

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

SEP 1 1978

MEMORANDUM

OFFICE OF ENFORCEMENT

TO: Addressees (Attached)

FROM: Jeffrey G. Miller, Deputy Assistant Administrator for
Water Enforcement (EN-335)Sweep T. Davis, Deputy Assistant Administrator for
Water Planning and Standards (WH-551)Stephen Plehn, Deputy Assistant Administrator for
Solid Waste (WH-562)SUBJECT: Request for Comments on "NPDES Permits for Solid Waste
Disposal Facilities in Waters of the United States"

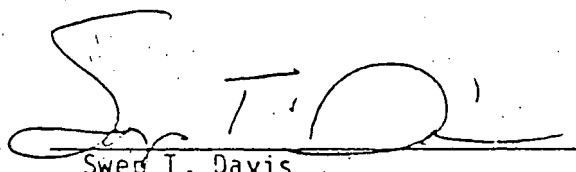

Attached is a draft (dated August 23, 1978) Policy Guidance
Memorandum on the above captioned matter. We would appreciate your
written comments on the draft memorandum and ask that you provide any
comments by ~~September 15~~, 1978.

October 13,

Please send comments to:

Tom Tomasello
Permits Division, Office of Water Enforcement (EN-336)
Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

Jeffrey G. Miller


Sweep T. Davis
Stephen Plehn

Attachment

Addressees:

Directors of Approved NPDES
Permit Programs
Enforcement Division Directors,
Regions I - X
Permit Branch Chiefs,
Regions I - X
Alan Eckert, OGC
Lee DeHhns, OGC
Libby Dollard, National Solid Waste
Management Association
Steve Schroeder, Natural Resources
Defense Council
William Hedeman, U. S. Army Corps
of Engineers
Curtis Clark, U.S. Army Corps of
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Dennis Huebner, Region I
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Morris Tucker, Region VII
Lawrence Gazda, Region VIII
Dale Vondenahl, Region VIII
Charles Bourns, Region IX
Tobia Hegdahl, Region X
Ronald Lee, Region X

MEMORANDUM

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TO: Regional Administrators
NPDES State Directors

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FROM: Deputy Assistant Administrator for Water
Enforcement (EN-335)
Deputy Assistant Administrator for Solid Waste (WH-562)
Deputy Assistant Administrator for Water Planning
and Standards (WH-551)

SUBJECT: NPDES Permits for Solid Waste Disposal Facilities
in Waters of the United States - POLICY GUIDANCE
MEMORANDUM

I. INTRODUCTION

Questions have been asked regarding the applicability of the National Pollution Discharge Elimination System ("NPDES") program to discharges of solid wastes into waters of the United States, particularly wetlands. In response to requests from EPA Regions and potential permittees for guidance, this memorandum provides policy on the applicability of the NPDES program to these types of discharges and the criteria and procedures for the issuance of such permits. Although the discharge of any solid waste into waters of the United States requires an NPDES permit, this guidance is limited to solid waste disposal facilities located in waters of the U. S. which receive wastes from sources such as trucks, barges, or other transportation vehicles. The guidance applies principally to those water areas most easily converted to solid waste disposal facilities, such as wetlands and tidal areas including unvegetated coastal mud flats.

The thrust of the policy expressed in this guidance is that the ^{disposal} discharge of solid wastes into water is subject to the NPDES requirements of section 402 of the Clean Water Act ("CWA") and

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should not be permitted where there are practicable alternatives which: 1) do not involve a discharge into water; or 2) could be conducted in a manner less damaging to the affected aquatic ecosystem. Appendix "A" provides the definition of certain terms used in this memorandum.

This policy is consistent with the principles contained in EPA's Wetlands Policy (38 Fed. Reg. 10834, May 2, 1973), Executive Order 11990 providing for the protection of wetlands (42 Fed. Reg. 26901, May 24, 1977), and EPA's proposed classification criteria for solid waste disposal facilities under section 4004 of the Resource Conservation and Recovery Act and section 405 of the Clean Water Act (43 Fed. Reg., 4953, February 6, 1978).

II. NPDES APPLICABILITY

There appears to be overlapping authorities under sections 402 and 404 of the CWA to control the discharge of solid waste. EPA and approved NPDES States have authority to issue NPDES permits under section 402, and the U.S. Army Corps of Engineers and approved 404 States have authority to issue permits to control solid waste disposal under section 404. EPA has on several occasions recognized the authority to regulate the discharge of solid waste under the NPDES program.^{1/} Corps

^{1/} Appendix "B" contains a brief discussion of EPA and Corps' jurisdiction to control the discharge of solid waste under sections 402 and 404.

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regulations, however, exclude from the definition of fill material "any pollutant discharged into the water primarily to dispose of waste", explaining that such discharges are to be regulated through NPDES permits. It is the Corps' position that the placement of solid waste in waters has as a primary purpose, the disposal of waste and thus is subject only to NPDES. EPA will initiate discussions with the Corps' to modify their position so that, where solid waste is disposed at a site resulting in the filling of an area of the waters of the United States, a Corps' 404 permit as well as an NPDES permit will be required for the entire discharge. In other words such a discharge would have a dual purpose (disposal and fill) requiring both an NPDES, and 404 permit. Until this issue is resolved, EPA and approved NPDES States have the authority and responsibility to control the discharge of solid waste under section 402 of the CWA.

A. Who Must Apply?

Under the definition of "point source" solid waste collection and transport vehicles which discharge of solid waste into waters might be considered "dischargers" subject to NPDES requirements. Logically, however, the solid waste disposal facility (see Appendix "A" definitions) not the collection and transport vehicles should be required to comply with the NPDES requirements. Thus, the owner or operator of a

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new or existing solid waste facility must apply for an NPDES permit. New facilities must apply for and be issued an NPDES permit before receiving any solid waste for disposal into waters of the United States.

B. How To Apply?

Owners and operators of solid wastes facilities shall file applications for NPDES permits with the appropriate EPA Regional Office or the approved NPDES State. Applicants should use the relevant portions of NPDES permit application Short Form B (agriculture). Under the authority of 40 CFR §§124.23 and 125.13 the following additional information should be provided with the application in order that the discharge may be completely and accurately evaluated:

1. a factual statement of whether the facility is a new or existing facility;
2. a description of the applicability of any State, local, or regional solid waste or water quality management plans, including any plans approved under section 4007 of the Resource Conservation and Recovery Act (RCRA) or section 208 of the CWA, to the facility and its consistency with these plans;
3. copies of all applicable State and local permits and licenses obtained for the facility, a list of those required but not obtained (including the current status of the permit application), and a statement that no other such permits or licenses are required;

4. a description of the types and estimated quantities of waste known to have been received by the facility in the past, presently being received in the case of existing facilities, and wastes anticipated to be received during the term of the permit this description shall include the frequency and duration of the discharge. Particular reference shall be made to any toxic pollutants identified by EPA under section 307 (a)(1) of the CWA, any hazardous substances identified under section 311 of the CWA, and any wastes considered hazardous under Subtitle C of the RCRA;
5. a brief description of those specific areas of the facility and adjacent and nearby waters where the flow and circulation of waters of the United States may be impaired or their reach reduced (including any areas to be dewatered) during the term of the permit.
6. a description of any adverse environmental or health effects which the owner or operator has reason to know are or will be related to the operation of the facility, including those based on any physical, chemical or biological data and information available (including fish kills), etc.;
7. a description of technologies and management practices which the applicant proposes to employ to minimize adverse impacts on the physical, chemical,

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and biological integrity of waters adjacent to and nearby the facility, during operation of the facility and similar practices which will be implemented to minimize these impacts upon "close-down" of the facility;

8. for new facilities, an alternatives study which investigates the availability of practicable alternative disposal sites (including those which would not involve a discharge into water) and alternative methods of disposal (including improved technological controls over the generation and migration of leachate);
9. for new facilities, the permit issuers may require the applicant to perform algal or biological assay tests on adjacent and nearby waters to assist in establishing permit terms and conditions; and
10. a "close-down" date if appropriate, indicating how long the facility will receive solid waste.

III. Permit Issuance and Denial

A. New Facilities

Only under extraordinary circumstances should an NPDES permit be issued authorizing a new discharge of solid waste into waters of the United States. Thus permits for

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new facilities may be issued only upon such a showing. A finding that extraordinary circumstances exists can be made by a NPDES permitting authority only upon determination that: 1) there are no practicable alternative sites which would not involve a discharge into water; and 2) where there are no available alternative sites that the facility will employ all practicable measures and management practices to protect and minimize potential harm to the affected aquatic ecosystem. These determinations must be based upon the results of alternatives studies required by the permit issuing authority in the application or the permit as provided in sections II, IV and V of the Memorandum.

Since effluent limitations guidelines controlling the discharge of solid waste have not been issued under sections 301 and 304 of the CWA, the decision whether to issue or deny a permit and the permit requirements imposed must be decided on a case-by-case basis under the authority of section 402(a)(1). In making these decisions the permit issuer must consider the appropriate factors listed in section 304(b)(1)(B). One of these factors is "other factors as ... deemed appropriate." In the case of solid waste facilities the alternatives study is an essential element in any permit issuance decision and is an appropriate factor warranting consideration under section 304(b)(1)(B). Thus, the permit issuer must consider the

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alternatives study in assessing the technology applicable to the discharge. If reasonable alternative sites exist which would not result in a discharge into waters of the U.S. a zero discharge limitation would apply and the application for a permit for the new facility must be denied. If, however, there are no alternative sites available with a zero discharge potential and a permit is issued, it should be issued for the site with the least potential for adverse environmental impact as determined by the alternative studies.

Solid waste is not susceptible to the same kinds of treatment technology traditionally application to industrial effluent waste streams. We are not dealing with a waste stream that can be treated to reduce the amount of pollution entering waters of the U.S. A decision to allow a discharge of solid waste would have an irreversible adverse effect on waters of the U.S. i.e., the elimination of these water. Apparently the only technology available to control the impact of the discharge of solid waste (i.e., the elimination of areas of waters of the U.S.) is to prevent the discharge or to reduce its quantity. The decision whether to allow the discharge depends on the availability of feasible alternatives which is determined through the alternatives study. The determination of zero discharge for a solid waste facility is similar to the zero discharge requirements imposed on industry (i.e. where total recycle of effluent is the technology applied).

B. Existing Facilities

Interim and final NPDES permits may be issued to existing facilities as follows:

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(1) Interim permits shall require an alternatives study and shall be issued to existing facilities where the discharge of solid waste at the facility has not completely or substantially converted waters of the U.S. within the disposal site into a dry area. The permit shall authorize the discharge only into those areas already converted or substantially converted into dry areas and shall not authorize any further encroachment into waters of the U.S. The interim permit shall expire 180 days after submission of the final alternatives study as required in the interim permit. This interim permit mechanism allows existing facilities to continue to discharge solid waste pending the results of the alternatives study;

(2) Final permits may be issued to existing facilities:

- o without requiring an alternatives study where the discharge of solid waste at the facility has completely or substantially converted waters of the U.S. into a dry area. 2/The final

2/ These areas which are waters of the U.S. and have been converted into dry areas remain waters of the U.S. subject to the CWA. Dischargers discharging into these areas must apply for an NPDES permit. Under unusual circumstances (i.e., where these areas are filled after the date of this memorandum without a permit) restoration of the area may be required.

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permit shall not authorize any discharge of solid waste into waters of the U.S. other than into those which have already been converted or substantially converted into a dry area.

- o at the expiration of an interim permit where the results of the alternatives study indicates that there are no practicable alternative discharge sites.

Final permits for the continued discharge at existing facilities where water areas of the U.S. have not been substantially filled shall be denied if the alternatives study required in the interim permit demonstrates the existence of an alternative site. The authority and rationale to deny issuance of a final permit based on the alternatives study is the same as that set out for "new facilities" above.

Final permits (for both new existing facilities) shall expire five years from issuance or on the "close-down" date reported in the application, whichever is earliest. However, permits of even shorter duration may be issued on the basis of the alternatives study if the study indicates that the facility may be phased out before the "close-down" date. The permit issuer may establish an expiration date extending beyond the "close-down" date as appropriate to impose monitoring and inspection requirements at the facility to ensure that leachate or other pollutants will not enter waters of the U.S. following close-down.

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Appendix "C" provides a schematic flow diagram of the above permit issuance and denial discussion.

IV. Permit Terms and Conditions

While the procedures for processing solid waste facility permits will not vary appreciably from other NPDES permits, their content might be substantially different.^{3/} This is due to the fact that the appropriate permit controls are not traditional "end-of-pipe" effluent limitations; instead, the appropriate controls are specific management practices imposed under section 402(a)(1) of the CWA which are designed to reduce adverse impacts upon the adjacent and nearby aquatic ecosystem if the discharge is authorized.

The utilization of such management practices when effluent limitations are infeasible has recently been sanctioned by the District of Columbia Circuit Court of Appeals [NRDC v. Costle ___ F 2d ___, 10 ERC 2025 (D.C. Cir. 1977)]. Moreover, there is authority under sections 304(e) and 402(a)(1) of the CWA to impose BMP's where the discharge of solid waste may contribute significant amounts of toxic or hazardous pollutants as defined under section 307(a)(1) or 311 of the CWA.

^{3/} However, the traditional NPDES approach of specifying end-of-pipe treatment is still appropriate in certain cases for example where leachate is channelized and collected and ultimately discharged.

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Because of the nature of these management practices, EPA permit writers should work closely with the Office of Solid Waste as well as Regional 404 permit reviewers in devising permit terms and conditions, particularly those designed to ensure adequate control and treatment of leachate. Similarly, permit writers in approved States should contact appropriate State or Federal agencies involved in solid waste management or the regulation of discharges of dredged or fill material.

Although specific permit conditions will vary depending upon the characteristics and location of the facility, permits for solid waste facilities must incorporate the following:

1. for all permits:

- a. specific boundary limits on the area into which the discharge is authorized; the amount of solid waste which can be discharged; and permissible elevations of the disposal area (including the use of compaction). Conditions requiring the construction of dikes, levees and other techniques, where required to minimize incursions into waters of the United States. (It is important to note that section 404 permits are required for the construction of these dikes, levees, etc.)
- b. requirements for appropriate control technologies and management practices which apply during operation and upon "close-down" of the facility which will, to

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the maximum extent practicable, minimize potential adverse impacts upon adjacent or nearby waters, particularly those impacts resulting from leachate generation and migration. The required control technologies and management practices may include constructing drainage control structures, maintenance of adequate soil cover, minimization of the active working face of the facility, prevention of contact of discharged waste with ground water, means necessary to prevent toxic and hazardous substances from entering the environment outside of the disposal site, employment of impermeable barriers or collection ditches and treatment of collected leachate;

c. terms and conditions necessary to ensure compliance with any appropriate requirements of sections 307 (toxic pollutants) 311 (hazardous substances), and 405 (sewage sludge) of the CWA;

d. provisions for adequate monitoring record-keeping, and reporting on the wastes being discharged including the amount of waste discharged;

e. to the extent that the disposal area falls within the waters defined in section 403 of the CWA, compliance with guidelines issued under Section 403(c) of the CWA; and

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f. where appropriate, a requirement of periodic bioassay and/or algal assay tests on the solid waste and leachate (where collected and treated) and on the receiving waters to assist in determining whether the management practices and conditions specified in the permit remain adequate to minimize adverse water quality effects. Sampling from wells may be required to detect ground water contamination particularly where this contamination may effect surface waters.

2. for interim permits:

a. a condition that the applicant will undertake a study of practicable alternative disposal sites (including those which would not involve a discharge into water) and alternative methods of disposal (including improved technological controls over the generation and migration of leachate), which will form the basis for the issuance of any NPDES permit after the expiration of the interim permit.

b. a compliance schedule for preparation of an alternatives study including: a) a date for submission of a draft alternatives study, which should be as soon as practicable, but generally not later than one year from the date of issuance of the interim permit; and b) a date for submission of the final alternatives study, which should allow up to six months to revise the study in response to comments from the permit issuing authority.

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c. a condition that the interim permit will not extend more than 180 days after the date established in the compliance schedule for the submission of the final alternatives study, and in no case later than July 1, 1981.

3. for final permits:

a reasonable compliance schedule towards implementation of the best management practices and control requirements required in the permit.

V. Alternatives Study

The alternatives study in the permit application for new facilities and in interim permits for existing facilities is essential to fulfilling the objective of eliminating the disposal of solid waste in waters. In addition to describing alternative sites and methods of disposal, the study must: 1) assess the effects on water quality of each alternative; 2) assess the technical and economic feasibility of each alternative; 3) compare the relative water quality impact and feasibility of the alternatives; and 4) determine which feasible alternative (alone or in combination) will most effectively minimize anticipated impacts upon waters of the U.S.; and 5) for existing facilities issued interim permits, consider the impact that solid waste disposal has had on waters of the U. S. within the existing disposal site. Determinations of the economic feasibility of alternatives shall be based on the total cost of solid waste management (including the cost of solid waste collection and transportation), not merely on the costs associated with disposal.

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The study must be a realistic appraisal of alternatives. For example, where a significant portion of an entire region is composed of wetlands, such as southern Louisiana, the alternatives study should focus on the relative merits of alternative sites and methods of disposal in water, with a view toward determining the least damaging alternative in terms of water quality impact. Also, the study shall not be limited to areas under the present ownership of the applicant or the permittee but include all reasonable alternative areas.

Generally, the study should be made on a permit-by-permit basis. However, in unusual areas where there may be many permittees and/or permit applicants in a geographic area the permit issuing authority may authorize the preparation of an "areawide alternatives study". This study, which may be prepared by an appropriate regional planning commission, must cover the activities of permittees and permit applicants in a designated geographic area, with the express agreement of those permittees and applicants and the concurrence of the permit issuing authority in the area so designated.

Jeffrey G. Miller
Deputy Assistant Administrator,
Office of Water Enforcement

Stephen Plehn
Deputy Assistant Administrator
Office of Solid Waste

Swep T. Davis
Deputy Assistant Administrator
Office of Water, Planning and Standards

APPENDIX "B"

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Both EPA and the U.S. Army Corps of Engineers have recognized the authority to regulate discharges of solid waste into waters of the United States under section 402 of the Clean Water Act. A February 9, 1977, letter from EPA's General Counsel noted that such discharges were unlawful unless authorized by an NPDES permit. A March 7, 1977, letter from the Deputy Director of the Corps' Civil Works Division agreed that the discharge of solid waste into water of the United States, including wetlands, is subject to the Clean Water Act. The letter also stated that while an NPDES permit would be required for such a discharge a section 404 permit would also be required if it is necessary to construct a levee or other containment structure to restrain the wastes from entering surrounding aquatic areas. The letter further declared that the Corps would not issue a 404 permit for such a levee or containment structure until the applicable NPDES permit was issued.

Based on these letters the Deputy Assistant Administrator for Water Enforcement issued a guidance memorandum on July 11, 1977 indicating that the disposal of solid waste such as garbage into wetlands or other waters of the United States is an unlawful discharge of pollutants unless permitted under section 402 or the Clean Water Act.

Corps regulations issued on July 19, 1977, eliminated from the definition of fill material subject to section 404 permit

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requirements those "pollutant(s) discharged into the water, primarily to dispose of waste," explaining that such pollutants were to be regulated through NPDES permits (33 CFR 323.2(m)). The preamble accompanying the Corps' regulations noted that the disposal of waste materials, such as sludge, garbage, trash, and debris in water was better controlled through NPDES permits, even though the final result of the discharge might be a filling of an area of the waters of the United States (42 Fed. Reg. 37130, July 19, 1977).

Most recently, on February 6, 1978, EPA proposed regulations specifying minimum criteria for the classification of solid waste disposal facilities under sections 1008(a)(3) and 4004(a) of the Resource Conservation and Recovery Act and section 405(d) of the Clean Water Act. Section 257.3-1(a) of these regulations would classify solid waste facilities in wetlands as "open dumps" unless an NPDES permit was obtained (43 Fed. Reg. 4953, February 6, 1978). These regulations would also establish a strong presumption against the issuance of an NPDES permit unless: 1) the discharge is justified in light of other practicable alternatives; and 2) the permit assures that the facility will utilize all practicable technologies and/or best management practices to minimize adverse effects on the aquatic ecosystem.

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memorandum; (2) a facility for which the owner or operator cannot demonstrate to the satisfaction of the NPDES permitting authority that a substantial commitment has been made to solid waste disposal before the date of this memorandum or (3) any expansion of an existing facility after the date of issuance of this memorandum into waters of the U.S. where these waters have not been converted or substantially converted into dry land as part of the operation of the existing facility.

- (d) "Solid waste" means any garbage, trash, sludge from waste treatment plants, water supply treatment plants, or air pollution control facilities, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining or agricultural operations, or other community activities which constitutes a discharge of pollutants that would not be adequately controlled through conventional NPDES "end-of-pipe" treatment technology.

- (e) "Waters of the United States" includes, but is not limited to:

- (1) The territorial seas;

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- (2) All waters which are presently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide, intermittent streams, and adjacent wetlands.
- (3) Tributaries of navigable waters of the United States, including adjacent wetlands;
- (4) Interstate waters, including adjacent wetlands; and
- (5) All other waters of the United States such as intrastate lakes, rivers, streams, mudflats, sandflats and wetlands, the use, degradation or destruction of which would effect or could affect interstate commerce including, but not limited to:
 - (i) Intrastate lakes, rivers, streams, and wetlands which are or could be used by interstate travelers for recreational or other purposes; and
 - (ii) Intrastate lakes, rivers, streams, and wetlands from which fish or shellfish are or could be taken and sold in interstate commerce; and

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- (iii) Intrastate lakes, rivers, streams, and wetlands which are or could be utilized for industrial purposes by industries in interstate commerce; and
- (6) All impoundments of water otherwise defined as waters of the United States under this definition.
- (f) "Wetlands" means those areas that are inundated or saturated by surface or ground waters at a frequency and duration sufficient to support, and under normal circumstances do or would support a prevalence of vegetation typically adapted for life in saturated or seasonally saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mudflats, and natural ponds.

APPENDIX "C"
PERMIT DECISION MAKING PROCESS

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