Partner
[Print Name]

_____, Notary Public

[Print name and title]

ATTACHMENT B

Calculating Financial Assurance

The following excel document can provide the permittee with the necessary information to determine how much financial assurance will be needed based upon present worth. The document can be applied for engineering controls for soils as well as for groundwater.

Commercially available software systems that can be used to calculate financial assurance.

- Cost Pro
- RACER (Remedial Action Cost Engineering and Requirements)
- Other commercially available engineering cost projection software that can develop cost projections for the maintenance of an engineering control.

The LSRP can develop independently the amount of financial assurance required by providing all costs related to the monitoring and maintenance of the engineering control for its life-time. The LSRP will need to provide a list and how the costs were derived as part of the cost estimated for financial assurance.

Instructions to use the Financial Assurance Calculator (optional)

The permittee should only fill in the yellow boxes (quantity and unit costs) that apply to their engineering control. The work sheet will include capital costs associated with the design and construction of the engineering control as well as annual operation and maintenance costs for the duration of the engineering control (30-years). The permittee working with their LSRP can also develop costs for engineering controls that will be in place for a shorter time merely by modifying the life span of the engineering control.

If some of the categories identified do not apply to the design and construction of an engineering control, the permittee should enter 0 for quantity and 0 for unit costs in the yellow boxes. To access the following work sheet, the applicant should double click on the Excel work sheet.

Attachment B (continued)

Calculating Financial Assurance

		Quantity	Unit	Unit Cost	Item Cost
I.	Institutional Controls		lump		\$ -
II.	Site Preparation				
	Mobilization/Setup		lump		\$ -
	Erosion and Sediment Controls		lump		\$ -
	Subtotal				\$ -
III	Demolition				
	Demolition and Crushing/Grading Debris		lump		\$ -
	Relocating and Grading of Sediments/Soil		cy		\$ -
	Subtotal				\$ -
IV	Engineer Cover System				
	Sub-base layer (6" General Fill)		cy		\$ -
	Geosynthetic Clay Liner		sf		\$ -
	60 mil HDPE Liner		sf		\$ -
	Geonet Drainage Layer		sf		\$ -
	Protective Geotextile		sf		\$ -
	18" General Clean Fill		cy		\$ -
	6" Topsoil		cy		\$ -
	Mulching/Seeding		1,000 sf		\$ -
	Subtotal				\$ -
V.	Construction				
	Direct Construction Total (DCT)				\$ -
	Indirect Construction (20% of DCT)				\$ -
	Construction Total				\$ -
VI.	Predesign Investigation (Total)				
	Supplemental Ground Water Investigation				
	Building Survey				
	Soil/Sediment Characterization				

ATTACHMENT C

Guidance Documents

1. Guidance for the Submission and Use of Data in GIS compatible formats

The "Guidance for the Submission and Use of Data In GIS Compatible Formats Pursuant to "Technical Requirements for Site Remediation" (TECHGIS2)" is available on the Site Remediation Web page at:

<http://www.nj.gov/dep/srp/guidance/techgis/>

2. Field Sampling Procedures Manual

<http://www.nj.gov/dep/srp/guidance/fspm/>

The August 2005 edition of NJDEP's *Field Sampling Procedures Manual* replaces the 1992 edition as the most current technical guidance associated with procedures and equipment utilized for the collection of environmental samples. It also represents the first edition published on the World Wide Web, which brings the benefit of improved access to information for the public and regulated community.

The primary intent of the manual has always been to promote accuracy and consistency when environmental samples are collected and prepared for chemical analysis by public and private entities. The validity of analytical data is directly dependent upon the integrity of the field procedures employed to obtain a sample. The methods and procedures described herein are intended for use by those State of New Jersey regulatory agencies that require chemical, physical and certain biological analysis of samples for remedial evaluation and monitoring purposes. Since these methods are applicable to such a wide variety of regulatory programs throughout the Department, any site and/or regulatory specific questions/ issues regarding a particular sampling technique must be discussed with the applicable program personnel prior to going out into the field.

3. Field Analysis Manual

<http://www.nj.gov/dep/srp/guidance/fam/>

This manual will provide technical guidance on how to comply with the department's Technical Requirements for Site Remediation (N.J.A.C. 7:26E) with regard to field analysis and will promote greater consistency and enhance the department's ability to evaluate sample results. The procedures and quality assurance/quality control requirements have been placed into one document so that it is clear to those individuals performing field analysis what is expected of them. The manual includes method summaries, advantages and disadvantages, detectable compounds and quality assurance/quality control requirements. Each project contains variables that must be factored into a final field analysis plan, but use of this manual will provide a level of confidence when presenting the field analysis portion of a project plan for the department's review.

4. Remediation Standards

<http://www.nj.gov/dep/srp/guidance/rs/>

On June 2, 2008, the Department adopted new Remediation Standards rules at N.J.A.C. 7:26D. The soil remediation standards contained in those rules are effective on June 2, 2008. The ground water and surface water remediation were previously effective at N.J.A.C. 7:26E-1.13. The Remediation Standards rules and Basis and Background documents are available at <http://www.nj.gov/dep/srp/regs/rs/>.

5. Guidance Document for the Remediation of Contaminated Soils

<http://www.nj.gov/dep/srp/regs/soilguide/>

Although this *Guidance Document for the Remediation of Contaminated Soils* provides assistance in choosing an appropriate action at a specific site, the reader is reminded that the Technical Requirements N.J.A.C.7:26E is the complete and final technical authority for the remediation process. It includes an extensive, although not comprehensive, list of remedial actions that have proven track records or have been stated as being effective by USEPA for remediating soil impacted by particular contaminants. Non-inclusion of a specific type of remedial action in this guidance document does not preclude its use or indicate that it will not be effective for a particular contaminant or situation. It will, however, require justification on a technical basis. Natural attenuation will be considered on a case-by-case basis.

This guidance document describes four types of remedial actions: excavation, treatment, reuse, and capping. Each type is described in its own section but is not intended to provide extensive information on sampling or investigative procedures at a site. Refer to the Technical Requirements (see next section) and the NJDEP *Field Sampling Procedures Manual* <http://www.nj.gov/dep/srp/guidance/fspm/>.