

April 3, 2000

**MEMORANDUM OF AGREEMENT BETWEEN THE NEW JERSEY PINELANDS
COMMISSION AND THE TOWNSHIP OF EVESHAM**

I. Purpose

The purpose of this Memorandum of Agreement (MOA) is to authorize the limited use of a specific sludge derived product, known as AllGro, at the site of a former Evesham Township (Township) landfill. The Township proposes to use AllGro as a soil amendment in the capping of the concerned landfill.

II. Background

The Township is proposing closure of a former landfill located on block 48, lots 19.01 and 33.02 and block 50, lots 18, 19, 20.01 and 21 in Evesham Township. The parcel contains 65.5 acres. The landfill comprises approximately 37 acres of the parcel.

On August 4, 1989, the Pinelands Commission (Commission) approved a development application that included a closure/post closure plan for the concerned landfill. The approved plan proposed the use of a composted sludge product as a soil amendment. At the time of Commission approval, the Pinelands Comprehensive Management Plan (CMP) allowed the use of a sludge derived product for this purpose.

The CMP (N.J.A.C. 7:50-6.79) was amended on May 20, 1996 to prohibit, with limited exceptions, the use of sludge derived products in the Pinelands Area. The use of a sludge derived product as part of a landfill closure plan is not one of the exceptions. Exceptions include the one time application of not more than 100 cubic yards of sludge derived product to any parcel of land and the use of sludge derived product for agricultural operations, both provided certain conditions are met.

The CMP (N.J.A.C. 7:50-6.80(c)) specifically provides that the Commission may enter into intergovernmental MOAs with other governmental agencies which authorize exemptions to certain limitations contained in N.J.A.C. 7:50-6.79. As applicable to this proposed MOA, these exemptions are authorized if the Commission determines that the sludge derived product shall only be used for land application in support of otherwise permitted land uses, reasonable safeguards are established to limit the type and total amount of material to be land applied or used, a monitoring program is implemented to determine the effects of the activities on the resources of the Pinelands and the duration of the MOA is limited to that necessary to complete the monitoring program, except if extended to permit subsequent rulemaking.

A revised closure/post closure landfill development application for the concerned landfill was submitted to the Pinelands Commission on May 10, 1999. The application proposed the use of a specific sludge derived product, known as AllGro, as a soil amendment for use in capping the landfill. The landfill is proposed to be capped in four approximate 10 acre phases. The Commission staff notified the Township that, in the absence of an MOA, the adopted amendment to the CMP precluded the use of the sludge derived product for the capping of the landfill.

AllGro is produced at the Burlington County Compost Facility located in Florence Township, Burlington County. The New Jersey Department of Environmental Protection (NJDEP) sets forth the standards for the use and disposal of sludge derived products in N.J.A.C. 7:14A-20-1 et. seq. (Standards for the Use or Disposal of Residual). Processing operations that generate sludge derived products require a New Jersey Pollution Elimination System (NJPDES) permit issued by the NJDEP. The NJPDES permit requires sludge derived products to be routinely tested and specifies the conditions under which these products may be applied to lands in New Jersey. The Burlington County Compost Facility is subject to NJPDES Permit No. NJ0082741.

This MOA will allow the use of AllGro as a soil amendment for the capping of the concerned landfill. This MOA requires a three year water quality monitoring program.

III. Commission Agreements;

1. The Commission shall allow the use of AllGro at the site of the former landfill in accordance with the provisions of this MOA.
2. Any Commission approval of the revised closure/post closure landfill development application shall conditionally approve the use of AllGro at the Township proposed maximum ratio of 4 parts existing soils on the parcel to 1 part AllGro. AllGro shall not be used in any of the four phases of the capping until the Township submits documentation to the Commission demonstrating the product meets the water quality requirements specified in Attachment 1, paragraph number 1.
3. Prior to the 5 year expiration date of this MOA, the Commission will amend the CMP, modify the MOA or terminate the MOA, as appropriate, based on the results and conclusions of the water quality monitoring. Specifically, if the water quality monitoring program indicates that AllGro is meeting the CMP water quality standards, the Commission staff will propose an amendment to the CMP to allow for comparable use of AllGro as authorized in this MOA in the Pinelands Area. If the water quality monitoring programs indicate that AllGro is not meeting CMP water quality standards, the Commission staff will propose to modify or terminate this MOA.

IV. Township Agreements;

1. This MOA applies exclusively to the use of the sludge derived product known as AllGro to amend the existing soil on the parcel for use in capping the concerned landfill.
2. No sludge derived product, including AllGro, is authorized to be applied for any other purpose or on any other parcel in the Pinelands Area, based upon the provisions of this MOA.
3. Any other proposed use of AllGro not expressly authorized in this MOA shall only occur if it is otherwise allowed by the CMP.
4. No use of AllGro shall occur in association with the concerned landfill unless a revised landfill closure/post closure plan, including a water quality monitoring program for the use of AllGro in accordance with Attachment 1 of this MOA, receives Commission approval
5. AllGro shall not be used on the parcel in excess of the Township's proposed ratio of 4 parts existing soils on the parcel to 1 part AllGro. Prior to use of AllGro at this specified ratio, the Township shall demonstrate that the proposed ratio of existing soil on the parcel to AllGro meets the water quality requirements specified in Attachment 1, paragraph number 1. If the proposed ratio does not meet this specified water quality requirement, the Township shall modify the proposed ratio of AllGro or otherwise modify the use of AllGro to meet the requirement of Attachment 1, paragraph 1. If the use of AllGro cannot be modified to meet this requirement, the product shall not be used.
6. Once the All AllGro amended soil is applied to any of the four approximate 10 acre phases of the landfill closure, no additional AllGro amended soil shall be applied on that phase of the landfill for the duration of this MOA.
7. The location and design of the four stormwater runoff collection areas for water quality monitoring specified in Attachment 1 and the proposed maximum ratio of 4 parts existing soil on the parcel to 1 part AllGro shall be depicted on any revised closure/postclosure landfill plan subject of any Commission approval.
8. The Township will be responsible for all costs associated with the water quality monitoring program set forth in Attachment 1.
9. The results of the water quality testing will be submitted to the Commission within 45 days of required testing.

10. A comprehensive report of the water quality monitoring program, including conclusions and recommendations regarding any amendment to the CMP to allow for the use of AllGro, shall be submitted to the Commission with 120 days of the completion of the 3 year monitoring program.
11. AllGro shall not be applied on wetlands.
12. No use of AllGro shall exceed the nitrogen requirement of the vegetation as specified in 'Rutgers Production Recommendations for New Jersey Field Crops'.
13. All use of AllGro shall be consistent with all requirements and conditions of the NJPDES Permit No. NJ0082741 for the Burlington County Compost Facility, except if the CMP or this MOA specify more restrictive requirements or conditions.
14. AllGro shall only be applied if it meets the USEPA, 40 CFR Part 503 regulation for Exceptional Quality pollutant, pathogen reduction and the Class A vector attraction reduction options all in accordance with the NJPDES Permit No. NJ0082741.
15. The RMS-01 form utilized by the Burlington County Compost Facility to report nutrient and metal concentrations in the final AllGro product shall be submitted to the Commission by the Township at the same times it is submitted to NJDEP for the duration of the monitoring program.

V. Effective Date and Duration

1. This MOA shall take effect upon approval by the authorized representatives of both parties and subsequent to the Governor's review period of ten (10) days.
2. This MOA shall remain in effect for a period of 5 years from the date of the last signatory to the MOA.
3. This MOA may be terminated by Evesham Township prior to use of AllGro on the landfill or by the Commission upon sixty (60) days written notice.

VI. Signatures

William F. Harrison

William F. Harrison, Acting Executive Director
New Jersey Pinelands Commission

4/18/00

Date

Augustus F. Tamburro

Augustus F. Tamburro, Mayor
Township of Evesham

5/10/2000

Date

Approved as to form by:

Valerie B. Hayes

Deputy Attorney General
State of New Jersey

6/7/00

Date

MOA ATTACHMENT 1

WATER QUALITY MONITORING PROGRAM

The water quality monitoring program required by the attached MOA shall be undertaken in accordance with the following:

1. A 50' by 70' landfill clay cap test section will be constructed. The test section will be equally divided in two by a clay berm. A 12" sand drainage layer will be constructed over both sections of the test clay cap. A leachate collection system will be installed in the sand drainage layer in both sections of the divided clay test cap. One section of the test cap will be overlaid with 6" of existing soil from the parcel. The other section of the test cap will be overlaid with 6" of existing soil on the parcel mixed with AllGro at a maximum ratio of 4 parts soil to 1 part AllGro. The two sections will be saturated to simulate an appropriate design year rain storm event. The specifics of this test procedure shall be provided to and approved by the Commission staff in writing prior to any such test.

Water quality samples from both test sections will be analyzed for the constituents specified in paragraph 9 of this Attachment. The water quality sample results from the soil amended with AllGro shall be compared with water quality sample results from the existing soil on the parcel. If that comparison detects other than a minor elevation in any constituent listed in 9.B. below in the AllGro amended soil water quality sample, no AllGro shall be applied to the landfill until it is demonstrated that the use of AllGro will not result in more than a minor elevation in any of the constituents listed in 9.B below.

2. The water quality monitoring program shall include four small stormwater runoff collection areas distributed around the perimeter of the landfill cap. One such collection area shall be provided for each of the four phases of the landfill proposed for capping. The location of the collection areas shall be depicted on the plan submitted as part of the revised closure/postclosure landfill development application to the Commission. These stormwater runoff collection areas shall be suitable for the grab sampling of stormwater runoff from the landfill cap. The water quality monitoring program shall commence on the first monitoring date that occurs after the date of the use of AllGro on the concerned quarter of the landfill and continue for a period of 3 years.
3. All samples to be tested for the constituents listed in paragraph 9 of this Attachment will be taken from each runoff collection area 4 times per year within 24 hours of a significant storm event. The four sampling dates shall occur after the first significant storm event occurring after January 1, April 1, July 1 and October 1 of each year.
4. A New Jersey certified laboratory will perform all required sampling and analysis of the specified constituents. The laboratory must demonstrate that it meets or exceeds all necessary qualifications as outlined in N.J.A.C. 7:18, Regulations Governing the Certification of

Laboratories and Environmental Measurements" to perform the necessary sampling, preservation of samples and analyses. Sampling shall occur as specified by the NJDEP Field Sampling Procedures Manual (4th Edition, May, 1992). All methodology, sample containers, preservatives, and holding times shall be observed as specified by USEPA or NJDEP.

5. The amount of nitrogen from the AllGro applied on the parcel shall be limited so that the average concentration of total nitrogen in the water quality samples at the end of the three year monitoring period does not exceed 2 ppm total nitrogen.
6. The Pinelands Commission shall have access to all water quality sampling areas for necessary inspections and sampling at any time during normal business hours.
7. Once AllGro has been applied to any of the four phases of the landfill, if more than a minor elevation in any constituent in 9.B. below is detected in the water quality samples from the AllGro amended soil compared to the background concentrations obtained from the existing soil water quality sample and the application of the soil amended with AllGro to the concerned landfill has not been completed, the Township will modify or discontinue the use of AllGro so as to return the constituent to background concentrations.
8. Monitoring shall be conducted for 3 years period for each of the four phases of the landfill closure plan. Monitoring shall begin for each phase of the landfill at the completion of the application of the AllGro amended soil to that phase.
9. Analytical Requirements:

Constituents

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| A. | pH
Nitrogen, Total (N)
Nitrate, Nitrogen (NO ₃)
Ammonium, Nitrogen (NH ₄)
Phosphorus, Total (P)
Potassium, Total (K) | B. | Fecal Coliform (Enterococcus) or
Salmonella, sp. bacteria
Arsenic (As)
Cadmium (Cd)
Chromium (Cr)
Copper (Cu)
Lead (Pb)
Mercury (Hg)
Nickel (Ni) |
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