

Technical Manual

for

Solid Waste
Transfer Station/Material Recovery Facility
Permits and Approvals

Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste

April 2000

CHRISTINE TODD WHITMAN, GOVERNOR
STATE OF NEW JERSEY

ROBERT C. SHINN, JR. COMMISSIONER
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

MISSION STATEMENT

The mission of the New Jersey Department of Environmental Protection is to conserve, protect, enhance, restore and manage our environment for present and future generations. We strive to prevent pollution; ensure the efficient use of safe, environmentally sound and reliable energy resources; provide opportunities for recreation and enjoyment of natural and historic resources; and promote a healthy and sustainable ecosystem.

Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
NJDEP
401 East State Street
P.O. Box 414
Trenton, New Jersey 08625-0414
(609) 292-9880

Prologue

This manual has been produced by the Department of Environmental Protection (DEP) to make the permit process less complicated and time-consuming for you. This manual is one of a series of technical manuals produced by DEP under the requirements of the Environmental Management Accountability Plan (P. L. 1991, Chapter 422) with the goal of making the permit application process more consistent and predictable. In each technical manual, you will find summaries and explanations of policies that may not be fully described or explained in environmental laws or regulations. In addition, the manuals contain guidance on how the Department defines other standards, such as “state-of-the-art” control technologies or “best management practices.”

Unless otherwise required by federal or state law, the policies and procedures contained in a technical manual on the date an application is filed will be binding on both the DEP and the applicant. The technical manuals may be updated every six months or whenever a regulatory change requires revisions. Any revision made to a technical manual will have no effect upon a permit application that was submitted to the Department prior to adoption of the revision. This is a technical manual prepared pursuant to N.J.S.A. 13:1D-111 to 1D-113. Because it by necessity condenses and summarizes statutes, regulations, and other documents, it may not always precisely reflect all the requirements set forth in same. In the case of any inconsistency between this technical manual and any statutes, regulations, or policy determinations based upon same, the requirements of the statutes, regulations, or policy determinations shall prevail. Accordingly, this technical manual should not be used as a substitute for a thorough analysis of the law and the facts as they apply to any specific project or proposal. The State of New Jersey, including its Department of Environmental Protection and all agents and employees thereof, hereby disclaims any warranties (express or implied) and any legal liability for the accuracy, completeness, or usefulness of any of the information set forth in this technical manual.

DEP welcomes suggestions for improving its technical manuals. Please direct comments to the Director, Office of Pollution Prevention and Permit Coordination, NJDEP, P. O. Box 423, Trenton, New Jersey 08625-0423.

You may request additional copies of this manual by sending a check or money order made payable to the Treasurer, State of New Jersey for \$8.00 (includes first class mailing by the U. S. Postal Service) to: Map Sales & Publication Office, Bureau of Revenue, NJDEP, P. O. Box 417, Trenton, New Jersey 08625-0417.

Also, for information about other technical manuals offered by the Department, contact the sales office by phone at (609) 777-1039.

As stated previously, these manuals may be updated every six months or whenever a regulatory change requires it. Therefore, if the publication date of the manual is more than six months old or if you are aware of a regulatory change, you should contact the Map Sales & Publication Office for a copy of the appropriate revision.

Notice: This manual contains forms and applications that are provided as a convenience to the applicant. These forms are included for illustrative purposes only, are not subject to the limitation of N. J. S. A. 13:1D-112(b) and may be updated as often as necessary. Prior to submitting any forms to the Department, an applicant should contact the appropriate bureau or make certain that he or she is using the most up-to-date version.

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I. Introduction

This document describes the procedural and substantive requirements for the completion of an application for each permit or approval related to Solid Waste Transfer Station/Material Recovery Facilities and administered by the Bureau of Hazardous Waste and Transfer Facilities.

This manual, together with the New Jersey Solid Waste Regulations found at N.J.A.C. 7:26-1 et seq. and the applicable Administrative Completeness Checklist, provides the applicant with the technical guidance necessary to prepare a complete application. The manual includes information on how to submit the required information, how the Department will review the submittal, clarification of the Department's interpretation of applicable regulations, and a description of pertinent Department policies that are not defined by the regulations. This manual was developed pursuant to N.J.S.A. 13:1D-111 to 113.

Questions concerning this technical manual or the applicable regulations should be directed to the Bureau of Hazardous Waste and Transfer Facilities, Division of Solid and Hazardous Waste, NJDEP, 401 East State Street, P.O. Box 414, Trenton, New Jersey 08625, telephone 609-292-9880. Office hours are 8:00 a.m. thru 4:30 p.m. Monday thru Friday. Copies of the Solid Waste Regulations may be obtained by contacting West Group, 610 Opperman Drive, P.O. Box 64526, St. Paul, Minnesota 55164-0526, telephone 800-808-9378. A nonjudicial version of the regulations may be viewed by visiting the Division's web site at www.state.nj.us/dep/dshw.

II. Application Submission

The application for each permit or approval should be submitted in accordance with the instructions, guidance and Administrative Completeness Checklist for each permit or approval (detailed in each specific section of item VI. below), applicable sections of the Solid Waste Transfer Station/Material Recovery Facility Permit Application Review Checklist (Appendix A), the GIS Mapping and Digital Data Standards (Appendix B), the Solid Waste Facility Permit Application Form, if applicable (Appendix C), the New Jersey State Highway Access Management Code, if applicable (Appendix D) and the regulations at N.J.A.C. 7:26-1 et seq.

III. Application Review

A Department staff engineer will perform an administrative review of the information submitted using the applicable Administrative Completeness Checklist as a general guide and, within 30 days of receipt of the application, will determine whether the application is administratively complete. If the application fails to meet the criteria for administrative completeness, the Department will so advise the applicant and will specify in writing what additional information is required. The applicant shall submit the requested additional information within 30 days of receipt of the notice of incompleteness. Failure of the applicant to submit the requested additional information in a timely manner will result in termination of review of the application.

Once the application has been determined to be administratively complete, our engineer will perform a detailed technical review of the information submitted (including site visits to verify field conditions) using applicable portions of the attached Permit Application Review Checklist and the regulations as a general guide and, within 30 to 180 days of issuance of the letter of administrative completeness (depending upon the type of permit or approval and whether technical deficiencies are noted and addendums to the application are required), the Department will either reject the application as technically incomplete, deny the application, or issue the final permit or approval.

IV. Interpretation of Regulations

The Department's interpretation of pertinent specific regulatory requirements for Solid Waste Transfer Station/Material Recovery Facility permits and approvals are detailed in Appendix A and in each specific section of Item VI. of this manual.

V. Explanation Of Policies

The Department's policies related to Solid Waste Transfer Station/Material Recovery Facility permits and approvals which are not directly addressed in the regulations are detailed in Appendix A and in each specific section of Item VI. of this manual.

VI. Specific Sections Applicable to Each Permit or Approval

The numbered sections below include specific instructions, technical guidance, and an Administrative Completeness Checklist for each specific permit or approval related to Solid Waste Transfer Stations/Material Recovery Facilities.

Section 1

Solid Waste Facility Permits for New Transfer Station/Material Recovery Facilities

I. Introduction

This section discusses application and design requirements for new transfer station/material recovery facility permits. The applicant is required to arrange a pre-application meeting with the Division of Solid and Hazardous Waste to obtain information on the components of an application, the application review process, design requirements and other critical issues. The Solid Waste Facility Permit Application Form is attached as Appendix C to this manual. A checklist highlighting the requirements for the submission of a new solid waste facility permit application is appended at the end of this section.

II. Applicable Regulations

Title 7, Chapter 26, the rules of the Division of Solid and Hazardous Waste, should be consulted in preparing a permit application. Where applicable, these regulations will be discussed in greater detail below.

- 7:26-1.4 Definitions
- 7:26-2.4 Application procedures for a solid waste facility permit
- 7:26-2.5 Public hearing procedures
- 7:26-2.9 Environmental and Health Impact Statement requirements
- 7:26-2.10 General engineering design submission requirements
- 7:26-2.11 General operational requirements
- 7:26-2B.5 Additional engineering design submission requirements and design requirements for transfer stations and materials recovery facilities

The applicant should be familiar with the regulations prior to preparing an application. A copy of the regulations found at N.J.A.C. Title 7, Chapter 26 can be obtained by contacting West Publishing, 610 Opperman Dr., P.O. Box 64526, St. Paul, MN 55164-0526 or phone 1-800-808-WEST. A nonjudicial version of the regulations may be viewed by visiting our web site at www.state.nj.us/dep/dshw

III. Application Procedures

The requirements set forth at N.J.A.C. 7:26-2.4 and 2.5 establish the Department's procedures and associated time frames to review a complete application. Subchapters 2.4 and 2.5 describe the requirements for a complete application, the application review procedures, the public notice procedures, the public comment period procedures and the permit decision procedures.

As the lead agency for the review of a solid waste facility application, the Division will transmit copies of the application to other agencies for review and comment. During this review process, other State and Federal approvals and/or permits are identified. These may include, but are not limited to, the following:

- * New Jersey Pollutant Discharge Elimination System (NJPDDES) Permit
- * Waterfront Development Permit
- * Stream Encroachment Permit

- * Air Quality Permit
- * Soil Erosion and Sediment Control Certification
- * Army Corps of Engineers 404 Permit
- * Tidelands Grant
- * Coastal Area Facility Review Act (CAFRA) Permit
- * Freshwater Wetlands Permit
- * Pinelands Commission Approval
- * Water Quality Management Plan Certification
- * Road Access (Department of Transportation)
- * A-901 Approval (for privately owned material recovery facilities and/or transfer stations)
- * Federal Aviation Administration

The number of copies of bound application documents and appurtenant drawings required for review is project specific. The actual number will depend on factors such as the the location of the facility, the number of neighboring municipalities, and the number of other agencies involved (e.g. Army Corps of Engineers, Pinelands Commission, Delaware River Basin Commission, etc.). Initially, three (3) copies of the complete application shall be submitted for administrative review. When the application has been determined to be administratively complete, the Department will advise the applicant of the number of additional copies required for technical review.

The application documents should be submitted to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
 Division of Solid and Hazardous Waste
 New Jersey Department of Environmental Protection
 P.O. Box 414
 Trenton, New Jersey 08625-0414

 Telephone No. (609) 292-9880

The Department assesses a fee for new solid waste facility permit applications in accordance with N.J.A.C. 7:26-4.3. This fee is subject to change on an annual basis.

IV. Interpretation of Regulations

In addition to the regulatory interpretations detailed in Appendix A, the Department's interpretation of pertinent specific regulatory requirements for new Solid Waste Transfer Station/Material Recovery Facility permits are as follows:

1. GIS Mapping Standards [N.J.A.C. 7:26-2.10(b)1]

The Department considers "All maps of the proposed facility" to mean any mapping containing geographic data which must be submitted as part of an application for a new Solid Waste Transfer Station/Material Recovery Facility permit.

The Department considers "in a manner and format consistent with N.J.A.C. 7:1, Appendix A" to mean in accordance with the NJDEP GIS Mapping and Digital Data Standards, attached as Appendix B to this manual. These standards require that (1) all maps meet or exceed National Map

Accuracy Standards or be of survey quality, (2) data shown on the maps is tied to the New Jersey State Plane Coordinate System, and (3) all maps are submitted in digital format.

2. Material Recovery Facility and Transfer Station Designation [N.J.A.C. 7:26-1.4]

During 1987, the Department amended the New Jersey Solid Waste regulations to include definitions of "transfer station" and "material recovery facility" to clarify the types of activities which may be performed by each.

Transfer station is defined as a facility at which solid waste is transferred from one solid waste vehicle to another solid waste vehicle for transportation to a solid waste facility. This definition does not allow for any recovery of materials from the incoming waste stream, therefore a transfer station may not perform any material recovery operations.

Material recovery facility is defined as a solid waste facility, such as a transfer station, which is designed and operated to process non-hazardous waste by utilizing manual and/or mechanical methods to separate useful materials from the incoming waste stream for return to the economic mainstream for use as raw materials or products.

To achieve a greater degree of flexibility, applicants who intend to perform both of these types of activities should apply for a permit for a solid waste transfer station/ material recovery facility. Applicants should circle the letter I. in section II. on the Solid Waste Facility Permit Application Form attached as Appendix C to this manual.

3. Required Certifications [N.J.A.C. 7:26-2.4(e)]

The Department considers "applicant" to mean all applicants for a Solid Waste Transfer Station/Material Recovery Facility permit (including small scale facilities) and their designated representatives. Certifications must be included with the application at the time of submittal of the application documents. Applicants are advised that applications received without the required certifications will be rejected and returned to the applicant.

V. Explanation Of Policies

In addition to the policies detailed in Appendix A, the Department's policies related to new Solid Waste Transfer Station/Material Recovery Facility permits which are not directly addressed in the regulations are as follows:

1. Pre-Application Conference

The Department strongly recommends that all applicants for a Solid Waste Transfer Station/Material Recovery Facility permit schedule and complete a pre-application conference with the Bureau of Hazardous Waste and Transfer Facilities. The purpose of the conference is to discuss and clarify application requirements in order to eliminate confusion and submission of unnecessary information. Applicants should submit preliminary application information at least two weeks prior to the scheduled conference, as specified in Appendix A to this manual and in the regulations. The pre-application conference will be held at the facility site wherever possible.

2. Applications For Small Scale Facilities

The Department will require that applications for small scale facilities (projected capacity less than 100 tons per day) include an Environmental and Health Impact Statement (EHIS). The magnitude and detail required for the EHIS will be determined at the pre-application conference.

The Department will also require that applications for small scale facilities include Additional Engineering Design Data specified in Appendix A to this manual and in the regulations at N.J.A.C. 7:26-2B.5.

3. Noise Level Assessment

The Department will require that the applicant prepare a noise level assessment in accordance with Item 11. of the Permit Application Review Checklist (Appendix A to this manual) and the following:

i. Recreate the activities that will take place at the facility, at a given instance, during peak hour operations for the proposed maximum capacity applied for. All noise sources shall be accounted for and shall include (at a minimum):

- (1) Trucks queuing and those at the scale (use the information provided in the traffic report);
- (2) Loading and unloading activities occurring inside and outside the building;
- (3) Loader(s) pushing waste;
- (4) Any yard activity, such as dropping off and picking up of containers, loading recyclables, etc.;
- (5) Air pollution control equipment; and
- (6) Compactors, balers, grinders, and any other processing equipment, operating either inside and/or outside the facility.

All noise sources shall be compounded, logarithmically added and projected to the nearest sensitive receptors. If the projections show exceedance of the noise level standards set forth at N.J.A.C. 7:29-1 et seq. for day time, then mitigation measures shall be proposed to ensure that facility operations comply with noise level standards at all times.

ii. If the facility expects to conduct night time operations (any activity between 10:00 p.m. and 7:00 a.m.), the assessment must demonstrate compliance with the night time noise level standards set forth at N.J.A.C. 7:29-1 et seq.

iii. When projecting noise to sensitive receptors, it is important to note that the noise regulations at N.J.A.C. 7:29-1 et seq. depend on land use and not on the zoning of the property. This means that non-conforming residential receivers in commercial or industrial zones are afforded protection equivalent to residential receivers in residential zones. Also, the regulations consider commercial facilities to be sensitive receptors, while industrial facilities are not considered sensitive.

4. Traffic Assessment and Evaluation

The Department will require that the applicant prepare a traffic assessment and evaluation in accordance with Item 10. of the Permit Application Review Checklist (Appendix A to this manual), the New Jersey State Highway Access Management Code (Appendix D to this manual), and the following:

- i. Project an hourly daily waste delivery schedule for the anticipated maximum capacity of solid waste and recyclable material (if applicable). Provide the data base which supports the profile projections. Existing operating facilities shall utilize existing data. This schedule will determine the facility's peak hours.
- ii. Project an hourly daily transfer trailer/truck operational schedule which shows the amounts of waste and recyclable materials (if applicable) being hauled out of the facility. It is important to note that the ability to load waste out is restricted by waste delivery schedules and not by equipment processing capacity.
- iii. Identify off-site traffic routes for trucks accessing and exiting the facility. Critical intersections utilized by the truck traffic must be analyzed.
- iv. Hourly existing traffic counts (excluding the facility's truck traffic) shall be made (at a minimum) for each hour of facility operations. Roadway capacity shall be explicitly defined. This constitutes the baseline traffic assessment.
- v. The evaluation shall analyze the following scenarios:
 - (1) The existing roadway peak hour (with and without facility truck traffic);
 - (2) The hour of peak facility deliveries (with and without facility truck traffic); and
 - (3) Additional peak hours, if the facility is proposing 24-hour operations.
- vi. The evaluation shall account for traffic growth for the projected period of full-scale operations. Use the recommended NJDOT factor for the area.

5. Additional Application Requirements For Recycling Activities At Transfer Station/Material Recovery Facilities

The Department will require that applicants who wish to perform Class A and/or Class B Recycling activities at the facility submit the following additional information:

- i. A narrative description of proposed recycling activities, including but not limited to:
 - (1) Activities performed within the building to separate recyclables from wastes;
 - (2) Receipt within the building of any source separated recyclable materials;
 - (3) Receipt outside the building of any source separated recyclable materials; and
 - (4) Impact of added recycling activities upon the facility operation, including:
 - (A) General floor and yard space requirements;
 - (B) Materials handling and large vehicle traffic requirements; and
 - (C) Noise and other physical impacts (air emissions, waste water discharge, etc.).

- ii. A revised site plan (including building floor plan)
 - (1) Submit per N.J.A.C. 7:26-2.10(b)2 and 3; and
 - (2) Identify additional processing equipment.
 - iii. A revised O&M Manual
 - (1) Identify new equipment, provide specifications, add information to inspections, maintenance, spare parts and other sections;
 - (2) Identify additional personnel and job duties required; and
 - (3) Describe any special training, safety or other additional requirements.
 - iv. An identification of recyclable materials and markets
 - (1) List materials to be separated from waste streams by types and amounts:
 - (A) Identify materials designated as mandatory recyclable materials by the County; and
 - (B) For each designated material, verify that each generator has a waiver from the municipality not to source-separate.
 - (2) List source separated recyclable materials to be received; and
 - (3) For each material listed in (1) and (2) above, identify markets:
 - (A) List material buyers (to be approved by the Office of Recycling).
 - (B) Provide contracts or letters of intent.
 - v. A detailed description of storage activities for each recyclable material to be handled and stored
 - (1) Identify storage space on drawings;
 - (2) Describe type of storage unit (e.g. pile, bin, roll-off);
 - (3) Identify storage capacity in volume and weight (expressed in tons);
 - (4) Identify rate of storage (e.g. tons per day) and capacity expressed as "normal days";
 - (5) Identify planned storage time; and
 - (6) Describe any special storage requirements (fire monitoring/suppression, etc.).
 - vi. A description of recordkeeping requirements, including procedures to identify commingled waste stream sources and credit municipalities with quantities recycled (for mandatory recyclable materials).
 - vii. A description of measures to be employed for quality control of recyclable materials (if necessary).
6. Acceptance of Sludge and Sludge-Related Waste Types

The Department will require the following for applicants who wish to accept sludges or sludge-related (liquid) wastes:

- i. Documentation that the facility has been included in the respective District Solid Waste Management Plan for the acceptance of this waste type must be submitted with the application.
- ii. For existing facilities, this request will be classified as a major modification to the facility's current permit.

7. Weekly Averaging

The Department recognizes that the facility may experience daily variability in solid waste deliveries and will consider requests for authorization to exceed facility daily design capacity on peak days, provided that the facility's weekly capacity (the number of operating days per week times the daily design capacity) is not exceeded.

The Department will, however, require that the applicant demonstrate that facility operations will meet all requirements at the peak day capacity. Therefore, all information submitted for the facility's Environmental and Health Impact Statement, Engineering Design, Traffic Assessment and Evaluation and Noise Level Assessment (Items 6, 7, 8, 10 and 11 of the Permit Application Review Checklist attached as Appendix A to this manual) shall be based upon the proposed peak day capacity.

The Department will also require that applicants proposing a weekly averaging program demonstrate consistency with the respective district solid waste management plan where the facility is or will be located. The demonstration shall be in the form of a written determination from the respective district.



CHECKLIST FOR A NEW SOLID WASTE TRANSFER STATION/MATERIAL RECOVERY FACILITY PERMIT

1. Recommended Pre-Application Conference Information Per N.J.A.C. 7:26-2.4(a)
2. NJDEP Solid Waste Facility Permit Application Form Per N.J.A.C. 7:26-2.8(a)
3. Disclosure Statement Per N.J.A.C. 7:26-16.4 (This information shall be submitted to the Bureau of Hazardous Waste Regulation)
4. Documentation of District Solid Waste Management Plan Inclusion Per N.J.A.C. 7:26-2.4(b)2
5. Environmental and Health Impact Statement Per N.J.A.C. 7:26-2.9
6. General Engineering Design Submittal Per N.J.A.C. 7:26-2.10
7. Additional Engineering Design Submittal Per N.J.A.C. 7:26-2B.5
8. Certifications and Signatures Per N.J.A.C. 7:26-2.4(e)
9. Traffic Assessment and Evaluation In Accordance With Technical Manual Section 1V.4
10. Noise Level Assessment In Accordance With Technical Manual Section 1V.3
11. Operations and Maintenance Manual Per N.J.A.C. 7:26-2.10(b)9
12. Information Regarding Acceptance of Sludges or Sludge-Related Wastes In Accordance With Technical Manual Section 1V.6
13. Application Fee Per N.J.A.C. 7:26-4.3

The applicant will be billed the appropriate fee once the application has been received. The completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone Number: (609) 292-9880

Section 2

Major Permit Modifications

I. Introduction

This section presents the requirements for the preparation and submission of an application for a major modification to a solid waste transfer station/material recovery facility permit.

II. Applicable Regulations

The regulations governing modifications can be found in the Division of Solid and Hazardous Waste rules at New Jersey Administrative Code (N.J.A.C.) 7:26-2.6. In addition, the regulations concerning public hearing procedures can be found at N.J.A.C. 7:26-2.5.

A copy of N.J.A.C. Title 7, Chapter 26 can be obtained by contacting West Publishing, 610 Opperman Dr., P.O. Box 64526, St. Paul, MN 55164-0526 or phone 1-800-808-WEST. A nonjudicial version of the regulations may be viewed by visiting our web site at www.state.nj.us/dep/dshw.

III. Application Procedures

The requirements set forth at N.J.A.C. 7:26-2.5 and 2.6 establish the Department's procedures and the associated time frames involved for review of an application for a major permit modification.

The number of copies of bound application documents and appurtenant drawings required for review is project specific. The actual number will depend on factors such as the the location of the facility, the number of neighboring municipalities, and the number of other agencies involved (e.g. Army Corps of Engineers, Pinelands Commission, Delaware River Basin Commission, etc.). Initially, three (3) copies of the complete application shall be submitted for administrative review. When the application has been determined to be administratively complete, the Department will advise the applicant of the number of additional copies required for technical review.

The application documents should be submitted to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone No. (609) 292-9880

The Department assesses a fee for the review of major permit modifications in accordance with N.J.A.C. 7:26-4.3. This fee is subject to change on an annual basis. If the fee is not submitted with the application, please provide a name and address for the Department to send a bill for the fee.

IV. Submission Requirements

To achieve compliance with N.J.A.C. 7:26-2.6(e)1, the permittee shall submit sufficient engineering design information and an environmental impact assessment demonstrating that the proposed facility modifications are consistent with the solid waste regulations and will not adversely impact the environment. These documents shall include the following information, where applicable:

1. A revised site plan, prepared and submitted as required at N.J.A.C. 7:26-2.10(b)2, 3, and 6 and N.J.A.C. 7:26-2B.5(c);
2. A written description of the proposed changes and the overall facility operation in accordance with N.J.A.C. 7:26-2.9(c)4vii and N.J.A.C. 7:26-2B.5(d)3 and 4;
3. Wastewater management per N.J.A.C. 7:26-2B.5(b)1;
4. Stormwater management per N.J.A.C. 7:26-2.9(c)3iv(3);
5. Odors and noise controls per N.J.A.C. 7:26-2B.5(b)6 and 7 and N.J.A.C. 7:26-8 et seq.;
6. On-site traffic flows per N.J.A.C. 7:26-2B.5(b)8;
7. Off-site traffic flows per N.J.A.C. 7:26-2.9(c)3iv(1) and N.J.A.C. 7:26-2B.5(b)9;
8. A revised O&M Manual per N.J.A.C. 7:26-2.10(b)9;
9. Identification of markets for recyclable materials per N.J.A.C. 7:26-2.9(c)4iii;
10. Descriptions and specifications for all equipment to be utilized at the facility per N.J.A.C. 7:26-2B.5(d)1 and 2;
11. A demonstration that the facility will be operated in compliance with the requirements set forth at N.J.A.C. 7:26-2.11 and N.J.A.C. 7:26-2B.5(b); and
12. A schedule for implementation of the proposed changes.

V. Interpretation of Regulations

In addition to the regulatory interpretations detailed in Appendix A, the Department's interpretation of pertinent specific regulatory requirements for major modifications to Solid Waste Transfer Station/Material Recovery Facility permits are as follows:

1. GIS Mapping Standards [N.J.A.C. 7:26-2.10(b)1]

The Department considers "All maps of the proposed facility" to mean any mapping containing geographic data which must be submitted as part of an application for a major modification to a Solid Waste Transfer Station/Material Recovery Facility permit.

The Department considers "in a manner and format consistent with N.J.A.C. 7:1, Appendix A" to mean in accordance with the NJDEP GIS Mapping and Digital Data Standards, attached as

Appendix B to this manual. These standards require that (1) all maps meet or exceed National Map Accuracy Standards or be of survey quality, (2) data shown on the maps is tied to the New Jersey State Plane Coordinate System, and (3) all maps are submitted in digital format.

2. Material Recovery Facility and Transfer Station Designation [N.J.A.C. 7:26-1.4]

During 1987, the Department amended the New Jersey Solid Waste regulations to include definitions of "transfer station" and "material recovery facility" to clarify the types of activities which may be performed by each.

Transfer station is defined as a facility at which solid waste is transferred from one solid waste vehicle to another solid waste vehicle for transportation to a solid waste facility. This definition does not allow for any recovery of materials from the incoming waste stream, therefore a transfer station may not perform any material recovery operations.

Material recovery facility is defined as a solid waste facility, such as a transfer station, which is designed and operated to process non-hazardous waste by utilizing manual and/or mechanical methods to separate useful materials from the incoming waste stream for return to the economic mainstream for use as raw materials or products.

To achieve a greater degree of flexibility, applicants who intend to perform both of these types of activities should apply for a permit for a solid waste transfer station/ material recovery facility. Applicants should circle the letter I. in section II. on the Solid Waste Facility Permit Application Form attached as Appendix C to this manual.

3. Required Certifications [N.J.A.C. 7:26-2.4(e)]

The Department considers "applicant" to mean all applicants for a major modification to a Solid Waste Transfer Station/Material Recovery Facility permit (including small scale facilities) and their designated representatives. Certifications must be included with the application at the time of submittal of the application documents. Applicants are advised that applications received without the required certifications will be rejected and returned to the applicant.

4. Capacity Changes [N.J.A.C. 7:26-2.7(a)2]

Requests for increases in facility capacity may not be included in a major permit modification application. Any increase in the original approved permitted capacity is classified as an expansion in accordance with N.J.A.C. 7:26-2.7(a)2 and requires the issuance of a new permit pursuant to N.J.A.C. 7:26-2.4.

5. Permit Conditions Open For Public Comment [N.J.A.C. 7:26-2.6(e)4]

Under a major modification, only those permit conditions to be modified shall be opened for public comment in accordance with the procedures set forth at N.J.A.C. 7:26-2.4(g)17.

VI. Explanation Of Policies

In addition to the policies detailed in Appendix A, the Department's policies related to major modifications to Solid Waste Transfer Station/Material Recovery Facility permits which are not directly addressed in the regulations are as follows:

1. Definition of Major Modification

In general, any change to the physical plant or operational procedures of a permitted facility that do not meet the description of a minor modification shall require a major modification of the Solid Waste Transfer Station/Material Recovery Facility permit. Examples of major modifications include the addition of waste types which are different in nature from the waste types currently listed in the facility's permit (such as the inclusion of ID 10 household waste, or ID 23 vegetative waste which includes grass when only non-putrescible wastes are currently listed in the permit) or the upgrading of a Transfer Station/Material Recovery Facility which was permitted prior to the promulgation of the Department's current solid waste regulations.

2. Pre-Application Conference

The Department strongly recommends that all applicants for a major modification to a Solid Waste Transfer Station/Material Recovery Facility permit schedule and complete a pre-application conference with the Bureau of Hazardous Waste and Transfer Facilities. The purpose of the conference is to discuss and clarify application requirements in order to eliminate confusion and submission of unnecessary information. Applicants should submit preliminary application information at least two weeks prior to the scheduled conference, as specified in Appendix A to this manual and in the regulations. The pre-application conference will be held at the facility site wherever possible.

3. Applications For Small Scale Facilities

The Department will require that applications for small scale facilities (projected capacity less than 100 tons per day) include an Environmental and Health Impact Statement (EHIS). The magnitude and detail required for the EHIS will be determined at the pre-application conference.

The Department will also require that applications for small scale facilities include Additional Engineering Design Data specified in Appendix A to this manual and in the regulations at N.J.A.C. 7:26-2B.5.

4. Noise Level Assessment

The Department will require that the applicant prepare a noise level assessment in accordance with Item 11. of the Permit Application Review Checklist (Appendix A to this manual) and the following:

- i. Recreate the activities that will take place at the facility, at a given instance, during peak hour operations for the proposed maximum capacity applied for. All noise sources shall be accounted for and shall include (at a minimum):

- (1) Trucks queuing and those at the scale (use the information provided in the traffic report);
- (2) Loading and unloading activities occurring inside and outside the building;
- (3) Loader(s) pushing waste;
- (4) Any yard activity, such as dropping off and picking up of containers, loading recyclables, etc.;
- (5) Air pollution control equipment; and
- (6) Compactors, balers, grinders, and any other processing equipment, operating either inside and/or outside the facility.

All noise sources shall be compounded, logarithmically added and projected to the nearest sensitive receptors. If the projections show exceedance of the noise level standards set forth at N.J.A.C. 7:29-1 et seq. for day time, then mitigation measures shall be proposed to ensure that facility operations comply with noise level standards at all times.

- ii. If the facility expects to conduct night time operations (any activity between 10:00 p.m. and 7:00 a.m.), the assessment must demonstrate compliance with the night time noise level standards set forth at N.J.A.C. 7:29-1 et seq.
- iii. When projecting noise to sensitive receptors, it is important to note that the noise regulations at N.J.A.C. 7:29-1 et seq. depend on land use and not on the zoning of the property. This means that non-conforming residential receivers in commercial or industrial zones are afforded protection equivalent to residential receivers in residential zones. Also, the regulations consider commercial facilities to be sensitive receptors, while industrial facilities are not considered sensitive.

5. Traffic Assessment and Evaluation

The Department will require that the applicant prepare a traffic assessment and evaluation in accordance with Item 10. of the Permit Application Review Checklist (Appendix A to this manual), the New Jersey State Highway Access Management Code (Appendix D to this manual), and the following:

- i. Project an hourly daily waste delivery schedule for the anticipated maximum capacity of solid waste and recyclable material (if applicable). Provide the data base which supports the profile projections. Existing operating facilities shall utilize existing data. This schedule will determine the facility's peak hours.
- ii. Project an hourly daily transfer trailer/truck operational schedule which shows the amounts of waste and recyclable materials (if applicable) being hauled out of the facility. It is important to note that the ability to load waste out is restricted by waste delivery schedules and not by equipment processing capacity.
- iii. Identify off-site traffic routes for trucks accessing and exiting the facility. Critical intersections utilized by the truck traffic must be analyzed.
- iv. Hourly existing traffic counts (excluding the facility's truck traffic) shall be made (at a minimum) for each hour of facility operations. Roadway capacity shall be explicitly defined. This constitutes the baseline traffic assessment.

- v. The evaluation shall analyze the following scenarios:
 - (1) The existing roadway peak hour (with and without facility truck traffic);
 - (2) The hour of peak facility deliveries (with and without facility truck traffic); and
 - (3) Additional peak hours, if the facility is proposing 24-hour operations.
 - vi. The evaluation shall account for traffic growth for the projected period of full-scale operations. Use the recommended NJDOT factor for the area.
6. Additional Application Requirements For Recycling Activities At Transfer Station/Material Recovery Facilities

The Department will require that applicants who wish to perform Class A and/or Class B Recycling activities at the facility submit the following additional information:

- i. A narrative description of proposed recycling activities, including but not limited to:
 - (1) Activities performed within the building to separate recyclables from wastes;
 - (2) Receipt within the building of any source separated recyclable materials;
 - (3) Receipt outside the building of any source separated recyclable materials; and
 - (4) Impact of added recycling activities upon the facility operation, including:
 - (A) General floor and yard space requirements;
 - (B) Materials handling and large vehicle traffic requirements; and
 - (C) Noise and other physical impacts (air emissions, waste water discharge, etc.).
- ii. A revised site plan (including building floor plan)
 - (1) Submit per N.J.A.C. 7:26-2.10(b)2 and 3; and
 - (2) Identify additional processing equipment.
- iii. A revised O&M Manual
 - (1) Identify new equipment, provide specifications, add information to inspections, maintenance, spare parts and other sections;
 - (2) Identify additional personnel and job duties required; and
 - (3) Describe any special training, safety or other additional requirements.
- iv. An identification of recyclable materials and markets
 - (1) List materials to be separated from waste streams by types and amounts:
 - (A) Identify materials designated as mandatory recyclable materials by the County; and
 - (B) For each designated material, verify that each generator has a waiver from the municipality not to source-separate.
 - (2) List source separated recyclable materials to be received; and
 - (3) For each material listed in (1) and (2) above, identify markets:
 - (A) List material buyers (to be approved by the Office of Recycling).
 - (B) Provide contracts or letters of intent.

- v. A detailed description of storage activities for each recyclable material to be handled and stored
 - (1) Identify storage space on drawings;
 - (2) Describe type of storage unit (e.g. pile, bin, roll-off);
 - (3) Identify storage capacity in volume and weight (expressed in tons);
 - (4) Identify rate of storage (e.g. tons per day) and capacity expressed as "normal days";
 - (5) Identify planned storage time; and
 - (6) Describe any special storage requirements (fire monitoring/suppression, etc.).
- vi. A description of recordkeeping requirements, including procedures to identify commingled waste stream sources and credit municipalities with quantities recycled (for mandatory recyclable materials).
- vii. A description of measures to be employed for quality control of recyclable materials (if necessary).

7. Acceptance of Sludge and Sludge-Related Waste Types

The Department will require the following for applicants who wish to accept sludges or sludge-related (liquid) wastes:

- i. Documentation that the facility has been included in the respective District Solid Waste Management Plan for the acceptance of this waste type must be submitted with the application.
- ii. For existing facilities, this request will be classified as a major modification to the facility's current permit.

8. Weekly Averaging

The Department recognizes that the facility may experience daily variability in solid waste deliveries and will consider requests for authorization to exceed facility daily design capacity on peak days, provided that the facility's weekly capacity (the number of operating days per week times the daily design capacity) is not exceeded.

The Department will, however, require that the applicant demonstrate that facility operations will meet all requirements at the peak day capacity. Therefore, all information submitted for the facility's Environmental and Health Impact Statement, Engineering Design, Traffic Assessment and Evaluation and Noise Level Assessment (Items 6, 7, 8, 10 and 11 of the Permit Application Review Checklist attached as Appendix A to this manual) shall be based upon the proposed peak day capacity.

The Department will also require that applicants proposing a weekly averaging program demonstrate consistency with the respective district solid waste management plan where the facility is or will be located. The demonstration shall be in the form of a written determination from the respective district.



CHECKLIST FOR MAJOR MODIFICATION TO A SOLID WASTE TRANSFER STATION/MATERIAL RECOVERY FACILITY PERMIT

1. Revised/Updated Solid Waste Facility Permit Application Form
2. Written description of the proposed change(s) containing relevant factors and rationale supporting the request
3. Environmental Impact Assessment demonstrating that the modification will not adversely impact the environment
4. Revised engineering drawings (if necessary), signed and sealed by a NJ licensed professional engineer
5. Revised O&M Manual
6. Schedule for implementation of the proposed change(s)
7. Application Fee Per N.J.A.C. 7:26-4.3

The applicant will be billed the appropriate fee once the application has been received. The completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone Number: (609) 292-9880

Section 3

Minor Permit Modifications

I. Introduction

This section presents the requirements for the preparation and submission of an application for a minor modification to a solid waste transfer station/material recovery facility permit.

II. Applicable Regulations

The regulations governing minor modifications can be found in the Division of Solid and Hazardous Waste rules at New Jersey Administrative Code (N.J.A.C.) 7:26-2.6(d).

A copy of N.J.A.C. Title 7, Chapter 26 can be obtained by contacting West Publishing, 610 Opperman Dr., P.O. Box 64526, St. Paul, MN 55164-0526 or phone 1-800-808-WEST. A nonjudicial version of the regulations may be viewed by visiting our web site at www.state.nj.us/dep/dshw.

III. Application Procedures

An administrative completeness checklist is included at the end of this section to assist the applicant in submitting a complete application.

The number of copies of bound application documents and appurtenant drawings required for review is project specific. The actual number will depend on factors such as the the location of the facility, the number of neighboring municipalities, and the number of other agencies involved (e.g. Army Corps of Engineers, Pinelands Commission, Delaware River Basin Commission, etc.). Initially, three (3) copies of the complete application shall be submitted for administrative review. When the application has been determined to be administratively complete, the Department will advise the applicant of the number of additional copies required for technical review.

The application documents should be submitted to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone No. (609) 292-9880

The Department assesses a fee for the review of minor modifications in accordance with N.J.A.C. 7:26-4.3. This fee is subject to change on an annual basis. If the fee is not submitted with the application, please provide a name and address for the Department to send a bill for the fee.

IV. Submission Requirements

To achieve compliance with N.J.A.C. 7:26-2.6(d), the permittee shall submit sufficient engineering design information and an environmental impact assessment demonstrating that the proposed facility modifications

are consistent with the solid waste regulations and will not adversely impact the environment. These documents shall include, but not be limited to the following information, where applicable:

1. A written description of the proposed modification, containing relevant factors and rationale supporting the request and a discussion of how the proposed modification will comply with the regulations.
2. A revised site plan, prepared and submitted as required at N.J.A.C. 7:26-2.10(b)2, 3, and 6 and N.J.A.C. 7:26-2B.5(c);
3. A revised O&M Manual per N.J.A.C. 7:26-2.10(b)9; and
4. A schedule for implementation of the proposed changes.

V. Interpretation of Regulations

In addition to the regulatory interpretations detailed in Appendix A, the Department's interpretation of pertinent specific regulatory requirements for minor modifications to Solid Waste Transfer Station/Material Recovery Facility permits are as follows:

1. GIS Mapping Standards [N.J.A.C. 7:26-2.10(b)1]

The Department considers "All maps of the proposed facility" to mean any mapping containing geographic data which must be submitted as part of an application for a minor modification to a Solid Waste Transfer Station/Material Recovery Facility permit.

The Department considers "in a manner and format consistent with N.J.A.C. 7:1, Appendix A" to mean in accordance with the NJDEP GIS Mapping and Digital Data Standards, attached as Appendix B to this manual. These standards require that (1) all maps meet or exceed National Map Accuracy Standards or be of survey quality, (2) data shown on the maps is tied to the New Jersey State Plane Coordinate System, and (3) all maps are submitted in digital format.

2. Material Recovery Facility and Transfer Station Designation [N.J.A.C. 7:26-1.4]

During 1987, the Department amended the New Jersey Solid Waste regulations to include definitions of "transfer station" and "material recovery facility" to clarify the types of activities which may be performed by each.

Transfer station is defined as a facility at which solid waste is transferred from one solid waste vehicle to another solid waste vehicle for transportation to a solid waste facility. This definition does not allow for any recovery of materials from the incoming waste stream, therefore a transfer station may not perform any material recovery operations.

Material recovery facility is defined as a solid waste facility, such as a transfer station, which is designed and operated to process non-hazardous waste by utilizing manual and/or mechanical methods to separate useful materials from the incoming waste stream for return to the economic mainstream for use as raw materials or products.

To achieve a greater degree of flexibility, applicants who intend to perform both of these types of activities should apply for a permit for a solid waste transfer station/ material recovery facility. Applicants should circle the letter I. in section II. on the Solid Waste Facility Permit Application Form attached as Appendix C to this manual.

3. Required Certifications [N.J.A.C. 7:26-2.4(e)]

The Department considers "applicant" to mean all applicants for a Solid Waste Transfer Station/Material Recovery Facility permits and approvals (including small scale facilities) and their designated representatives. Certifications must be included with the application at the time of submittal of the application documents. Applicants are advised that applications received without the required certifications will be rejected and returned to the applicant.

4. Form of Request [N.J.A.C. 7:26-2.6(e)]

For those minor modifications listed at N.J.A.C. 7:26-2.6(d)1i thru vi, the Department will normally accept the request for modification in the form of a letter containing a description of the proposed changes.

5. Public Comment Requirements [N.J.A.C. 7:26-2.4(g)17]

Minor modifications are not subject to public comment requirements.

VI. Explanation Of Policies

In addition to the policies detailed in Appendix A, the Department's policies related to minor modifications to Solid Waste Transfer Station/Material Recovery Facility permits which are not directly addressed in the regulations are as follows:

1. Meaning of Minor Design Modification

In general, the Department considers minor design modifications to mean changes to the approved design of the facility which will result in an equivalent standard, an upgrade of the environmental performance of the facility, or a reduction in adverse environmental or human health impacts without increasing the design capacity of the facility. Examples of minor design modifications include the addition of a structure to an existing facility, adding materials recovery activities to a transfer station, the acceptance of source separated recyclable materials, and the replacement of processing equipment in like kind.

2. Pre-Application Conference

The Department strongly recommends that all applicants for a minor modification to a Solid Waste Transfer Station/Material Recovery Facility permit schedule and complete a pre-application conference with the Bureau of Hazardous Waste and Transfer Facilities. The purpose of the conference is to discuss and clarify submission requirements and the differences between major and minor modifications, in order to eliminate confusion and the submission of unnecessary information. The pre-application conference will be held at the facility site wherever possible.

3. Noise Level Assessment

The Department will require that the applicant prepare a noise level assessment (if applicable) in accordance with Item 11. of the Permit Application Review Checklist (Appendix A to this manual) and the following:

- i. Recreate the activities that will take place at the facility, at a given instance, during peak hour operations for the proposed maximum capacity applied for. All noise sources shall be accounted for and shall include (at a minimum):
 - (1) Trucks queuing and those at the scale (use the information provided in the traffic report);
 - (2) Loading and unloading activities occurring inside and outside the building;
 - (3) Loader(s) pushing waste;
 - (4) Any yard activity, such as dropping off and picking up of containers, loading recyclables, etc.;
 - (5) Air pollution control equipment; and
 - (6) Compactors, balers, grinders, and any other processing equipment, operating either inside and/or outside the facility.

All noise sources shall be compounded, logarithmically added and projected to the nearest sensitive receptors. If the projections show exceedance of the noise level standards set forth at N.J.A.C. 7:29-1 et seq. for day time, then mitigation measures shall be proposed to ensure that facility operations comply with noise level standards at all times.

- ii. If the facility expects to conduct night time operations (any activity between 10:00 p.m. and 7:00 a.m.), the assessment must demonstrate compliance with the night time noise level standards set forth at N.J.A.C. 7:29-1 et seq.
- iii. When projecting noise to sensitive receptors, it is important to note that the noise regulations at N.J.A.C. 7:29-1 et seq. depend on land use and not on the zoning of the property. This means that non-conforming residential receivers in commercial or industrial zones are afforded protection equivalent to residential receivers in residential zones. Also, the regulations consider commercial facilities to be sensitive receptors, while industrial facilities are not considered sensitive.

4. Traffic Assessment and Evaluation

The Department will require that the applicant prepare a traffic assessment and evaluation (if applicable) in accordance with Item 10. of the Permit Application Review Checklist (Appendix A to this manual), the New Jersey State Highway Access Management Code (Appendix D to this manual), and the following:

- i. Project an hourly daily waste delivery schedule for the anticipated maximum capacity of solid waste and recyclable material (if applicable). Provide the data base which supports the profile projections. Existing operating facilities shall utilize existing data. This schedule will determine the facility's peak hours.

- ii. Project an hourly daily transfer trailer/truck operational schedule which shows the amounts of waste and recyclable materials (if applicable) being hauled out of the facility. It is important to note that the ability to load waste out is restricted by waste delivery schedules and not by equipment processing capacity.
 - iii. Identify off-site traffic routes for trucks accessing and exiting the facility. Critical intersections utilized by the truck traffic must be analyzed.
 - iv. Hourly existing traffic counts (excluding the facility's truck traffic) shall be made (at a minimum) for each hour of facility operations. Roadway capacity shall be explicitly defined. This constitutes the baseline traffic assessment.
 - v. The evaluation shall analyze the following scenarios:
 - (1) The existing roadway peak hour (with and without facility truck traffic);
 - (2) The hour of peak facility deliveries (with and without facility truck traffic); and
 - (3) Additional peak hours, if the facility is proposing 24-hour operations.
 - vi. The evaluation shall account for traffic growth for the projected period of full-scale operations. Use the recommended NJDOT factor for the area.
5. Additional Application Requirements For Recycling Activities At Transfer Station/Material Recovery Facilities

The Department will require that applicants who wish to perform Class A and/or Class B Recycling activities at the facility submit the following additional information:

- i. A narrative description of proposed recycling activities, including but not limited to:
 - (1) Activities performed within the building to separate recyclables from wastes;
 - (2) Receipt within the building of any source separated recyclable materials;
 - (3) Receipt outside the building of any source separated recyclable materials; and
 - (4) Impact of added recycling activities upon the facility operation, including:
 - (A) General floor and yard space requirements;
 - (B) Materials handling and large vehicle traffic requirements; and
 - (C) Noise and other physical impacts (air emissions, waste water discharge, etc.).
- ii. A revised site plan (including building floor plan)
 - (1) Submit per N.J.A.C. 7:26-2.10(b)2 and 3; and
 - (2) Identify additional processing equipment.
- iii. A revised O&M Manual
 - (1) Identify new equipment, provide specifications, add information to inspections, maintenance, spare parts and other sections;
 - (2) Identify additional personnel and job duties required; and
 - (3) Describe any special training, safety or other additional requirements.

- iv. An identification of recyclable materials and markets
 - (1) List materials to be separated from waste streams by types and amounts:
 - (A) Identify materials designated as mandatory recyclable materials by the County; and
 - (B) For each designated material, verify that each generator has a waiver from the municipality not to source-separate.
 - (2) List source separated recyclable materials to be received; and
 - (3) For each material listed in (1) and (2) above, identify markets:
 - (A) List material buyers (to be approved by the Office of Recycling).
 - (B) Provide contracts or letters of intent.

- v. A detailed description of storage activities for each recyclable material to be handled and stored
 - (1) Identify storage space on drawings;
 - (2) Describe type of storage unit (e.g. pile, bin, roll-off);
 - (3) Identify storage capacity in volume and weight (expressed in tons);
 - (4) Identify rate of storage (e.g. tons per day) and capacity expressed as "normal days";
 - (5) Identify planned storage time; and
 - (6) Describe any special storage requirements (fire monitoring/suppression, etc.).

- vi. A description of recordkeeping requirements, including procedures to identify commingled waste stream sources and credit municipalities with quantities recycled (for mandatory recyclable materials).

- vii. A description of measures to be employed for quality control of recyclable materials (if necessary).

- 6. Weekly Averaging

The Department recognizes that the facility may experience daily variability in solid waste deliveries and will consider requests for authorization to exceed facility daily design capacity on peak days, provided that the facility's weekly capacity (the number of operating days per week times the daily design capacity) is not exceeded.

The Department will, however, require that the applicant demonstrate that facility operations will meet all requirements at the peak day capacity. Therefore, all information submitted for the facility's Environmental and Health Impact Statement, Engineering Design, Traffic Assessment and Evaluation and Noise Level Assessment (Items 6, 7, 8, 10 and 11 of the Permit Application Review Checklist attached as Appendix A to this manual) shall be based upon the proposed peak day capacity.

The Department will also require that applicants proposing a weekly averaging program demonstrate consistency with the respective district solid waste management plan where the facility is or will be located. The demonstration shall be in the form of a written determination from the respective district.



CHECKLIST FOR MINOR MODIFICATION TO A SOLID WASTE TRANSFER STATION/MATERIAL RECOVERY FACILITY PERMIT

1. Revised/Updated Solid Waste Facility Permit Application Form
2. Written description of the proposed change(s) containing relevant factors and rationale supporting the request
3. Environmental Impact Assessment demonstrating that the modification will not adversely impact the environment
4. Revised engineering drawings (if necessary), signed and sealed by a NJ licensed professional engineer
8. Revised O&M Manual
9. Schedule for implementation of the proposed change(s)
10. Application Fee Per N.J.A.C. 7:26-4.3

The applicant will be billed the appropriate fee once the application has been received. The completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone Number: (609) 292-9880

Section 4

Permit Renewals

I. Introduction

This section presents the requirements for the preparation and submission of a permit renewal application for an existing permitted solid waste transfer station/material recovery facility. The term of a solid waste facility permit is five years. Upon the Department's acceptance of a permit renewal application for technical review, the existing permit may be extended so that the conditions of the expired permit are continued in force pursuant to the Administrative Procedure Act, N.J.S.A. 52:14B-11, until the effective date of any renewed permit. In this manner, the Department can ensure the environmentally sound operation of a facility by requiring amendments to the facility's engineering design or operating procedures to upgrade the environmental performance of the solid waste transfer station/material recovery facility at the time of renewal.

II. Applicable Regulations

The regulations for a permit renewal can be found in the Division of Solid and Hazardous Waste rules at New Jersey Administrative Code (N.J.A.C.) 7:26-2.7(b)1 through 8. The rules allow for the renewal of an existing permit provided that existing capacity is available and the solid waste transfer station/material recovery facility is included in the approved District Solid Waste Management Plan.

As with an application for a new solid waste facility, public participation will be required during the Department's review of a permit renewal application per N.J.A.C. 7:26-2.7(b)3, 5, 6 and 7.

A copy of N.J.A.C. Title 7, Chapter 26 can be obtained by contacting West Publishing, 610 Opperman Dr., P.O. Box 64526, St. Paul, MN 55164-0526 or phone 1-800-808-WEST. A nonjudicial version of the regulations may be viewed by visiting our web site at www.state.nj.us/dep/dshw.

III. Application Procedures

An administrative completeness checklist is included at the end of this section to assist the applicant in submitting a complete permit renewal application. A Solid Waste Facility Permit Application Form must be updated and included in the application. This form can be obtained by contacting the Bureau of Hazardous Waste and Transfer Facilities at the address and phone number listed below.

The number of copies of bound application documents and appurtenant drawings required for review is project specific. The actual number will depend on factors such as the the location of the facility, the number of neighboring municipalities, and the number of other agencies involved (e.g. Army Corps of Engineers, Pinelands Commission, Delaware River Basin Commission, etc.). Initially, three (3) copies of the complete application shall be submitted for administrative review. When the application has been determined to be administratively complete, the Department will advise the applicant of the number of additional copies required for technical review.

The application documents should be submitted to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone No. (609) 292-9880

The Department assesses a fee for the review of a permit renewal application in accordance with N.J.A.C. 7:26-4.3. This fee is subject to change on an annual basis. If the fee is not submitted with the application, please provide a name and address for the Department to send a bill for the fee.

IV. Submission Requirements

To achieve compliance with N.J.A.C. 7:26-2.7(b), the permittee shall include the following information in the permit renewal application, where applicable:

1. An updated Solid Waste Facility Permit Application Form.
2. An updated facility engineering design per N.J.A.C. 7:26-2.7(b)2ii, including all facility modifications or operational changes completed between the date of issuance of the expiring permit and the date of submittal of the renewal application. The updated design must also reflect the most current facility operations occurring at the facility site. Completed engineering designs for any proposed facility modifications should also be included. In addition, engineering reports prepared for the initial issuance of the permit must be updated to include all approved facility modifications and narratives explaining the current facility operations. For any proposed modifications, the report should include a comprehensive narrative to address all engineering concerns. This narrative must be prepared in accordance with N.J.A.C. 7:26-2.9(c)4ii, N.J.A.C. 7:26-2.10 and 2.11, and N.J.A.C. 7:26-2B.5.
3. A revised O&M Manual per N.J.A.C. 7:26-2.10(b)9, including all operational and personnel changes which have occurred since the initial O&M Manual was approved by the Department. Some examples of items to include are changes to the inspection plan for equipment used at the facility, changes in key personnel related to the facility's emergency contingency plan, changes to the operational hours of the facility, identification of any new equipment since the issuance of the current permit, and any new requirements associated with the implementation of recycling operations at the facility.
4. An amended Disclosure Statement per N.J.A.C. 7:26-16.1 et seq. It is recommended that applicants contact the A-901 Intake Unit of the New Jersey Division of Law at 609-292-6018 for further information on what is required to comply with this requirement.
5. An updated Environmental and Health Impact Statement per N.J.A.C. 7:26-2.7(b)2v to identify any changes to the initial EHIS prepared for the facility. Previously identified environmental impacts must be restated and any changes (negative or positive) which have resulted from the facility's operation should be detailed. For negative changes, the permittee must identify mitigative measures

implemented to address and resolve the situation. The impact of any proposed expansion or modification of the facility should also be included.

V. Interpretation of Regulations

In addition to the regulatory interpretations detailed in Appendix A, the Department's interpretation of pertinent specific regulatory requirements for Solid Waste Transfer Station/Material Recovery Facility permit renewals are as follows:

1. GIS Mapping Standards [N.J.A.C. 7:26-2.10(b)1]

The Department considers "All maps of the proposed facility" to mean any mapping containing geographic data which must be submitted as part of an application for a Solid Waste Transfer Station/Material Recovery Facility permit renewal.

The Department considers "in a manner and format consistent with N.J.A.C. 7:1, Appendix A" to mean in accordance with the NJDEP GIS Mapping and Digital Data Standards, attached as Appendix B to this manual. These standards require that (1) all maps meet or exceed National Map Accuracy Standards or be of survey quality, (2) data shown on the maps is tied to the New Jersey State Plane Coordinate System, and (3) all maps are submitted in digital format.

2. Material Recovery Facility and Transfer Station Designation [N.J.A.C. 7:26-1.4]

During 1987, the Department amended the New Jersey Solid Waste regulations to include definitions of "transfer station" and "material recovery facility" to clarify the types of activities which may be performed by each.

Transfer station is defined as a facility at which solid waste is transferred from one solid waste vehicle to another solid waste vehicle for transportation to a solid waste facility. This definition does not allow for any recovery of materials from the incoming waste stream, therefore a transfer station may not perform any material recovery operations.

Material recovery facility is defined as a solid waste facility, such as a transfer station, which is designed and operated to process non-hazardous waste by utilizing manual and/or mechanical methods to separate useful materials from the incoming waste stream for return to the economic mainstream for use as raw materials or products.

To achieve a greater degree of flexibility, applicants who intend to perform both of these types of activities should apply for a permit for a solid waste transfer station/ material recovery facility. Applicants should circle the letter I. in section II. on the Solid Waste Facility Permit Application Form attached as Appendix C to this manual.

3. Required Certifications [N.J.A.C. 7:26-2.4(e)]

The Department considers "applicant" to mean all applicants for a Solid Waste Transfer Station/Material Recovery Facility permit renewal (including small scale facilities) and their designated representatives. Certifications must be included with the application at the time of submittal of the application documents. Applicants are advised that applications received without the required certifications will be rejected and returned to the applicant.

3. Renewal Application Requirements [N.J.A.C. 7:26-2.7(b)]

Permittees are advised that the renewal application documents must be submitted at least 90 days prior to the expiration date of the existing permit. This will allow sufficient time for the Department to perform an administrative review (30 days) and sufficient time for the permittee to revise and resubmit the application in the event that it is determined to be administratively incomplete.

4. Continuation of Expired Permit [N.J.A.C. 7:26-2.7(c)1]

The Department considers a “timely” application to mean a renewal application submitted at least 90 days prior to the expiration date of the existing permit. The Department considers a “complete” application to mean a renewal application determined by the Department to be administratively complete prior to the expiration date of the existing permit.

VI. Explanation Of Policies

In addition to the policies detailed in Appendix A, the Department’s policies related to Solid Waste Transfer Station/Material Recovery Facility permit renewals which are not directly addressed in the regulations are as follows:

1. Pre-Application Conference

The Department strongly recommends that all applicants for a Solid Waste Transfer Station/Material Recovery Facility permit renewal schedule and complete a pre-application conference with the Bureau of Hazardous Waste and Transfer Facilities. The purpose of the conference is to discuss and clarify application requirements in order to eliminate confusion and submission of unnecessary information. Applicants should submit preliminary application information at least two weeks prior to the scheduled conference, as specified in Appendix A to this manual and in the regulations. The pre-application conference will be held at the facility site wherever possible.

2. Applications For Small Scale Facilities

The Department will require that applications for small scale facilities (projected capacity less than 100 tons per day) include an Environmental and Health Impact Statement (EHIS). The magnitude and detail required for the EHIS will be determined at the pre-application conference.

The Department will also require that applications for small scale facilities include Additional Engineering Design Data specified in Appendix A to this manual and in the regulations at N.J.A.C. 7:26-2B.5.

3. Noise Level Assessment

The Department will require that the applicant prepare a noise level assessment in accordance with Item 11. of the Permit Application Review Checklist (Appendix A to this manual) and the following:

- i. Recreate the activities that will take place at the facility, at a given instance, during peak hour operations for the proposed maximum capacity applied for. All noise sources shall be accounted for and shall include (at a minimum):
 - (1) Trucks queuing and those at the scale (use the information provided in the traffic report);
 - (2) Loading and unloading activities occurring inside and outside the building;
 - (3) Loader(s) pushing waste;
 - (4) Any yard activity, such as dropping off and picking up of containers, loading recyclables, etc.;
 - (5) Air pollution control equipment; and
 - (6) Compactors, balers, grinders, and any other processing equipment, operating either inside and/or outside the facility.

All noise sources shall be compounded, logarithmically added and projected to the nearest sensitive receptors. If the projections show exceedance of the noise level standards set forth at N.J.A.C. 7:29-1 et seq. for day time, then mitigation measures shall be proposed to ensure that facility operations comply with noise level standards at all times.

- ii. If the facility expects to conduct night time operations (any activity between 10:00 p.m. and 7:00 a.m.), the assessment must demonstrate compliance with the night time noise level standards set forth at N.J.A.C. 7:29-1 et seq.
- iii. When projecting noise to sensitive receptors, it is important to note that the noise regulations at N.J.A.C. 7:29-1 et seq. depend on land use and not on the zoning of the property. This means that non-conforming residential receivers in commercial or industrial zones are afforded protection equivalent to residential receivers in residential zones. Also, the regulations consider commercial facilities to be sensitive receptors, while industrial facilities are not considered sensitive.

4. Traffic Assessment and Evaluation

The Department will require that the applicant prepare a traffic assessment and evaluation in accordance with Item 10. of the Permit Application Review Checklist (Appendix A to this manual), the New Jersey State Highway Access Management Code (Appendix D to this manual), and the following:

- i. Project an hourly daily waste delivery schedule for the anticipated maximum capacity of solid waste and recyclable material (if applicable). Provide the data base which supports the profile projections. Existing operating facilities shall utilize existing data. This schedule will determine the facility's peak hours.
- ii. Project an hourly daily transfer trailer/truck operational schedule which shows the amounts of waste and recyclable materials (if applicable) being hauled out of the facility. It is important to note that the ability to load waste out is restricted by waste delivery schedules and not by equipment processing capacity.
- iii. Identify off-site traffic routes for trucks accessing and exiting the facility. Critical intersections utilized by the truck traffic must be analyzed.

- iv. Hourly existing traffic counts (excluding the facility's truck traffic) shall be made (at a minimum) for each hour of facility operations. Roadway capacity shall be explicitly defined. This constitutes the baseline traffic assessment.
 - v. The evaluation shall analyze the following scenarios:
 - (1) The existing roadway peak hour (with and without facility truck traffic);
 - (2) The hour of peak facility deliveries (with and without facility truck traffic); and
 - (3) Additional peak hours, if the facility is proposing 24-hour operations.
 - vi. The evaluation shall account for traffic growth for the projected period of full-scale operations. Use the recommended NJDOT factor for the area.
5. Additional Application Requirements For Recycling Activities At Transfer Station/Material Recovery Facilities

The Department will require that applicants who wish to perform Class A and/or Class B Recycling activities at the facility submit the following additional information:

- i. A narrative description of proposed recycling activities, including but not limited to:
 - (1) Activities performed within the building to separate recyclables from wastes;
 - (2) Receipt within the building of any source separated recyclable materials;
 - (3) Receipt outside the building of any source separated recyclable materials; and
 - (4) Impact of added recycling activities upon the facility operation, including:
 - (A) General floor and yard space requirements;
 - (B) Materials handling and large vehicle traffic requirements; and
 - (C) Noise and other physical impacts (air emissions, waste water discharge, etc.).
- ii. A revised site plan (including building floor plan)
 - (1) Submit per N.J.A.C. 7:26-2.10(b)2 and 3; and
 - (2) Identify additional processing equipment.
- iii. A revised O&M Manual
 - (1) Identify new equipment, provide specifications, add information to inspections, maintenance, spare parts and other sections;
 - (2) Identify additional personnel and job duties required; and
 - (3) Describe any special training, safety or other additional requirements.
- iv. An identification of recyclable materials and markets
 - (1) List materials to be separated from waste streams by types and amounts:
 - (A) Identify materials designated as mandatory recyclable materials by the County; and

- (B) For each designated material, verify that each generator has a waiver from the municipality not to source-separate.
 - (2) List source separated recyclable materials to be received; and
 - (3) For each material listed in (1) and (2) above, identify markets:
 - (A) List material buyers (to be approved by the Office of Recycling).
 - (B) Provide contracts or letters of intent.
 - v. A detailed description of storage activities for each recyclable material to be handled and stored
 - (1) Identify storage space on drawings;
 - (2) Describe type of storage unit (e.g. pile, bin, roll-off);
 - (3) Identify storage capacity in volume and weight (expressed in tons);
 - (4) Identify rate of storage (e.g. tons per day) and capacity expressed as "normal days";
 - (5) Identify planned storage time; and
 - (6) Describe any special storage requirements (fire monitoring/suppression, etc.).
 - vi. A description of recordkeeping requirements, including procedures to identify commingled waste stream sources and credit municipalities with quantities recycled (for mandatory recyclable materials).
 - vii. A description of measures to be employed for quality control of recyclable materials (if necessary).
6. Acceptance of Sludge and Sludge-Related Waste Types

The Department will require the following for applicants who wish to accept sludges or sludge-related (liquid) wastes:

- i. Documentation that the facility has been included in the respective District Solid Waste Management Plan for the acceptance of this waste type must be submitted with the application.
 - ii. For existing facilities, this request will be classified as a major modification to the facility's current permit.
7. Weekly Averaging

The Department recognizes that the facility may experience daily variability in solid waste deliveries and will consider requests for authorization to exceed facility daily design capacity on peak days, provided that the facility's weekly capacity (the number of operating days per week times the daily design capacity) is not exceeded.

The Department will, however, require that the applicant demonstrate that facility operations will meet all requirements at the peak day capacity. Therefore, all information submitted for the facility's Environmental and Health Impact Statement, Engineering Design, Traffic Assessment and Evaluation and Noise Level Assessment (Items 6, 7, 8, 10 and 11 of the Permit Application Review Checklist attached as Appendix A to this manual) shall be based upon the proposed peak day capacity.

The Department will also require that applicants proposing a weekly averaging program demonstrate consistency with the respective district solid waste management plan where the facility is or will be located. The demonstration shall be in the form of a written determination from the respective district.

8. Timeframe For Submittal

The Department advises all permittees that should the submittal of a permit renewal application occur with less than 30 days remaining on the existing permit, the Department can not ensure that the required administrative completeness review will be completed prior to the expiration date of the existing permit. Furthermore, all applicants are hereby forewarned that should the above noted situation occur and the renewal application is determined to be administratively incomplete, the permittee will be classified as an illegal solid waste facility, and will be required to file an application as a new solid waste facility.

9. Facilities Authorized Prior To June 1, 1987

Solid Waste Transfer Station/Material Recovery Facilities who were issued a Certificate of Approved Registration and Engineering Design Approval (CAREDA) or a Solid Waste Facility permit prior to the adoption of amendments to N.J.A.C. 7:26-2.9, 2.10, 2.11 and 2B.5, which became effective June 1, 1987 will be required to comply with the new regulatory requirements upon renewal of the permit or approval, and are hereby forewarned that substantial upgrading or retrofit of the facility may be necessary to achieve compliance. The scope and magnitude of facility improvements that may be required will be discussed at the pre-application conference.

Note: Items 3 and/or 4 of paragraph VI above may not be required when the permittee is proposing no changes to the design or operation of the facility. This determination will be made at the pre-application conference.



CHECKLIST FOR THE RENEWAL OF A SOLID WASTE TRANSFER STATION/MATERIAL RECOVERY FACILITY PERMIT

1. Revised/Updated Solid Waste Facility Permit Application Form
2. Updated engineering design
3. Updated Operations and Maintenance Manual
4. Amended disclosure statement (A-901) pursuant to NJAC 7:26-16.1 et seq.
5. List of changes in environmental impacts due to operation of facility
6. Application Fee Per N.J.A.C. 7:26-4.3

The applicant will be billed the appropriate fee once the application has been received. The completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone Number: (609) 292-9880

Section 5

Transfers of Ownership

I. Introduction

This manual presents the requirements for the transfer of a solid waste transfer station/material recovery facility permit to a new owner or operator.

II. Applicable Regulations

The regulations for the transfer of a solid waste facility permit can be found in the Division of Solid and Hazardous Waste rules at N.J.A.C. 7:26-2.7(e).

A copy of N.J.A.C. Title 7, Chapter 26 can be obtained by contacting West Publishing, 610 Opperman Dr., P.O. Box 64526, St. Paul, MN 55164-0526 or phone 1-800-808-WEST. A nonjudicial version of the regulations may be viewed by visiting our web site at www.state.nj.us/dep/dshw.

III. Application Procedures

An administrative completeness checklist is included at the end of this section to assist the applicant in submitting a complete application. Three copies of the completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone No. (609) 292-9880

The Department assesses a fee for the transfer of a solid waste transfer station/material recovery facility permit to a new owner or operator in accordance with N.J.A.C. 7:26-4.3. This fee is subject to change on an annual basis. If the fee is not submitted with the application, please provide a name and address for the Department to send a bill for the fee.

IV. Submission Requirements

To achieve compliance with N.J.A.C. 7:26-2.7(e), applicants for transfer of ownership shall include the following information in the application, where applicable:

1. A copy of the written agreement negotiated between the existing permittee and the proposed permittee. The agreement shall include the date of the proposed transfer and assumption of ownership.
2. An updated Environmental and Health Impact Statement (EHIS) per N.J.A.C. 7:26-2.7(b)2v may be required. The need for this requirement will be discussed at the pre-application conference.

3. New or revised engineering designs and engineering design report information per N.J.A.C. 7:26-2.10 and N.J.A.C. 7:26-2B.5 may be required. The need for this requirement will be discussed at the pre-application conference.
4. A new O&M Manual prepared in accordance with N.J.A.C. 7:26-2.10(b)9. The manual shall reflect the operating policies and procedures of the proposed permittee.
5. An amended Disclosure Statement per N.J.A.C. 7:26-16.1 et seq. It is recommended that applicants contact the A-901 Intake Unit of the New Jersey Division of Law at 609-292-6018 for further information on what is required to comply with this requirement.
6. A demonstration that the financial responsibility requirements of N.J.A.C. 7:26-2A.9 will be met by the proposed permittee.
7. The Department may require environmental and/or operational improvements to the facility as a condition of the approval of the transfer of ownership. If so, a revised EHIS, engineering designs, and engineering design report will also be required.
8. If the applicant for transfer of ownership also requests an increase in facility capacity or authorization to conduct Class A or Class B recycling activities at the facility, a revised EHIS, engineering designs, and engineering design report must be submitted. These requirements will be discussed at the pre-application conference.

V. Interpretation of Regulations

In addition to the regulatory interpretations detailed in Appendix A, the Department's interpretation of pertinent specific regulatory requirements for transfer of ownership of Solid Waste Transfer Station/Material Recovery Facilities are as follows:

1. GIS Mapping Standards [N.J.A.C. 7:26-2.10(b)1]

The Department considers "All maps of the proposed facility" to mean any mapping containing geographic data which must be submitted as part of an application for the transfer of a Solid Waste Transfer Station/Material Recovery Facility permit.

The Department considers "in a manner and format consistent with N.J.A.C. 7:1, Appendix A" to mean in accordance with the NJDEP GIS Mapping and Digital Data Standards, attached as Appendix B to this manual. These standards require that (1) all maps meet or exceed National Map Accuracy Standards or be of survey quality, (2) data shown on the maps is tied to the New Jersey State Plane Coordinate System, and (3) all maps are submitted in digital format.

2. Material Recovery Facility and Transfer Station Designation [N.J.A.C. 7:26-1.4]

During 1987, the Department amended the New Jersey Solid Waste regulations to include definitions of "transfer station" and "material recovery facility" to clarify the types of activities which may be performed by each.

Transfer station is defined as a facility at which solid waste is transferred from one solid waste vehicle to another solid waste vehicle for transportation to a solid waste facility. This definition does not allow for any recovery of materials from the incoming waste stream, therefore a transfer station may not perform any material recovery operations.

Material recovery facility is defined as a solid waste facility, such as a transfer station, which is designed and operated to process non-hazardous waste by utilizing manual and/or mechanical methods to separate useful materials from the incoming waste stream for return to the economic mainstream for use as raw materials or products.

To achieve a greater degree of flexibility, applicants who intend to perform both of these types of activities should apply for a permit for a solid waste transfer station/ material recovery facility. Applicants should circle the letter I. in section II. on the Solid Waste Facility Permit Application Form attached as Appendix C to this manual.

3. Required Certifications [N.J.A.C. 7:26-2.4(e)]

The Department considers "applicant" to mean all applicants for a Solid Waste Transfer Station/Material Recovery Facility permits and approvals (including small scale facilities) and their designated representatives. Certifications must be included with the application at the time of submittal of the application documents. Applicants are advised that applications received without the required certifications will be rejected and returned to the applicant.

4. Meaning Of Transfer Of Ownership [N.J. A.C. 7:26-2.7(e)]

The Department considers "transfer of ownership" to mean the transfer of a solid waste facility permit, asset purchase transaction, stock purchase agreement or any other stock purchase.

5. Required Notification [N.J.A.C. 7:26-2.7(e)1]

Any request for a transfer of a solid waste transfer station/material recovery facility permit must be pre-approved by the Department. Therefore, applicants must submit written notice to the Department at least 180 days prior to the date of the proposed transfer of ownership or assumption of operational control. In addition, applicants must provide notice to all other agencies or governmental authorities as required by their respective regulations or statutes.

VI. Explanation Of Policies

In addition to the policies detailed in Appendix A, the Department's policies related to the transfer of ownership or operational control of Solid Waste Transfer Station/Material Recovery Facilities which are not directly addressed in the regulations are as follows:

1. Pre-Application Conference

The Department strongly recommends that all applicants for the transfer of a Solid Waste Transfer Station/Material Recovery Facility permit schedule and complete a pre-application conference with the Bureau of Hazardous Waste and Transfer Facilities. The purpose of the conference is to discuss and clarify application requirements in order to eliminate confusion and submission of unnecessary information. Applicants should submit preliminary application information at least two weeks prior

to the scheduled conference, as specified in Appendix A to this manual and in the regulations. The pre-application conference will be held at the facility site wherever possible.

2. Applications For Small Scale Facilities

The Department will require that applications for small scale facilities (projected capacity less than 100 tons per day) include an Environmental and Health Impact Statement (EHIS). The magnitude and detail required for the EHIS will be determined at the pre-application conference.

The Department will also require that applications for small scale facilities include Additional Engineering Design Data specified in Appendix A to this manual and in the regulations at N.J.A.C. 7:26-2B.5.

3. Noise Level Assessment

The Department will require that the applicant prepare a noise level assessment in accordance with Item 11. of the Permit Application Review Checklist (Appendix A to this manual) and the following:

i. Recreate the activities that will take place at the facility, at a given instance, during peak hour operations for the proposed maximum capacity applied for. All noise sources shall be accounted for and shall include (at a minimum):

- (1) Trucks queuing and those at the scale (use the information provided in the traffic report);
- (2) Loading and unloading activities occurring inside and outside the building;
- (3) Loader(s) pushing waste;
- (4) Any yard activity, such as dropping off and picking up of containers, loading recyclables, etc.;
- (5) Air pollution control equipment; and
- (6) Compactors, balers, grinders, and any other processing equipment, operating either inside and/or outside the facility.

All noise sources shall be compounded, logarithmically added and projected to the nearest sensitive receptors. If the projections show exceedance of the noise level standards set forth at N.J.A.C. 7:29-1 et seq. for day time, then mitigation measures shall be proposed to ensure that facility operations comply with noise level standards at all times.

ii. If the facility expects to conduct night time operations (any activity between 10:00 p.m. and 7:00 a.m.), the assessment must demonstrate compliance with the night time noise level standards set forth at N.J.A.C. 7:29-1 et seq.

iii. When projecting noise to sensitive receptors, it is important to note that the noise regulations at N.J.A.C. 7:29-1 et seq. depend on land use and not on the zoning of the property. This means that non-conforming residential receivers in commercial or industrial zones are afforded protection equivalent to residential receivers in residential zones. Also, the regulations consider commercial facilities to be sensitive receptors, while industrial facilities are not considered sensitive.

4. Traffic Assessment and Evaluation

The Department will require that the applicant prepare a traffic assessment and evaluation in accordance with Item 10. of the Permit Application Review Checklist (Appendix A to this manual), the New Jersey State Highway Access Management Code (Appendix D to this manual), and the following:

- i. Project an hourly daily waste delivery schedule for the anticipated maximum capacity of solid waste and recyclable material (if applicable). Provide the data base which supports the profile projections. Existing operating facilities shall utilize existing data. This schedule will determine the facility's peak hours.
- ii. Project an hourly daily transfer trailer/truck operational schedule which shows the amounts of waste and recyclable materials (if applicable) being hauled out of the facility. It is important to note that the ability to load waste out is restricted by waste delivery schedules and not by equipment processing capacity.
- iii. Identify off-site traffic routes for trucks accessing and exiting the facility. Critical intersections utilized by the truck traffic must be analyzed.
- iv. Hourly existing traffic counts (excluding the facility's truck traffic) shall be made (at a minimum) for each hour of facility operations. Roadway capacity shall be explicitly defined. This constitutes the baseline traffic assessment.
- v. The evaluation shall analyze the following scenarios:
 - (1) The existing roadway peak hour (with and without facility truck traffic);
 - (2) The hour of peak facility deliveries (with and without facility truck traffic); and
 - (3) Additional peak hours, if the facility is proposing 24-hour operations.
- vi. The evaluation shall account for traffic growth for the projected period of full-scale operations. Use the recommended NJDOT factor for the area.

5. Additional Application Requirements For Recycling Activities At Transfer Station/Material Recovery Facilities

The Department will require that applicants who wish to perform Class A and/or Class B Recycling activities at the facility submit the following additional information:

- i. A narrative description of proposed recycling activities, including but not limited to:
 - (1) Activities performed within the building to separate recyclables from wastes;
 - (2) Receipt within the building of any source separated recyclable materials;
 - (3) Receipt outside the building of any source separated recyclable materials; and
 - (4) Impact of added recycling activities upon the facility operation, including:
 - (A) General floor and yard space requirements;
 - (B) Materials handling and large vehicle traffic requirements; and
 - (C) Noise and other physical impacts (air emissions, waste water discharge, etc.).

- ii. A revised site plan (including building floor plan)
 - (1) Submit per N.J.A.C. 7:26-2.10(b)2 and 3; and
 - (2) Identify additional processing equipment.
 - iii. A revised O&M Manual
 - (1) Identify new equipment, provide specifications, add information to inspections, maintenance, spare parts and other sections;
 - (2) Identify additional personnel and job duties required; and
 - (3) Describe any special training, safety or other additional requirements.
 - iv. An identification of recyclable materials and markets
 - (1) List materials to be separated from waste streams by types and amounts:
 - (A) Identify materials designated as mandatory recyclable materials by the County; and
 - (B) For each designated material, verify that each generator has a waiver from the municipality not to source-separate.
 - (2) List source separated recyclable materials to be received; and
 - (3) For each material listed in (1) and (2) above, identify markets:
 - (A) List material buyers (to be approved by the Office of Recycling).
 - (B) Provide contracts or letters of intent.
 - v. A detailed description of storage activities for each recyclable material to be handled and stored
 - (1) Identify storage space on drawings;
 - (2) Describe type of storage unit (e.g. pile, bin, roll-off);
 - (3) Identify storage capacity in volume and weight (expressed in tons);
 - (4) Identify rate of storage (e.g. tons per day) and capacity expressed as "normal days";
 - (5) Identify planned storage time; and
 - (6) Describe any special storage requirements (fire monitoring/suppression, etc.).
 - vi. A description of recordkeeping requirements, including procedures to identify commingled waste stream sources and credit municipalities with quantities recycled (for mandatory recyclable materials).
 - vii. A description of measures to be employed for quality control of recyclable materials (if necessary).
6. Acceptance of Sludge and Sludge-Related Waste Types

The Department will require the following for applicants who wish to accept sludges or sludge-related (liquid) wastes:

- i. Documentation that the facility has been included in the respective District Solid Waste Management Plan for the acceptance of this waste type must be submitted with the application.
- ii. For existing facilities, this request will be classified as a major modification to the facility's current permit.

7. Weekly Averaging

The Department recognizes that the facility may experience daily variability in solid waste deliveries and will consider requests for authorization to exceed facility daily design capacity on peak days, provided that the facility's weekly capacity (the number of operating days per week times the daily design capacity) is not exceeded.

The Department will, however, require that the applicant demonstrate that facility operations will meet all requirements at the peak day capacity. Therefore, all information submitted for the facility's Environmental and Health Impact Statement, Engineering Design, Traffic Assessment and Evaluation and Noise Level Assessment (Items 6, 7, 8, 10 and 11 of the Permit Application Review Checklist attached as Appendix A to this manual) shall be based upon the proposed peak day capacity.

The Department will also require that applicants proposing a weekly averaging program demonstrate consistency with the respective district solid waste management plan where the facility is or will be located. The demonstration shall be in the form of a written determination from the respective district.



CHECKLIST FOR A TRANSFER OF OWNERSHIP OF A SOLID WASTE TRANSFER STATION/MATERIAL RECOVERY FACILITY PERMIT

1. Solid Waste Facility Permit Application Form
2. Disclosure statement (A-901) pursuant to NJAC 7:26-16.1 et seq.
3. Demonstration that responsibility according to NJAC 7:26-2A.9 will be met by applicant (closure and post-closure plan)
4. Written agreement between existing and proposed permittee with date for transfer of ownership
5. Notice of transfer to others as required by all other regulations or statutes
6. Updated Operations and Maintenance Manual
7. Application Fee Per N.J.A.C. 7:26-4.3

The applicant will be billed the appropriate fee once the application has been received. The completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone Number: (609) 292-9880

Section 6

Minor Technical Reviews

I. Introduction

This section presents the requirements for the preparation and submission of an application for a minor technical review.

II. Applicable Regulations

The regulations governing minor technical reviews are varied and can be found in the Division of Solid and Hazardous Waste rules at New Jersey Administrative Code (N.J.A.C.) Title 7, Chapter 26.

A copy of N.J.A.C. Title 7, Chapter 26 can be obtained by contacting West Publishing, 610 Opperman Dr., P.O. Box 64526, St. Paul, MN 55164-0526 or phone 1-800-808-WEST. A nonjudicial version of the regulations may be viewed by visiting our web site at www.state.nj.us/dep/dshw.

III. Application Procedures

An administrative completeness checklist is included at the end of this section to assist the applicant in submitting a complete application for a minor technical review.

The number of copies of application documents required for review is dependent upon the nature of the minor technical review. Accordingly, the applicant should consult the Bureau of Hazardous Waste and Transfer Facilities for a determination on the exact number of copies required.

The application documents should be submitted to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone No. (609) 292-9880

The Department assesses a fee for the review of a permit renewal application in accordance with N.J.A.C. 7:26-4.3. This fee is subject to change on an annual basis. If the fee is not submitted with the application, please provide a name and address for the Department to send a bill for the fee.

IV. Submission Requirements

To achieve compliance with N.J.A.C. 7:26-1 et seq., the applicant should submit the following information in the application, where applicable:

1. A written description of the proposed changes to the facility, facility operation, or the permit. The submission should include all relevant factors and rationale supporting the requested change.

2. Revised engineering designs per N.J.A.C. 7:26-2.10 and N.J.A.C. 7:26-2B.5 may be required. The need for this requirement will be discussed at the pre-application conference.
3. A schedule for implementation of the proposed changes.

V. Interpretation of Regulations

In addition to the regulatory interpretations detailed in Appendix A, the Department's interpretation of pertinent specific regulatory requirements for minor technical reviews are as follows:

1. GIS Mapping Standards [N.J.A.C. 7:26-2.10(b)1]

The Department considers "All maps of the proposed facility" to mean any mapping containing geographic data which must be submitted as part of an application for a minor technical review.

The Department considers "in a manner and format consistent with N.J.A.C. 7:1, Appendix A" to mean in accordance with the NJDEP GIS Mapping and Digital Data Standards, attached as Appendix B to this manual. These standards require that (1) all maps meet or exceed National Map Accuracy Standards or be of survey quality, (2) data shown on the maps is tied to the New Jersey State Plane Coordinate System, and (3) all maps are submitted in digital format.

2. Material Recovery Facility and Transfer Station Designation [N.J.A.C. 7:26-1.4]

During 1987, the Department amended the New Jersey Solid Waste regulations to include definitions of "transfer station" and "material recovery facility" to clarify the types of activities which may be performed by each.

Transfer station is defined as a facility at which solid waste is transferred from one solid waste vehicle to another solid waste vehicle for transportation to a solid waste facility. This definition does not allow for any recovery of materials from the incoming waste stream, therefore a transfer station may not perform any material recovery operations.

Material recovery facility is defined as a solid waste facility, such as a transfer station, which is designed and operated to process non-hazardous waste by utilizing manual and/or mechanical methods to separate useful materials from the incoming waste stream for return to the economic mainstream for use as raw materials or products.

To achieve a greater degree of flexibility, applicants who intend to perform both of these types of activities should apply for a permit for a solid waste transfer station/ material recovery facility. Applicants should circle the letter I. in section II. on the Solid Waste Facility Permit Application Form attached as Appendix C to this manual.

3. Required Certifications [N.J.A.C. 7:26-2.4(e)]

The Department considers "applicant" to mean all applicants for a Solid Waste Transfer Station/Material Recovery Facility permits and approvals (including small scale facilities) and their designated representatives. Certifications must be included with the application at the time of submittal of the application documents. Applicants are advised that applications received without the required certifications will be rejected and returned to the applicant.

VI. Explanation Of Policies

In addition to the policies detailed in Appendix A, the Department's policies related to minor technical reviews which are not directly addressed in the regulations are as follows:

1. Definition of Minor Technical Review

Minor technical reviews are those reviews that do not fall under the major permit and/or approval review activities. The Bureau of Hazardous Waste and Transfer Facilities defines minor technical reviews as changes to the facility or the solid waste facility permit that require modifications which are minor in nature. The following are examples of minor technical reviews:

- a. Replacement of equipment used in solid waste operations;
- b. Changes in approved compliance schedules;
- c. Changes in facility operating procedures; and
- d. Any other minor changes, additions, or modifications made to the facility of the facility's permit.

2. Pre-Application Conference

The Department strongly recommends that all applicants for a minor technical review schedule and complete a pre-application conference with the Bureau of Hazardous Waste and Transfer Facilities. The purpose of the conference is to discuss and clarify application requirements in order to eliminate confusion and submission of unnecessary information. Applicants should submit preliminary application information at least two weeks prior to the scheduled conference, as specified in Appendix A to this manual and in the regulations. The pre-application conference will be held at the facility site wherever possible.

All applicants are advised that if a request for a minor technical review is submitted without scheduling a pre-application conference, the Bureau of Hazardous Waste and Transfer Facilities will determine if the request may be classified as a minor technical review.

3. Noise Level Assessment

The Department will require that the applicant prepare a noise level assessment (if applicable) in accordance with Item 11. of the Permit Application Review Checklist (Appendix A to this manual) and the following:

- i. Recreate the activities that will take place at the facility, at a given instance, during peak hour operations for the proposed maximum capacity applied for. All noise sources shall be accounted for and shall include (at a minimum):
 - (1) Trucks queuing and those at the scale (use the information provided in the traffic report);
 - (2) Loading and unloading activities occurring inside and outside the building;

- (3) Loader(s) pushing waste;
- (4) Any yard activity, such as dropping off and picking up of containers, loading recyclables, etc.;
- (5) Air pollution control equipment; and
- (6) Compactors, balers, grinders, and any other processing equipment, operating either inside and/or outside the facility.

All noise sources shall be compounded, logarithmically added and projected to the nearest sensitive receptors. If the projections show exceedance of the noise level standards set forth at N.J.A.C. 7:29-1 et seq. for day time, then mitigation measures shall be proposed to ensure that facility operations comply with noise level standards at all times.

- ii. If the facility expects to conduct night time operations (any activity between 10:00 p.m. and 7:00 a.m.), the assessment must demonstrate compliance with the night time noise level standards set forth at N.J.A.C. 7:29-1 et seq.
- iii. When projecting noise to sensitive receptors, it is important to note that the noise regulations at N.J.A.C. 7:29-1 et seq. depend on land use and not on the zoning of the property. This means that non-conforming residential receivers in commercial or industrial zones are afforded protection equivalent to residential receivers in residential zones. Also, the regulations consider commercial facilities to be sensitive receptors, while industrial facilities are not considered sensitive.

4. Additional Application Requirements For Recycling Activities At Transfer Station/Material Recovery Facilities

The Department will require that applicants who wish to perform Class A and/or Class B Recycling activities at the facility submit the following additional information:

- i. A narrative description of proposed recycling activities, including but not limited to:
 - (1) Activities performed within the building to separate recyclables from wastes;
 - (2) Receipt within the building of any source separated recyclable materials;
 - (3) Receipt outside the building of any source separated recyclable materials; and
 - (4) Impact of added recycling activities upon the facility operation, including:
 - (A) General floor and yard space requirements;
 - (B) Materials handling and large vehicle traffic requirements; and
 - (C) Noise and other physical impacts (air emissions, waste water discharge, etc.).
- ii. A revised site plan (including building floor plan)
 - (1) Submit per N.J.A.C. 7:26-2.10(b)2 and 3; and
 - (2) Identify additional processing equipment.
- iii. A revised O&M Manual
 - (1) Identify new equipment, provide specifications, add information to inspections, maintenance, spare parts and other sections;

- (2) Identify additional personnel and job duties required; and
 - (3) Describe any special training, safety or other additional requirements.
- iv. An identification of recyclable materials and markets
- (1) List materials to be separated from waste streams by types and amounts:
 - (A) Identify materials designated as mandatory recyclable materials by the County; and
 - (B) For each designated material, verify that each generator has a waiver from the municipality not to source-separate.
 - (2) List source separated recyclable materials to be received; and
 - (3) For each material listed in (1) and (2) above, identify markets:
 - (A) List material buyers (to be approved by the Office of Recycling).
 - (B) Provide contracts or letters of intent.
- v. A detailed description of storage activities for each recyclable material to be handled and stored
- (1) Identify storage space on drawings;
 - (2) Describe type of storage unit (e.g. pile, bin, roll-off);
 - (3) Identify storage capacity in volume and weight (expressed in tons);
 - (4) Identify rate of storage (e.g. tons per day) and capacity expressed as "normal days";
 - (5) Identify planned storage time; and
 - (6) Describe any special storage requirements (fire monitoring/suppression, etc.).
- vi. A description of recordkeeping requirements, including procedures to identify commingled waste stream sources and credit municipalities with quantities recycled (for mandatory recyclable materials).
- vii. A description of measures to be employed for quality control of recyclable materials (if necessary).



CHECKLIST FOR A MINOR TECHNICAL REVIEW

1. Written description of the proposed change(s) containing relevant factors and rationale supporting the request
2. Engineering drawings (if necessary) signed and sealed by a licensed NJ professional engineer
3. Schedule for implementation of proposed change(s)
4. Application Fee Per N.J.A.C. 7:26-4.3

The applicant will be billed the appropriate fee once the application has been received. The completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone Number: (609) 292-9880

Intermodal Container Facility Approvals

I. Introduction

This manual presents the requirements for the preparation and submission of an application for an Intermodal Container Facility approval.

II. Applicable Regulations

The regulations governing Intermodal Container Facilities can be found in the Division of Solid and Hazardous Waste rules at New Jersey Administrative Code (N.J.A.C.) 7:26-3.6.

A copy of N.J.A.C. Title 7, Chapter 26 can be obtained by contacting West Publishing, 610 Opperman Dr., P.O. Box 64526, St. Paul, MN 55164-0526 or phone 1-800-808-WEST. A nonjudicial version of the regulations may be viewed by visiting our web site at www.state.nj.us/dep/dshw.

III. Application Procedures

An administrative completeness checklist is included at the end of this section to assist the applicant in submitting a complete application.

The number of copies of bound application documents and appurtenant drawings required for review is project specific. The actual number will depend on factors such as the the location of the facility, the number of neighboring municipalities, and the number of other agencies involved (e.g. Army Corps of Engineers, Pinelands Commission, Delaware River Basin Commission, etc.). Initially, three (3) copies of the complete application shall be submitted for administrative review. When the application has been determined to be administratively complete, the Department will advise the applicant of the number of additional copies required for technical review.

The application documents should be submitted to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone No. (609) 292-9880

The Department assesses a fee for the review of Intermodal Container Facility applications in accordance with N.J.A.C. 7:26-4.7. This fee is subject to change on an annual basis. If the fee is not submitted with the application, please provide a name and address for the Department to send a bill for the fee.

IV. Explanation of Policies

The Department's policies related to Intermodal Container Facility approvals which are not directly addressed in the regulations are as follows:

1. Pre-Application Conference

The Department strongly recommends that all applicants for an Intermodal Container Facility approval schedule and complete a pre-application conference with the Bureau of Hazardous Waste and Transfer Facilities. The purpose of the conference is to discuss and clarify application requirements in order to eliminate confusion and submission of unnecessary information. Applicants should submit preliminary application information at least two weeks prior to the scheduled conference, as specified in this manual and in the regulations. The pre-application conference will be held at the facility site wherever possible.

2. Solid Waste Facility Permit Application Form

The Department will require that a completed Solid Waste Facility Permit Application Form, attached as Appendix C to this manual, be submitted as part of an application for an Intermodal Container Facility approval.

3. GIS Mapping Standards

The Department will require that any mapping containing geographic data which must be submitted as part of an application for an Intermodal Container Facility Approval be submitted in a manner and format consistent with the most updated version of the NJDEP GIS Mapping and Digital Data Standards, attached as Appendix B to this manual. These standards require that (1) all maps meet or exceed National Map Accuracy Standards or be of survey quality, (2) data shown on the maps is tied to the New Jersey State Plane Coordinate System, and (3) all maps are submitted in digital format.



CHECKLIST FOR AN INTERMODAL CONTAINER FACILITY APPROVAL

1. NJDEP Solid Waste Facility Permit Application Form
2. Documentation of registration and licensing as a solid waste transporter per N.J.A.C. 7:26-3.6(b)2
3. Evidence of other local, regional, State or Federal approvals per N.J.A.C. 7:26-3.6(b)3
4. Copy of Tax Map per N.J.A.C. 7:26-3.6(b)5
5. Description of current use of facility site and adjoining properties per N.J.A.C. 7:26-3.6(b)6
6. Documentation of consistency with the applicable District Solid Waste Management Plan per N.J.A.C. 7:26-3.6(b)7
7. List of all waste types to be managed at the facility per N.J.A.C. 7:26-3.6(b)8
8. Description of maximum amounts of wastes to be managed at the facility per N.J.A.C. 7:26-3.6(b)9
9. Description of sources and disposal locations for all wastes per N.J.A.C. 7:26-3.6(b)10
10. Description of types and numbers of containers and means of storage or staging per N.J.A.C. 7:26-3.6(b)11
11. Site Plan per N.J.A.C. 7:26-3.6(b)12
12. USGS Quadrangle map per N.J.A.C. 7:26-3.6(b)13
13. Copy of deed or legal agreement for ownership/use of property per N.J.A.C. 7:26-3.6(b)14
14. Description of facility design capacity per N.J.A.C. 7:26-3.6(b)15
15. Copies of all applicable air pollution control permit applications per N.J.A.C. 7:26-3.6(b)16
16. Narrative description of facility operations per N.J.A.C. 7:26-3.6(b)17
17. Application Fee per N.J.A.C. 7:26-4.7

The applicant will be billed the appropriate fee once the application has been received. The completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone Number: (609) 292-9880

Certificates of Authority to Operate

I. Introduction

This manual presents the requirements for the preparation and submission of an application for a Certificate of Authority to Operate.

II. Applicable Regulations

The regulations governing Certificates of Authority to Operate can be found in the Division of Solid and Hazardous Waste rules at New Jersey Administrative Code (N.J.A.C.) 7:26-1.7(e).

A copy of N.J.A.C. Title 7, Chapter 26 can be obtained by contacting West Publishing, 610 Opperman Dr., P.O. Box 64526, St. Paul, MN 55164-0526 or phone 1-800-808-WEST. A nonjudicial version of the regulations may be viewed by visiting our web site at www.state.nj.us/dep/dshw.

III. Application Procedures

An administrative completeness checklist is included at the end of this section to assist the applicant in submitting a complete application.

The number of copies of bound application documents and appurtenant drawings required for review is project specific. The actual number will depend on factors such as the the location of the facility, the number of neighboring municipalities, and the number of other agencies involved (e.g. Army Corps of Engineers, Pinelands Commission, Delaware River Basin Commission, etc.). Initially, three (3) copies of the complete application shall be submitted for administrative review. When the application has been determined to be administratively complete, the Department will advise the applicant of the number of additional copies required for technical review.

The application documents should be submitted to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone No. (609) 292-9880

The Department will assess a fee for the review of applications for Certificates of Authority to Operate in accordance with N.J.A.C. 7:26-4.3(f). The amount of the fee will be equal to the Department's estimate of the number of person-hours required to perform the work, multiplied by the hourly rate of \$84.17. If the fee is not submitted with the application, please provide a name and address for the Department to send a bill for the fee.

IV. Interpretation of Regulations

The Department's interpretation of pertinent specific regulatory requirements for Certificates of Authority to Operate are as follows:

1. Demonstration of Integrity, Expertise and Competence [N.J.A.C. 7:26-1.7(e)1i]

The Department considers "such information as the Department may require" to mean that sufficient historical information or other documentation demonstrating the integrity, expertise and competence of the proposed owner or operator to operate a transfer station shall be submitted with the application for a Certificate of Authority to Operate.

2. Demonstration of Need [N.J.A.C. 7:26-1.7(e)1ii]

The Department considers "provided that use of the facility prior to the time that a registration can be issued pursuant to N.J.A.C. 7:26-2 is essential" to mean that sufficient documentation demonstrating the need to operate the facility in order to avoid a disruption in solid waste services which would be inconsistent with the applicable District Solid Waste Management Plan shall be submitted with the application for a Certificate of Authority to Operate.

V. Explanation of Policies

The Department's policies related to Certificates of Authority to Operate which are not directly addressed in the regulations are as follows:

1. Pre-Application Conference

The Department strongly recommends that all applicants for a Certificate of Authority to Operate schedule and complete a pre-application conference with the Bureau of Hazardous Waste and Transfer Facilities. The purpose of the conference is to discuss and clarify application requirements in order to eliminate confusion and submission of unnecessary information. Applicants should submit preliminary application information at least two weeks prior to the scheduled conference, as specified in this manual and in the regulations. The pre-application conference will be held at the facility site wherever possible.

2. Solid Waste Facility Permit Application Form

The Department will require that a completed Solid Waste Facility Permit Application Form, attached as Appendix C to this manual, be submitted as part of an application for a Certificate of Authority to Operate.

3. GIS Mapping Standards

The Department will require that any mapping containing geographic data which must be submitted as part of an application for a Certificate of Authority to Operate be submitted in a manner and format consistent with the most updated version of the NJDEP GIS Mapping and Digital Data Standards, attached as Appendix B to this manual. These standards require that (1) all maps meet or exceed National Map Accuracy Standards or be of survey quality, (2) data shown on the maps is tied to the New Jersey State Plane Coordinate System, and (3) all maps are submitted in digital format.



CHECKLIST FOR A CERTIFICATE OF AUTHORITY TO OPERATE

1. NJDEP Solid Waste Facility Permit Application Form
2. Demonstration of Integrity, Expertise and Competence per N.J.A.C. 7:26-1.7(e)1i
3. Demonstration of Need per N.J.A.C. 7:26-1.7(e)1ii
4. Disclosure Statement per N.J.A.C. 7:26-1.7(e)2i
5. Emergency Environmental and Health Impact Statement per N.J.A.C. 7:26-1.7(e)2ii and 3
6. Engineering Design and Operating Information per N.J.A.C. 7:26-1.7(e)2iii
7. Demonstration of Filing of Notifications and Publication of Public Notices per N.J.A.C. 7:26-1.7(e)4
8. Application Fee per N.J.A.C. 7:26-4.3(f)

The applicant will be billed the appropriate fee once the application has been received. The completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone Number: (609) 292-9880

Section 9

Temporary Permit Modification Approvals

I. Introduction

This manual presents the requirements for the preparation and submission of an application for a Temporary Permit Modification Approval.

II. Applicable Regulations

The regulations governing Temporary Permit Modification Approvals can be found in the Division of Solid and Hazardous Waste rules at New Jersey Administrative Code (N.J.A.C.) 7:26-1.9

A copy of N.J.A.C. Title 7, Chapter 26 can be obtained by contacting West Publishing, 610 Opperman Dr., P.O. Box 64526, St. Paul, MN 55164-0526 or phone 1-800-808-WEST. A nonjudicial version of the regulations may be viewed by visiting our web site at www.state.nj.us/dep/dshw.

III. Application Procedures

An administrative completeness checklist is included at the end of this section to assist the applicant in submitting a complete application.

The number of copies of bound application documents and appurtenant drawings required for review is project specific. The actual number will depend on factors such as the the location of the facility, the number of neighboring municipalities, and the number of other agencies involved (e.g. Army Corps of Engineers, Pinelands Commission, Delaware River Basin Commission, etc.). Initially, three (3) copies of the complete application shall be submitted for administrative review. When the application has been determined to be administratively complete, the Department will advise the applicant of the number of additional copies required for technical review.

The application documents should be submitted to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone No. (609) 292-9880

The Department will assess a fee for the review of applications for Temporary Permit Modification Approvals in accordance with N.J.A.C. 7:26-4.3(f). The amount of the fee will be equal to the Department's estimate of the number of person-hours required to perform the work, multiplied by the hourly rate of \$84.17. If the fee is not submitted with the application, please provide a name and address for the Department to send a bill for the fee.

IV. Interpretation of Regulations

The Department's interpretation of pertinent specific regulatory requirements for Temporary Permit Modification Approvals are as follows:

1. Demonstration of Need [N.J.A.C. 7:26-1.9(b)1ii]

The Department considers "provided that issuance of a temporary permit modification approval prior to the time that such modification to the solid waste facility permit can be issued pursuant to N.J.A.C. 7:26-2.6 is essential" to mean that sufficient documentation demonstrating the need to continue operation of the facility in order to avoid a disruption in solid waste services which would be inconsistent with the applicable District Solid Waste Management Plan shall be submitted with the application for a Temporary Permit Modification Approval.

V. Explanation of Policies

The Department's policies related to Temporary Permit Modification Approvals which are not directly addressed in the regulations are as follows:

1. Pre-Application Conference

The Department strongly recommends that all applicants for a Temporary Permit Modification Approval schedule and complete a pre-application conference with the Bureau of Hazardous Waste and Transfer Facilities. The purpose of the conference is to discuss and clarify application requirements in order to eliminate confusion and submission of unnecessary information. Applicants should submit preliminary application information at least two weeks prior to the scheduled conference, as specified in this manual and in the regulations. The pre-application conference will be held at the facility site wherever possible.

2. Solid Waste Facility Permit Application Form

The Department will require that a completed Solid Waste Facility Permit Application Form, attached as Appendix C to this manual, be submitted as part of an application for a Temporary Permit Modification Approval.

3. GIS Mapping Standards

The Department will require that any mapping containing geographic data which must be submitted as part of an application for a Temporary Permit Modification Approval be submitted in a manner and format consistent with the most updated version of the NJDEP GIS Mapping and Digital Data Standards, attached as Appendix B to this manual. These standards require that (1) all maps meet or exceed National Map Accuracy Standards or be of survey quality, (2) data shown on the maps is tied to the New Jersey State Plane Coordinate System, and (3) all maps are submitted in digital format.



CHECKLIST FOR A TEMPORARY PERMIT MODIFICATION APPROVAL

1. Revised/Updated Solid Waste Facility Permit Application Form
2. Demonstration of Need per N.J.A.C. 7:26-1.9(b)1ii
3. Amendments to the approved EHIS and a description of changes in environmental impacts per N.J.A.C. 7:26-1.9(b)2i
4. Description of changes in traffic impacts per N.J.A.C. 7:26-1.9(b)2i
5. Amendments to the approved O & M Manual per N.J.A.C. 7:26-1.9(b)2ii
6. Amended Engineering Design per N.J.A.C. 7:26-1.9(b)2iii
7. Application Fee per N.J.A.C. 7:26-4.3(f)

The applicant will be billed the appropriate fee once the application has been received. The completed application should be mailed to the following address:

Chief, Bureau of Hazardous Waste and Transfer Facilities
Division of Solid and Hazardous Waste
New Jersey Department of Environmental Protection
P.O. Box 414
Trenton, New Jersey 08625-0414

Telephone Number: (609) 292-9880

APPENDIX A

NJDEP
SOLID WASTE TRANSFER STATION/MATERIAL RECOVERY FACILITY
PERMIT APPLICATION REVIEW CHECKLIST

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		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
1.	PRE-APPLICATION CONFERENCE INFORMATION (Recommended) Provide the following information at least two weeks prior to the scheduled pre-application conference.					2.4
1.1	<u>Site Map</u> Facility site location plotted on the latest revision of the 7.5 minute series USGS Topographic Quadrangle.					2.4(a)1
1.2	<u>Facility Description</u> Provide a general description of the facility, including how the facility will operate to accept, process and transfer solid waste.					2.4(a) 2
1.3	<u>Estimate of Facility Design Capacity</u>					2.4(a)3
1.4	<u>Description of Waste Types</u>					2.4(a)4
1.5	<u>Construction Schedule</u> Provide a written plan establishing the tentative construction schedule for the facility.					2.4(a)5
1.6	<u>Scope of Work</u> Provide a written scope of work outlining how each of the following requirements will be accomplished:					2.4(a)6
1.6.1	<u>EHIS</u>					
1.6.2	<u>Geotechnical Investigation</u>					
1.6.3	<u>Engineering Design</u>					
1.7	<u>Documentation of SWMP Inclusion</u> Provide a written documentation that the facility is included in the solid waste management plan pursuant to N.J.S.A. 13:1E-23 or that an application has been submitted to the appropriate public authority seeking inclusion in the solid waste management plan.					2.4(a)7
2.	<u>APPLICATION FORM</u> Provide a completed NJDEP Solid Waste Facility Permit Application Form.					None
3.	<u>(RESERVED)</u>					
4.	<u>DISCLOSURE STATEMENT</u> Note: The disclosure statement will be submitted to and reviewed by the Bureau of Hazardous Waste Regulation.					16.4
5.	<u>DISTRICT PLAN INCLUSION</u> Provide documentation establishing that the facility has been included in the applicable district solid waste management plan.					2.4(b)2

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.	<p><u>EHIS</u></p> <p>Provide an Environmental and Health Impact Statement, which has been prepared using a systematic interdisciplinary approach in order to ensure the integrated assessment of technical, economic, environmental and social parameters potentially affected by the proposed facility.</p> <p>The EHIS shall address each category listed in 6.3 below. The magnitude and detail of the environmental inventory, the environmental assessment, the health impact assessment and the overall EHIS shall reflect the type, size and location of the proposed facility. Where the information addressing a requirement in the inventory is supplied in the engineering designs or reports, reference to such designs or reports may be noted in the inventory, provided that the appropriate section and page number of the design or report is cross-referenced and indexed.</p> <p>If any category listed at 6.3 below presents no impact relative to the facility, a notation of non-applicability shall be entered in the environmental inventory for that category. These categories shall be discussed with Department representatives at the Pre-Application Conference, prior to preparation of the EHIS.</p> <p>The Department may allow variances to these requirements for any category, or to reduce the size of the general area to be described in the inventory relative to site-specific impacts, if the applicant demonstrates during the pre-application conference that specific categories are not applicable or the area is not appropriately subject to EHIS requirements based on the type, size and location of the facility.</p> <p>The EHIS shall include the following:</p>					2.9
6.1	<p><u>Executive Summary</u></p> <p>An executive summary, including:</p>					2.9(c)
6.1.1	<u>Description of Proposed Facility</u>					2.9(c)1
6.1.2	<p><u>Positive Impacts</u></p> <p>Briefly describe any significant associated positive environmental impacts.</p>					
6.1.3	<p><u>Negative Impacts</u></p> <p>Briefly describe any significant associated negative environmental impacts.</p>					
6.1.4	<p><u>Mitigative Measures</u></p> <p>Describe any mitigative measures which will be taken to minimize or eliminate any negative impacts listed at 6.1.3 above</p>					
6.2	<p><u>Site Description</u></p> <p>Provide a description of the site location, including the following:</p>					2.9(c)2
6.2.1	<p><u>Setting</u></p> <p>Describe the municipal and neighborhood setting of the proposed facility.</p>					
6.2.2	<p><u>Site Plans</u></p> <p>Provide site maps as follows:</p>					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.2.2.1	<u>Key Map</u> An 8 ½ x 11 inch copy of the key map prepared in accordance with N.J.A.C. 7:26-2.10(b)4 and submitted as part of the engineering design per 7.4 below.					2.9(c)2i
6.2.2.2	<u>Vicinity Map</u> An 8 ½ x 11 inch copy of the vicinity map prepared in accordance with N.J.A.C. 7:26-2.10(b)5 and submitted as part of the engineering design per 7.5 below.					2.9(c)2ii
6.3	<u>Environmental Inventory</u> Provide a detailed site-specific inventory and general description of conditions within one mile of the proposed facility for each of the following categories.					2.9(c)3
6.3.1	<u>Category I (Physical/Chemical)</u> Describe the following parameters:					2.9(c)3i
6.3.1.1	<u>Physical Geology</u> Describe the following:					2.9(c)3i(1)
6.3.1.1.1	<u>Formations Present</u> Identify the major characteristics of the geologic formations, including:					
6.3.1.1.1.1	<u>Thickness</u>					
6.3.1.1.1.2	<u>Lithology</u>					
6.3.1.1.1.3	<u>Structural Features</u>					
6.3.1.1.1.4	<u>Degree of Weathering</u>					
6.3.1.1.1.5	<u>Amount of Overburden</u>					
6.3.1.1.1.6	<u>Engineering Properties</u>					
6.3.1.1.1.7	<u>Indexes</u>					
6.3.1.1.1.8	<u>Subsurface Soils Quality</u>					
6.3.1.1.2	<u>Geologic Map</u> Provide a copy of the geologic map prepared per N.J.A.C. 7:26-2.10(b)7ii.					
6.3.1.2	<u>Soils</u> Describe the soils present as follows: Note: Information shall be based on U.S. Soil Conservation Service surveys.					2.9(c)3i(2)
6.3.1.2.1	<u>Identification</u> Identify the major soil types present.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.1.2.2	<u>Characteristics</u> Describe the soil characteristics, including the following:					2.9(c)3i(2)
6.3.1.2.2.1	<u>Drainage</u>					
6.3.1.2.2.2	<u>Erosion Potential</u>					
6.3.1.2.2.3	<u>Sedimentation Potential</u>					
6.3.1.2.2.4	<u>Texture of Each Horizon</u>					
6.3.1.2.2.5	<u>Thickness of Each Horizon</u>					
6.3.1.2.2.6	<u>Mottling</u>					
6.3.1.2.2.7	<u>Taxonomic Classification</u>					
6.3.1.2.2.8	<u>Surface Soils Quality</u>					
6.3.1.2.3	<u>Soils Map</u> Provide a copy of the soils map prepared in accordance with N.J.A.C. 7:26-2.10(b)7i.					
6.3.1.3	<u>Subsurface Hydrology</u> Describe the subsurface hydrology by presenting groundwater quantity and quality data for aquifers located beneath the site, as follows:					2.9(c)3i(3)
6.3.1.3.1	<u>Depth to Groundwater</u> Provide depth to water table during seasonal high and low flow conditions.					
6.3.1.3.2	<u>Groundwater Flow Direction</u>					
6.3.1.3.3	<u>Existing Uses</u>					
6.3.1.3.4	<u>Future Supply Capabilities</u>					
6.3.1.4	<u>On-Site Water Bodies</u> For water bodies which abut the site, exist on the site, or drain directly onto or off the site, provide water quantity and quality data as follows:					2.9(c)3i(4)
6.3.1.4.1	<u>Flow Rates</u>					
6.3.1.4.2	<u>Current Uses</u>					
6.3.1.4.3	<u>Supply Capabilities</u>					
6.3.1.4.4	<u>Dissolved Oxygen (DO)</u>					
6.3.1.4.5	<u>Biochemical Oxygen Demand (BOD)</u>					
6.3.1.4.6	<u>Total Organic Carbon (TOC)</u>					
6.3.1.4.7	<u>Total Suspended Solids (TSS)</u>					
6.3.1.4.8	<u>Temperature Regime</u>					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.1.4.9	<u>Classifications</u> All existing water classifications per N.J.A.C. 7:9B					2.9(c)3i(4)
6.3.1.4.10	<u>Designated Uses</u> Designated uses per N.J.A.C. 7:9B.					
6.3.1.4.11	<u>Limitations</u> Limitations per N.J.A.C. 7:9B					
6.3.1.5	<u>Tributaries</u> For upstream or downstream tributaries of water bodies which flow onto or from the site, provide the following:					2.9(c)3i(5)
6.3.1.5.1	<u>Classifications</u> All existing water classifications per N.J.A.C. 7:9-4.					
6.3.1.5.2	<u>Designated Uses</u> Designated uses per N.J.A.C. 7:9-4.					
6.3.1.5.3	<u>Limitations</u> Limitations per N.J.A.C. 7:9-4					
6.3.1.5.4	<u>Water Quality Factors</u> A narrative description of factors influencing water quality, including but not limited to the following:					
6.3.1.5.4.1	<u>Major Permitted Discharges</u>					
6.3.1.5.4.2	<u>Tributaries</u>					
6.3.1.5.4.3	<u>Confluences with Other Water Bodies</u>					
6.3.1.5.5	<u>One-Mile Radius</u> Information required by 6.3.1.5.1 through 6.3.1.5.4 above shall be provided for a distance of one mile from the site boundary.					
6.3.1.6	<u>Other Water Bodies</u> For all water bodies not covered by 6.3.1.4 and 6.3.1.5 above, provide the following information:					
6.3.1.6.1	<u>Classifications</u> All existing water classifications per N.J.A.C. 7:9-4					
6.3.1.6.2	<u>Designated Uses</u> Designated uses per N.J.A.C. 7:9-4					
6.3.1.6.3	<u>Limitations</u> Limitations per N.J.A.C. 7:9-4					
6.3.1.7	<u>Consistency with Water Quality Planning Act</u> Document that the proposed facility will not be inconsistent with any facility or area-wide Water Quality Management Plan developed per N.J.S.A. 58:11A-1 et seq.					2.9(c)3i(7)

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.1.8	<u>Topography</u> Provide topographic information as follows:					2.9(c)3i(8)
6.3.1.8.1	<u>Contours</u>					
6.3.1.8.2	<u>Drainage Patterns</u>					
6.3.1.8.3	<u>Floodways</u> Delineation of any floodways developed pursuant to the Flood Hazard Area Control Act (N.J.S.A. 58:16A-50) and/or shown on the current effective F.E.M.A. flood map.					
6.3.1.8.4	<u>Flood Hazard Areas</u> Delineation of any flood hazard areas (100-year flood) developed pursuant to the Flood Hazard Area Control Act (N.J.S.A. 58-16A-50) and/or shown on the current effective F.E.M.A. flood map.					
6.3.1.9	<u>Climate</u> Provide site-specific data as follows: Note: Meteorological data may be obtained from the nearest NOAA-sanctioned weather station, unless otherwise required by the Department.					2.9(c)3i(9)
6.3.1.9.1	<u>Wind Direction</u>					
6.3.1.9.2	<u>Wind Velocity and Frequency</u>					
6.3.1.9.3	<u>Average Annual Precipitation</u>					
6.3.1.9.4	<u>Average Monthly Precipitation</u>					
6.3.1.9.5	<u>Average Annual Temperature</u>					
6.3.1.9.6	<u>Average Monthly Temperature</u>					
6.3.1.10	<u>Ambient Air Quality</u> Provide the following information: Note: Data may be obtained from the nearest State-operated monitoring station, unless otherwise required by the Department.					2.9(c)3i(10)
6.3.1.10.1	<u>Pollutant Concentrations</u> Existing concentrations of the National Ambient Air Quality Standard pollutants as identified in 42 USC 7401 et seq.					
6.3.1.10.2	<u>Consistency with State Plan</u> A demonstration that the proposed facility will be consistent with the New Jersey State Implementation Plan and related air quality requirements established by the Division of Environmental Quality.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.1.11	<u>Acoustical Conditions</u> Describe ambient acoustical conditions by providing the following:					2.9(c)3i(11)
6.3.1.11.1	<u>Day and Night Noise Levels</u> Noise levels measured at the boundaries of the site.					
6.3.1.11.2	<u>Impulsive and Continuous Sources</u> Identify sources of impulsive and continuous noise.					
6.3.2	<u>Category II (Biological/Ecological)</u> Describe the following parameters:					2.9(c)3ii
6.3.2.1	<u>Major Plants</u> Provide the following information:					2.9(c)3ii(1)
6.3.2.1.1	<u>Delineation of Associations</u> Delineate the different major plant associations present in a mapped format.					
6.3.2.1.2	<u>Major and Minor Species</u> Identify major dominant and minor species present in each plant association.					
6.3.2.1.3	<u>Proportions</u> Estimate the proportions of each species identified in 6.3.2.1.2 above.					
6.3.2.1.4	<u>One-Mile Radius</u> Information required by 6.3.2.1.1. through 6.3.2.1.3 above shall be provided for a distance of one mile from the site boundary.					
6.3.2.2	<u>Game and Non-Game Mammals Utilization</u> Provide the following information:					2.9(c)3ii(2)
6.3.2.2.1	<u>Species</u> Identify species utilizing the site for year-round, breeding, wintering and migratory purposes.					
6.3.2.2.2	<u>Populations</u> Estimate populations utilizing the site for year-round, breeding, wintering and migratory purposes.					
6.3.2.2.3	<u>Relation to Major Plants</u> Relate utilization of the site by mammals to the plant associations described in 6.3.2.1 above.					
6.3.2.2.4	<u>One-Mile Radius</u> Information required by 6.3.2.2.1 through 6.3.2.2.3 above shall be provided for a distance of one mile from the site boundary.					2.9(c)3ii(2)

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.2.3	<u>Game and Non-Game Birds Utilization</u> Provide the following information:					2.9(c)3ii(3)
6.3.2.3.1	<u>Species</u> Identify species utilizing the site for year-round, breeding, wintering and migratory purposes.					
6.3.2.3.2	<u>Populations</u> Estimate populations utilizing the site for year-round, breeding, wintering and migratory purposes.					
6.3.2.3.3	<u>Relation to Major Plants</u> Relate utilization of the site by birds to the plant associations described in 6.3.2.1 above.					
6.3.2.3.4	<u>One-Mile Radius</u> Information required by 6.3.2.3.1 through 6.3.2.3.3 above shall be provided for a distance of one mile from the site boundary.					
6.3.2.4	<u>Reptiles and Amphibians Utilization</u> Provide the following information:					2.9(c)3ii(4)
6.3.2.4.1	<u>Species</u> Identify species utilizing the site for year-round, breeding, wintering and migratory purposes.					
6.3.2.4.2	<u>Populations</u> Estimate populations utilizing the site for year-round, breeding, wintering and migratory purposes.					
6.3.2.4.3	<u>Relation to Major Plants</u> Relate utilization of the site by reptiles and amphibians to the plant associations described in 6.3.2.1 above.					
6.3.2.4.4	<u>Quarter-Mile Radius</u> Information required by 6.3.2.4.1 through 6.3.2.4.3 above shall be provided for a distance of one-quarter mile from the site boundary.					
6.3.2.4.5	<u>Water Bodies</u> Information required by 6.3.2.4.1 through 6.3.2.4.3 above shall be provided for those water bodies listed in 6.3.1.4 and 6.3.1.5 above.					
6.3.2.5	<u>Fish Utilization</u> Provide the following information:					3.9(c)3ii(5)

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.2.5.1	<u>Species</u> Identify species utilizing the site for year-round, breeding, wintering and migratory purposes.					2.9(c)3ii(5)
6.3.2.5.2	<u>Populations</u> Estimate populations utilizing the site for year-round, breeding, wintering and migratory purposes.					
6.3.2.5.3	<u>Quarter-Mile Radius</u> Information required by 6.3.2.5.1 and 6.3.2.5.2 above shall be provided for a distance of one-quarter mile from the site boundary.					
6.3.2.5.4	<u>Water Bodies</u> Information required by 6.3.2.5.1 and 6.3.2.5.2 above shall be provided for those water bodies listed in 6.3.1.4 and 6.3.1.5 above.					
6.3.2.6	<u>Endangered Species</u> Describe plant or animal species on the Federal and State endangered, threatened or rare species lists as follows:					2.9(c)3ii(6)
6.3.2.6.1	<u>Species</u> Identify plant or animal species on the list(s)					
6.3.2.6.2	<u>Utilization</u> Identify, in a mapped format, present species listed in 6.3.2.6.1 above.					
6.3.2.6.3	<u>Habitat</u> Quantify the amount of habitat and corresponding carrying capacity at the site for each species identified in 6.3.2.6.1 above.					
6.3.2.6.4	<u>Patterns</u> Evaluate applicable breeding, wintering and migratory patterns.					
6.3.2.7	<u>Identification of Unique Habitat</u> Map any unique, critical or unusual habitats, including the following:					2.9(c)3ii(7)
6.3.2.7.1	<u>Wetlands</u>					
6.3.2.7.2	<u>Prime Agricultural Lands</u>					
6.3.2.7.3	<u>Steep Slopes</u> Slopes greater than 15 percent.					
6.3.2.7.4	<u>Riparian Lands</u>					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.2.7.5	<u>Coastal Zones</u>					2.9(c)3ii(7)
6.3.2.7.6	<u>Other Areas</u> Other unique, critical or unusual habitats as specified by the Department.					
6.3.2.8	<u>Description of Site Visits</u> Provide a description of site visits undertaken to evaluate the site ecosystem, including the following:					2.9(c)3ii(8)
6.3.2.8.1	<u>Date</u>					
6.3.2.8.2	<u>Duration</u>					
6.3.2.8.3	<u>Weather Conditions</u>					
6.3.2.8.4	<u>Individuals Present</u>					
6.3.2.8.5	<u>Study Parameters</u>					
6.3.2.8.6	<u>Copy of Studies</u> Provide a copy of studies prepared in connection with preparation of the environmental inventory.					
6.3.2.9	<u>Description of Methodologies</u> Provide a description of the methodologies used to evaluate the biotic community. The description shall meet the following requirements:					2.9(c)3ii(9)
6.3.2.9.1	<u>Sufficiently Detailed</u> The description shall be sufficient to permit an independent expert to form an opinion as to the scientific justification and integrity of the selected methodology.					
6.3.2.9.2	<u>Bibliography</u> The description shall include a bibliography of all research materials utilized in the preparation of the environmental inventory.					
6.3.3	<u>Category III (Cultural)</u> Describe the following parameters:					2.9(c)3iii
6.3.3.1	<u>Recreational Activities</u> Identify those areas used for or designated as the following:					2.9(c)3iii(1)
6.3.3.1.1	<u>Hunting</u>					
6.3.3.1.2	<u>Fishing</u>					
6.3.3.1.3	<u>Trapping</u>					
6.3.3.1.4	<u>Boating</u>					
6.3.3.1.5	<u>Swimming</u>					
6.3.3.1.6	<u>Tourism</u>					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.3.1.7	<u>Camping</u>					2.9(c)3iii(1)
6.3.3.1.8	<u>Nature Photography</u>					
6.3.3.1.9	<u>Bird Watching</u>					
6.3.3.1.10	<u>Parks</u>					
6.3.3.1.11	<u>Forests</u>					
6.3.3.1.12	<u>Wildlife Management Areas</u>					
6.3.3.1.13	<u>Natural Areas</u>					
6.3.3.1.14	<u>Other Recreational Lands</u> Other publicly or privately owned lands designated for open space or recreational activities.					
6.3.3.2	<u>Aesthetics</u> Identify and describe the following:					2.9(c)3iii(2)
6.3.3.2.1	<u>Surrounding Architecture</u>					
6.3.3.2.3	<u>Open Space Areas</u>					
6.3.3.2.3	<u>Scenic Areas</u>					
6.3.3.3	<u>Historical Areas</u> Describe areas of historical or archeological importance.					2.9(c)3iii(3)
6.3.4	<u>Category IV (Socioeconomic)</u> Describe the following parameters:					2.9(c)3iv
6.3.4.1	<u>Transportation Facilities</u> Identify the following:					2.9(c)3iv(1)
6.3.4.1.1	<u>Network</u> The transportation network which will service the facility.					
6.3.4.1.2	<u>Site Access Capability</u>					
6.3.4.1.3	<u>Traffic Flow</u> Existing traffic flow patterns, expressed as follows:					
6.3.4.1.3.1	<u>Daily Peak Hour Volumes</u>					
6.3.4.1.3.2	<u>Off Peak Hour Volumes</u>					
6.3.4.1.3.3	<u>Levels of Service</u>					
6.3.4.1.3.4	<u>Average Daily Number of Trips</u>					
6.3.4.1.4	<u>Future Plans</u> Any proposed local, county or NJDOT traffic engineering plans for the network identified in 6.3.4.1.1 above.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.4.2	<u>Sewage Facilities</u> Identify the following:					2.9(c)3iv(2)
6.3.4.2.1	<u>Treatment System Type</u>					
6.3.4.2.2	<u>Treatment Capacity</u>					
6.3.4.2.3	<u>Collection System Capacity</u>					
6.3.4.2.4	<u>Average Flow Data</u>					
6.3.4.2.5	<u>Peak Flow Data</u>					
6.3.4.2.6	<u>Committed Capacity</u> Current committed capacity for the treatment and collection system.					
6.3.4.3	<u>Stormwater Management System</u> Identify the following:					2.9(c)3iv(3)
6.3.4.3.1	<u>System Type</u>					
6.3.4.3.2	<u>System Capacity</u> Describe the system's current collection and treatment capacity and utilization.					
6.3.4.4	<u>Water Supply System</u> Identify the following					2.9(c)3iv(4)
6.3.4.4.1	<u>System Type</u>					
6.3.4.4.2	<u>Water Sources</u>					
6.3.4.4.3	<u>Pre-Treatment</u> Describe the level and type of existing pre-treatment.					
6.3.4.4.4	<u>System Capacity</u>					
6.3.4.4.5	<u>Committed Capacity</u>					
6.3.4.4.6	<u>Available Additional Supply</u>					
6.3.4.4.7	<u>Peak Demand</u>					
6.3.4.4.8	<u>Average Demand</u>					
6.3.4.5	<u>Energy Supply System</u> Identify the following:					2.9(c)3iv(5)
6.3.4.5.1	<u>Existing Power or Pipelines</u>					
6.3.4.5.2	<u>Committed Capacity</u>					
6.3.4.5.3	<u>Supply Capability</u>					
6.3.4.5.4	<u>Conveyance Capability</u> If applicable, capability of conveyance from the site of energy generated by the facility.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.4.6	<u>Demography</u> Provide the following information: Note: State, county or local government sources may be used for all demographic data.					2.9(c)3iv(6)
6.3.4.6.1	<u>Present Population</u>					
6.3.4.6.2	<u>Future Population</u>					
6.3.4.6.3	<u>Population Trends</u>					
6.3.4.6.4	<u>Facility District</u> Information required by 6.3.4.6.1 through 6.3.4.6.3 above shall be provided for the district within which the facility will be located.					
6.3.4.6.5	<u>Other Districts</u> Information required by 6.3.4.6.1 through 6.3.4.6.3 above shall also be provided for all districts, which will utilize the proposed facility.					
6.3.4.7	<u>Property Values</u> Describe property values as follows:					2.9(c)3iv(7)
6.3.4.7.1	<u>Immediate Vicinity</u> The description of property values within the immediate neighborhood of the proposed facility shall include a discussion of the following:					
6.3.4.7.1.1	<u>Prices and Trends</u> Median sales prices and recent (1-2 year) trends.					
6.3.4.7.1.2	<u>Zoning Changes</u>					
6.3.4.7.1.3	<u>Development Patterns</u>					
6.3.4.7.1.4	<u>Development Approvals</u>					
6.3.4.7.1.5	<u>Sufficiently Detailed</u> Information required by 6.3.4.7.1.1 through 6.3.4.7.1.4 above shall be sufficiently detailed to allow assessment of the effect that construction and operation of the facility may have on property values in the immediate vicinity.					
6.3.4.7.2	<u>Other Areas</u> Information required by 6.3.4.7.1.1 through 6.3.4.7.1.4 above shall also be provided for other areas within the municipality where the facility will be located.					
6.3.4.7.3	<u>Other Municipalities</u> Information required by 6.3.4.7.1.1 through 6.3.4.7.1.4 above shall also be provided for all other municipalities within one-half mile of the facility.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.3.4.8	<u>Public Services</u> Describe public services available in the municipality in which the facility will be located by identifying the following:					2.9(c)3iv(8)
6.3.4.8.1	<u>Law Enforcement Services</u>					
6.3.4.8.2	<u>Fire Protection Services</u>					
6.3.4.8.3	<u>Health Protection Capabilities</u>					
6.3.4.9	<u>Community Facilities</u> Describe and map the location of community facilities, including but not limited to the following:					2.9(c)3iv(9)
6.3.4.9.1	<u>Hospitals</u>					
6.3.4.9.2	<u>Nursing Homes</u>					
6.3.4.9.3	<u>Food Processing Centers</u>					
6.3.4.9.4	<u>Playgrounds</u>					
6.3.4.9.5	<u>Parks</u>					
6.3.4.9.6	<u>Schools</u>					
6.3.4.9.7	<u>Residences</u>					
6.4	<u>Operations Description</u> Provide a detailed description of the proposed facility operations, including the following:					2.9(c)4
6.4.1	<u>Project Sponsor</u> Identify the project sponsor by providing the following information:					2.9(c)4i
6.4.1.1	<u>Name</u>					
6.4.1.2	<u>Address</u>					
6.4.1.3	<u>Telephone Number</u>					
6.4.1.4	<u>Associations with Other Waste Management Projects</u> If the sponsor is presently, or was previously, associated with any other waste disposal or collection project or operation, provide the following:					
6.4.1.4.1	<u>Project Name</u> Identify the project or operation.					
6.4.1.4.2	<u>Responsibilities</u> Describe the sponsor's responsibilities during any project identified in 6.4.1.4.1 above.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.4.2	<u>Purpose</u> Explain the purpose of the proposed facility by providing the following:					2.9(c)4ii
6.4.2.1	<u>Description of Services</u> Describe the products or services being provided.					
6.4.2.2	<u>List of Benefits</u> List the benefits to be realized by the owner, the community in which the facility is to be located, and the surrounding communities.					
6.4.3	<u>Existing or Potential Markets</u> Describe the existing or potential markets for each of the products to be recovered by the solid waste facility operation by providing the following:					2.9(c)4iii
6.4.3.1	<u>Identification of Products</u> Describe the types, quality and daily quantities of products to be recovered.					
6.4.3.2	<u>Quality Control</u> Provide the elements of a quality control plan for the recovered products.					
6.4.3.3	<u>Contracts</u> Provide a copy of any long-term contracts for the sale of the recovered products, OR					
6.4.3.4	<u>Letter of Intent</u> If long-term contracts have not yet been finalized, provide a detailed letter of intent, describing the areas of agreement and disagreement.					
6.4.3.5	<u>Description of End Use</u> Describe the purchaser's end use of the recovered products.					
6.4.4	<u>Economic Analysis</u> Provide an economic analysis of the proposed facility, including:					2.9(c)4iv
6.4.4.1	<u>Revenue Projection</u> Approximate and project any revenues to be realized from the sale of recovered products.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.4.4.2	<u>Expenditures Projection</u> Approximate and project capital, operating and maintenance expenditures.					2.9(c)4iv
6.4.4.3	<u>Waste Processing Charges</u> Project maximum and minimum charges to be assessed for the various waste types to be handled, including an estimate of the initial tipping charges.					
6.4.5	<u>Waste Streams Identification and Guarantee</u>					2.9(c)4v
6.4.5.1	<u>Identification</u> Describe the waste streams, which will be accepted by the facility.					
6.4.5.2	<u>Guarantee</u> Provide copies of any agreements, which will guarantee a steady flow of the wastes identified in 6.4.5.1 above to the facility.					
6.4.6	<u>Time Schedule</u> Provide a time schedule for the development and startup of the proposed facility, including anticipated completion dates for major phases of the construction.					2.9(c)4vi
6.4.7	<u>Description of Processes</u> Provide a narrative description of the disposal processes to be used, including the following information:					2.9(c)4vii
6.4.7.1	<u>Process Types</u>					2.9(c)4vii(1)
6.4.7.2	<u>Number of Units</u>					
6.4.7.3	<u>Process Capacities</u>					
6.4.7.4	<u>Daily Handling Capacity</u>					2.9(c)4vii(2)
6.4.7.5	<u>Hourly Handling Capacity</u>					
6.4.7.6	<u>Anticipated Operating Times</u> Provide anticipated operating times in hours per day and days per week. Provide schedules of operating hours dedicated for waste acceptance and waste processing. Note: If weekly averaging is proposed, provide the number of days of operation per week, tons of waste to be accepted per week and daily maximums.					
6.4.7.7	<u>Process Control Measures</u>					
6.4.7.8	<u>Process Monitoring Instrumentation</u>					2.9(c)4vii

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.4.8	<u>Process Residues Management</u> Describe any process residues and side-stream wastes resulting from facility operations, including the following information:					2.9(c)4viii
6.4.8.1	<u>Quantity</u>					
6.4.8.2	<u>Physical/Chemical Characteristics</u>					
6.4.8.3	<u>Methods of Disposal</u> Discuss appropriate methods of disposal of process residues, including the following information, where applicable:					
6.4.8.3.1	<u>Disposal Contracts</u>					
6.4.8.3.2	<u>District Plan Inclusion</u>					
6.4.8.3.3	<u>Primary Disposal Sites</u>					
6.4.8.3.4	<u>Alternate Disposal Sites</u>					
6.4.8.3.5	<u>Methods of Storage & Handling</u>					
6.4.8.3.6	<u>Methods of Reuse or Recycling</u>					
6.5	<u>Conformance with Plans, Policies and Regulations</u> Provide a discussion of the relationship of the proposed action to federal, State, county and local land-use plans, policies, controls and environmental regulations, including the following:					2.9(c)5
6.5.1	<u>Present Land Use</u> Describe present land use as follows:					2.9(c)5i
6.5.1.1	<u>Facility Site</u>					
6.5.1.2	<u>Adjacent Areas</u> Areas within 2 miles of the property line.					
6.5.1.3	<u>Zoning Maps</u>					
6.5.1.4	<u>Use Restrictions Chart</u>					
6.5.1.5	<u>Landfill Data</u> If any portion of the facility site or areas adjacent to the site was previously used for the landfilling of wastes, provide the following information:					
6.5.1.5.1	<u>Depth</u>					
6.5.1.5.2	<u>Area of Deposition</u>					
6.5.1.5.3	<u>Waste Types</u>					
6.5.1.5.4	<u>Gas Concentration</u>					
6.5.1.5.5	<u>Gas Migration</u>					
6.5.1.5.6	<u>Settlement</u>					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.5.1.5.7	<u>Other Factors</u> Discuss any other factors, which may affect construction or operation of the proposed facility.					2.9(c)5i
6.5.2	<u>Conformance with Requirements</u> Describe how the project will conform or conflict with the objectives of any federal, state or local land use or environmental requirements, including:					2.9(c)5ii
6.5.2.1	<u>Flood Hazard Requirements</u> Floodway, flood fringe or flood hazard areas identified by the New Jersey Flood Hazard Area Control Act or by flood insurance studies prepared by the Federal Emergency Management Agency.					2.9(c)5ii(1)
6.5.2.2	<u>Wild & Scenic Areas</u> Areas designated as wild, scenic, recreational or developed recreational rivers pursuant to the National Wild and Scenic Rivers Act or the New Jersey Wild and Scenic River Act.					2.9(c)5ii(2)
6.5.2.3	<u>Critical Habitat</u> Critical habitat of endangered or threatened species of plants, fish or wildlife as defined by the Federal Endangered Species Act or the New Jersey Endangered and Non-Game Species Conservation Act.					2.9(c)5ii(3)
6.5.2.4	<u>Wetlands, Tidelands & Coastal Zones</u> Wetlands, tidelands and coastal zone areas as identified by the Department pursuant to the Wetlands and Coastal Resource and Development Policies and as identified on the U.S. Fish and Wildlife Services National Wetlands Inventory Maps.					2.9(c)5ii(4)
6.5.2.5	<u>Pinelands Area</u> Preservation and Protection Areas as established by the New Jersey Pinelands Protection Act.					2.9(c)5ii(5)
6.5.2.6	<u>Nonattainment Areas</u> Nonattainment areas as defined in N.J.A.C. 7:27-18					2.9(c)5ii(6)
6.5.2.7	<u>PSD Areas</u> Areas subject to the Prevention of Significant Deterioration criteria as defined at 40 CFR 52.21.					2.9(c)5ii(7)
6.5.2.8	<u>Acoustical Impact Areas</u> Areas which may impact the acoustical quality of residential and commercial properties pursuant to N.J.A.C. 7:29.					2.9(c)5ii(8)
6.5.2.9	<u>Water Quality Impact Areas</u> Areas which may significantly impact water quality pursuant to N.J.A.C. 7:15.					2.9(c)5ii(9)

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.5.2.10	<u>Agricultural Development Areas</u> Lands certified by the State Agriculture Development Committee as agricultural development areas pursuant to the New Jersey Agricultural Retention and Development Act.					2.9(c)5ii(10)
6.5.2.11	<u>Watershed Areas</u> Watershed areas for waters classified by the Department as FW-1 Waters or FW-2 Trout Production Waters pursuant to the New Jersey Surface Water Quality Standards.					2.9(c)5ii(11)
6.5.2.12	<u>Aquifer Areas</u> Areas overlying a sole source aquifer designated pursuant to section 1424(e) of the Safe Drinking Water Act.					2.9(c)5ii(12)
6.5.2.13	<u>Critical Water Supply Areas</u> Areas located within critical supply areas defined by the New Jersey Water Supply Management Act.					2.9(c)5ii(13)
6.5.2.14	<u>Historic Areas</u> Areas which will encroach upon, damage or destroy any area, site, structure or object included in the National or State Register of Historic Places.					2.9(c)5ii(14)
6.5.2.15	<u>Airport Proximity</u> Areas within 10,000 feet of any airport runway which is equal to or greater than 3,000 feet in length, or within 5,000 feet of any airport runway which is less than 3,000 feet in length.					2.9(c)5ii(15)
6.5.2.16	<u>Recreational or Open Spaces</u> Areas dedicated to recreational or open space use, such as national parks, national recreation areas, national forests, national wildlife refuges, State wildlife management areas, State parks, State forests, State designated natural areas and county or local parks, wildlife sanctuaries and recreational facilities.					2.9(c)5ii(16)
6.5.2.17	<u>Cleanup Areas</u> Areas subject to cleanup requirements pursuant to the New Jersey Industrial Site Remediation Act.					2.9(c)5ii(17)
6.5.3	<u>Mitigation Efforts</u> Where the potential for a land use or environmental conflict exists, describe the mitigation efforts to be undertaken to meet the intent of the applicable land use or environmental requirement.					2.9(c)5iii
6.6	<u>Description of District Plans</u> Provide a description of the District Solid Waste Management Plans and Sludge Management Plans for the following districts:					2.9(c)6

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.6.1	<u>Facility District</u> For the district in which the facility will be located, describe each plan as follows:					2.9(c)6
6.6.1.1	<u>Solid Waste Management Plan</u> The description of the District Solid Waste Management Plan shall contain the following:					
6.6.1.1.1	<u>Municipalities</u> Identify all municipalities within the district.					2.9(c)6i
6.6.1.1.2	<u>Plan Strategy</u> Describe the strategy of the plan as it pertains to the proposed facility.					
6.6.1.1.3	<u>Waste Flow Agreements</u> Describe inter-district waste flow agreements.					
6.6.1.1.4	<u>Waste Flow Patterns</u> Describe intra-district waste flow patterns					
6.6.1.1.5	<u>Plan Duration</u>					
6.6.1.1.6	<u>Recycling Goals</u>					
6.6.1.1.7	<u>Waste Reduction Goals</u>					
6.6.1.1.8	<u>Implementation Schedules</u>					
6.6.1.1.9	<u>Plan Implementing Agencies</u>					
6.6.1.1.10	<u>Plan Conformance</u> Describe how the proposed facility will conform with the content and strategy of the plan.					
6.6.1.1.11	<u>Facility Need</u> Discuss the elements of the plan which indicate a need for the facility.					2.9(c)6ii
6.6.1.1.12	<u>Current Capacities</u> Discuss the facility's relation to current solid waste disposal capacities.					
6.6.1.1.13	<u>Guarantee Mechanisms</u> Describe the established mechanisms that will guarantee the necessary waste flows to the proposed facility.					
6.6.1.2	<u>Sludge Management Plan</u> The description of the Sludge Management Plan shall contain the following:					2.9(c)6
6.6.1.2.1	<u>Municipalities</u> Identify all municipalities within the district.					2.9(c)6i

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.6.1.2.2	<u>Plan Strategy</u> Describe the strategy of the plan as it pertains to the proposed facility.					2.9(c)6i
6.6.1.2.3	<u>Waste Flow Agreements</u> Describe inter-district waste flow agreements.					
6.6.1.2.4	<u>Waste Flow Patterns</u> Describe intra-district waste flow patterns.					
6.6.1.2.5	<u>Plan Duration</u>					
6.6.1.2.6	<u>Recycling Goals</u>					
6.6.1.2.7	<u>Sludge Reduction Goals</u>					
6.6.1.2.8	<u>Implementation Schedules</u>					
6.6.1.2.9	<u>Plan Implementing Agencies</u>					
6.6.1.2.10	<u>Plan Conformance</u> Describe how the proposed facility will conform with the content and strategy of the plan.					
6.6.1.2.11	<u>Facility Need</u> Discuss the elements of the plan which indicate a need for the facility.					
6.6.1.2.12	<u>Current Capacities</u> Discuss the facility's relation to current sludge disposal capacities.					
6.6.1.2.13	<u>Guarantee Mechanisms</u> Describe the established mechanisms that will guarantee the necessary sludge flows to the proposed facility.					
6.6.2	<u>Sending Districts</u> For the districts from which the solid wastes will be received, describe each plan as follows:					
6.2.1	<u>Solid Waste Management Plan</u> The description of the District Solid Waste Management Plan shall contain the following:					2.9(c)6
6.6.2.1.1	<u>Municipalities</u> Identify all municipalities within the district.					
6.6.2.1.2	<u>Plan Strategy</u> Describe the strategy of the plan as it pertains to the proposed facility.					
6.6.2.1.3	<u>Waste Flow Agreements</u> Describe inter-district waste flow agreements.					2.9(c)6i

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE	
6.6.2.1.4	<u>Waste Flow Patterns</u> Describe intra-district waste flow patterns.					2.9(c)6i	
6.6.2.1.5	<u>Plan Duration</u>						
6.6.2.1.6	<u>Recycling Goals</u>						
6.6.2.1.7	<u>Waste Reduction Goals</u>						
6.6.2.1.8	<u>Implementation Schedules</u>						
6.6.2.1.9	<u>Plan Implementing Agencies</u>						
6.6.2.1.10	<u>Plan Conformance</u> Describe how the proposed facility will conform with the content and strategy of the plan.						
6.6.2.1.11	<u>Facility Need</u> Discuss the elements of the plan which indicate a need for the facility.						2.9(c)6ii
6.6.2.1.12	<u>Current Capabilities</u> Discuss the facility's relation to current solid waste disposal capacities.						
6.6.2.1.13	<u>Guarantee Mechanism</u> Describe established mechanisms that will guarantee the necessary waste flows to the proposed facility.						
6.6.2.2	<u>Sludge Management Plan</u> The description of the Sludge Management Plan shall contain the following:					2.9(c)6	
6.6.2.2.1	<u>Municipalities</u> Identify all municipalities within the district.					2.9(c)6i	
6.6.2.2.2	<u>Plan Strategy</u> Describe the strategy of the plan as it pertains to the proposed facility.						
6.6.2.2.3	<u>Waste Flow Agreements</u> Describe inter-district waste flow agreements.						
6.6.2.2.4	<u>Waste Flow Patterns</u> Describe intra-district waste flow patterns						
6.6.2.2.5	<u>Plan Duration</u>						
6.6.2.2.6	<u>Recycling Goals</u>						
6.6.2.2.7	<u>Sludge Reduction Goals</u>						
6.6.2.2.8	<u>Implementation Schedules</u>						
6.6.2.2.9	<u>Plan Implementing Agencies</u>						

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.6.2.2.10	<u>Plan Conformance</u> Describe how the proposed facility will conform with the content and strategy of the plan.					2.9(c)6i
6.6.2.2.11	<u>Facility Need</u> Discuss the elements of the plan which indicate a need for the facility.					2.9(c)6ii
6.6.2.2.12	<u>Current Capacities</u> Discuss the facility's relation to current sludge disposal capacities.					
6.6.2.2.13	<u>Guarantee Mechanisms</u> Describe established mechanisms that will guarantee the necessary sludge flows to the proposed facility.					
6.6.3	<u>Receiving Districts</u> For the districts where process residues from the proposed facility are to be sent for disposal, describe each plan as follows:					2.9(c)6
6.6.3.1	<u>Solid Waste Management Plan</u> The description of the District Solid Waste Management Plan shall contain the following:					
6.6.3.1.1	<u>Municipalities</u> Identify all municipalities within the district.					2.9(c)6i
6.6.3.1.2	<u>Plan Strategy</u> Describe the strategy of the plan as it pertains to the proposed facility.					
6.6.3.1.3	<u>Waste Flow Agreements</u> Describe inter-district waste flow agreements.					
6.6.3.1.4	<u>Waste Flow Patterns</u> Describe intra-district waste flow patterns.					
6.6.3.1.5	<u>Plan Duration</u>					
6.6.3.1.6	<u>Recycling Goals</u>					
6.6.3.1.7	<u>Waste Reduction Goals</u>					
6.6.3.1.8	<u>Implementation Schedules</u>					
6.6.3.1.9	<u>Plan Implementing Agencies</u>					
6.6.3.1.10	<u>Plan Conformance</u> Describe how the proposed facility will conform with the content and strategy of the plan.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.6.3.1.11	<u>Facility Need</u> Discuss the elements of the plan which indicate a need for the facility.					2.9(c)6ii
6.6.3.1.12	<u>Current Capacities</u> Discuss the facility's relation to current solid waste disposal capacities.					
6.6.3.1.13	<u>Guarantee Mechanism</u> Describe established mechanisms that will guarantee the necessary waste flows to the proposed facility.					
6.6.3.2	<u>Sludge Management Plan</u> The description of the Sludge Management Plan shall contain the following:					2.9(c)6
6.6.3.2.1	<u>Municipalities</u> Identify all municipalities within the district.					2.9(c)6i
6.6.3.2.2	<u>Plan Strategy</u> Describe the strategy of the plan as it pertains to the proposed facility.					
6.6.3.2.3	<u>Waste Flow Agreements</u> Describe inter-district waste flow agreements.					
6.6.3.2.4	<u>Waste Flow Patterns</u> Describe intra-district waste flow patterns.					
6.6.3.2.5	<u>Plan Duration</u>					
6.6.3.2.6	<u>Recycling Goals</u>					
6.6.3.2.7	<u>Sludge Reduction Goals</u>					
6.6.3.2.8	<u>Implementation Schedules</u>					
6.6.3.2.9	<u>Plan Implementing Agencies</u>					
6.6.3.2.10	<u>Plan Conformance</u>					
6.6.3.2.11	<u>Facility Need</u> Discuss the elements of the plan which indicate a need for the facility.					2.9(c)6ii
6.6.3.2.12	<u>Current Capacities</u> Discuss the facility's relation to current sludge disposal capacities.					
6.6.3.2.13	<u>Guarantee Mechanisms</u> Describe established mechanisms that will guarantee the necessary sludge flows to the proposed facility.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.7	<u>List of Permits</u> Provide a list and status report of all federal, state, county and local licenses, permits and certifications necessary for the proposed facility.					2.9(c)7
6.8	<u>Environmental Assessment</u> Provide a detailed evaluation of the potential impacts of the proposed facility on the environment, including all parameters identified in 6.3 above. The assessment shall include:					2.9(c)8
6.8.1	<u>Impacts Evaluation</u> An evaluation of the impacts on each parameter, including the following:					2.9(c)8i
6.8.1.1	<u>Primary Impacts</u> Direct or immediate impacts, both positive and negative.					
6.8.1.2	<u>Secondary Impacts</u> Indirect or long range impacts, both positive and negative.					
6.8.1.3	<u>Maximum Usage</u> The evaluation shall assume conditions of maximum usage of the facility.					
6.8.1.4	<u>Site Usage Correlation</u> Correlate the impacts above with the various stages listed below:					
6.8.1.4.1	<u>Site Preparation</u>					
6.8.1.4.2	<u>Facility Construction</u>					
6.8.1.4.3	<u>Facility Operation</u>					
6.8.1.4.4	<u>Closure</u>					
6.8.1.4.5	<u>Post-Closure</u>					
6.8.1.5	<u>All Parameters Evaluated</u> All parameters identified in the environmental inventory in 6.3 above shall be evaluated for impacts.					2.9(c)8
6.8.2	<u>Modeling Techniques</u> Describe the modeling techniques used to predict the impacts discussed in 6.8.1 above, as follows:					2.9(c)8ii
6.8.2.1	<u>Identification of Techniques</u> Identify and describe the modeling techniques used.					
6.8.2.2	<u>Model Calibrated and Verified</u>					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.8.2.3	<u>Copy Furnished</u> A copy of the model(s) shall be provided to the Department.					2.9(c)8ii
6.8.2.4	<u>Best Judgment</u> Where accepted modeling technique is not available and best professional judgment is used, provide a detailed description of the logical reasoning used and the assumptions made.					
6.8.3	<u>Mapping</u> Provide isopleths, grid maps or other maps to depict the following:					2.9(c)8iii
6.8.3.1	<u>Contaminant Migration</u> Potential zones of contaminant migration surrounding any and all sources of emissions or discharges.					
6.8.3.2	<u>Sources</u> Type and location of each source of contamination.					
6.8.4	<u>Quantification of Impacts</u> Provide a quantification of all impacts identified in 6.8.1 above. Note: Where quantification is not included, provide an explanation of the reason for the omission.					2.9(c)8iv
6.8.5	<u>Qualitative Discussion of Impacts</u> Provide a qualitative discussion of all impacts identified in 6.8.1 above.					2.9(c)8v
6.8.6	<u>Mitigative Techniques</u> Provide a detailed description of the mitigative techniques proposed to address any potential environmental impacts identified in 6.8.1 above.					2.9(c)8vi
6.9	<u>Summary Discussion</u> Provide a discussion of any potential adverse impacts identified in the environmental assessment in 6.8 above that cannot be avoided should the proposed facility be implemented. The discussion should include:					2.9(c)10
6.9.1	<u>Impacts</u> A discussion of the implications of any impacts that cannot be avoided.					
6.9.2	<u>Reasons for Permitting</u> Discuss the reasons why the proposed facility should be permitted.					
6.9.3	<u>Mitigative Measures</u> If mitigative measures are proposed to reduce the adverse impacts, discuss the costs and effectiveness of these measures.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.10	<u>Design Alternatives</u> Provide a comparison of reasonable design alternatives to the proposed facility in sufficient detail to permit independent and comparative evaluation of the benefits, costs and environmental impacts of the design of the proposed facility and each reasonable design alternative. The comparison shall include:					2.9(c)11
6.10.1	<u>No Action</u> A discussion of the no action or no project alternative, addressing the major foreseeable consequences.					2.9(c)11i
6.10.2	<u>Alternative Designs</u> A discussion of the feasibility of various alternative design or process changes, including those which could reduce or avoid some or all of the adverse impacts identified in 6.9 above.					2.9(c)11ii
6.10.3	<u>Economic Analyses</u> An economic analysis for both the chosen design and any design alternatives. Note: Cost-effectiveness analysis, cost-revenue analysis or other techniques approved by the Department may be employed.					2.9(c)11iii
6.10.4	<u>Significant Differences</u> An identification of any significant differences in environmental impact, which would result from use of the design/process changes, identified in 6.10.2 above, as compared to impacts resulting from the chosen alternative.					2.9(c)11iv
6.10.5	<u>Comparison of Alternatives</u> A comparison, in matrix or other format, of the degree of feasibility and economic and environmental impacts of both the chosen alternative and the set of feasible alternatives identified in 6.10.2 above.					2.9(c)11v
6.10.6	<u>Reasons for Selection</u> A discussion of the reasons why the proposed action was selected over the alternatives.					2.9(c)11vi
6.11	<u>Future Effects</u> Provide a discussion of the relationship between local, short-term (construction phase) uses of the environment and the effect of the proposed facility on available options for subsequent future uses. Describe the following:					2.9(c)12
6.11.1	<u>Cumulative and Long-Term Effects</u> Cumulative and long-term effects of the proposed facility which either negatively impact or enhance the environment for the future.					2.9(c)12i

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
6.11.2	<u>Future Options</u> The extent to which the proposed facility prohibits future options.					2.9(c)12ii
6.11.3	<u>Protection During Construction</u> Plans which provide for the protection and maintenance of the environment during construction of the proposed facility, including the following:					2.9(c)12iii
6.11.3.1	<u>Archeological Resources</u>					2.9(c)12iii(1)
6.11.3.2	<u>Erosion and Sediment Control</u>					2.9(c)12iii(2)
6.11.3.3	<u>Control of Dusts</u>					2.9(c)12iii(3)
6.11.3.4	<u>Control of Odors</u>					
6.11.3.5	<u>Control of Noise</u>					
6.11.3.6	<u>Traffic Control</u>					
6.11.3.7	<u>Control of Soil Tracking</u>					
6.11.4	<u>Protection After Termination</u> Plans which provide for the protection and maintenance of the environment after termination of facility operations.					2.9(c)12iv
6.12	<u>Commitment of Resources</u> Provide a discussion of irreversible and irretrievable commitments of resources resulting from the construction and operation of the proposed facility. Include the following:					2.9(c)13
6.12.1	<u>Use During Construction</u> An analysis of the use of renewable and nonrenewable resources during construction of the facility.					
6.12.2	<u>Use During Operation</u> An analysis of the use of renewable and nonrenewable resources throughout continued operation of the facility, including energy consumption.					
6.12.3	<u>Alternative Energy Sources</u> Compare alternative energy sources to the type selected and state the rationale for selection.					

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
7.	<u>GENERAL ENGINEERING DESIGN DATA</u> Provide general engineering design documents as follows:					2.10
7.1	<u>General Requirements</u> Drawings/maps shall meet the following general requirements for mapping standards and copies:					2.10(b)1
7.1.1	<u>GIS Mapping Standards</u> All maps shall be prepared and submitted in a manner consistent with the GIS Mapping and Digital Data Standards found at N.J.A.C. 7:1, Appendix A.					
7.1.2	<u>Number of Copies</u> Provide sets of drawings and other application information as follows:					
7.1.2.1	<u>Small-Scale Facilities</u> For facilities with capacity less than 100 tons per day in a six day per week operation, provide three (3) complete sets. Additional sets may be required.					
7.1.2.2	<u>Other Facilities</u> For other than small-scale facilities, provide five (5) complete sets.					2.10(b)1
7.2	<u>Drawing Size</u> Drawing sheets shall not be larger than 30 inches by 42 inches or smaller than 24 inches by 36 inches in size.					2.10(b)2
7.3	<u>P.E. Certification</u> Each drawing sheet shall bear the date of preparation, signature and raised seal of the New Jersey licensed professional engineer responsible for the preparation of the design.					2.10(b)3
7.4	<u>Key Map</u> Provide the location of the proposed facility plotted on the latest revision of a 7.5 minute series USGS topographic quadrangle showing at least three miles around the perimeter of the facility. The quadrangle name shall also be shown. The key map shall show the following:					2.10(b)4
7.4.1	<u>Surface Waters</u>					2.10(b)4i
7.4.2	<u>Coastal Zones</u>					
7.4.3	<u>Wetlands</u>					
7.4.4	<u>Wells</u>					
7.4.5	<u>Reservoirs</u>					
7.4.6	<u>Trout Waters</u>					

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7.4.7	<u>Wild and Scenic Rivers</u>					2.10(b)4i
7.4.8	<u>Floodway Areas</u>					
7.4.9	<u>Flood Hazard Areas</u>					
7.4.10	<u>General Zoning Designations</u>					2.10(b)4ii
7.4.11	<u>Roads</u>					2.10(b)4iii
7.4.12	<u>Airports & Runways</u>					2.10(b)4iv
7.5	<u>Vicinity Map</u> Provide a vicinity map showing at least one mile around the perimeter of the facility. Minimum map scale shall be 1 inch equals 400 feet. Contour interval shall be 20 feet. Elevations shall be based on NJVD 1929 and tied into the New Jersey Plane Coordinate Datum 1927. The vicinity map may be an enlarged USGS quadrangle. The vicinity map shall show the following:					2.10(b)5
7.5.1	<u>Structures</u>					2.10(b)5i
7.5.2	<u>Property Lines</u>					2.10(b)5ii
7.5.3	<u>Limits of Operation</u>					2.10(b)5iii
7.5.4	<u>Tax Map Data</u>					2.10(b)5iv
7.5.5	<u>Specific Zoning Designations</u>					2.10(b)5v
7.5.6	<u>Utilities</u> Utility lines, pipelines or other utility structures, including:					2.10(b)5vi
7.5.6.1	<u>Stormwater Systems</u>					
7.5.6.2	<u>Sanitary Sewers</u>					
7.5.6.3	<u>Water Supply Systems</u>					2.10(b)5vi
7.5.6.4	<u>Energy Systems</u>					
7.5.6.5	<u>Other Utilities</u>					
7.6	<u>Site Plan</u> Provide a site plan map showing existing and final as-built contours (2' intervals) for the facility site. Minimum map scale shall be 1 inch equals 200 feet. Elevations shall be based on NGVD 1929 and tied into the North American Datum of 1983. The site plan map shall show the following:					2.10(b)6
7.6.1	<u>Property Lines</u> The legal boundaries of the site as determined by a New Jersey licensed land surveyor.					2.10 (b)6i

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
7.6.2	<u>Property Deed</u> Copy of the deed of record or other document showing ownership of the property, OR					2.10(b)6i
7.6.3	<u>Property Lease</u> Copy of the lease agreement establishing leasehold of the property, OR					
7.6.4	<u>Timetable</u> Submit a timetable if the applicant is scheduled to take title to the property or enter into a lease agreement for the property in the near future.					
7.6.5	<u>Acreage</u>					2.10(b)6ii
7.6.5.1	<u>Facility Property</u> Provide the total acreage of the facility property.					
7.6.5.2	<u>Facility Operations</u> Provide the total acreage of facility waste management operations.					
7.6.6	<u>Limits of Operations</u> Show the boundaries of waste management operations.					2.10(b)6iii
7.6.7	<u>Physical Features</u> Layout of all buildings, roads, traffic routes and environmental controls.					2.10(b)6iv
7.7	<u>Geotechnical and Soils Report</u> Provide a geotechnical and soils report, including the following:					2.10(b)7
7.7.1	<u>Soils Map</u>					2.10(b)7i
7.7.2	<u>Geologic Map</u>					7.10(b)7ii
7.8	<u>Engineering Report</u> Provide an engineering report, including the following:					2.10(b)8
7.8.1	<u>Process Descriptions</u>					2.10(b)8i
7.8.2	<u>Methods of Construction</u>					2.10(b)8ii
7.8.3	<u>Construction Schedule</u>					
7.8.4	<u>Facility Capacity</u> If weekly averaging is proposed, provide additional information as detailed in 6.4.7.6 above.					2.10(b)8iii
7.8.5	<u>Vehicle Descriptions</u>					2.10(b)8iv
7.8.6	<u>Testing Results</u>					2.10(b)8v
7.8.7	<u>Life Expectancy</u>					2.10(b)8vi
7.9	<u>O & M Manual</u> Provide an operations and maintenance manual, including the following:					2.10(b)9

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
7.9.1	<u>Operations Description</u> A description of proposed methods of facility operation, including:					2.10(b)9i
7.9.1.1	<u>Hours of Operation</u>					2.10(b)9i(1)
7.9.1.1.1	<u>Waste Acceptance Hours</u>					
7.9.1.1.2	<u>Waste Processing Hours</u>					
7.9.1.2	<u>Equipment</u> Procedures for the operation of each major facility component and equipment item.					2.10(b)9i(2)
7.9.1.3	<u>Implementation Schedule</u>					2.10(b)9i(3)
7.9.1.4	<u>Monitoring</u>					2.10(b)9i(4)
7.9.1.4.1	<u>On-Site Traffic Control Plan</u>					
7.9.1.4.2	<u>Noise Monitoring</u> Procedures to monitor truck noise and to exclude from the facility trucks which produce excessive noise.					
7.9.1.4.3	<u>Staffing Plan</u> Provide a facility staffing plan indicating the following:					
7.9.1.4.3.1	<u>Job Titles</u>					
7.9.1.4.3.2	<u>Job Descriptions</u> Job descriptions for each position at the facility, including:					
7.9.1.4.3.3	<u>Duties</u>					
7.9.1.4.3.4	<u>Performance Standards</u>					
7.9.1.4.3.5	<u>Skills</u>					
7.9.1.4.3.6	<u>Education</u>					
7.9.1.4.3.7	<u>Other Qualifications</u>					
7.9.1.4.4	<u>Incoming Waste Inspection Plan</u> A plan describing how incoming wastes will be inspected to identify recyclable materials, prohibited waste types and the incidence of designated recyclables mandated to be source separated by the County District Recycling Plan.					
7.9.1.5	<u>Security</u> Facility security systems, including communications and alarms systems.					2.10(b)9i(5)
7.9.1.6	<u>Methods to Meet N.J.A.C. 7:26-2.11</u> A description of methods which will be used to meet the general operational requirements for solid waste facilities found at N.J.A.C. 7:26-2.11(b), including the following:					2.10(b)9i(6)
7.9.1.6.1	<u>Cleaning</u> Each area of the facility where waste has been deposited or stored shall be cleaned at least once each 24 hours.					2.11(b)1

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7.9.1.6.2	<u>Odor Control</u> Treatment to prevent odors associated with putrefaction shall be provided whenever wastes are stored overnight at the facility.					2.11(b)2
7.9.1.6.3	<u>Litter Control</u> Facility property shall be maintained free of litter, debris, and accumulations of waste, process residues and effluents. Methods to control wind-blown papers and other lightweight materials shall be provided.					2.11(b)3
7.9.1.6.4	<u>Dust Control</u> Methods to prevent off-site migration of dusts shall be provided.					2.11(b)4
7.9.1.6.5	<u>Off-Site Odors</u> Facility operations shall not result in the detection of off-site odors in any area of human occupancy.					2.11(b)5
7.9.1.6.6	<u>Systems Maintenance</u> Facility systems and appurtenances shall be maintained in a manner that minimizes system downtime and facilitates proper operation. The operator shall furnish (upon request) proof that provisions have been made for the repair or replacement of inoperative equipment.					2.11(b)6
7.9.1.6.7	<u>Fire Control</u> Methods and measures to control fires shall be provided as follows:					2.11(b)7
7.9.1.6.7.1	<u>Water Supply</u> A water supply adequate to extinguish any and all types of fires shall be maintained at the facility or be readily available.					
7.9.1.6.7.2	<u>Fire-Fighting Equipment</u> Equipment adequate to fight any and all types of fires shall be maintained at the facility or be readily available.					
7.9.1.6.7.3	<u>Posting of Procedures</u> Fire-fighting procedures as delineated in the approved O&M Manual, including telephone numbers of local police, fire, ambulance and hospital facilities shall be posted in and around the facility at all times.					2.11(b)7
7.9.1.6.8	<u>Pest Control</u> Methods and measures to control pests shall be provided as follows:					2.11(b)8
7.9.1.6.8.1	<u>Control Program</u> A program to effectively control insects, other arthropods and rodents in compliance with the New Jersey Pesticide Control Code at N.J.A.C. 7:30.					
7.9.1.6.8.2	<u>Certified Operator</u> Application of pesticides shall be performed by an operator certified in accordance with the New Jersey Pesticide Control Code at N.J.A.C. 7:30.					

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7.9.1.6.9	<u>Vehicle Control</u> Control of registered and exempt vehicles shall be performed as follows:					2.11(b)9
7.9.1.6.9.1	<u>Registration</u> All vehicles admitted for loading or unloading of any solid wastes at the facility shall be (1) properly registered with NJDEP, Division of Solid and Hazardous Waste pursuant to N.J.A.C. 7:26-3 and displaying a valid registration number and solid waste decal, or (2) exempt from registration requirements pursuant to N.J.A.C. 7:26-3.3					
7.9.1.6.9.2	<u>Access Control</u> Vehicles exempt from registration shall not be admitted to the tipping area when registered commercial type solid waste vehicles are loading or unloading, or when other heavy equipment is being operated in the tipping area.					
7.9.1.6.9.3	<u>Adequate Staffing</u> The facility shall be sufficiently staffed to ensure that the access control requirement of 7.9.1.6.9.2 above is not violated.					
7.9.1.6.10	<u>Loading/Unloading Areas Designation</u> The operator shall designate, where applicable, the following separate secure areas for loading and unloading of wastes. Designated areas shall comply with 7.6.1.6.10.4 through 7.6.1.6.10.7 below					2.11(b)10
7.9.1.6.10.1	<u>Exempt Vehicle Area</u> An area where wastes may be unloaded from vehicles which are exempt from the registration requirements of N.J.A.C. 7:26-3.3 Note: This requirement applies only to public facilities.					
7.9.1.6.10.2	<u>Bulky Items and Recyclables Area</u>					
7.9.1.6.10.3	<u>Asbestos Wastes Area</u> With Department approval, an area for the drop-off and/or transfer of asbestos-containing waste material (ACWM).					
7.9.1.6.10.4	<u>Containment</u> Containers used for drop-off and/or transfer shall be fully enclosed and located on an impermeable surface.					
7.9.1.6.10.5	<u>Qualified Asbestos Personnel</u> No person other than facility personnel or a licensed commercial asbestos removal contractor may load asbestos or ACWM into the container used for drop-off or transfer.					
7.9.1.6.10.6	<u>Orderly Operation</u> The facility operator shall be responsible for the sanitary conditions and orderly operation of each designated area.					
7.9.1.6.10.7	<u>Maintenance of Storage Capacity</u> The facility shall remove bulky items, recyclable materials, ACWM or other waste materials from each designated area at a frequency so as not to exceed the storage capacity of the area.					

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7.9.1.6.11	<u>Compliance with Permit</u> The operator shall at all times comply with the conditions of the transfer station/material recovery facility permit, as well as all other permits or other approvals issued by the Department or any other governmental agency. The operator shall not receive, store, handle, process or dispose of waste types not specifically authorized in the facility's permit.					2.11(b)11
7.9.1.6.12	<u>Designation of Unpermitted Waste Types Area</u> The operator shall designate a secure area under the facility's control located a safe distance from the active disposal area, where unauthorized solid wastes, including suspected hazardous wastes, may be held until the operator receives instruction from the Department as to the proper disposition of the unpermitted waste.					2.11(b)12
7.9.1.6.13	<u>Record of Waste Receipts</u> The facility operator shall maintain a record of the quantity of each authorized waste type accepted at the facility, in accordance with N.J.A.C. 7:26-2.13 and 3.2 Note: If the facility is exempt from the requirement to use scales to weigh the waste, volume to weight conversions shall be made using the formula found at N.J.A.C. 7:26-2B.					2.11(b)13
7.9.1.6.14	<u>Right of Entry and Inspection</u> Department inspectors have the right to enter and inspect any building or other portion of the facility at any time. The right to inspect includes, but is not limited to the following:					2.11(b)14
7.9.1.6.14.1	<u>Sampling</u>					
7.9.1.6.14.2	<u>Photographing</u>					
7.9.1.6.14.3	<u>Investigating</u>					
7.9.1.6.14.4	<u>Ascertaining Compliance</u> Ascertaining compliance or non-compliance with Department statutes, rules or regulations, including transfer station/material recovery facility permit conditions or conditions of other permits, certificates or approvals issued by the Department.					
7.9.1.6.14.5	<u>Reviewing Records</u> Reviewing and copying all applicable records, which shall be furnished upon request and made available at all reasonable times for inspection.					

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7.9.1.6.15	<u>Design Capacity</u> The quantity of waste received shall not exceed the facility's designed storage, processing or disposal capacity as identified in the facility permit. Note: The designed processing capacity approved within permit conditions as a ton per day operational maximum shall be inclusive of all solid wastes received at the facility as well as tonnages of source separated recyclables received. However, a separate approved capacity for Class A or Class B recyclable materials may also be maintained (as part of an approval for Class A or Class B Recycling Center) in addition to the solid waste facility design capacity.					2.11(b)15
7.9.1.6.16	<u>Operating Methods</u> The facility shall be operated in a manner that employs the use of those equipment and techniques that are specifically authorized by the facility's permit for the receipt, storage, handling, processing or disposal of incoming wastes and process residues.					2.11(b)16
7.9.1.6.17	<u>Tire Cleaning</u> The operator shall provide a means of removing mud, solid wastes or other debris from the tires of all vehicles. Tires shall be cleaned prior to the vehicles' departure from the facility site.					2.11(b)17
7.9.1.6.18	<u>Maintenance of O&M Manual</u> The approved final O&M Manual shall be maintained at the facility. The operator shall submit any proposed changes to the final O&M Manual to the Department for review. Proposed changes shall not be implemented until approved by the Department.					2.11(b)18
7.9.2	<u>Inspection Plan</u> Provide a plan for inspecting all major aspects of facility operations necessary to achieve compliance with N.J.A.C. 7:26-2 and 2B. The plan shall include the following:					2.10(b)9ii
7.9.2.1	<u>Schedule</u> A schedule for inspecting the following items:					
7.9.2.1.1	<u>Monitoring Equipment</u>					
7.9.2.1.2	<u>Safety Equipment</u>					
7.9.2.1.3	<u>Emergency Equipment</u>					
7.9.2.1.4	<u>Security Devices</u>					
7.9.2.1.5	<u>Process Operating Equipment</u>					
7.9.2.1.6	<u>Structural Equipment</u>					

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7.9.2.2	<u>Frequency</u> The frequency of inspection shall be based on the rate of potential equipment deterioration or malfunction. Note: Areas subject to spills shall be inspected daily when in use.					2.10(b)9ii
7.9.2.3	<u>Types of Problems</u> The inspection plan shall identify the types of problems which are to be looked for during inspection.					
7.9.2.4	<u>Hazardous Waste Detection</u> A program for detecting and preventing the disposal of regulated hazardous wastes, PCB wastes or other unauthorized wastes, including the following:					2.10(b)9ii(1)
7.9.2.4.1	<u>Incoming Load Inspections</u> Random inspections of incoming waste loads, unless the applicant demonstrates that other steps are taken to ensure that incoming shipments do not contain hazardous wastes or PCB wastes.					2.10(b)9ii(1)(A)
7.9.2.4.2	<u>Records of Inspections</u>					2.10(b)9ii(1)(B)
7.9.2.4.3	<u>Personnel Training</u> A staff training plan, describing the type and amount of both initial and follow-up training to be provided for the following:					2.10(b)9ii(1)(C)
7.9.2.4.3.1	<u>Incoming Waste Inspections</u>					
7.9.2.4.3.2	<u>Unauthorized Waste</u> How employees will be trained to identify and manage unauthorized wastes.					
7.9.2.4.3.3	<u>Fire Training</u>					
7.9.2.4.3.4	<u>Noise Monitoring</u>					
7.9.2.4.4	<u>Notification Procedures</u> Procedures to report to the Department any discovery of regulated hazardous wastes or PCB wastes at the facility.					2.10(b)9ii(1)(D)
7.9.3	<u>Maintenance Plan</u> Provide a facility maintenance plan, which shall include the following items:					2.10(b)9iii
7.9.3.1	<u>Equipment Analysis</u> An analysis of all major aspects of the facility operation based on established rates of equipment deterioration or malfunction.					
7.9.3.2	<u>Parts Analysis</u> An analysis of spare parts inventory needs for the facility.					
7.9.3.3	<u>Repair Schedules</u>					
7.9.3.4	<u>Maintenance Contracts</u>					
7.9.4	<u>Safety Plan</u> Facility safety considerations, including the following:					2.10(b)9iv

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7.9.4.1	<u>Injury Protection</u> Procedures to protect personnel from injury.					2.10(b)9iv
7.9.4.2	<u>Contingency Plan</u> An emergency contingency plan, including the following items:					
7.9.4.2.1	<u>Description of Actions</u> Describe actions and procedures for responding to fires, explosions or releases of harmful substances to air, soil or waters.					
7.9.4.2.2.	<u>Arrangements for Entry</u> Describe arrangements made with NJDEP and with local police and fire officials to allow immediate entry into the facility to respond to emergencies.					
7.9.4.2.3	<u>List of Coordinators</u> A list of names, addresses and telephone numbers (office and home) of persons qualified to act as emergency coordinator for the facility. Where more than one person is listed, one person shall be named as primary emergency coordinator and the others listed in the order in which they will assume responsibility as alternates.					
7.9.4.2.4	<u>Distribution of Copies</u> A demonstration that copies of the contingency plan have been submitted to local police, fire departments, local and county health departments and other offices of emergency management.					
7.9.5	<u>Peak Loading Plan</u> Provide a description of proposed measures to handle unusual peak loadings which may exceed design capacity.					2.10(b)9v
7.9.6	<u>Shutdown Plan</u> Describe proposed methods to handle incoming waste flow during periods of short-term and long-term shutdown, equipment breakdown or other emergencies.					2.10(b)9vi
7.9.7	<u>Final O&M Manual</u> Provide a final O&M annual addressing any deficiencies the Department has identified. The final O&M Manual shall be submitted after completion of construction, but at least 60 days prior to initiating full-scale operations. Note: The requirement for a final O&M Manual applies only to newly-constructed facilities.					2.10(b)10
7.10	<u>Landscaping Plan</u> Provide a facility landscaping plan, including the following:					2.10(b)11
7.10.1	<u>Vegetation Delineation</u> Identify vegetation type, location and purpose (buffer, screening or aesthetics)					
7.10.2	<u>Protection Methods</u>					
7.10.3	<u>Planting Schedule</u>					

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7.11	<u>Sources and Basis Documents</u> Provide foundation sources and basis documents for the general engineering design, supporting all factual information submitted and all conclusions drawn.					2.10(b)12
8.	<u>ADDITIONAL ENGINEERING DESIGN DATA</u> Facilities shall be designed in accordance with the following requirements:					2B..5
8.1	<u>Wastewater Management</u> Facilities shall have a system capable of collecting, storing, treating and disposing of wastewater generated during normal operations, including cleaning of equipment, trucks and floors, in compliance with applicable rules concerning wastewater and stormwater management found at N.J.A.C. 7:14A.					2B.5(b)1
8.2	<u>Enclosed Building</u> Processing (including loading of processed wastes and residues), tipping, sorting, compaction and storage shall be located within an enclosed building.					2B.5(b)2
8.3	<u>Concrete Floors</u> Tipping floors and ramps shall be constructed of concrete or equivalent material, to ensure the proper containment and channeling of wastewater to sanitary sewers or corrosion-resistant holding tanks and to withstand heavy vehicle usage, in compliance with applicable rules regarding the discharge of wastewater and the utilization of holding tanks at N.J.A.C. 7:14A and 7:14B.					2B.5(b)3
8.4	<u>Paved Loading and Unloading Areas</u> Roadways, storage areas, etc. subject to vehicle loading or unloading activities shall be paved with concrete or asphalt pavement.					2B.5(b)4
8.5	<u>Incoming Waste Storage Areas</u> Facilities shall have sufficient internal storage area for unprocessed incoming solid wastes to ensure an environmentally sound operation and for proper processing of the maximum permitted daily incoming waste loading. Provide volume calculations to demonstrate compliance.					2B.5(b)5
8.6	<u>Sound Levels</u> Facilities shall be designed such that sound levels generated by facility activities do not exceed limits specified in N.J.A.C. 7:29. Provide results of a noise level assessment to demonstrate compliance.					2B.5(b)6
8.7	<u>Dusts and Odors</u> Facilities shall be designed to prevent the migration of odors and mitigate the amount of dusts outside the confines of the enclosed building, in accordance with N.J.A.C. 7:27.					2B.5(b)7

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8.8	<u>Vehicular Movement</u> Onsite vehicular movement shall be fluid, in accordance with the approved on-site queuing plan. Traffic backups and related traffic hazards on access roads servicing the facility shall be prevented. Provide the on-site queuing and staging plan to demonstrate compliance.					2B.5(b)8
8.9	<u>Offsite Truck Routes</u> Offsite truck routes shall be designed to minimize impacts on surrounding residential areas or similar receptors. Truck traffic to and from the facility shall not result in an unacceptable decrease in the level of service, as defined in the NJDOT Highway Access Management Code found at N.J.A.C. 16:47, at major intersections located along the designated truck routes. Provide a traffic assessment and evaluation in accordance with the Technical Manual policy statement and item 10 below.					2B.5(b)9
8.10	<u>Setback Areas</u> All main building enclosures shall be located at least 50 feet from the facility property line. Note: The setback limit may be reduced if the applicant demonstrates that the reduced setback will not have an adverse impact on adjacent properties.					2B.5(b)10
8.11	<u>Fire Protection</u> Facilities shall be equipped with fire protection and alarm systems designed to comply with N.J.A.C. 5:23-3.17 and NFPA Standards and capable of detecting, controlling and extinguishing any and all fires that may occur.					2B.5(b)11
8.12	<u>Safety</u> The installation, maintenance, operation and repair of all systems within the interior layout of the facility shall comply with OSHA and the New Jersey Worker and Community Right to Know Act.					2B.5(b)12
8.13	<u>Construction Code</u> Facilities shall be designed and constructed in full conformance with the requirements and specifications of the Uniform Construction Code at N.J.A.C. 5:23					2B.5(b)13
8.14	<u>Utilities Demand</u> Facilities shall be designed so as not to place a demand exceeding the remaining use capability of existing physical utilities (e.g. water supply, wastewater and stormwater collection, energy supply, transportation systems, etc.)					2B.5(b)14
8.15	<u>Ultimate Disposal Facility</u> The name and location of all proposed ultimate disposal facilities shall be identified for all wastes processed by the facility.					2B.5(b)15
8.16	<u>Site Plan</u> The site plan map identified in 7.6 above shall also show the following:					2B.5(c)

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
8.16.1	<u>Layout</u> A layout of all buildings, structures and roadways indicating construction materials.					2B.5(c)1
8.16.2	<u>Plan Views</u> Show building setback, side and rear distances between proposed structures and other existing structures, site boundaries, roadways or parking areas.					2B.5(c)2
8.16.3	<u>Profile Views</u> Show profile views (including dimensions) of all structures and enclosures.					
8.16.4	<u>Interior Floor Plan</u> Show the layout, profile view and dimensions of processing lines, interior unloading, sorting, storage and loading areas.					2B.5(c)3
8.16.5	<u>Transportation System</u> Description and detailed specifications of the proposed onsite and offsite transportation system identifying construction materials.					2B.5(c)4
8.16.6	<u>Utilities Plan</u> Identify, locate and describe all utilities (including, but not limited to stormwater systems, sanitary sewer systems, water supply systems and energy systems) which will service the facility, including a statement of carrying capacities of existing systems and remaining capacities for future needs. Provide flow calculations to demonstrate compliance.					2B.5(c)5
8.17	<u>Engineering Report</u> The engineering report identified in 7.8 above shall include the following:					2B.5(d)
8.17.1	<u>Equipment Description</u> Schematic diagrams and detailed descriptions of all process equipment to be used, including rated and design capacity.					2B.5(d)1
8.17.2	<u>Equipment Specifications</u> Equipment specifications, including make, model, manufacturer, reliability and efficiency.					2B.5(d)2
8.17.3	<u>Storage Time</u> Maximum length of storage time for wastes and recyclable materials. Note: Wastes may not be stored overnight on the tipping floor. Tipping floors must be cleaned at the end of each operating day.					2B.5(d)3
8.17.4	<u>Recycling Activities</u> Description of any materials recycling or reclamation activities to be performed at the facility.					2B.5(d)4
8.18	<u>Protection of Waters</u> Methods of monitoring and protection of groundwaters and nearby surface waters, if the facility is to handle liquid waste or liquid-solid waste mixtures.					2B.5(e)

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
8.19	<u>Explosion Suppression</u> Design data for an explosion suppression system, if the facility is equipped with mechanical size reduction equipment.					2B.5(f)
9.	<u>CERTIFICATION AND SIGNATURES</u> Applications shall be signed and/or certified as follows:					2.4(e)
9.1	<u>Registration Statement</u> The Registration Statement identified in 3. above shall be signed by:					2.4(e)1
9.1.1	<u>Corporation</u> For a corporation, by a principal executive officer of at least the level of vice president, OR					2.4(e)1i
9.1.2	<u>Partnership</u> For a partnership or sole proprietorship, by a general partner or the proprietor, OR					2.4(e)1ii
9.1.3	<u>Public Agency</u> For a municipality, state, federal or other public agency, by either a principal executive officer or ranking elected official.					2.4(e)1iii
9.2	<u>Other Application Documents</u> The EHIS identified in 6. above, the engineering designs identified in 7. and 8. above, the engineering report identified in 7.8 above and any addenda required by N.J.A.C. 7:26-2.4(f) or (g)4 shall be signed by:					2.4(e)2
9.2.1	<u>Corporation</u> For a corporation, by a principal executive officer of at least the level of vice president (or duly authorized representative), OR					2.4(e)1i
9.2.2	<u>Partnership</u> For a partnership or sole proprietorship, by a general partner or the proprietor, OR					2.4(e)1ii
9.2.3	<u>Public Agency</u> For a municipality, state, federal or other public agency, by either a principal executive officer or ranking elected official. Note: If a duly authorized representative signs, a written authorization by one of the persons specified in 9.2.1, 9.2.2 or 9.2.3 above specifying that representative shall be submitted to the department.					2.4(e)1iii
9.3	<u>Certification</u> Any person (applicant) signing the registration statement, EHIS, engineering designs, engineering reports or addenda identified in 9.1 or 9.2 above shall make the following certification: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I understand that, in addition to criminal penalties, I may be liable for a civil administrative penalty pursuant to N.J.A.C. 7:26-5 and that submitting false information may be grounds for denial, revocation or termination of any solid waste facility permit or vehicle registration for which I may be seeking approval or now hold."					2.4(e)3

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
10.	TRAFFIC ASSESSMENT AND EVALUATION Provide a traffic assessment and evaluation in accordance with the Technical Manual policy statement and the following: Note: All calculations and analyses must be performed in accordance with the NJ State Highway Access Management Code (N.J.A.C. 16:47) and the Transportation Research Board Highway Capacity Manual.					2.B5(b)9&14 2.9(c)3iv(1) 2.10(b)8iv
10.1	<u>Waste Delivery Schedule</u> A projection of the hourly daily trailer/truck schedule for the delivery of the maximum anticipated solid waste and recyclable materials into the facility. Provide the data base which supports this projection. This schedule will determine the facility's peak hours.					Same as above.
10.2	<u>Waste Shipment Schedule</u> A projection of the anticipated hourly daily trailer/truck schedule for shipment of solid waste and recyclable materials out of the facility. Note: Ability to load waste out is restricted by waste delivery schedules, traffic impact assessment and queuing and staging of transfer vehicles, not by equipment processing capacity.					Same as above.
10.3	<u>Off-Site Routes</u> Identify off-site traffic routes used by trucks to access and exit the facility.					Same as above.
10.4	<u>Intersections Analyses</u> Analysis of critical intersections used by facility truck traffic.					Same as above.
10.5	<u>Baseline Traffic Counts</u> Existing hourly traffic counts to include, at a minimum, the hours of facility operation. Roadway capacity shall also be included.					Same as above.
10.6	<u>Traffic Analysis</u> The assessment and evaluation shall analyze the following scenarios:					Same as above.
10.6.1	<u>Roadway Peak Hour</u> Existing roadway peak hour, with and without facility truck traffic.					Same as above.
10.6.2	<u>Delivery Peak Hour</u> The hour of peak waste deliveries, with and without facility truck traffic.					Same as above.
10.6.3	<u>Other Peak Hours</u> Identify other peak hours, if the facility will operate 24 hours per day.					Same as above.
10.7	<u>Traffic Growth</u> Account for traffic growth for the projected period of full scale facility operations, using the recommended NJDOT factor for the area.					Same as above.

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
11.	<u>NOISE LEVEL ASSESSMENT</u> Provide a noise level assessment in accordance with the Technical Manual policy statement and the following: Note: The analysis shall include a baseline noise assessment per 6.3.1.11 above in addition to the following:					2B.5(b)6 2.9(c)5ii(8) 2.9(c)3i(11)
11.1	<u>Estimate Maximum Levels</u> Estimate peak hour noise levels for proposed maximum facility capacity for all noise sources, including:					Same as above.
11.1.1	<u>Queuing Trucks</u>					Same as above.
11.1.2	<u>Loading/Unloading</u> Truck loading/unloading activities, inside and outside the building.					Same as above.
11.1.3	<u>Pushing of Waste</u>					Same as above.
11.1.4	<u>Yard Activities</u> Dropping or picking up containers, loading recyclables, etc.					Same as above.
11.1.5	<u>Air Pollution Control Equipment</u>					Same as above.
11.1.6	<u>Processing Equipment</u> Compactors, balers, grinders and any other processing equipment, inside and outside the facility.					Same as above.
11.2	<u>Noise Projection</u> Noise sources identified in 11.1 above shall be compounded, logarithmically added and projected to the nearest sensitive receptors. Note: Noise regulations are land use based, not zoning based. Therefore, residential receivers in commercial or industrial zones are protected by the same standards as residential receivers in residential zones. Noise regulations consider commercial facilities to be sensitive receptors. Industrial facilities are not considered sensitive.					Same as above.
11.3	<u>Comparison with Standards</u> Compare the projected noise levels from 11.2 above with the noise level standards found at N.J.A.C. 7:29 et seq. for day time (and for night time, if the facility will operate between the hours of 10:00 p.m. and 7:00 a.m.).					Same as above.
11.4	<u>Mitigation Measures</u> Describe any necessary proposed mitigative measures to ensure compliance with the standards, if the noise levels projected in 11.2 above exceed any of the standards identified in 11.3 above.					Same as above.

		COMPLETE (Y/N)	TECHNICALLY ADEQUATE (Y/N)	NOT APPLICABLE	COMMENTS	N.J.A.C. 7:26 CITE
12.	<u>ACCEPTANCE OF SLUDGES OR SLUDGE-RELATED WASTES</u> Facilities proposing to accept sludge or sludge-related waste types (liquid waste) shall provide the following:					None
12.1	<u>District Plan Inclusion</u> Documentation that the facility has been included in the respective District Solid Waste Management Plan for the acceptance of the waste.					2.4(b)2

APPENDIX B

**New Jersey Department of Environmental
Protection
Geographic Information System**

**Mapping the Present to Protect
New Jersey's Future**

**Mapping and Digital Data
Standards**

Prepared by:

**New Jersey Department of Environmental Protection
Office of Information Resources Management
Bureau of Geographic Information Analysis
P.O. Box 428
Trenton, NJ 08625-0428**

November 1998

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Appendix A: Metadata Example

Appendix B: Scale Horizontal Accuracy for NMAS

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SUMMARY

The New Jersey Department of Environmental Protection (DEP) has developed a Geographic Information System (GIS) for use by the Department for the storage and analysis of cartographic (mapped) and related environmental scientific and regulatory database information. A GIS is a computer mapping system used in the analysis of geographic data and databases. By Administrative Order, Commissioner Shinn has required that mapped information be submitted to the DEP according to the standards of this document such that the data can be input to the DEP/GIS. This document details three important GIS concepts regarding the creation, capture and delivery of mapped information. There are three basic standard concepts that must be followed.

First, all mapping regardless of scale must meet or reference a published standard, such as the United States National Map Accuracy Standard (NMAS), a GPS standard (state or federal), or a defined survey standard. This will guarantee true positional accuracy of the geographic data and, therefore, compatibility of digital information. GIS data must also be documented using the Federal Geographic Data Committee (FGDC) Metadata Standards or be FGDC metadata compliant.

Second, it is required that for all mapping, geographic data be mapped in New Jersey state plane coordinates (SPC) in North American Datum 1983 (NAD83). SPC means a geographic reference system in the horizontal plane describing the position of points or features with respect to other points in New Jersey. The official survey base of the state is known as the New Jersey State Plane Coordinate System whose geodetic positions have been adjusted on the NAD83 as per Chapter 218, Laws of New Jersey 1989.

Third, geographic data must be delivered according to standard media and digital formats. Accepted formats and media are presented in the body of this paper.

Resources: 1997 New Jersey GIS Resource Guide, NJDEP Maps and Publications, CD-ROM Series 2, #1, GIS Tools for Decision Making (609) 777-1039.

Mapping and Digital Data Standards, 1997, NJDEP, P.O. Box 428, Trenton, NJ 08625 (609) 777-0672.

**MAPPING AND DIGITAL DATA STANDARDS
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL
PROTECTION
GEOGRAPHIC INFORMATION SYSTEM**

1.0 INTRODUCTION

Geographic Information System (GIS) technology has become a state-of-the-art tool for innovative efforts nationally and within the State of New Jersey to protect the natural environment and protect the public health of citizens. To adequately address these and other issues, the NJDEP must make decisions based on sound, accurate spatial data. This document provides guidance for the basic standards for creating and distributing spatial data on a GIS. Basic standards will ensure consistent data quality and documentation, provide for compatibility between data sets, and facilitate interactive analysis and ensure the quality of results derived from the GIS.

2.0 STATE STANDARD MAP RESOURCES and MAPPING CRITERIA

2.1 National Map Accuracy Standards

The most common statement for accuracy for mapped information at common mapping scales for mapping is National Map Accuracy Standards (NMAS). These standards were established in 1947 and have formed the basis for mapping accuracy by the United States Geological Survey (USGS) for the past 50 years. Simply stated, NMAS requires that for horizontal accuracy, 90% of the well-defined points on a map must be within +/- 33.3 feet of their true position at 1:12000 (1/30th of an inch where an inch = 1000ft.); +/- 40 feet at 1:24000 (1/50th of an inch where 1 inch = 2000ft.). Refer to Appendix B for a table on scale horizontal accuracy. The NMAS then relies on a statement of accuracy based on the scale of the published map (data). Maps which are digital must be evaluated at the scale of production. The New Jersey Department of Environmental Protection (NJDEP) has created several source basemaps that are available for mapping initiatives that meet or exceed NMAS. The NMAS is reprinted below.

NATIONAL MAP ACCURACY STANDARDS

United States National Map Accuracy Standards

U.S. Bureau of the Budget, Revised June 17, 1947

With a view to the utmost economy and expedition in producing maps which fulfill not only the broad needs for standard or principal maps, but also the reasonable particular needs of individual agencies, standards of accuracy for published maps are defined as follows.

1. **Horizontal accuracy.** For maps on publication scales larger than 1:20,000, not more than 10% of the points tested shall be in error by more than 1/30 inch, measured on the publication scale; for maps on publication scales of 1:20,000 or smaller, 1/50th of an inch. These limits of accuracy shall apply in all cases to positions of well-defined points only. Well-defined points are those that are easily visible or recoverable on the ground, such as the following: monuments or markers, such as bench marks, property boundary monuments; intersections of roads, railroads, etc.; corners of large buildings or structures (or center points of small buildings); etc. In general what is well-defined will also be determined by what is plottable on the scale of the map within 1/100 inch. Thus, while the intersection of two road or property lines meeting at right angles would come within a sensible interpretation, identification of the intersection of such lines meeting at an acute angle would obviously not be practicable within 1/100 inch. Similarly, features not identifiable upon the ground within close limits are not to be considered as test points within the limits quoted, even though their positions may be scaled closely upon the map. In this class would come timber lines, soil boundaries, etc.

2. **Vertical Accuracy,** as applied to contour maps on all publication scales, shall be such that not more than 10 percent of the elevations tested shall be in error more than one-half the contour interval. In checking elevations taken from the map, the apparent vertical error may be decreased by assuming a horizontal displacement within the permissible horizontal error for a map of that scale.

3. The accuracy of any map may be tested by comparing the positions of points whose locations or elevations are shown upon it with corresponding positions as determined by surveys of a higher accuracy. Tests shall be made by the producing agency, which shall also determine which of its maps are to be tested, and the extent of such testing.

4. Published maps meeting these accuracy requirements shall note this fact on their legends, as follows: "This map complies with National Map Accuracy Standards."

5. Published maps whose errors exceed those aforesaid shall omit from their legends all mention of standard accuracy.

6. When a published map is a considerable enlargement of a map drawing (manuscript) or of a published map, that fact shall be stated in the legend. For example, "This map is an enlargement of a 1:20000-scale map drawing," or "This map is an enlargement of a 1:24000-scale published map."

7. To facilitate ready interchange and use of basic information for map construction among all Federal mapmaking agencies, feasible and consistent with the uses to which the map is to be put, shall conform to latitude and longitude boundaries, being 15 minutes of latitude and longitude, or 7.5 minutes, or 3-3/4 minutes in size. (from Thompson, 1987).

2.2 New Jersey Basemaps That Meet NMAS

Basemaps provide the foundation for many mapping projects and for the display of mapped information. As such, basemaps must meet uniform, rigorous standards for positional accuracy and cartographic integrity. Over the years, several series of quality basemaps that meet or exceed NMAS have been produced. Basemaps can be either hardcopy (mylar or acetate) or digital (softcopy). A statewide synoptic set of hardcopy basemaps for New Jersey were made from aerial overflights sponsored by the NJDEP in 1991 and 1986. In both cases, both quadrangle (1:24000) and quarter quadrangle (1:12000) hardcopy mylar basemaps were produced. Other basemaps cover specific areas only, such as the 1977-78 Tidelands photo basemaps. Two series of digital (softcopy) basemaps have also been produced, from the 1991 and 1995/97 overflights. The digital images were produced at quarterquad scale (1:12000).

2.2.1 Hardcopy (mylar) Basemaps

Listed below in order of general overall quality are available New Jersey basemap series that were produced on stable base mylar and meet a definable mapping standard (NMAS). The first four series listed are photo basemaps, derived from aerial photography. The 1991/92 and the 1986 wetlands series are both orthophoto basemaps compiled from a sophisticated aero-triangulation process. They should be used whenever possible to generate GIS compatible data and/or to use as a recompilation base.

All the hardcopy basemaps described herein with the exception of the 1991/92 products are referenced in NAD27. For this reason, the 1991/92 mylar basemap quads (1:24000) and quarterquads (1:12000) series, referenced in NAD83 are highly recommended by the NJDEP over all other sources listed for mapping at these scales. Stable base site maps of large scale meeting NMAS, produced by surveying, mapping or photogrammetric firms may qualify as GIS compatible if they contain a minimum of four registration tics in the New Jersey State Plane Coordinate System, North American Datum 1983 (NAD83), the official survey base of New Jersey. The USGS topoquad series are not recommended as a delineation source because they are generally available only on paper and are not synoptic data sources. Rather, they represent variable data sources and dates.

1991/92 Orthophoto Basemaps (Quadrangles and Quarter quadrangles)

The most recent statewide set of hardcopy chronoflex quarterquad (1:12000) and photoquad (1:24000) photo basemaps were produced from the 1991/92 aerial overflight of the state. These basemaps meet or exceed NMAS. This series of maps is referenced in SPC feet in NAD83, but also has NAD27 tics in the margin. This series is the most current, highest quality basemaps of their scale available statewide, that are referenced in the new datum, NAD83. This basemap series is highly recommended by the NJDEP for mapping efforts at these scales.

1986 Freshwater Wetlands Orthophoto Quarterquad Basemaps (1:12000)

The passage of the Freshwater Wetlands Act of 1987 required the state to produce a composite map of the freshwater wetlands (FWW) for the state. Subsequently, a set of 635 chronoflex photo quarterquads for the entire state from the March 1986 overflight was produced. The maps represent an excellent source for both photo-interpretation and recompilation at a county, municipal or site level. However, these maps are dated and are referenced in the old datum (NAD27). The 1991/92 series now supercedes these maps. There is also a set of composite hardcopy FWW maps with the delineation superimposed on the image.

1986 Photoquad Basemaps (1:24000)

A statewide overflight in March 1986 produced a complete set of stable base photoquads at 1:24000. The control for the production of these basemaps was the mylar USGS 7.5-Minute topoquads. The photoquads have been widely used both to create data layers and to recompile other data sources from paper or non-planimetric sources. These basemaps did not follow rigorous orthophoto techniques and are referenced in the old datum. The 1991/92 basemaps supercedes these maps.

1977/78 Tidelands Basemaps (1:2400)

The tidelands maps are a series of 1:2400 base maps for the coastal zone that include all tidal areas in the state to delineate the State's claim to all tide-flowed lands. The series consists of 1628 photo basemaps. These maps are rectified products that meet NMAS below the ten foot contour. The photo-image is late summer of 1977 and 1978. These maps cover the entire coastal zone up to the head-of-tide.

USGS 7.5-Minute Series Topoquad Basemaps (1:24000)

The USGS has published an entire series of 172 topographic maps for the state at a scale of 1:24000. The base information ranged from the late 1940's to the 1980's with photo-updates into the mid 1990's. Because these maps vary in source date, and because more accurate and current basemaps (1991/92) are available, the USGS topoquads series *is not recommended* by the NJDEP as a mapping base. The topoquads do represent an excellent reference source, particularly for named places and features.

2.2.2 Hardcopy Basemap Resources

Mylar photo basemaps from 1991, 1986 and 1977/78 and the digital imagery from 1991 may be obtained from MARKHURD, Minneapolis, MN (1-800-MAP-HURD). There are several sets of the 1986 and 1991 chronoflex (mylar) basemaps in the Department. The GIS Unit has a set of each for reference.

Paper prints of 1986 and 1991 orthophoto basemap series, as well as paper prints of USGS topoquads, may be obtained from NJDEP Maps and Publications; (609) 777-1039. Paper prints from the 1977/78 series are available from the Tidelands Element; (609) 292-2573.

Topoquads and other USGS federal maps (and aerial photos) may be ordered from (1-800-USA-MAPS or (703) 648-5931.

2.3 Digital Imagery that Meets NMAS

The State Mapping Advisory Committee, Aerial Photo Subcommittee, has produced a 1995/97 statewide digital imagery in partnership with the USGS, National Mapping Division. The imagery conforms with the standards of USGS "standard product" for digital orthophoto quarterquads (DOQQs). The imagery is color infrared (CIR), has 3 bands, 1 meter resolution, and is NAD83 in UTM (meters). The standard product is available through the USGS EROS Data Center. The NJDEP has made the data available on the GIS server and on a set of CD-ROMs in SPC feet, NAD83. The CDROMs are available through Maps and Publications.

USGS Resource: <http://edcwww.ed.usgs.gov/webglis>
<http://mapping.usgs.gov>
USGS, (703) 648-5931

NJDEP Resource: GIS Server
Maps and Publications (609) 777-1038

1991/92 digital imagery is available at 5 ft (quarter quad) resolution or 10 ft (quad) grayscale (1 band) digital files, NAD83. These images meet NMAS at the production scale (1:12000) and are the manuscript images from which the 1991/92 mylar basemaps were made. The files are .gis (ERDAS) files and are 16mb each. These digital images are available on the GIS server but may not be distributed outside the DEP. Others must contact MARKHURD.

NJDEP Resource: GIS Server

Contractor Resource: MARKHURD, Minneapolis, MN (1-800-MAP-HURD).

2.4 Projection and Datums

2.4.1 Projection and Coordinate System

Based on the Chapter 218, Laws of New Jersey 1989, New Jersey State Plane is required in either meters (or feet), North American Datum 1983. The State of New Jersey is entirely contained within one state plane zone. Special situations may require other projection systems for small scale maps of regional (interstate) or national interest.

2.4.2 Horizontal and Vertical Datums

The North American Datum of 1983 is required for mapping in the horizontal (NAD83). The North American Vertical Datum of 1988 (NAVD 88) should be used when possible rather than the older National Geodetic Vertical Datum of 1929 (NGVD29).

2.5 Other Resources: Aerial Photographs

Historic aerial photography is available for inspection at the NJDEP Tidelands Management Program (TMP) by scheduled appointment. The 1986, 1991/92 and 1995/97 photo color infrared frames are also available for inspection at the TMP. Appointments are required. The 1991/92 and 1995/97 photos may also be purchased from the USGS EROS Data Center.

USGS Resource: <http://mapping.usgs.gov>
USGS, (703) 648-5931

NJDEP Resource: Tidelands Management Program, (609) 633-7369

1997 New Jersey GIS Resource Guide,
NJDEP Maps and Publications, CD-ROM
Series 2, #1, GIS Tools for Decision Making
(609) 777-1039.

3.0 Map Production Specifications (Data Capture)

Mapped information comes from a variety of sources that are not always GIS compatible. Consequently, each source must be evaluated to determine whether redrafting is necessary to prepare the data for entry into the GIS. Much of the data required for the GIS can be derived directly from the photo-interpretation of aerial photos to rectified photo basemaps.

3.1 PHOTO -INTERPRETATION

Today's GIS data development efforts rely to a large degree on the derivation of themes from the stereoscopic interpretation of aerial photos. The DEP has used this technique in conjunction with various photo basemaps to produce land use/land cover and freshwater wetland coverages, for instance. The TMP of DEP maintains an extensive library of current and historical color infrared, color and panchromatic photographs from the 1930's to the present. The TMP offers light tables, photo basemaps and stereoscopes as well as some instruction on set up to assist DEP employees as well as the public and regulated community. This service is available at a modest fee (for outside agencies) and is well worth the effort, particularly if the data are to be captured in the GIS.

Delineators should be intimately familiar with the classification system being employed prior to producing data for input into the GIS. Care should be taken in choosing an appropriate standard classification system. If non-standard classification systems are used, the contractor shall fully describe the system.

3.2 RECOMPILATION

Recompilation involves the redrafting of features from one source to a more accurate, planimetric source based on identifiable features. This method is commonly used to give more accuracy to data that have been delineated on sources of unknown or unspecified quality or paper manuscripts. It is also commonly used to transfer data delineated on or to unrectified photography to a rectified or orthophoto basemap based on a series of local fits of common photo-identifiable features, such as roads.

Other data sources without photo-images may be recompiled to planimetric sources by using other coincident features. For instance, grids on source data may be generated and plotted to planimetric basemaps and used as a guide for the redrafting of information that would otherwise not be usable in a digital form. This has been used to draft historical purveyor boundaries from old atlas sheets to the photoquads, for instance. Whatever the technique, a data dictionary form must be completed describing the recompilation techniques employed.

Resource: Photobase Map Compilation (USDA, 1984).

3.3 DATA AUTOMATION

The conversion of analog data to digital data is a critical step in the creation of a digital database in the GIS. Tablet digitizing was the most common method, however, scanning, GPS and heads-up digitizing have all gained popularity. For tablet digitizing, a manuscript's lines should be clear and complete with no gaps or shortfalls. Operators should not interpret and digitize at the same time. The digitizer should concentrate solely on capturing the exact nature of the features. All maps shall be edge matched prior to digitization to eliminate cartographic errors

and reduce digital problems. Digital accuracy shall be evaluated by proof plotting the digital data to the base at the same scale as the manuscript and overlaying the data to the original map. The linework should be digitized in such a way as to create a digital copy that is within +/- one line width of the original. Edits can be flagged and corrected such that the standard is met.

Heads up digitizing is a new digitizing technique that is useful for capturing data or updates from digital imagery. High resolution digital imagery now allows GIS users to capture edits and delineate features directly on the screen using desktop GIS software. The user must document procedures when using this technique. Users should maintain clear definitions or classifications of features that are being interpreted and delineated. Scales used for data capture should be logged. Detailed classification systems and resolution of imagery may require that features be photo-interpreted from aerial photography to the digital image and then captured on the screen. Ground truth (field verification) remains an important step in establishing the quality of heads-up digitizing, particularly for land cover delineations. Photo-interpreting and heads-up digitizing at the same time can be extremely difficult even for experienced users. Make sure appropriate entries concerning the quality of the data are documented in the metadata files.

The requirements for GPS derived features are discussed in Section 4.0.

The coding of features should follow an approved classification system as adopted by state and federal agencies. These codes follow specifications of organizations responsible for deriving and maintaining the data. For example, the DEP uses the Cowardin et al. (1979) system for the Classification of Wetland and Subaqueous Lands in the United States as adopted by the National Wetlands Inventory of the U.S. Fish and Wildlife Service. In addition the Department supports a modified version of Anderson et al. (1976), USGS, for classifying land use/land cover. For prototype classification schemes, clear concise documentation describing the classes is required.

All attribute coding shall be 100% correctly coded. A full description of each code should be provided as part of the metadata. All documentation shall be delivered in hard copy and on diskette.

NJDEP Resource: GIS Training Courses (3-2169)

4.0 GLOBAL POSITIONING SYSTEM

The NAVSTAR Global Positioning System (GPS) has become a mainstream technology for data collection for GIS. In New Jersey, the technology is being used for GIS related activities by state, county, and municipal government agencies, academic institutions, public utilities, non-profit organizations, and private firms. This satellite based radio-navigation system, developed by the US Department of Defense (DoD), is comprised of a constellation of orbiting satellites (between 24-26) that transmit signals

that can be received by anyone with a GPS receiver. From the signals, a GPS receiver is able to determine its 3D position (latitude, longitude, and elevation) on the surface of the earth. Users can store these locations to represent mapped features in a GIS. Users can not only capture a feature's location, but also enter descriptive attribute data that significantly adds to the final data layer's value in GIS.

Depending on the design of the GPS receiver, and the data collection/data processing techniques used, the horizontal range of accuracy can be 100 meters to sub-centimeter. GPS is most effective when the GPS receiver's antenna has an unobstructed view of the sky. Buildings in urban areas and dense tree cover can create reception problems making GPS collection work difficult in these types of environments. The GPS receiver must be able to receive relatively clear signals from at least four satellites simultaneously to determine a 3D position or fix.

The US DoD maintains the system, and although civilians are allowed to use GPS, the military has imposed a policy called selective availability (SA), which intentionally degrades the accuracy of the system for non-military users. There are GPS data collection/processing techniques non-military users can employ that can result in very high accuracy despite the presence of SA.

The most commonly used GPS receivers for GIS applications are the mapping or resource grade, code based receivers. These are specifically designed for storing mappable features (coordinates and attributes). Positions determined by these receivers are generally in the 1 to 5 meter accuracy range after differential correction.

Positional data collected with GPS must, at a minimum, meet within a 5 meter, 95% confidence standard. This requires all GPS data to be differentially corrected. If accuracy requirements call for higher accuracy, parameter settings have to be adjusted accordingly in order to meet the higher standard. For detailed information on recommended GPS receiver settings, see NJDEP's *Standards for Using Code-Based Global Positioning Systems (GPS) for the Development of Accurate Location Data for Use with Arc/Info and ArcView Geographic Information Systems*.

NJDEP Resource: Lou Jacoby, (609) 633-1203

Contractor Resource: www.state.nj.us/dep/gis

5.0 REMOTE SENSING STANDARDS

Satellite remote sensing imagery is a valuable resource of information that aids in the analysis of the Earth's environment. There are many types of satellite vehicles that orbit the Earth, each with various characteristics and capabilities. One example is the Landsat Thematic Mapper (TM). This satellite collects data at an orbit of 705 kilometers above the Earth. Its on-board sensor measures the amount of surface features light absorption and reflectance across various wavelengths in the electromagnetic spectrum from the "visible", which is what the human eye perceives, to the "infrared". The spatial resolution (cell size) is 30 meters, meaning one cell represents an area of 30 by 30

meters on the ground. The resultant 7-band digital image reveals a picture of the Earth spanning an area of 185 by 185 kilometers; therefore, only two image "scenes" are necessary to encompass the entire State of New Jersey. These characteristics make the Landsat TM particularly suitable for the environmental analysis of this region.

The Grant F. Walton Center for Remote Sensing and Spatial Analysis (CRSSA) at Rutgers University uses Landsat TM imagery, as well as other satellite vehicles such as SPOT, IRS-C, and AVHRR. Their sensors (primarily Landsat TM), allow CRSSA extensive mapping capabilities for a variety of landscape mapping/monitoring projects throughout New Jersey and neighboring lands containing natural resources that affect this state.

The power and wide usage of remote sensing data merits the existence of standards for content and accuracy. Unfortunately, there are no current remote sensing standards (i.e. positional accuracy) mandated by the Federal Geographic Data Committee (FGDC) at the time of this report. However, there are several federal agency mapping projects which provide useful guidelines for remote sensing data. For example, the Coastal Change Analysis Program (C-CAP), maps and monitors land cover and submerged aquatic vegetation change in coastal zones throughout the United States. C-CAP, administered by the National Oceanic and Atmospheric Administration (NOAA), effectively and thoroughly outlines various remote sensing guidelines related to positional accuracy, land cover/habitat classifications, etc. These protocols were instrumental for CRSSA's mapping of Southern New Jersey for the NOAA C-CAP project.

The remote sensing user community can purchase geo-referenced, terrain-corrected imagery such as Landsat TM from a variety of sources, whether governmental, such as the USGS EROS Data Center, or private enterprises including Space Imaging. When using these data, it is important to understand the "in-house" accuracy standards used by each facility when processing the data.

Overall, there are resources available to guide satellite image analysts in their use of remote sensing data. Until the federal government mandates standards through the FGDC, users must rely on the existing unregulated guidelines provided by individual sources. Many are quite reputable, but for those projects without remote sensing guidelines, it is more challenging to establish appropriate protocol for remote sensing processing and applications.

FGDC Resources: <http://www.fgdc.gov/Standards/Standards.html>

<http://www.fgdc.gov/Standards/Documents/Proposals/swathpr3.html>

"Content Standard for Remote Sensing Swath Data" is in the draft stage submitted by NASA to the FGDC Standards Working Group.

USGS Resource: (EROS) Data Center <http://edcwww.cr.usgs.gov>

ASPRS Resource: <http://www.asprs.org/asprs/resources/standards.html>

NOAA Resource: Coastal Change Analysis Program (C-CAP): "Guidance for Regional Implementation"

<http://www.csc.noaa.gov/ccap/protocol/protocoltxt.html>

Private Sector Resource: <http://www.spaceimaging.com>

Contains Landsat TM ortho-corrected processing procedures.

<i>OPERATING SYSTEM</i>	UNIX	DOS
<i>FORMAT</i>	ARC/INFO Import Export ARCVIEW3.x shapefiles DXF	FLAT ASCII (SDF) ARC INFO Import Export ARCVIEW3.x shapefiles DWG (AutoCad) DGN (Microstation) DXF
<i>SOFTWARE</i>	TAR CPIO	VARIOUS

MEDIA	150 MB TAPE 3 1/2" HD 1.44MB CD-ROM (CD-R) EXABYTE	3 1/2" HD 1.44MB CD-ROM (CD-R) 120/250MB QIC120 COLORADO MAYNARD
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7.0 METADATA

Metadata, that is, data about the digital data are required for all digital data layers produced. Metadata is the information that describes the digital data layer based on the parameters that are included in the layer. The Federal Geographic Data Committee has defined the federal metadata standard which all federal agencies are required to produce for each digital data layer. Metadata describes how the data was created, who created the data and who maintains it, when the data was created and/or updated, item (attribute) descriptions, transfer standards, and more. The NJDEP requires that metadata be provided with each digital data layer and that the metadata be FGDC compliant. Standard FGDC compliant metadata is a critical component to information management systems (clearinghouses) on the World Wide Web (WWW) and for any interactive mapping applications provided across the WWW.

The following is a statement from the FGDC on the metadata standard.

The objectives of the standard are to provide a common set of terminology and definitions for the documentation of digital geospatial data. The standard establishes the names of data elements and compound elements (groups of data elements) to be used for these purposes, the definitions of these compound elements and data elements, and information about the values that are to be provided for the data elements.

This standard is the data documentation standard referenced in the executive order (Executive Order 12906, "Coordinating Geographic Data Acquisition and Access: the National Spatial Data Infrastructure)." The standard was developed from the perspective of defining the information required by a prospective user to determine the availability of a set of geospatial data, to determine the fitness the set of geospatial data for an intended use, to determine the means of accessing the set of geospatial data, and to successfully transfer the set of geospatial data. As such, the standard establishes the

names of data elements and compounds elements to be used for these purposes, the definitions of these data elements and compound elements, and information about values that are to be provided for the data elements. (Source: FGDC homepage).

Resources: <http://geochange.er.usgs.gov>
<http://www.fgdc.gov>

7.1 Metadata Template

An example of an FGDC compliant metadata form with about 40 fields for feature based (point, line polygon) digital data is presented below. Appendix A contains a completed sample form.

NJDEP FGDC Compliant Metadata

1.0 IDENTIFICATION INFORMATION

- 1.1 Citation -- information to reference data set.*
- 1.13 Native Data Set Environment -- a description data sets in the producer's processing environment.*
- 1.14 Cross Reference -- information about other, related data sets that are likely to be of interest.*
- 1.2 Description -- a characterization of the data set.*
 - 1.2.1 Abstract -- a brief narrative of the data set.*
 - 1.2.2 Purpose -- a summary of intentions with what the data set was developed.*
 - 1.2.3 Supplemental Information -- other descriptive info about data set.*
- 1.3.1 Currentness Reference -- time period(s) for which the data set corresponds to the ground.*
- 1.6 Key Words -- words or phrases summarizing an aspect of the data set.*
- 1.6.2 Place -- geographic locations characterized by the data set.*
- 1.8 Use Constraints -- restrictions and legal prerequisites for using data sets.*
- 1.13 Native Data Set Environment -- a description data sets in the producer's processing environment.*
- 1.15 Cross Reference -- information about other, related data sets that are likely to be of interest.*

2.0 DATA QUALITY INFORMATION

- 2.1.1** *Attribute Accuracy Report – an explanation of the attributes in the data set.*
- 2.1.2** *Quantitative Attribute Accuracy Assessment*
- 2.3** *Completeness Report -- Information about the completeness of the data set.*
- 2.4.1.1** *Horizontal Positional Accuracy -- an explanation of the horizontal coordinate measurements.*
- 2.5** *Lineage -- information about the events and parameters in which the data set was constructed.*
- 2.5.1** *Source Information -- list of sources for the data set.*
- 2.5.1.2** *Source Scale Denominator -- the denominator of the representative fraction.*
- 2.5.1.3** *Type of Source Media -- the medium of the source data set.*
- 2.5.1.4.1** *Source Currentness Reference -- source time period of content information of the source data set.*
- 2.5.2.3** *Process Date -- the date when the event was completed.*

3.0 SPATIAL DATA ORGANIZATION

- 3.2** *Direct Spatial Reference Method -- the system objects used to represent space in the data set.*

4.0 SPATIAL REFERENCE

- 4.1.2.1.1** *Map Projection Name -- name of the map projection.*
- 4.1.2.2.1** *Grid Coordinate System -- name of the grid coordinate system.*
- 4.1.4.1** *Horizontal Datum Name -- the identification given to the reference system used for defining the coordinates of points.*

5.0 ENTITY AND ATTRIBUTE INFORMATION

- 5.1.2.1** *Attribute Label -- the name of the attribute.*
- 5.1.2.2** *Attribute Definition -- the description of the attribute(s).*
- 5.1.2.4** *Attribute Definition Values -- the valid values that can be assigned for an attribute.*

6.0 DATA DISTRIBUTION

- 6.4** *Standard Order Process -- the common ways in which the data set can be obtained.*
- 6.4.2.1** *Name -- the name of the data transfer format.*
- 6.4.2.2.2.1** *Offline Media*

7.0 METADATA REFERENCE INFORMATION

- 7.1** *Meta Data Date -- the date the meta data were create or updated.*
- 7.4** *Meta Data Contact -- the party responsible for creating the meta data.*

8.0 CITATION INFORMATION

- 8.1** *Originator -- Name of the parties that developed the data set.*
- 8.4** *Title -- name by which the data set is known.*
- 8.5** *Edition -- the version of the title.*

9.0 TIME PERIOD INFORMATION

- 9.1.1** *Calendar Date -- the year*

10.0 CONTACT INFORMATION

- 10.1.1** *Primary Contact Person*
- 10.1.2** *Contact Organization*
- 10.4** *Contact Address*
- 10.5** *Contact Voice Telephone Number*

Appendix A: Metadata Example

1.0 IDENTIFICATION INFORMATION

1.1 Citation

Mercer County Integrated Terrain Unit
Bureau of Geographic Information & Analysis
Trenton, New Jersey 08625

1.13 Native Data Set Environment/Database:

ARC/INFO Info

1.14 Cross Reference

Lookup tables for land use/land cover, soils, geology and flood prone areas. Lu.class text file describes Anderson et al.

Lookup Table Descriptions:

MERBDRK.LUT	Bedrock geology (primary, secondary).
MERSOILS.LUT	Soils (consult the Soil Survey).
MERFLOOD.LUT	Flood prone areas.
MERSOILINC.LUT	Soil inclusions.
MERLU.LUT	Land use/land cover.
MERSURF.LUT	Surficial geology.

1.2 Description

Land use/land cover mapped using modified Anderson et al. (1976) classification system. Minimum mapping unit = 2.5 areas. Other sources re-scaled to 1:24000 and recompiled to 1986 photo quads based on coincident features. Data Description & Definition; Integrated terrain unit for Mercer County. This information is important to public agencies and private citizens concerned with land developments.

1.2.1 Abstract

A compilation of 4 data layers, geology, soils, flood prone, land use/land cover which were based upon 1986 aerial photography.

1.2.2 Purpose/Brief Description

Soils
Flood prone
Geology
Land use/land cover

Flood areas have been identified for: (1) urban areas where the upstream drainage basin exceeds 25 square miles, (2) rural areas in humid regions where the upstream drainage basin exceeds 100 square miles, (3) rural areas where in semiarid regions where the upstream drainage basin exceeds 250 square miles, and (4) smaller drainage basins, depending on topography and potential use of the flood plains.

1.2.3 Supplemental Information

Meritu.e00 - export file for the data distribution. Flood-prone Documentation Taken Directly from USGS Flood-prone Maps. Approximate boundaries of flood-prone areas are shown on this map. There is on the average about 1 chance in 100 that the designated areas will be inundated in any year. The flood-prone areas have been delineated through the use of readily available information on past floods rather than from detailed surveys and inspections. In general, the delineated areas are for natural conditions and do not take into consideration the possible effects of existing or proposed flood control structures except where those effects could be evaluated. The 89th Congress, in House Document 465, recommended the preparation of flood-prone area maps to assist in minimizing flood losses by quickly identifying the areas of potential flood hazards. More detailed flood information may be required for other purposes such as structural designs, economic studies, or formulation of land-use regulations. Such detailed information may be obtained from the U.S. Geological Survey, other Federal agencies, or state, local, and private agencies.

1.3.1 Currentness Reference

Land use/land cover interpreted from 1986 JSS CIR (1:58000) photos. Geology recompiled from 1906 (1:63360) Atlas Sheet. Soils recompiled from 1971 SCS Soil Survey. Flood prone areas recompiled from paper USGS flood maps (polys closed by contractor & coded as such).

1.6 Keywords

Land use, soils, mercer, geology, flood prone

1.6.2 Geographic Extent/place

Geographic Area; Mercer County

1.8 Use Constraints

Data Distribution Agreement

2.0 DATA QUALITY INFORMATION

2.1.1 Attribute Accuracy Report

Frequencies run to check for valid attribute. Land use codes containing #9 values require field verification.

2.1.2 Quantitative Attribute Accuracy Assessment

Basemap (photo quad) feature position are good to about +/- 60 feet or better. Delineated lines good to about +/- feet from locations on manuscript. Freshwater wetlands and geology are general, more detail in FWW and Cogo map coverages. Map Accuracy; National Map Accuracy Standard (NMAS)
Cartographic Quality; Data has not been systematically plotted on mylar and checked to basemap. Nodeerrors, labelerrors and slivers resolved.

2.3 Completeness Report

Photo-Quad. Automation Status; Complete.

2.4.1.1 Horizontal Positional Accuracy

Meets National Map Accuracy at the scale created

2.5 Lineage

Scan Data was derived/delineated from 1986 photo-quad.

2.5.1 Source Information

2.5.1.2. Source Scale Denominator

24000

2.5.1.3 Type of Source Media

Mylar

2.5.1.4.1 Source Currentness Reference

1986

2.5.2.3 Process Date

June 1989

3.0 SPATIAL DATA ORGANIZATION

3.2 Direct Spatial Reference

Polygon

4.0 SPATIAL REFERENCE

4.1.2.1.1 Map Projection Name

Polyconic

4.1.2.2.1 Grid Coordinate System

NJ State Plane Feet

4.1.4.1 Horizontal Datum Name

NAD27, Projected in NAD83

5.0 ENTITY AND ATTRIBUTE INFORMATION

5.1.2.1 Attribute Label

Item Name & Description;

LAND-USE	Land use/land cover code (four digit)
PRIM-GEOL	Primary geology
SEC-GEOL	Secondary geology
SURFICIAL-GEOL	Surficial geology
FLOOD PRONE	Flood prone areas
SOIL-INCLUSIONS	Soil inclusions for polygons that had soil polygons of less than 2.5 areas.
SOIL-LABEL	SCS soil label
SOIL-CAPS	SCS soil labels in capitals for reselects.

BEDROCK GEOLOGY CODES:

"BGN"
"BGN"
"BYRAM GNEISS"

"EH"
"EH"
"HARDYSTON QUARTZITE"

"GB"
"GB"
"GABRO"

"GN"
"GN"
"AMPHIBOLITES AND GNEISSES"

"KET"
"KET"
"ENGLISHTOWN SAND"

"KM"
"KM"
"MAGOTHY FORMATION"

"KML"
"KML"
"MOUNT LAUREL SAND"

"KMR"
"KMR"
"MAGOTHY AND RARITAN FORMATIONS"

"KMT"
"KMT"
"MARSHALLTOWN FORMATION"

"KMV"
"KMV"
"MERCHANTVILLE CLAY"

"KNS"
"KNS"
"NAVESINK MARL"

"KRGB"
"KRGB"
"RED BANK (GLAUCONITE SAND UNIT)"

"KW"
"WENONAH SAND"

"KWB"
"KWB"
"WOODBURY CLAY"

"TBH"
"TBH"
"BEACON HILL GRAVEL"

"TCH"
"TCH"
"COHANSEY SAND"

"THT"
"THT"
"HORNERSTOWN MARL"

"TKW"
"TKW"
"KIRKWOOD SAND"

"TMQ"
"TMQ"
"MANASQUAN MARL"

"TRB"
"TRB"
"BRUNSWICK FORMATION"

"TRBA"
"TRBA"
"BEDS SIMILAR TO LOCKATONG FORMATION"

"TRBD"
"TRBD"
"DIABASE"

"TRL"
"TRL"
"LOCKATONG FORMATION"

"TRS"
"TRS"
"STOCKTON FORMATION"

"TVT"
"TVT"
"VINCENTOWN SAND"

"WGN"
"WGN"
"WISSAHICKON SCHIST"

FLOOD PRONE AREAS CODES:

- 1 - "USGS Documented Flood prone Area"
- 2 - "Undocumented Flood prone Area"
- 8 - "Water"
- 9 - "Not a Flood prone Area"

SOIL INCLUSION CODES

- 0 - "NO INCLUSIONS"
- 1 - "SOIL POLYGONS < 2.5 ACRES OMITTED"

SOILS CODES:

"Ad" - "Alluvial land, wet"
"Ae" - "Alluvial land, very wet"
"AfB" - "Aura sandy loam, moderately firm, 0 to 5 percent slopes"
"AfC" - "Aura sandy loam, moderately firm, 5 to 10 percent slopes"
"BbB" - "Birdsboro loam, 0 to 6 percent slopes"
"BbB2" - "Birdsboro loam, 2 to 6 percent, eroded"
"BbC2" - "Birdsboro loam, 6 to 12 percent slopes, eroded"
"BdA" - "Birdsboro silt loam, 0 to 2 percent slopes"
"BdB" - "Birdsboro silt loam, 2 to 6 percent slopes"
"BnA" - "Birdsboro soils, sandy subsoil variants, 0 to 2 percent slopes"
"BnB" - "Birdsboro soils, sandy subsoil variants, 2 to 6 percent slopes"
"BnC" - "Birdsboro soils, sandy subsoil variants, 6 to 12 percent slopes"
"BoB" - "Birdsboro soils, gravelly solum variants, 0 to 5 percent slopes"
"Bt" - "Brownsville silt loam"
"BuA" - "Bucks silt loam, 0 to 2 percent slopes"
"BuB" - "Bucks silt loam, 2 to 6 percent slopes"
"BuB2" - "Bucks silt loam, 2 to 6 percent slopes, eroded"
"BuC" - "Bucks silt loam, 6 to 12 percent slopes"
"BuC2" - "Bucks silt loam, 6 to 12 percent slopes, eroded"
"CdA" - "Chalfont silt loam, 0 to 2 percent slopes"
"CdB" - "Chalfont silt loam, 2 to 6 percent slopes"
"CdB2" - "Chalfont silt loam, 2 to 6 percent slopes, eroded"
"CdC2" - "Chalfont silt loam, 6 to 12 percent slopes, eroded"
"CeB" - "Chalfont very stony silt loam, 0 to 6 percent slopes"
"Cf" - "Cut and fill land, clayey substratum"
"Cg" - "Cut and fill land, gravelly material"
"Ct" - "Cut and fill land, rock substratum"
"Cu" - "Cut and fill land, stratified substratum"
"Df" - "Downer fine sandy loam, gravelly clay loam substratum"
"DgA" - "Doylestown silt loam and Reaville silt loam, wet variant, 0 to 2 percent slopes"
"DgB" - "Doylestown silt loam and Reaville silt loam, wet variant 2 to 6 percent slopes"
"DgB2" - "Doylestown silt loam and Reaville silt loam, wet variant, 2 to 6 percent slopes"
"DgC" - "Doylestown silt loam and Reaville silt loam, wet variant 6 to 12 percent slopes"
"DgC2" - "Doylestown silt loam and Reaville silt loam, wet variant, 6 to 12 percent slopes"
"DwB" - "Dragston and Woodstown sandy loams, 0 to 4 percent slopes"
"Ek" - "Elkton silt loam"
"EvB" - "Evesboro loamy sand, 0 to 5 percent slopes"
"EwB" - "Evesboro soils, sandy loam subsoil variants, 0 to 5 percent slopes"
"Fd" - "Fallsington sandy loam"
"Fm" - "Fresh water marsh"
"FrB" - "Fort Mott loamy sand, 0 to 5 percent slopes"
"FrC" - "Fort Mott loamy sand, 5 to 10 percent slopes"
"GaB" - "Galestown loamy sand, 0 to 5 percent slopes"
"GeB" - "Galestown sandy loam, 0 to 6 percent slopes"
"Km" - "Klejs soils, sandy loam subsoil variants"
"KsC" - "Klinesville shaly loam 6 to 12 percent slopes"
"KsE" - "Klinesville shaly loam, 12 to 30 percent slopes"
"LaB" - "Lansdale sandy loam, 2 to 6 percent slopes"
"LcC2" - "Lansdale channery loam, 6 to 12 percent slopes"
"LcD2" - "Lansdale channery loam, 12 to 18 percent slopes, eroded"
"LdC" - "Lansdale very stony loam, 0 to 12 percent slopes"
"LdE" - "Lansdale very stony loam, 12 to 30 percent slopes"
"LeA" - "Lawrenceville and Mount Lucas silt loams, 0 to 2 percent slopes"
"LeB" - "Lawrenceville and Mount Lucas silt loams, 2 to 6 percent slopes"
"LeB2" - "Lawrenceville and Mount Lucas silt loams, 2 to 6 percent slopes"
"LeC2" - "Lawrenceville and Mount Lucas silt loams, 6 to 12 percent slopes, eroded"
"LgC" - "Legore gravelly loam, 6 to 12 percent slopes"
"LgD" - "Legore gravelly loam, 12 to 18 percent slopes"
"LgE" - "Legore gravelly loam, 18 to 30 percent slopes"
"LhB" - "Lehigh silt loam, 0 to 6 percent slopes"
"LhB2" - "Lehigh silt loam, 2 to 6 percent slopes, eroded"
"LhC2" - "Lehigh silt loam, 6 to 6 percent slopes, eroded"
"Lk" - "Lenox-Keyport silt loams"
"Mf" - "Made land, dredged river materials"

"MoA" - "Matapeake loam, 0 to 2 percent slopes"
 "MoB" - "Matapeake loam, 2 to 5 percent slopes"
 "MoC2" - "Matapeake loam, 5 to 10 percent slopes, eroded"
 "Mq" - "Mattapex and Bertie loams"
 "MvB" - "Mount Lucas very stony silt loam, 0 to 6 percent slopes"
 "McC" - "Mount Lucas very stony silt loam, 6 to 12 percent slopes"
 "NeB" - "Neshaminy silt loam, 0 to 6 percent slopes"
 "NeC" - "Neshaminy silt loam, 6 to 12 percent slopes"
 "NeC2" - "Neshaminy silt loam, 6 to 12 percent slopes, eroded"
 "NhC" - "Neshaminy very stony silt loam, 0 to 12 percent slopes"
 "NhE" - "Neshaminy very stony silt loam, 12 to 30 percent slopes"
 "Ot" - "Othello silt loam"
 "PeB" - "Penn shaly silt loam, 0 to 6 percent slopes"
 "PeC" - "Penn shaly silt loam, 6 to 12 percent slopes"
 "PeD" - "Penn shaly silt loam, 12 to 18 percent"
 "Pg" - "Pits"
 "Pu" - "Plummer sandy loam"
 "Pv" - "Plummer sandy loam, very wet"
 "Pw" - "Portsmouth silt loam, thin surface variant"
 "QkB" - "Quakertown silt loam, 0 to 6 percent slopes"
 "QkB2" - "Quakertown Silt loam, 2 to 6 percent slopes, eroded"
 "QkC" - "Quakertown silt loam, 6 to 12 percent slopes"
 "QkC2" - "Quakertown silt loam, 6 to 12 percent slopes, eroded"
 "QuB" - "Quakertown channery silt loam, 2 to 6 percent slopes"
 "QuC" - "Quakertown channery silt loam, 6 to 12 percent slopes"
 "QuC2" - "Quakertown channery silt loam, 6 to 12 percent slopes, eroded"
 "QuD2" - "Quakertown channery silt loam, 12 to 18 percent slopes, eroded"
 "RaA" - "Readington and Abbottstown silt loams, 0 to 2 percent slopes"
 "RaB" - "Readington and Abbottstown silt loams, 2 to 6 percent slopes"
 "RaB2" - "Readington and Abbottstown silt loams, 2 to 6 percent slopes, eroded"
 "RaC2" - "Readington Abbottstown silt loams, 6 to 12 percent slopes, eroded"
 "ReA" - "Reaville silt loam, 0 to 2 percent slopes"
 "ReB" - "Reaville silt loam, 2 to 6 percent slopes"
 "ReB2" - "Reaville silt loam, 2 to 6 percent slopes, eroded"
 "ReC2" - "Reaville silt loam, 6 to 12 percent slopes, eroded"
 "Ro" - "Rowland silt loam"
 "SdD" - "Sandy and silty loam, strongly sloping"
 "SdE" - "Sandy and silty loam, steep"
 "SrA" - "Sassafras sandy loam, 0 to 2 percent slopes"
 "SrB" - "Sassafras sandy loam, 2 to 5 percent slopes"
 "SrC" - "Sassafras sandy loam, gently undulating"
 "SrC2" - "Sassafras sandy loam, 5 to 10 percent slopes,"
 "SbS" - "Sassafras gravelly sandy loam, 2 to 5 percent slopes"
 "StC3" - "Sassafras sandy clay loam, 5 to 10 percent slopes, severely eroded"
 "SyB" - "Sassafras Woodstown sandy loams, gently undulating"
 "TnB" - "Tinton loamy sand, 2 to 5 percent slopes"
 "To" - "Tioga fine sandy loam"
 "Ug" - "Urban land, Galestown material"
 "Us" - "Urban land, Sassafras material"
 "VmC" - "Very stony land, Mount Lucas and Neshaminy materials, 0 to 12 percent slope"
 "VnE" - "Very stony land, Neshaminy material, 12 to 30 percent slopes"
 "Vw" - "Very stony land, Watchung material"
 "We" - "Watchung silt loam"
 "WfB" - "Woodstown-Fallsington sandy loam, gently undulating"
 "W" - "Stream, River"
 "W" - "Lake, Pond"
 "Unk" - "Unknown"

SURFICIAL GEOLOGY CODES:

"QBS" - "BEACH SAND"
 "QF" - "RECENT FILL"
 "QG" - "GRAVEL"
 "QM" - "TIDAL MARSH AND SWAMP DEPOSITS"
 "X" - "NO SURFICIAL DEPOSIT"
 "W" - "WATER"
 "QBS" - "BEACH SAND"
 "QF" - "RECENT FILL"

"QG" - "GRAVEL"
"QM" - "TIDAL MARSH AND SWAMP DEPOSITS"
"X" - "NO SURFICIAL DEPOSIT"
"W" - "WATER"

LAND USE/LAND COVER CODES:

1000 - "Urban Land"
1100 - "Residential"
1200 - "Commercial and Services"
1211 - "Military Reservations"
1300 - "Industrial"
1400 - "Transportation/Communication/Utilities"
1500 - "Industrial and Commercial Complexes"
1600 - "Mixed Urban or Built-up Land"
1700 - "Other Urban or Built-up Land"
1800 - "Recreational Land"
1804 - "Athletic Fields (Schools)"
2000 - "Agriculture"
2100 - "Cropland and Pastureland"
2200 - "Orchards, Vineyards, Nurseries, Horticultural Areas"
2260 - "Cranberry Bogs"
2300 - "Confined Feeding Operations"
2400 - "Other Agriculture"
4000 - "Forest"
4100 - "Deciduous Forest"
4200 - "Coniferous Forest"
4210 - "Pitch-Pine Lowland Forest"
4300 - "Mixed Forest"
4310 - "Coniferous/Deciduous Forest"
4320 - "Deciduous/Coniferous Forest"
4400 - "Brushland/Shrubland"
5000 - "Water"
5100 - "River Channel"
5200 - "Lake or Pond"
5300 - "Reservoir"
5400 - "Bay, Estuary"
5410 - "Bay, Estuary"
5420 - "Dredged Lagoon"
6000 - "Wetlands"
6100 - "Coastal Wetlands"
6110 - "Saline Marshes"
6120 - "Freshwater Tidal Marshes"
6130 - "Vegetated Dune Communities"
6200 - "Interior Wetlands"
6210 - "Deciduous Wooded Wetlands"
6220 - "Coniferous Wooded Wetlands"
6221 - "Cedar Swamp"
6230 - "Brush-Dominant and Bog Wetlands"
6240 - "Non-Tidal Marshes"
7000 - "Barren Land"
7100 - "Beaches"
7200 - "Bare Exposed Rock, Rock Slides, etc."
7300 - "Extractive Mining"
7400 - "Altered Lands"
7500 - "Transitional Areas"
7600 - "Undifferentiated Barren Lands"

5.1.2.2 Attribute Definition

see above

5.1.2.4 Attribute Definition Values

see above

6.0 DATA DISTRIBUTION

6.4 Standard Order Process

All data is available through map sales on the Central, South and North Jersey. CD-ROM \$30.00 per CD.
NJ Department of Environmental Protection Maps and Publications
P.O. Box 438
428 E. State Street
Trenton, NJ 08625
(609) 777-1039
Make a **check payable** to: Treasurer, State Of New Jersey.

6.4.2.1 Digital Transfer Information

Data is available in the following format Arc/Info, export.

6.4.2.2.1 Offline Media

Data Distribution Agreement (NJDEP)
Agrees to abide by the terms and conditions of the following:

I. Description of Data to be Provided

The data provided herein are distributed subject to the following conditions and restrictions.

Subject Data Layers

For all data contained herein, (NJDEP) makes no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied with respect to the digital data layers furnished hereunder. NJDEP assumes no responsibility to maintain them in any manner or form.

II. Terms of Agreement

1. Digital data received from the NJDEP are to be used solely for internal purposes in the conduct of daily affairs.
2. The data are provided, as is, without warranty of any kind and the user is responsible for understanding the accuracy limitations of all digital data layers provided herein, as documented in the accompanying Data Dictionary and Readme files. Any reproduction or manipulation of the above data must ensure that the coordinate reference system remains intact.
3. Digital data received from the NJDEP may not be reproduced or redistributed for use by anyone without first obtaining written permission from the NJDEP. This clause is not intended to restrict the distribution of printed mapped information produced from the digital data.
4. Any maps, publications, reports, or other documents produced as a result of this project that utilize NJDEP digital data will credit the NJDEP's Geographic Information System (GIS) as the source of the data with the following credit/disclaimer:

"This (map/publication/report) was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized."

5. Users shall require any independent contractor, hired to undertake work that will utilize digital data obtained from the NJDEP, to agree not to use, reproduce, or redistribute NJDEP GIS data for any purpose other than the specified contractual work. All copies of NJDEP GIS data utilized by an independent contractor will be required to be returned to the original user at the close of such contractual work.

Users hereby agree to abide by the use and reproduction conditions specified above and agree to hold any independent contractor to the same terms. By using data provided herein, the user acknowledges that terms and conditions have been read and that the user is bound by these criteria.

7.0 METADATA REFERENCE INFORMATION

7.1 Metadata Date

May 1, 1996

7.4 Metadata Contact

John Fleming or Lenora Ross

8.0 CITATION INFORMATION

8.1 Originator

NJ Department of Environmental Protection

8.4 Title
Meritum

8.5 Edition
#1

9.0 TIME PERIOD INFORMATION

9.1.1 Calendar Date
YEAR 1996

10.0 CONTACT INFORMATION

10.1.1 Contact Person(s) Primary
Larry Thornton/John Tyrawski, NJDEP
Production Staff; ESRI & AIS, Redlands, CA

10.1.2 Contact Organization
Bureau of Geographic Information & Analysis

10.4 Contact Address
NJDEP/OIRM/BGIA
401 E. State St.
P.O. Box 428
Trenton, NJ 08625

10.5 Contact Voice Telephone
609-984-2243

Appendix B: Scale Horizontal Accuracy for NMAS

SCALE	+/-Feet	+/-Meters
1:12000	33.3	
1:24000	40	12.2
1:63360	105.6	32.2
1:100000	166.7	50.8
1:250000	416.7	127
1:500000	833.3	254

Table 1: Photoquad Number &		<u>Name</u>	
1	MILFORD PA-NJ	46	HIGH BRIDGE NJ
2	PT. JERVIS S. NJ-NYPA	47	CALIFON NJ
3	UNIONVILLE NY-NJ	48	GLADSTONE NJ
4	PINE ISLAND NY-NJ	49	BERNARDSVILLE NJ
5	LAKE MASKENOZHA PA-NJ	50	CHATHAM NJ
6	CULVERS GAP NJ-PA	51	ROSELLE NJ
7	BRANCHVILLE NJ	52	ELIZABETH NJ-NY
8	HAMBURG NJ	53	JERSEY CITY NJ-NY
9	WAWAYANDA NJ-NY	55	RIEGELSVILLE PA-NJ
10	GREENWOOD LAKE NY-NJ	56	FRENCHTOWN NJ-PA
11	SLOATSBURG NY-NJ	57	PITTSTOWN NJ
12	BUSHKILL PA-NJ	58	FLEMINGTON NJ
13	FLATBROOKVILLE NJ-PA	59	RARITAN NJ
14	NEWTON WEST NJ	60	BOUND BROOK NJ
15	NEWTON EAST NJ	61	PLAINFIELD NJ
16	FRANKLIN NJ	62	PERTH AMBOY NJ-NY
17	NEWFOUNDLAND NJ	63	ARTHUR KILL NY-NJ
18	WANAQUE NJ	66	LUMBERVILLE PA-NJ
19	RAMSEY NJ-NY	67	STOCKTON NJ-PA
20	PARK RIDGE NJ-NY	68	HOPEWELL NJ
21	NYACK NY-NJ	69	ROCKY HILL NJ
22	STROUDSBURG PA-NJ	70	MONMOUTH JUNCTION NJ
23	PORTLAND NJ-PA	71	NEW BRUNSWICK NJ
24	BLAIRSTOWN NJ	72	SOUTH AMBOY NJ-NY
25	TRANQUILITY NJ	73	KEYPORT NJ-NY
26	STANHOPE NJ	74	SANDY HOOK NJ-NY
27	DOVER NJ	76	LAMBERTVILLE PA-NJ
28	BOONTON NJ	77	PENNINGTON NJ-PA
29	POMPTON PLAINS NJ	78	PRINCETON NJ
30	PATERSON NJ	79	HIGHTSTOWN NJ
31	HACKENSACK NJ	80	JAMESBURG NJ
32	YONKERS NJ-NY	81	FREEHOLD NJ
33	BANGOR PA-NJ	82	MARLBORO NJ
34	BELVIDERE NJ-PA	83	LONG BRANCH NJ
35	WASHINGTON NJ	86	TRENTON WEST PA-NJ
36	HACKETTSTOWN NJ	87	TRENTON EAST NJ-PA
37	CHESTER NJ	88	ALLENTOWN NJ
38	MENDHAM NJ	89	ROOSEVELT NJ
39	MORRISTOWN	90	ADELPHIA NJ
40	CALDWELL NJ		
41	ORANGE NJ		
42	WEEHAWKEN NJ-NY		
43	CENTRAL PARK NY-NJ		
44	EASTON NJ-PA		
45	BLOOMSBURY NJ		

Table 1: Continued			
91	FARMINGDALE NJ	136	LONG BEACH NE NJ
92	ASBURY PARK NJ	137	DELAWARE CITY DEL-NJ
93	FRANKFORD PA-NJ	138	SALEM NJ
94	BEVERLY PA-NJ	139	ALLOWAY NJ
95	BRISTOL PA-NJ	140	ELMER NJ
96	COLUMBUS NJ	141	NEWFIELD NJ
97	NEW EGYPT NJ	142	BUENA NJ
98	CASSVILLE NJ	143	NEWTONVILLE NJ
99	LAKEHURST NJ	144	EGG HARBOR CITY NJ
100	LAKWOOD NJ	145	GREEN BANK NJ
101	POINT PLEASANT NJ	146	NEW GRETNA NJ
102	PHILADELPHIA PA-NJ	147	TUCKERTON NJ
103	CAMDEN NJ-PA	148	BEACH HAVEN NJ
104	MOORESTOWN NJ	149	TAYLORS BRIDGE DEL-NJ
105	MOUNT HOLLY NJ	150	CANTON NJ-DEL
106	PEMBERTON NJ	151	SHILOH NJ
107	BROWNS MILLS NJ	152	BRIDGETON NJ
108	WHITING NJ	153	MILLVILLE NJ
109	KESWICK GROVE NJ	154	FIVE POINTS NJ
110	TOMS RIVER NJ	155	DOROTHY NJ
111	SEASIDE PARK NJ	156	MAYS LANDING NJ
112	MARCUS HOOK PA-NJ-DEL	157	PLEASANTVILLE NJ
113	BRIDGEPORT NJ-PA	158	OCEANVILLE NJ
114	WOODBURY	159	BRIGANTINE INLET NJ
115	RUNNEMEDE NJ	160	BOMBAY HOOK DEL-NJ
116	CLEMENTON NJ	161	BEN DAVIS PT. NJ-DEL
117	MEDFORD LAKES NJ	162	CEDARVILLE NJ
118	INDIAN MILLS NJ	163	DIVIDING CREEK NJ
119	CHATSWORTH NJ	164	PORT ELIZABETH NJ
120	WOODMANSIE NJ	165	TUCKAHOE NJ
121	BROOKVILLE NJ	166	MARMORA NJ
122	FORKED RIVER NJ	167	OCEAN CITY NJ
123	BARNEGAT LIGHT NJ	168	ATLANTIC CITY NJ
124	WILMINGTON S. DEL-NJ	169	FORTESCUE NJ
125	PENNS GROVE NJ-DEL	170	PORT NORRIS NJ
126	WOODSTOWN NJ	171	HEISLerville NJ
127	PITMAN WEST NJ	172	WOODBINE NJ
128	PITMAN EAST NJ	173	SEA ISLE CITY NJ
129	WILLIAMSTOWN NJ	174	RIO GRANDE NJ
130	HAMMONTON NJ	175	STONE HARBOR NJ
131	ATSION NJ	176	AVALON NJ
132	JENKINS NJ	177	CAPE MAY NJ
133	OSWEGO LAKE NJ	178	WILDWOOD NJ
134	WEST CREEK NJ	974	SANDY HOOK EAST
135	SHIP BOTTOM NJ	983	LONG BRANCH EAST
		992	ASBURY PARK EAST
		9173	SEA ISLE CITY EAST

APPENDIX C

State of New Jersey
Department of Environmental Protection
SOLID WASTE FACILITY PERMIT APPLICATION FORM

READ REQUIREMENTS - FOLLOW INSTRUCTIONS CAREFULLY - PLEASE PRINT OR TYPE

1a. Applicant/Owner* _____ Telephone () _____
Permanent Legal Address _____
City or Town _____ State _____ Zip Code _____
Federal Tax I.D. or S.S. # _____

1b. Applicant/Operator _____ Telephone () _____
Permanent Legal Address _____
City or Town _____ State _____ Zip Code _____

1c. Co-Permittee** _____ Telephone () _____
Permanent Legal Address _____
City or Town _____ State _____ Zip Code _____

FOR OFFICIAL USE

FILE NO. _____ DATE RECEIVED _____

PROJECT MANAGER _____ PROJECT ENGINEER _____

PERMIT TYPE _____ TELEPHONE () _____

FEES BILLED _____ DATE _____ DATE _____ DATE _____

 RECEIVED _____ DATE _____ DATE _____ DATE _____

2. Location of Work_____

Name of Facility, if applicable_____

Address (Street/Road)_____

Lot No._____

Block No._____

E.P.A. # _____

Municipality_____ County_____

3. Give name of: Engineer

Name_____ N.J. License No._____

Name of Firm_____

Address (Street/Road)_____

City or Town_____ State_____ Zip Code_____

Municipality_____ County_____

Telephone ()_____

4. This is an application for_____ Permit
(Name of permit, certification, approval, jurisdictional determination
or exemption.)

I. Application for: (Circle A. or B.)

- A. New Facility
- B. Existing Facility - Indicate (Expansion/Closure/Disruption
_____).

II. Facility Type: (Circle appropriate letters.) (Separate application for each)

- | | |
|---|--|
| A. Sanitary Landfill | F. Shredder |
| B. Incinerator | G. Baler |
| C. Compost | H. Disruption |
| D. Chemical Processing & Treatment Facility | I. Transfer Station/
Material Recovery Facility |
| E. Transfer Station | X. Other |

III. Waste Type: (Circle all types of waste requested for acceptance at this facility by numbers.)

- | | |
|---|----------------------------------|
| 10. Municipal Waste (household, commercial and institutional) | 72. Bulk Liquid and Semi-Liquid |
| 12. Dry Sewage Sludge | 73. Septic Tank Clean-Out Wastes |
| 13. Bulky Waste | 74. Liquid Sewage Sludge |
| 23. Vegetative Waste | |
| 25. Animal and Food Processing Wastes | |
| 27. Dry Industrial | |

IV. Facility Life and Capacity: **YEARS** **TONS** **CUBIC YARDS**

- | | | | |
|--------------------------------|-------|-------|-------|
| A. Proposed Facility Estimate | _____ | _____ | _____ |
| B. Facility Expansion Estimate | ===== | ===== | ===== |

V. Identification Numbers:

- A. Facility Registration # _____
- B. Federal Employer ID # _____
- C. Social Security # _____
- D. Certificate of Public Convenience & Necessity (CPCN) # _____

Is (Will) this facility (be) under BPU regulation?
_____ Yes _____ No

USE ADDITIONAL PAPER, IF REQUIRED, IN ORDER TO GIVE FULL AND COMPLETE DISCLOSURES TO THE FOLLOWING ITEMS.

VI. Type of Organization: (Circle appropriate letter.)

- | | | |
|-------------------|-------------------------|-----------------------|
| A. Proprietorship | D. Municipal Government | G. Authority |
| B. Partnership | E. County Government | H. Federal Government |
| C. Corporation | F. State Government | X. Other |

VII. PARTNERSHIP DATA

A. State the name and address of each partner, including silent or limited, and their interest:

NAME	ADDRESS	PROPORTION OF INTEREST
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. Registered in State of: _____ County of: _____

C. Date of Filing: _____

D. Agent's Name _____

Street Address _____ Telephone () _____

City _____ State _____ Zip Code _____

VIII. CORPORATE DATA:

A. Date of Incorporation _____

B. Registered Agent (Name) _____

(Address) _____

C. Corporate Officers:

OFFICIAL TITLE	NAME	BUSINESS ADDRESS
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

D. Directors:

NAME OF DIRECTOR	RESIDENCE	TERM OF OFFICE
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

E. Identify below any individual, corporation or other business organization having ownership or a controlling interest in the applicant. If applicable, the chain of ownership or control should be traced to the main parent company.

NAME _____

ADDRESS _____

NATURE OF CONTROL _____

F. Principal Security Holders and Voting Power. Identify owner(s) of all securities in the applicant corporation having more than ten (10) percent of value.

NAME	ADDRESS	TYPE OF SECURITIES*	NUMBER OF VOTES
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

*(Common stock, Preferred stock, etc.)

5. Other Permits Applied For Or Obtained

<u>PERMIT TYPE</u>	<u>N.A.</u>	<u>APPLICATION STATUS</u>		<u>Date Applied For or Project Number</u>
		<u>Pending</u>	<u>Approved</u>	
(Use additional sheets if necessary)				
5.1 CAFRA.....	_____	_____	_____	_____
5.2 Waterfront Development.....	_____	_____	_____	_____
5.3 Tidal or Coastal Wetlands.....	_____	_____	_____	_____
5.4 Freshwater Wetlands Permit.....	_____	_____	_____	_____
5.5 Freshwater Wetlands Transitional Area Waiver (after July 1, 1989).....	_____	_____	_____	_____
5.6 Stream Encroachment....	_____	_____	_____	_____
5.7 Water Quality Certificate (Section 401).....	_____	_____	_____	_____
5.8 Open Water Fill.....	_____	_____	_____	_____

<u>PERMIT TYPE</u> (Use additional sheets if necessary)	<u>N.A.</u>	<u>APPLICATION STATUS</u>		<u>Date Applied For or Project Number</u>
		<u>Pending</u>	<u>Approved</u>	
5.9 Tidelands (Riparian) Grant, Lease or License.....	_____	_____	_____	_____
5.10 Divert Surface Waters for Private Use.....	_____	_____	_____	_____
5.11 Temporary Water Lowering.....	_____	_____	_____	_____
5.12 Sewer Systems: Collectors, Pump Station, etc.....	_____	_____	_____	_____
5.13 Underground Storage Tanks.....	_____	_____	_____	_____
5.14 Hazardous Waste Permits (Specify).....	_____	_____	_____	_____
5.15 Air Quality Permits....	_____	_____	_____	_____
5.16 Delaware and Raritan Canal Review Zone "Certificate of Approval".....	_____	_____	_____	_____
5.17 Pinelands Certificate.....	_____	_____	_____	_____
5.18 Green Acres Program Review.....	_____	_____	_____	_____
5.19 Other State Agencies' Permits.....	_____	_____	_____	_____
5.20 Federal Permits.....	_____	_____	_____	_____

Brief Description of the Proposed Project and Intended Use:

6. **Certification**

I certify under penalty of law that I have personally examined and am familiar with the information submitted. in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Type: Name and Date

Signature of Applicant/Owner

Type: Position Date

Type: Name and Date

Signature of Applicant/Operator

Type: Position Date

Type: Name and Date

Signature of Co-permittee*

Type: Position Date

A. PROPERTY OWNER'S CERTIFICATION

I hereby certify that _____

Property Owner's Name

is the owner of the property upon which the proposed work is to be done. This endorsement is certification that the owner grants permission for the conduct of the proposed activity and authorizes that staff of DEP may conduct on-site inspections as necessary for the review of this application.

In addition, the aforementioned property owner shall certify:

1. Whether any work is to be done within an easement -

Yes _____ No _____
(Initial) (Initial)

2. Whether any part of the entire project will be located within property belonging to the State of New Jersey -

Yes _____ No _____
(Initial) (Initial)

If "Yes", reviewing agency must notify the Department of Treasury, Office of Property Management, CN 226, Trenton, N.J. 08625-0226.

3. Whether any part of the entire project will be located within property belonging to a municipality or county -

Yes _____ No _____
(Initial) (Initial)

Type or Print Name and Address of Owner
if different from Item 1 on Page 1

Date

Signature of Owner

B. APPLICANT'S AGENT

I, the Applicant/Owner _____ or
Applicant/Operator (when the owner of the facility and the operator of the
facility are distinct parties) _____ or
Co-permittee (when the Co-permittee is a local governmental unit) _____
_____ authorize to act as my agent/representative
in all matters pertaining to my application the following person:

Name _____ Phone _____
Address _____ County _____
City or Town _____ State _____ Zip Code _____
Occupation/Profession _____

(Signature of Applicant/Owner)

(Signature of Applicant/Operator)

(Signature of Co-permittee)*

AGENT'S CERTIFICATION

Sworn before me
this _____ day of
_____ 20 _____

I agree to serve as agent for the above-
mentioned applicant

Notary Public

(Signature of Agent)

C. STATEMENT OF PREPARER OF PLANS, SPECIFICATIONS, SURVEYOR'S OR ENGINEER'S REPORT

I hereby certify that the engineering plans, specifications and engineer's reports applicable to this project comply with the current rules and regulations of the State Department of Environmental Protection with the exceptions as noted.

(Signature of Engineer/Architect)

Type: Name and Date

Position, Name of Firm

PROFESSIONAL ENGINEER'S/ARCHITECT'S
EMBOSSSED SEAL

APPENDIX D

**NEW JERSEY
STATE HIGHWAY ACCESS
MANAGEMENT CODE**

(New Jersey Administrative Code Title 16 Chapter 47)

Electronic copies of this document are not yet available for download. To obtain a hard copy of the published version, please contact the following office:

New Jersey Department of Transportation
Bureau of Major Access Permits
P.O. Box 600
Trenton, New Jersey 08625-0600
609-530-2875