

Application No. OH0139254

Issue Date: July 27, 2006

Effective Date: September 1, 2006

Expiration Date: August 31, 2011

Ohio Environmental Protection Agency
Authorization to Discharge Under the
National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

De Maximis, Inc.

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Ashtabula River Landfill wastewater treatment works located at 600 State Road, Ashtabula Township, Ohio, Ashtabula County and discharging to the Ashtabula River in accordance with the conditions specified in Parts I, II, III, IV, V and VI of this permit.

I have determined that a lowering of water quality in the Ashtabula River is necessary. In accordance with OAC 3745-1-05, this decision was reached only after examining a series of technical alternatives, reviewing social and economic issues related to the degradation, and considering all public and appropriate intergovernmental comments.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

Joseph P. Koncelik
Director

Total Pages: 35

Part I, A. - INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting for 6 months, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 3IN00350001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Interim

| Effluent Characteristic Parameter | Discharge Limitations | | | | | | Monitoring Requirements | | | |
|--|-------------------------------|--------|-----------------|-------|--------|---------------------|-------------------------|-------------------|----------------|-----|
| | Concentration Specified Units | | Loading* kg/day | | | Measuring Frequency | Sampling Type | Monitoring Months | | |
| Maximum | Minimum | Weekly | Monthly | Daily | Weekly | | | | Monthly | |
| 00335 - Chemical Oxygen Demand (Low Level) - mg/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 00400 - pH - S.U. | 9.0 | 6.5 | - | - | - | - | - | 1/Day | Multiple Grab | All |
| 00530 - Total Suspended Solids - mg/l | 20 | - | - | - | 3198 | - | - | 1/Day | 24hr Composite | All |
| 00978 - Arsenic, Total Recoverable - ug/l | 502 | - | - | - | 12.4 | - | - | 1/Week | 24hr Composite | All |
| 00981 - Selenium, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 00985 - Vanadium, Total Recoverable In Water (as V) - ug/l | 221 | - | - | - | 5.4 | - | - | 1/Week | 24hr Composite | All |
| 01009 - Barium, Total Recoverable - ug/l | 2943 | - | - | - | 72.4 | - | - | 1/Week | 24hr Composite | All |
| 01030 - Chromium, Dissolved (Cr) - ug/l | 16 | - | - | - | 0.4 | - | - | 1/Week | Grab | All |
| 01074 - Nickel, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01094 - Zinc, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01113 - Cadmium, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01114 - Lead, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01118 - Chromium, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01119 - Copper, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 39516 - PCBS - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 50050 - Flow Rate - MGD | - | - | - | - | - | - | - | Continuous | 24hr Total | All |
| 50092 - Mercury, Total (Low Level) - ng/l | - | - | - | - | - | - | - | 1/Week | Grab | All |
| 70300 - Residue, Total Filterable - mg/l | - | - | - | - | - | - | - | 1/Day | 24hr Composite | All |

Notes for Station Number 3IN00350001:

* Effluent loadings based on an average design flow rate of 6.5 MGD.

- Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, report "AL" in the first column of the first day of the month on the 4500 Form (Monthly Operating Report). A signature is still required.

- Polychlorinated Biphenyls (PCBs) - See Part II, Item F for Quantification Level.

- See Part II, Item G for additional monitoring requirements.

- See Parts IV, V, and VI for additional Stormwater Requirements.

- Upon review of the analytical data generated during the initial start-up period, permittee may request a reduction or elimination of specific monitoring and/or reporting requirements at this station.

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning 7 months from the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 3IN00350001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

| Effluent Characteristic Parameter | Discharge Limitations | | | | | | | Monitoring Requirements | | |
|--|-------------------------------|---------|-----------------|---------|-------|--------|-----------|-------------------------|----------------|-------------------|
| | Concentration Specified Units | | Loading* kg/day | | | | | Measuring Frequency | Sampling Type | Monitoring Months |
| | Maximum | Minimum | Weekly | Monthly | Daily | Weekly | Monthly | | | |
| 00335 - Chemical Oxygen Demand (Low Level) - mg/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 00400 - pH - S.U. | 9.0 | 6.5 | - | - | - | - | - | 1/Day | Multiple Grab | All |
| 00530 - Total Suspended Solids - mg/l | 20 | - | - | 10 | 3198 | - | 1599 | 1/Day | 24hr Composite | All |
| 00978 - Arsenic, Total Recoverable - ug/l | 502 | - | - | 168 | 12.4 | - | 4.1 | 1/Week | 24hr Composite | All |
| 00981 - Selenium, Total Recoverable - ug/l | - | - | - | 5.6 | - | - | 0.14 | 1/Week | 24hr Composite | All |
| 00985 - Vanadium, Total Recoverable In Water (as V) - ug/l | 221 | - | - | 49 | 5.4 | - | 1.2 | 1/Week | 24hr Composite | All |
| 01009 - Barium, Total Recoverable - ug/l | 2943 | - | - | 242 | 72.4 | - | 6.0 | 1/Week | 24hr Composite | All |
| 01030 - Chromium, Dissolved (Cr) - ug/l | 16 | - | - | 11 | 0.4 | - | 0.3 | 1/Week | Grab | All |
| 01074 - Nickel, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01094 - Zinc, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01113 - Cadmium, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01114 - Lead, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01118 - Chromium, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 01119 - Copper, Total Recoverable - ug/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 39516 - PCBS - ug/l | - | - | - | 0.0001 | - | - | 0.0000025 | 1/Week | 24hr Composite | All |
| 50050 - Flow Rate - MGD | - | - | - | - | - | - | - | Continuous | 24hr Total | All |
| 50092 - Mercury, Total (Low Level) - ng/l | - | - | - | - | - | - | - | 1/Week | Grab | All |
| 70300 - Residue, Total Filterable - mg/l | - | - | - | - | - | - | - | 1/Day | 24hr Composite | All |

Notes for Station Number 3IN00350001:

* Effluent loadings based on an average design flow rate of 6.5 MGD.

- Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, report "AL" in the first column of the first day of the month on the 4500 Form (Monthly Operating Report). A signature is still required.

- Polychlorinated Biphenyls (PCBs) - See Part II, Item F for Quantification Level.

- See Part II, Item G for additional monitoring requirements.

- See Parts IV, V, and VI for additional Stormwater Requirements.

- Upon review of the analytical data generated during the initial start-up period, permittee may request a reduction or elimination of specific monitoring and/or reporting requirements at this station.

Part I, C. - SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the terms and conditions of this NPDES permit as expeditiously as practicable. In any event, the permittee shall complete the actions not later than the dates developed in accordance with the following schedule:

1. Before the permittee generates any wastewater or discharges any wastewater, the construction of the wastewater treatment system shall be completed, and the treatment system operation must be authorized by the Ohio EPA district office.
2. The permittee shall submit a report that provides a technical appraisal of the operation of the new wastewater treatment system during normal operating conditions as soon as practicable but no later than 6 months after the new wastewater system is placed into operation. For purposes of the report, the permittee shall evaluate and compare the effluent discharge quality with the Final Effluent Limitations and/or Target Pollutant Concentrations listed in Tables 8 and 9 of the Ashtabula River Dredging Project, Factsheet for the NPDES Permit, June 2006. The report shall include recommendations for further actions and/or improvements necessary to enhance treatment performance, and a schedule for implementing all recommended actions and improvements.
3. The permittee shall implement all recommended actions and complete construction of any improvements necessary to achieve treatment performance in accordance with the schedule contained in the report but not later than 6 months from the effective date of this permit. The permittee shall be responsible for the timely submittal of all necessary Permit to Install (PTI) applications to Ohio EPA for treatment system improvements.

Part II, OTHER REQUIREMENTS

A. Description of the location of the required sampling stations are as follows:

| Sampling Station | Description of Location |
|------------------|-------------------------|
|------------------|-------------------------|

| | |
|-------------|---|
| 3IN00350001 | Final effluent discharge to Ashtabula River (Lat: 41 N 53 ' 56 " ; Long: 80 W 47 ' 43 ") |
|-------------|---|

B. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved.

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

C. Permit limitations may be revised in order to meet water quality standards after a stream use determination and waste load allocation are completed and approved. This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable water quality effluent limitations.

D. Composite samples shall be comprised of a series of grab samples collected over a 24-hour period and proportionate in volume to the wastewater flow rate at the time of sampling. Such samples shall be collected at such times and locations, and in such a fashion, as to be representative of the facility's overall performance.

E. Grab samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's performance.

F. The parameters below have had effluent limitations established that are below the Ohio EPA Quantification Level (OEPA QL) for the approved analytical procedure promulgated at 40 CFR 136. OEPA QLs may be expressed as Practical Quantification Levels (PQL) or Minimum Levels (ML).

Compliance with an effluent limit that is below the OEPA QL is determined in accordance with ORC Section 6111.13 and OAC Rule 3745-33-07(C). For maximum effluent limits, any value reported below the OEPA QL shall be considered in compliance with the effluent limit. For average effluent limits, compliance shall be determined by taking the arithmetic mean of values reported for a specified averaging period, using zero (0) for any value reported at a concentration less than the OEPA QL, and comparing that mean to the appropriate average effluent limit. An arithmetic mean that is less than or equal to the average effluent limit shall be considered in compliance with that limit.

The permittee must utilize the lowest available detection method currently approved under 40 CFR Part 136 for monitoring these parameters.

REPORTING:

All analytical results, even those below the OEPA QL (listed below), shall be reported. Analytical results are to be reported as follows:

1. Results above the QL: Report the analytical result for the parameter of concern.
2. Results above the MDL, but below the QL: Report the analytical result, even though it is below the QL.
3. Results below the MDL: Analytical results below the method detection limit shall be reported as "below detection" using the reporting code "AA".

The following table of quantification levels will be used to determine compliance with NPDES permit limits:

| Parameter | PQL | ML |
|----------------------------------|-----------|----|
| Polychlorinated Biphenyls (PCBs) | 0.50 ug/l | -- |

This permit may be modified, or, alternatively, revoked and reissued, to include more stringent effluent limits or conditions if information generated as a result of the conditions of this permit indicate the presence of these pollutants in the discharge at levels above the water quality based effluent limit (WQBEL).

G. Additional Pollutant Monitoring

1. During the initial 3 months of discharge, the permittee shall conduct monthly analysis at Outfall 3IN00350001 for the priority pollutants listed below in Part II, Items G.2 through G.7. Subsequent analyses may be conducted at a frequency of not less than quarterly during the time period when dredging activities are in operation.

Composite sampling over a 24-hour period, except for samples collected for volatile organic analyses, shall be utilized. Discharge samples for organics shall be prepared and analyzed by GC/MS in accordance with U.S. EPA promulgated methods 624 and 625, or equivalent. In addition to the quantitative analysis for organic priority pollutants, a reasonable attempt shall be made to identify and quantify any additional substances indicated to be present in the GC/MS fractions by peaks on the reconstructed gas chromatograms (total ion plots) more than 10 times higher than the adjacent peak-to-peak background noise.

Identification shall be referenced to the EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be an order-of-magnitude estimate based upon comparison with an internal standard. GC/MS analysis results are to be reported to the appropriate district office within 30 days of receiving sampling results from the lab.

Upon selecting a laboratory to perform the GC/MS analytical work, the laboratory's quality control and quality assurance procedures must be reviewed by the permittee to ensure that the laboratory's quality control and quality assurance procedures meet the minimum requirements as described in the U.S. EPA promulgated methods. The permittee must request and receive copies of all the laboratory's written quality control and quality assurance records used to define the quality of the data generated. These records shall be available for review by representatives of the Ohio EPA. All records shall be kept for at least three years.

2. Volatile Organic Compounds:

- a. Acrolein
- b. Acrylonitrile
- c. Benzene
- d. Carbon Tetrachloride
- e. Chlorobenzene
- f. 1,1-Dichloroethane
- g. 1,2 - Dichloroethane
- h. 1,1,1-Trichloroethane
- i. 1,1,2-Trichloroethane
- j. 1,1,2,2 - Tetrachloroethane
- k. Chloroethane
- l. 2 - Chloroethyl vinyl ether
- m. Chloroform
- n. 1,1-Dichloroethylene
- o. 1,2 - Trans-dichloroethylene
- p. 1,3 - Dichloropropene
- q. Ethylbenzene
- r. Methylene Chloride
- s. Methyl Chloride
- t. Methyl Bromide
- u. Bromoform
- v. Dichlorobromomethane
- w. 1,2 - Dichloropropane
- x. Chlorodibromomethane
- y. Tetrachloroethylene
- z. Toluene
- aa. Trichloroethylene
- bb. Vinyl Chloride
- cc. Xylene

3. Other Base/Neutral Extractable Organic Compounds:

- a. Benzidine
- b. 1,2,4 - Trichlorobenzene
- c. Hexachlorobenzene
- d. Hexachloroethane
- e. Bis (2-chloroethyl) Ether
- f. 2 - Chloronaphthalene
- g. 1,2 - Dichlorobenzene
- h. 1,3 - Dichlorobenzene
- i. 1,4 - Dichlorobenzene
- j. 3,3 - Dichlorobenzidine
- k. 2,4 - Dinitrotoluene
- l. 2,6 - Dinitrotoluene
- m. 1,2 - Diphenylhydrazine
- n. 4 - Chlorophenyl Phenyl Ether
- o. 4 - Bromophenyl Phenyl Ether
- p. Bis (2-chloroisopropyl) Ether
- q. Bis (2-chloroethoxy) methane
- r. Hexachlorobutadiene
- s. Hexachlorocyclopentadiene
- t. Isophorone
- u. Nitrobenzene
- v. N - nitrosodimethylamine
- w. N - nitrosodiphenylamine
- x. N - nitrosodipropylamine
- y. Butyl Benzyl Phthalate
- z. Dibutyl Phthalate
- aa. Dioctyl Phthalate
- bb. Diethyl Phthalate
- cc. Dimethyl Phthalate
- dd. Bis (2-ethylhexyl) Phthalate

4. Poly-Aromatic Hydrocarbons:

- a. Acenaphthene
- b. Fluoranthene
- c. Naphthalene
- d. Benzo (a) Anthracene
- e. Benzo (a) Pyrene
- f. Benzo (b) Fluoranthene
- g. Benzo (k) Fluoranthene
- h. Chrysene
- i. Acenaphthylene
- j. Anthracene
- k. Benzo (g,h,i) Perylene
- l. Fluorene
- m. Phenanthrene
- n. Dibenzo (a,h) Anthracene
- o. Indeno (1,2,3-cd) Pyrene
- p. Pyrene

5. Acid Extractable Organic Compounds:

- a. 2,4,6 - Trichlorophenol
- b. 4 - Chloro - M - Cresol
- c. 2 - Chlorophenol
- d. 2 - Nitrophenol
- e. Penta Chlorophenol
- f. 2,4 - Dimethylphenol
- g. 4 - Nitrophenol
- h. 2,4 - Dinitrophenol
- i. 2 - Methyl - 4,6 - Dinitrophenol
- j. 2,4 - Dichlorophenol
- k. Phenol

6. Pesticides and PCBs:

- a. Aldrin
- b. Dieldrin
- c. Chlordane
- d. 4,4' - DDT
- e. 4,4' - DDE
- f. 4,4' - DDD
- g. Endosulfan IO. PCB - 1232
- h. Endosulfan II
- i. Endosulfan Sulfate
- j. Endrin
- k. Endrin Aldehyde
- l. Heptachlor
- m. Heptachlor Epoxide
- n. a - BHC
- o. b - BHC
- p. g - BHC
- q. d - BHC
- r. PCB - 1016
- s. PCB - 1221
- t. PCB - 1232
- u. PCB - 1242
- v. PCB - 1248
- w. PCB - 1254
- x. PCB - 1260
- y. Toxaphene

7. Other Pollutants:

- a. Antimony
- b. Arsenic
- c. Beryllium
- d. Cadmium
- e. Chromium
- f. Copper
- g. Lead
- h. Mercury
- i. Nickel
- j. Selenium
- k. Silver
- l. Thallium
- m. Zinc
- n. Total Cyanide

8. Each season after dredging activities have been concluded, the permittee shall submit a report that provides an evaluation of the results of the priority pollutant scans and compares those results to the Target Pollutant Concentrations listed in Table 9 of the Ashtabula River Dredging Project, Factsheet for this NPDES Permit, June 2006. The report shall include proposed recommendations for operational changes and/or treatment plant improvements necessary to enhance treatment performance for those target concentrations which have been exceeded. Upon review of each report, the Ohio EPA may propose effluent limitations for specific pollutants, or continue or modify the monitoring program as appropriate.