

**MEMORANDUM OF AGREEMENT BETWEEN
THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
AND THE NEW JERSEY PINELANDS COMMISSION**

I. Purpose

This Memorandum of Agreement (“MOA”) between the New Jersey Department of Environmental Protection (hereinafter “DEP”), Southern Ocean Landfill, Inc. and United Environmental Services, Inc. (hereinafter UES) and the New Jersey Pinelands Commission (hereinafter “Commission”) is intended to establish the procedures for the use of mixed broken glass and construction and demolition (“C & D”) screenings as part of an innovative use of materials to implement the landfill closure project for the lined portions of the Southern Ocean Landfill in Ocean Township, Ocean County, New Jersey. This agreement is also intended to ensure that the leachate generated by the lined portions of the landfill is managed in a way that is protective of human health and the environment during the time that the closure activities are occurring and after closure.

This agreement is also intended to ensure that a remedial investigation is done to determine what actions are necessary to close the unlined section of the landfill and to remediate any identified ground or surface water contamination resulting from the landfill, either on or off the site. This MOA is the first step in achieving the final closure of the entire landfill in a manner consistent with the requirements of the Pinelands Comprehensive Management Plan and the remedial action plan required by this MOA.

In accordance with N.J.A.C. 7:50-4.52(c)(2), the Commission “may enter into intergovernmental memoranda of agreement with any agency of the Federal, State or local government which authorizes such agency to carry out specified development activities that may not be fully consistent with the provisions of N.J.A.C. 7:50-5 and 6, provided such agency demonstrates and the Commission finds that variation from the standards of this Plan is accompanied by measures that will, at a minimum, afford an equivalent level of protection of the resources of the Pinelands than would be provided through strict application of the standards of this Plan. Any intergovernmental memorandum of agreement shall be consistent with the standards and provisions of N.J.A.C. 7:50-6.80”.

N.J.A.C. 7:50-6.80(c) provides that the Pinelands Commission may enter intergovernmental agreements with other governmental agencies that authorize exemptions to the limitations prescribed in N.J.A.C. 7:50-6.75(h) which limits the materials that may be used for landfill closure.

II. Mutual Agreements

A. The DEP, the Commission, UES and Southern Ocean Landfill agree that:

1. This agreement shall apply to the capping pursuant to closure of the

Southern Ocean Landfill which is located on Block 6, Lot 4.01 and Block 7, Lot 1 in Ocean Township, Ocean County, New Jersey.

2. The Southern Ocean Landfill ceased accepting waste in 1988 by order of DEP, but has not been closed in a manner consistent with the requirements of the Pinelands Comprehensive Management Plan (N.J.A.C. 7:50-6.71 et seq) or the regulations administered by the DEP.
3. The Pinelands Comprehensive Management Plan (CMP) permits closure techniques involving the beneficial use of materials including source separated, non putrescible glass, waste concrete, brick or block and wood that has been processed through a chipper provided that the water quality standards of the CMP are met (N.J.A.C. 7:50-6.81 through 6.87) and that the use of such techniques is part of a total financial commitment that ensures that the final capping is completed.
4. United Environmental Services, Inc. (UES) has put forward an innovative proposal under which private resources will be used for closure activities. Specifically, UES has proposed a Phase I plan to address closure of the lined portions of the landfill. UES proposes to use mixed broken glass and screenings produced in the recycling of construction and demolition(C & D) debris as grading and cover material for the lined portions of the landfill; to use high density polyethylene as an impermeable cap on the lined portions of the landfill and possibly use Kaofin as part of the cap system. UES proposes to use mixed broken glass as needed to achieve final grades in a portion of the unlined landfill beyond the lined landfill consistent with the grading plan in item # 10 below and the financial plan as approved by DEP. UES also proposes to provide a clay soil cap with a maximum permeability of 1×10^{-6} cm/sec. on the portion of the unlined landfill area where the mixed broken glass is used to reach final grade.
5. Through its review of the financial plan submitted pursuant to N.J.A.C. 7:26-2A.9(f), the DEP will ensure that the financial plan demonstrates that adequate funds will be generated to complete the closure activities described in item #4, above.
6. The use of C & D screenings and Kaofin in the closure of the landfill is not specifically permitted by N.J.A.C. 7:50-6.75(h).
7. The mixed broken glass, C & D screenings and possibly Kaofin will be used in conjunction with the closure of the landfill which is mandated by N.J.A.C. 7:50-6.75(c).
8. Except for mixed broken glass, Kaofin and C & D screenings, no other beneficial use materials shall be accepted at the landfill. No hazardous

waste shall be accepted at the landfill.

9. The DEP shall ensure that all revenues generated from the receipt of mixed broken glass, C & D screenings and Kaofin will be deposited directly into an escrow account under the control of DEP. These funds will not be an asset of UES or the landfill owner and operator, Southern Ocean Landfill, Inc. These funds would be used to assure that the closure program is properly completed. No funds may be withdrawn from the escrow account except upon approval of DEP and in a manner consistent with this Agreement.
10. If UES fails to complete the landfill closure, the escrow account funds shall only be used by DEP for the proper closure of the landfill.
11. UES shall be responsible for leachate management for the lined portions of the landfill from the time that mixed broken glass, C & D screenings or Kaofin is accepted at the landfill until UES certifies to the DEP that the closure activities are completed in accordance with the DEP's Phase 1A Capping Plan approval. Southern Ocean Landfill, Inc. shall be responsible for the management of leachate after this certification is received by the DEP.
12. UES shall complete an application for the closure and grading activities with the Pinelands Commission by submitting the information listed in IIA13 below. When the Commission has issued a Certificate of Filing that indicates that the proposal is consistent with the Pinelands Comprehensive Management Plan and this Agreement, the DEP may issue an approval for the proposal if it is consistent with N.J.A.C. 7:26-1 et seq.
13. The volumes of mixed broken glass, C & D screenings and Kaofin shall not exceed the amounts necessary for grading and closure of the lined landfill and the volume of mixed broken glass shall not exceed the amount necessary for the grading of the unlined landfill area consistent with Drawing Sheet 1 of 3 titled "Phase 1A Closure of Lined Area Proposed Grading Plan" dated 6/2/99, included in the document titled "Clarification Items the June 28, 1999 Submission, Presented to UES on July 13, 1999", dated July 16, 1999 and prepared by UES, and as modified by final plans approved by the DEP after a determination that the plans are consistent with the Pinelands Comprehensive Management Plan and this Agreement.
14. The Pinelands Commission agrees that the information necessary to complete the application for the closure and grading activities is as follows:
 - a. For the portion of the site in which the activities are proposed,

provide a plan prepared by an appropriately licensed professional showing the location of all existing and proposed development including all existing and proposed facilities, buildings, structures, parking areas, roads, limits of disturbance and clearing and driveways. Also include a grading plan or plans showing existing and proposed contours.

- b. The boundaries of the wetlands that are on or within 300 feet of the project area are clearly marked in the field.
 - c. A plan depicting all surface water bodies, wetland vegetation and wetland soil types located on or within 300 feet of the project area. The line delineating the limits of disturbance associated with the project must be shown on the plans. This may be included on the plan diagram required by section 13a above.
 - d. A completed Pinelands Comprehensive Management Plan Application form.
 - e. Information demonstrating that it is feasible for the capping plan to meet the applicable stormwater management standards of the Pinelands Comprehensive Management Plan.
15. Before DEP approves any modification of its Capping Plan Approval related to the final plans, UES shall obtain an amended Certificate of Filing for the final plans from the Pinelands Commission. In order to complete an application for the Amended Certificate of Filing, UES shall submit to the Pinelands Commission a storm water management plan prepared by an appropriately licensed professional along with stormwater drainage calculations. The calculations must be provided utilizing the Soil Conservation Service Technical Release No.55, "Urban Hydrology for Small Watersheds." The calculations and management plan should demonstrate compliance with the following standards:
- a. The total volume of runoff generated from any net increase in impervious surfaces by a 10 year storm of a 24 hour duration shall be retained and infiltrated on-site.
 - b. The peak rates of runoff generated by the parcel for a 2 year, 10 year and 100 year storm of a 24 hour duration shall not increase as a result of development of the site.
 - c. The bottom of all recharge facilities must be located an adequate distance (2 feet minimum) above the seasonal high water table. The results of a soil boring taken within each recharge area must be

submitted with a numerical estimation of the seasonal high water table.

- d. A maintenance and inspection program for the stormwater management system shall be provided. Identify the party that will be responsible for the maintenance and inspections and include a schedule for these activities.
- B. DEP shall over see the closure and grading activities to ensure that UES conducts the activities according to the requirements and conditions of DEP's approval and the terms of this Agreement including, but not limited to, the following:
1. The glass and C & D screenings used as part of the closure activities shall be limited to mixed broken glass and C & D screenings that meet the following criteria:
 - a. Mixed broken glass from specified recycling operations. The material may contain up to 1% residuals (caps, labels, etc.)
 - b. C & D screenings shall be inert material, free of putrescible waste and passing the 2-inch screen.
 - c. C & D screenings shall only be used over the lined portion of the landfill.
 - d. Except for asphalt related constituents in Table 2, the average quality of the C & D screenings used as fill material in the lined portion of the landfill shall meet the DEP's Non-Residential Direct Contact Soil Cleanup Criteria.
 - e. For each source of C & D screenings, representative composite samples will be collected for every 2,000 cubic yards of material (i.e., one aliquot for every 500 cubic yards) and will be tested for the full suite of Toxicity Characteristic Leaching Procedure (TCLP) parameters and for Priority Pollutants + 40. In addition, one grab sample for every 500 cubic yards will be analyzed for a TCLP volatile organic compounds (VOC) and Priority Pollutants VOCs. Additional sampling may be conducted at any time and shall be conducted if the C & D screening material is suspected by UES to contain contaminants of concern.
 - f. Any shipment of C & D screenings that does not comply with the DEP's Non-Residential Direct Contact Soil Cleanup Criteria as modified by the minimum acceptance criteria contained in Tables 1

& 2, attached hereto, shall be rejected by UES.

2. All beneficial use materials accepted at the landfill shall be produced at materials handling centers that have all required Federal, State and local permits and approvals.
3. Prior to accepting material from any particular materials handling facility, UES shall present to the DEP and the Commission information identifying the name, address and permit number for each such materials handling facility. Upon request of DEP or the Commission, UES shall provide written documentation that the recycling facility is duly permitted.
4. All C & D screenings accepted at the Southern Ocean Landfill shall be tested in accordance with the protocol, and shall be accompanied by written certification from the materials handling facility that the C & D screenings supplied comply with the criteria set forth in this Agreement and in Tables 1 & 2. UES shall require that each materials handling facility provide written documentation to establish that the material being supplied meets the criteria established by this Agreement, the DEP permit and the Protocol, including true and complete copies of all testing and analytical results.
5. UES shall reject any shipment of materials that do not meet the criteria established in this Agreement and the attached Tables 1 & 2 or that is unsafe or otherwise unsuitable for use at the landfill. If any rejected material has already been delivered to the landfill, UES shall be responsible for removing such material from the landfill and disposing of it outside the Pinelands Area, in compliance with all state, federal and local requirements.
6. UES shall allow Ocean Township access to the site to conduct random representative sampling of the loads of any vehicles carrying beneficial use materials for testing in accordance with the testing procedures of this agreement. UES shall also provide Ocean Township with copies of all plans and reports regarding the landfill at the same time that they are submitted to the DEP and the Pinelands Commission.
7. The activities associated with closure and capping of the landfill shall not cause further degradation of the quality of groundwater on the site.
8. Groundwater monitoring shall be performed in accordance with the DEP's requirements. One round of groundwater sampling shall be completed within three months of the execution of this agreement. The results of all groundwater monitoring shall be submitted to the Pinelands Commission and the DEP.

9. Upon completion of the closure activities, the surface layer of the completed capped portions of the landfill shall comply with DEP's Residential Direct Contact Soil Cleanup Criteria.
10. The remedial investigation of the entire landfill property shall be completed and a remedial investigation report shall be produced within one year of the issuance of DEP's approval of the closure plan. The remedial investigation shall characterize the groundwater system at the site, investigate the presence and extent of groundwater contamination that may have been caused by landfilling activities and investigate the potential for off-site migration of groundwater contamination. If the remedial investigation produces information that indicates that additional unanticipated testing, sampling or investigation is needed to adequately characterize any contamination or any potential migration of contamination, an interim report providing the results of the investigation and including a schedule for the completion of all additional work shall be produced within one year of the issuance of the DEP's approval of the closure plan. The interim report, schedule and additional work plan shall be submitted to the Pinelands Commission and the DEP for their concurrence.
11. The remedial investigation results shall be used to develop a Remedial Action Plan that addresses the entire landfill property, any groundwater contamination on the site and any off-site groundwater contamination that is related to the landfill. The remedial action plan shall meet all of the DEP's technical requirements and criteria for site remediation and shall be consistent with the provisions of the Pinelands Comprehensive Management Plan.
12. UES shall maintain insurance policies which include at least the following:
 - a. UES shall maintain continuously in effect a policy of comprehensive general liability insurance, including contractual liability, covering the obligations assumed by UES pursuant to this Agreement.
 - b. UES shall further maintain a Contractors Pollution Liability Policy in the basic form and with coverage at least as broad as the Contractors Pollution Legal Liability Policy issued by Lumbermens Mutual Casualty Company as Policy No. 4LS001028-01; however the policy shall provide coverage for an additional three years beyond the Policy Period and

shall cover all claims that result from actions or inactions of the insured during the policy period. No change of coverage shall be made without the approval of the Commission, SOLF and the DEP.

- c. Those provisions mandated by any permit or approval issued by DEP.
- C. Those portions of the property that have not been used for waste disposal or improvements associated with the management of the landfill shall be permanently conserved through the recording of restriction on the deed for the property. The deed restriction shall limit the use of the subject portions of the property to open space and low intensity recreational uses. This deed restriction shall be filed prior to the acceptance of glass, C & D screenings or Kaofin at the landfill site. The grading, capping and closure of the lined landfill pursuant to this Agreement along with the permanent conservation of these lands will ensure that there will be at least an equivalent level of protection afforded to the resources of the Pinelands as would be provided through strict application of the standards of the Pinelands Comprehensive Management Plan. The level of protection afforded to the resources of the Pinelands as a result of this MOA will be taken into consideration in the evaluation of the level of protection of the resources afforded by any future Memorandum of Agreement regarding waste management activities associated with the capping and closure of the unlined portions of the landfill.

III. Effective Date and Duration

- A. This Memorandum of Agreement shall take effect upon the approval by authorized representatives of all parties and subsequent to the Governor's review for a period of ten (10) days.
- B. This agreement shall remain in effect until otherwise amended or terminated by either governmental party upon sixty days written notice.
- C. In case of conflict, the conditions of the DEP's Phase 1A Capping Plan Approval for cap construction at Southern Ocean Landfill shall supersede the conditions of this agreement (to be issued subsequent to the execution of this agreement and consistent with IIA11 above).

IV. Signatures:

William F. Harrison

William F. Harrison, Esq.
Acting Executive Director
Pinelands Commission

January 18, 2000

Date

Gary Sondermeyer

Gary Sondermeyer
Assistant Commissioner
Department of Environmental Protection

January 21, 2000

Date

A. Robert Mirans

United Environmental Services, Inc.

February 4, 2000

Date

Bob McKeown

Southern Ocean Landfill, Inc.

FEB. 8, 2000

Date

Approved as to Form:

Valerie B. Haynes

Valerie Haynes
Deputy Attorney General

Feb. 15, 2000

Date

TABLE 1

Contaminant	Acceptance Criteria (mg/kg)
Antimony	680
Arsenic	40
Beryllium	4
Cadmium	200
Copper	1200
Lead	1200
Thallium	4
Zinc	3000
Indeno(1,2,3-cd)pyrene	10

TABLE 2

Contaminant	Acceptance Criteria (mg/kg)
Benzo(a)pyrene	9.9
Benzo(k)fluoranthene	60
3,4 benzofluoranthene	50
Benzo(a)anthracene	60
Dibenz(a,h)anthracene	9.9
Chrysene	500
Sum of above PAHs	200