

New Permit
Amendment

Permit Renewal # - SDP - - LAN

Permit



**IOWA DEPARTMENT OF NATURAL
RESOURCES**

**Solid Waste Land
Application**



PERMIT APPLICATION FORM 50G

Applications for solid waste land application must be accompanied by the plans, specifications and additional information required by the applicable solid waste rules under Iowa Administrative Code 567 Chapter 121.

Send completed applications with attached information to:

Planning, Permitting & Engineering Section
Energy & Waste Management Bureau
Iowa Department of Natural Resources
502 E 9th Street
Des Moines, IA 50319

For questions concerning this application contact Matt McDonald at 515-281-8150 or
matt.mcdonald@dnr.state.ia.us

SECTION 1. FACILITY CONTACT INFORMATION

Solid Waste Generator Name/Address:	Name/Address of Responsible Official:
Phone #: _____ Fax #: _____	Phone #: _____ Fax #: _____
Name/Address of Consultant, if any:	Name/Address of Certified Professional Agronomist:
Phone #: _____ Fax #: _____	Phone #: _____ Fax #: _____

SECTION 2. PERMIT APPLICATION CHECKLIST

Checking the appropriate boxes below certifies that the documents submitted in conjunction with this application form are complete and in compliance with the applicable chapters of the Iowa Administrative Code. While some of the documents below may have been submitted previously, updated copies of each is required to be provided with each permit renewal application. Three (3) copies of each document shall be submitted. If an application is found by the department to be incomplete, it may be denied and returned to the applicant.

Required Document	Attached
Section A. Executive summary	<input type="checkbox"/>
Section B. Site map(s) and aerial photograph(s) [IAC 567 121.7(1)a(1)]	<input type="checkbox"/>
Section C. Soil map(s) [IAC 567 121.7(1)a(2)]	<input type="checkbox"/>
Section D. Proof of site(s) ownership or legal entitlement to use the site [IAC 567 121.7(1)b(6)]	<input type="checkbox"/>
Section E. Evidence of NRCS review [IAC 567 121.7(1)a(3)]	<input type="checkbox"/>
Section F. Site(s) acreage information [IAC 567 121.7(1)a(4)]	<input type="checkbox"/>
Section G. Well information [IAC 567 121.7(1)a(5)]	<input type="checkbox"/>
Section H. Soil loss information [IAC 567 121.7(1)a(6), (7) and (8)]	<input type="checkbox"/>
Section I. Site(s) soil testing requirements [IAC 567 121.7(1)a(9)]	<input type="checkbox"/>
Section J. Site water table level(s) [IAC 567 121.7(1)a(10)]	<input type="checkbox"/>
Section K. Method of waste treatment prior to disposal [IAC 567 121.7(1)a(11)]	<input type="checkbox"/>
Section L. Waste analytical results [IAC 567 121.7(1)a(12)]	<input type="checkbox"/>
Section M. Detailed description of disposal process and equipment to be used [IAC 567 121.7(1)a(13) and (14)]	<input type="checkbox"/>
Section N. Evidence that waste application will not cause adverse effects to land and water [IAC 567 121.7(1)a(15), (16) and (17)]	<input type="checkbox"/>
Section O. Information indicating how the operational requirements of 121.7(1) "c" and "d" will be met [IAC 567 121.7(1)a(18)]	<input type="checkbox"/>
Section P. Emergency Response and Remedial Action Plan [IAC 567 102.14]	<input type="checkbox"/>

SECTION 4. APPLICANT CERTIFICATION

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I further certify that the construction and operation of the above described facility will be in accordance with the plans, specifications, reports and related communications accepted by the Iowa Department of Natural Resources and on file in its office; and in accordance with conditions imposed in the permit issued by the Iowa Department of Natural Resources.

Signature: _____ Date: _____

Printed Name: _____ Title: _____

DOCUMENTS TO BE ATTACHED

SECTION A. EXECUTIVE SUMMARY

- *An executive summary shall be included with the permit application and shall address the following:*
- Summary of modifications, if any, to the facility that occurred during the current permit cycle.
 - Summary of each special provision of the current permit to determine if it is to remain the same, be revised or be removed.
 - Summary of each permit amendment, if any, that occurred during the current permit cycle to determine if it shall be included with the renewed permit, be revised or be removed.
 - Provide documentation and certification as required for new permit amendment requests, if any.
 - Provide documentation and certification as required for new variance requests from Iowa Administrative Code requirements, if any.

SECTION B. SITE MAP(S) AND AERIAL PHOTOGRAPH(S) [IAC 567 121.7(1)a(1)]

- *Provide a map and aerial photograph for site(s) showing the following:*
- Homes and buildings within ½ mile;
 - Zoning and land use within ½ mile;
 - Homes and buildings within ½ mile;
 - Haul routes to and from the site with load limits or other restrictions; and,
 - Section lines or other legal boundaries.

**applicants may wish to use a surveyed plat map, or a printout of a county assessor's property description map as a base to create a scaled site map*

SECTION C. SOIL MAP(S) [IAC 567 121.7(1)a(2)]

- *Attach soil maps for each proposed site including soil type keys. Areas to be used for application shall be clearly highlighted.*

SECTION D. PROOF OF SITE(S) OWNERSHIP OR LEGAL ENTITLEMENT TO USE THE SITE [IAC 567 121.7(1)b(6)]

- *Attach proof of applicant's ownership of the site(s) or legal entitlement to use the site(s) for the disposal of solid waste for the term of the permit for which application is made.*

SECTION E. NRCS REVIEW IAC 567 121.7(1)a(3)]

- *Attach evidence that the proposed plan has been reviewed by the local soil conservation district commission and that the technical assistance of the soil conservation district will be utilized to facilitate compliance with wind and water soil loss limit regulations provided for in Iowa Code sections 161A.42 to 161A.51. The review shall include, at a minimum, the following:*
- If the application of industrial sludge or waste is relative to the conservation management plan that has been approved by the NRCS;
 - If soil type and texture are suitable for the type of waste that will be land applied (IDNR does not authorize application on Sand, Loamy Sand, or Silt based on the USDA textural classification chart);
 - If slope of the land is within IDNR limits (Slope is required to be less than 9%);
 - If water drainage characteristics for the area are unsuitable during weather events or certain times of the year (seasonal rain, seasonal groundwater tables, surface water ponding, flooding, etc.);
 - If the proposed application rate is acceptable for type of land use planned to be implemented;
 - How susceptible is the site to erosion or would erosion exceed the soil loss limits established by the county soil conservation district; and,
 - If drainage characteristics of the site would indicate migration and runoff of waste from the site.

SECTION F. SITE(S) ACREAGE INFORMATION [IAC 567 121.7(1)a(4)]

- *Indicate the total area of each proposed site in acres and the number of acres that are to be used for land application.*

SECTION G. WELL INFORMATION [IAC 567 121.7(1)a(5)]

- *Attach information on the depth, construction and use of any wells located within one mile of the proposed site(s).*

SECTION H. SOIL LOSS INFORMATION [IAC 567 121.7(1)a(6, (7) AND (8)]

- *Attach information that indicates the soil loss limits, design soil loss levels and current soil loss levels applicable for the proposed site(s).*

SECTION I. SITE(S) SOIL TESTING REQUIREMENTS [IAC 567 121.7(1)a(9)]

- *Attach results of the cation exchange capacity, current exchangeable cations, available potassium and phosphorus, total nitrogen, bulk density and pH (normal and as modified) of the proposed site(s) soils.*

SECTION J. SITE(S) WATER TABLE LEVELS [IAC 567 121.7(1)a(10)]

- *Attach information on water table levels of the proposed site(s), including the frequency and duration of any expected high water table or flooding.*

SECTION K. METHOD OF WASTE TREATMENT PRIOR TO DISPOSAL [IAC 567 121.7(1)a(11)]

- *Attach information on the source, quantity and method of treatment of the waste prior to disposal.*

SECTION L. WASTE ANALYTICAL RESULTS [IAC 567 121.7(1)a(12)]

- *Attach results of waste analyses, including the following: total residue; volatile residue; pH; total nitrogen*; NH₃-N*; NO₃-N*; total phosphorus*; potassium*; the following metals*: Arsenic (As), Cadmium (Cd), Chromium (Cr), Copper (Cu), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Lead (Pb), Selenium (Se), Zinc (Zn); and such other tests as may be necessary to establish the constituents and stability of the waste.*

**On a dry weight basis.*

SECTION M. DETAILED DESCRIPTION OF THE DISPOSAL PROCESS AND EQUIPMENT TO BE USED [IAC 567 121.7(1)a(13) AND (14)]

- *Attach a detailed description of the disposal process to be used, including: method of application and operation; daily, annual and total loading of waste and of all significant components of the waste identified in the analyses of 121.7(1)"a"(12); periods of use (including duration and frequencies); crop and cropping practice employed; and final use of site.*

Include information on the equipment to be used, its design capacities, degree of utilization and expected methods of operation.

SECTION N. EVIDENCE THAT WASTE APPLICATION WILL NOT CAUSE ADVERSE EFFECTS TO LAND AND WATER [IAC 567 121.7(1)a(15), (16) AND (17)]

- ➡ **Attach information indicating that the proposed sludge disposal project will not result in predictable uptake of contaminants by site vegetation to such a degree as to make the site unsuitable for its intended uses. This shall be supported by information as to the rate of uptake and toxicity of any constituent in question, along with soil pH and cation exchange capacities and any other data necessary to evaluate the significance of contamination.**

Include information indicating that the proposed sludge disposal project will not result in predictable movement of significant quantities of contaminants from the site to standing or flowing surface waters or to shallow aquifers that are in actual use or are deemed to have potential for use as water sources. Cation exchange capacities of site soils shall be utilized to evaluate the potential for metal contamination.

Include information indicating that the portion of the site to be utilized is outside a flood plain or shoreland, unless proper engineering and protection of the site will render it acceptable and prior approval of the department under Title V of these rules and, where necessary, the U.S. corps of engineers, is obtained.

SECTION O. INFORMATION INDICATING HOW THE OPERATIONAL REQUIREMENTS OF 121.7(1) “c” AND “d” WILL BE MET [IAC 567 121.7(1)a(18)]

- ➡ **Attach information indicating how the operational requirements of 121.7(1)“c” and “d” will be met.**

SECTION P. EMERGENCY RESPONSE AND REMEDIAL ACTION PLAN [IAC 567 102.14]

- ➡ **Attach an ERRAP for the land application project with this application. The ERRAP may be submitted in a format chosen by the applicant, but shall, at a minimum, contain the components listed in IAC 567 102.14(4) “Emergency response and remedial action plans.”**

In accordance with Iowa Code section 455B.306(6)“d”, owners and operators of all permitted sanitary disposal projects are required to file an Emergency Response and Remedial Action Plan (ERRAP) with the department at the time of application for a permit, and to update the ERRAP upon subsequent renewals of such permits. The ERRAP shall establish provisions to minimize the possibility of fire, explosion, or the release of pollutants to the air, land or water that could threaten human health and the environment.