Permit Application for a Land Treatment Facility
Guidance Document 3-08

I. APPLICANT INFORMATION

Name:
Address:
City: State: Zip Code:
Telephone Number:

II. LANDOWNER INFORMATION

Name:
Address:
City: State: Zip Code:
Telephone Number:

III. OPERATOR INFORMATION

Name:
Address:
City: State: Zip Code:
Telephone Number:
IV. PERSON PREPARING APPLICATION

Name:

Address:

City:   State:   Zip Code:

Telephone Number:

V. This application pertains to:  
   □ A proposed new Facility
   □ A modification to an existing Facility
   □ A permit reissuance

VI. SITE LOCATION

The proposed Facility consists of   acres.

Legal description of Facility:

   ________
   Latitude/Longitude   Date Collected

VII. HISTORY OF SITE

The applicant must include with this application a brief description of the property and a general history of the past use of the property. This description should include the present land use and the current zoning classification of the property.

VIII. RECOMMENDED SITE CRITERIA

The Minnesota Pollution Control Agency (MPCA) staff will review each application submitted to determine if the facility can be permitted under Minn. R. 7035.1590-2500. MPCA approval will be based on the hydrogeological setting, size, soil conditions, operating practices, and the potential for harm to human health or the environment. Although each application will be considered on a case-by-case basis, it is recommended that sites meet the following criteria:

1. Soil Permeability: Soil permeability should not exceed six inches per hour.

2. Soil Texture: The top four feet of soil should have one or more of the following soil textures as classified by the United States Department of Agriculture classification system: Sandy loam; loam; silt loam; silt; sandy clay loam; sandy clay; clay loam; silty clay loam; silty clay; or clay.

3. Depth to Water Table: The depth to the seasonal high water table should not be less than four feet. If subsurface drainage tile are present at the site, the MPCA shall consider the depth to those subsurface drainage tiles and the depth to the seasonal high water table.

4. Depth to Bedrock: The depth to bedrock should be greater than four feet.
5. **Slope**: A land treatment facility should not be located in an area where the slope is greater than six percent.

6. **Location**: Do not locate a land treatment facility on or in any cave, sinkhole, quarry, ten-year floodplain, parking lot, gravel pit, or any other area lacking either tillable surface soil or adequate conditions for biodegradation. Do not locate a land treatment facility within 200 feet of any intermittent stream, drainage ditch, tile drain inlet, stream, river, lake, pond, wetland, flowage, sinkhole, exposed bedrock, cave, private water supply well, place of habitation, or property lines. Do not locate a land treatment facility within 500 feet of a residential development or recreational area, or within 1,000 feet from any public water supply well.

**IX. SUPPORTING PLANS AND DOCUMENTATION**

The applicant must include with this application to the MPCA supporting plans and documentation containing at a minimum the following information:

1. **Site Criteria**: The applicant must provide information on the site criteria listed in Part VIII either through the Soil Conservation Service (SCS) Soil Survey Report or through on-site investigation.

2. **Soil Storage Area**: A description of the soil storage area must be included with this application. The soil storage area must protect the stored soil from run-on and run-off and have sufficient area to store separate batches of contaminated soil.

3. **Water Quality/Soil Conservation Plan**: The Applicant must include with this application a Facility Water Quality/Soil Conservation Plan. The discussion should include, but is not limited to, the following information:

   a. The potential for run-on and run-off at the proposed land treatment facility and a management system (including measures such as filter strips, berms, water collection areas and other standard SCS Practices) that will be used to minimize this potential run-on and run-off at the site. The management system must be designed to collect and control at least the water from a 24-hour, 100-year storm event.

   b. Location of any filter strips (designed according to or equivalent to SCS standards and specifications) that will be established. Filter strips of at least 50 feet should be established if the land treatment site is located within 500 feet of any trout stream, outstanding resource value water or any intermittent stream, drainage ditch or tile line which outlets to a trout stream or outstanding resource value water.

   c. What type of perennial cover (according to or equivalent to SCS standards and specifications) will be established on the Facility prior to landspreading.

   d. What type of perennial cover (according to or equivalent to SCS Standard and specifications) will be established on the permanent perimeter border areas, setback distances and any filter strips.
e. What type of crop will be grown on the land treatment plots following incorporation of petroleum contaminated soil, if any. Please note that under no circumstances shall root crops or crops for human consumption be grown during the period of time when soil monitoring is being done.

f. The precise location of any tile discharge points, or outlets, and discussion of when and under what conditions active flow from the discharge points is likely to occur. If tile lines are present, a map must be submitted showing the location of the tile lines and copies of all required registration(s) for the system must be included. The location of all tile system inlets must also be shown on the site map, and a discussion shall be included in the plan of all methods which will be used to minimize surface run-off to each inlet in order to prevent potential surface water and sediment loss from the Facility.

g. A contingency plan addressing actions which will be taken if petroleum constituents are determined to be present at any time in surface waters or waters discharging from tile lines. The costs associated with implementing the contingency plans, and possible consequences of the actions taken must also be discussed.

4. Maps: The applicant must submit copies of the following maps with the application:

a. A copy of the SCS Soil Survey Map together with copies of the appropriate soil interpretation sheets. If there is no soil mapping available for the site, the applicant must have the area mapped by a qualified soil scientist. The map which is submitted must show the borders of the land treatment site and petroleum contaminated soil storage areas.

b. A site map that shows the location of:

1. The proposed facility area;
2. all soil or geologic borings completed at the site;
3. any monitoring wells or surface water on the facility property;
4. all buildings, residences, businesses and road right of ways within one-quarter mile of the proposed facility;
5. any drainage tile, drainage tile inlet or drainage ways at the site;
6. any wetlands or other environmentally sensitive features that may be found within the facility boundary;
7. all surface waters including intermittent streams, lakes, rivers, streams, ditches, ponds; and
8. the storage area(s) for the petroleum contaminated soil.

c. A copy of the United States Geological Survey topographic map(s) covering the proposed application site.

d. A copy of a county plat map or comparable map which provides clear road directions to the land treatment site.

5. Site Investigation: The applicant must submit results from a site investigation that includes at least the following:

a. Soil Borings. Initially, at least one soil boring must be done for every five acres of proposed facility to characterize the site. Soil borings must be completed to ten feet deep
or to one foot below the seasonal high water table, whichever is less. Soil boring logs shall be submitted to MPCA and must include the depth to bedrock and/or depth to ground water if encountered. Logs must note soil texture with depth and any major changes in stratigraphy. Logs shall use United States Department of Agriculture designations for soil type and classification. Boreholes must be backfilled in accordance with the Minnesota Water Well Construction Code.

b. Each boring shall have a soil sample taken from the topsoil (0 to 9 inches) below surface. For initial background characterization of a facility each soil sample should be tested for texture, percent organic matter, and extractable phosphorus as measured by the Bray or Olsen extraction techniques. In addition the soil sample should be tested for total petroleum hydrocarbons, benzene, toluene, ethyl benzene and xylene prior to any land application.

6. Ground Water Investigation and Monitoring Plan:

a. A well search of the Minnesota Geological Survey files of all drinking water wells within one mile of the site. This information should be located on a map and copies of all well logs provided. In addition the applicant should make an effort to locate any abandoned wells on the facility property and any wells that exist but may not be registered with the Minnesota Geological Survey such as irrigation or stock watering wells.

b. A discussion of ground water conditions underlying the proposed facility and of how the proposed petroleum contaminated soil treatment facility shall be designed, constructed, monitored and maintained so that it will not degrade ground water through its operation.

c. The proposed locations for a minimum of four ground water monitoring wells which are required to be installed at the proposed facility before any land application of petroleum contaminated soil can begin. All wells must be placed on the facility's contiguous property. At least one well must be located immediately upgradient of the facility, one well must be located in the active operating area of the facility and at least two wells must be located immediately downgradient of the ground water flow beneath the facility. The downgradient wells must be located as close to the land application area as is physically practicable. All wells shall be placed in the uppermost portion of the first significant water-bearing zone below the land application facility. Larger or more complex facilities may require additional wells at the discretion of MPCA staff. All monitoring wells installed at the proposed facility must meet the requirements of Minn. R. ch. 4725, The Water Well Construction Code.

X. APPROVAL OF COUNTY AND LOCAL GOVERNMENTS

1. The applicant must obtain written approval from the appropriate county and township officials. Please provide the names and addresses of those officials.

2. The applicant is responsible for obtaining all necessary county and local approvals. The issuance of a solid waste permit allowing the development of a land treatment facility does not release the applicant from the duty to comply with applicable county and local regulations.
XI. MPCA REVIEW AND APPROVAL

All applications shall be reviewed for completeness and adequacy by MPCA staff. If the application is found to be complete and adequate, the estimated time for reviewing and processing the application is six months from the date of receipt. If the application is found to be incomplete or inadequate, a letter detailing staff comments will be sent to you after staff review has been completed. Further processing of the application will be suspended until the applicant has provided the necessary information or resolved the inadequacy.

XII. OTHER REQUIREMENTS

Please note that the Permittee will be required to provide financial assurance to the MPCA by way of a Letter of Credit and a Standby Trust Fund. The monetary amount will be based on $2,000 per acre or approximately $4 per cubic yard of contaminated soil accepted by the Facility.

XIII. CERTIFICATION

I certify under penalty of law that I am familiar with this document and all attachments submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information I believe the submitted information is true, accurate and complete. I understand that under Minn. R. 7000.0300, I may be subject to civil penalty of up to $10,000 for failure to act in good faith and complete truthfulness, accuracy, disclosure and candor.

_______________________________________________________
Applicant’s Signature

_______________________________________________________
Landowner’s Signature

XIII. SUBMISSION OF THE APPLICATION

Please submit two copies of this application to the MPCA project manager. For the correct mailing address, see the MPCA web page listed below.
Web pages and phone numbers

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<th>URL/Phone</th>
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<tr>
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<td>MPCA toll free</td>
<td>1-800-657-3864</td>
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<tr>
<td>PetroFund Phone</td>
<td>651-297-1119, or 1-800-638-0418</td>
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<tr>
<td>State Duty Officer</td>
<td>651-649-5451 or 1-800-422-0798</td>
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