Iowa Department of Natural Resources

Land Application (LAN) Inspection Form

Permit No: _____ -SDP- _____ - _____ P-LAN

Facility Name: _____ Phone Number: _____

Address: _____

City/State/Zip: _____ County: _____

Responsible Official: _____ Phone Number: _____

Address: _____

City/State/Zip: _____ County: _____

Person(s) Present: 1. _____

2. _____

3. _____

Date of This Inspection: _____ Date of Last Inspection: _____

*Be advised your facility may require, due to either SIC code or onsite management practices, an NPDES General Permit #1 (Stormwater permit).

567 IAC Chapter 102.103(455B) - Waste Eligible of Land Application (All land applied material must meet these requirements regardless of if it is being applied under the general permit or an individual permit)					Yes	No	NA
102.103(1)	Does the material either meet the definition of solid waste **or** is it a sludge resulting from commercial or industrial wastewater treatment, water supply treatment, or air pollution control facility?				☐	☐	☐
102.103(2)	Are the following constituents below the levels listed, measured on a dry weight basis?				☐	☐	☐
	Constituents	**Levels**	**Cumulative Loading Rate**				
	Arsenic	41 mg/kg	41 kg/ha	36 lb/ac			
	Cadmium	39 mg/kg	39 kg/ha	34 lb/ac			
	Chromium	1200 mg/kg	3000 kg/ha	2670 lb/ac			
	Copper	1500 mg/kg	1500 kg/ha	1335 lb/ac			
	Lead	300 mg/kg	300 kg/ha	267 lb/ac			
	Mercury	17 mg/kg	17 kg/ha	15 lb/ac			
	Molybdenum	75 mg/kg	75 kg/ha	66 lb/ac			
	Nickel	420 mg/kg	420 kg/ha	373 lb/ac			
	Selenium	36 mg/kg	100 kg/ha	89 lb/ac			
	Zinc	2800 mg/kg	2800 kg/ha	2490 lb/ac			
102.103(3)	If the waste has other toxic constituents, are the toxic constituents below levels where there is a threat to human, animal, or plant life as determined by the department?				☐	☐	☐
102.103(4)	Is the sodium absorption ratio below levels where there is a threat to plant life? If high sodium absorption ratios are suspected, analytical testing may be required.				☐	☐	☐

102.103(5)	If the waste contains pathogens, is the waste treated to reduce pathogen content by methods specified in 567—Chapter 67 prior to land application?	☐	☐	☐
102.103(6)	Does the waste have direct process stream contact with or originate from a process that may release the following organic compounds? a. Petroleum products, b. Organic solvents, c. Pesticides, d. Pharmaceuticals, e. Polychlorinated biphenyls (PCBs).	☐	☐	☐
102.103(6)	Does the waste assimilate and not readily present in a visual analysis of a random sample collected two years following application?	☐	☐	☐

Comments:

567 IAC Chapter 102.104 - Application Site Restrictions		Yes	No	NA
102.104(1)	Does the application area exclude soils classified as sand, loamy sand, or silt?	☐	☐	☐
102.104(2)	Is the soil pH maintained above 6.0 unless otherwise specified in a permit?	☐	☐	☐
102.104(3)	Is the waste applied to ground having 9 percent or lower slope unless specific permit conditions specify otherwise?	☐	☐	☐
102.104(4)	If the waste is applied to land subject to flooding more frequently than once in ten years, is the waste injected or applied to the surface and mechanically incorporated into the soil within 48 hours?	☐	☐	☐
102.104(5)	Is application on frozen or snow-covered ground limited to areas of less than 5 percent slope unless specific permit conditions specify otherwise?	☐	☐	☐
102.104(6)	Is waste application meeting setback distances of • 200 feet from an occupied residence • 500 feet from a well that is part of a public water supply, as defined in 567—subrule 40.2(1), or • 200 feet from all other wells.	☐	☐	☐
102.104(7)	If waste is applied to land used for growing crops that may be consumed by humans without prior heating or processing; or those that are commonly available to the public in raw form, are the crops not harvested for at least 14 months following land application?	☐	☐	☐
102.104(8)	Is a site used for land application of waste from only one generator in a growing season?	☐	☐	☐

Comments:

567 IAC Chapter 102.105(455B) - Operating Requirements for all Land Application Projects		Yes	No	NA
102.105(1)	If solid waste is applied within 200 feet of a stream, lake, sinkhole, or tile line surface intake located downgradient of the land application site, is the waste injected or applied to the surface and mechanically incorporated into the soil within 48 hours of application?	☐	☐	☐

102.105(2)	If waste is applied to land where crops being grown will be grazed by or fed to livestock within two months of waste application, or where cereal grains will be harvested within two months of waste application, is the waste injected or applied to the surface and mechanically incorporated into the soil? (unless specific permit conditions specify otherwise) Is the general public not given access to the disposal site during waste disposal and for a minimum of two months after waste disposal operations have ceased?	☐	☐	☐
102.105(3)	If the waste is putrescible, is it injected or mechanically incorporated within 24 hours or otherwise managed to prevent runoff and odor problems?	☐	☐	☐
102.105(4)	If land application takes place during or immediately preceding expected rains or other occasions when runoff may result, are subsurface injection methods utilized? Additionally, land application shall not take place during periods of high groundwater conditions or during flooding.	☐	☐	☐
102.105(5)	Does the application of nitrogen available from the waste and any other sources not exceed the acceptable agronomic application rates for the vegetation to be grown on the site over the next year? Does the total application of phosphorus and potassium not exceed the acceptable agronomic application rates for the site and crops involved?	☐	☐	☐
102.105(6)	If waste is staged prior to application at the application site, does it meet the following requirements? a. Putrescible waste shall not be staged for more than 48 hours. b. Non-putrescible waste shall not be staged for longer than two weeks. c. Waste shall not be staged within 200 feet of an occupied residence nor within 500 feet of a well that is part of a public water supply, as defined in 567—subrule 40.2(1), or 200 feet of all other wells. d. The waste shall not be staged on soils classified as sand, loamy sand, or silt on the USDA textural classification chart shown in 567—subrule 102.104(6). e. Runoff from the waste must be controlled at all times. f. If weather or extenuating circumstances prevent application from taking place, the generator must notify the department.	☐	☐	☐
102.105(7)	If the waste is supplied to other persons for land application, does the generating facility shall do the following? a. Inform the recipient of the applicable requirements of the waste disposal program. b. If the generating facility determines that the recipient is not complying with applicable requirements of the waste disposal program or the land application criteria, the generating facility shall work with the recipient to obtain compliance with the requirements. If subsequent compliance cannot be achieved, the generating facility shall not supply additional waste to the person. c. Inform all persons involved in waste disposal operations of the potential health hazards associated with waste disposal, including informing them of the cautions and recommended practices that should be followed to minimize these hazards.	☐	☐	☐
102.105(8)	Does the generator maintain records of the following? a. Analysis of waste to document compliance with 102.103(2). b. Records of land application for each site, which shall be maintained for five years; be made available to the department upon request; and include dates of application, application rate, and quantity of waste applied.	☐	☐	☐

Comments:

567 IAC Chapter 102.106(455B) - General Permit		Yes	No	NA
102.106(1)	Was the maximum application rate two tons or less per acre per year, measured on a dry weight basis? (Note: This rate must be less if this would exceed nutrient requirements of the crop being produced or would have heavy metal concentrations that would be detrimental to crop production)	☐	☐	☐
102.106(2)	Is any staging taking place on ground eligible for land application?	☐	☐	☐
102.106(3)	Before the land application took place, was the department notified of the following? a. The name and address of the generator of the waste. b. Contact information for the responsible official. c. A description of the waste including the process to generate it, chemical analyses showing compliance with 102.103(2), and any additional analysis that the department may require to adequately define the waste. Chemical analysis shall be done by a laboratory certified pursuant to 567—Chapter 83. d. Quantities of waste to be land applied. e. Application rate. f. Legal description of the site. g. An aerial photo with the site outlined and any areas ineligible for application marked off. h. Number of acres eligible for land application at the site. i. The landowner's name and contact information.	☐	☐	☐

Comments:

567 IAC Chapter 102.107(455B) - Permitted Land Application Operating Requirements		Yes	No	NA
102.107(1)	If the land application is not exempt as per 567—102.102(455B) or 567—102.106(455B), has a solid waste management permit pursuant to 567—subrule 100.4(2) obtained by the waste generator?	☐	☐	☐
102.107(2)"a"	Did the permit holder have a certified professional agronomist perform an annual inspection of all sites utilized in the previous year to ensure soil properties and constituents being applied are suitable and will not exceed agronomic rates for the crop that will be produced the following summer? Were the results of this inspection submitted to the department by April 1?	☐	☐	☐
102.107(2)"b"	Did the permit holder submit an annual report summarizing the records required in 102.105(8)*"b"* to the department by October 1?	☐	☐	☐
102.107(2)"c"	Was an analysis of the waste submitted to the department according to a schedule stipulated in the permit? At a minimum, an analysis shall be submitted with each permit renewal?	☐	☐	☐

102.107(3)“a”	If the permit allows for storage of stabilized sludge and solid waste at application sites does the storage meet the following conditions: (1) Waste shall not be stored within 200 feet of an occupied residence nor within 500 feet of a well that is part of a public water supply, as defined in 567—subrule 40.2(1), or 200 feet of all other wells. (2) The waste shall not be stored on soils classified as sand, loamy sand, or silt on the USDA textural classification chart shown in 102.104(6). (3) Amount stored may not exceed the amount needed for the next application window for that site. (4) All material stored must be land applied the next application season. (5) If weather or extenuating circumstances prevent application from taking place, the applicant must notify the department. (6) Runoff shall be controlled at all times. (7) Financial assurance in accordance with 567—102.108(455B) has been obtained.	☐	☐	☐
102.107(3)“b”	If the permit allows for storage of stabilized sludge and solid waste at a consolidation point does the storage meet the following conditions? (1) Waste shall not be stored within 200 feet of an occupied residence nor within 500 feet of a well that is part of a public water supply, as defined in 567—subrule 40.2(1), or 200 feet of all other wells. (2) The storage surface shall be made of asphalt, concrete, compacted granular aggregate, clay, or similar relatively impermeable material. (3) All material stored must be land applied the next application season. (4) If weather or extenuating circumstances prevent application from taking place, the applicant must notify the department. (5) Runoff from the waste shall be controlled at all times. (6) Financial assurance in accordance with 567—102.108(455B) has been obtained.	☐	☐	☐

Comments:

Summary of Requirements	Compliance Date
1.	
2.	
3.	
4.	
5.	

Summary of Reminders
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Summary of Recommendations
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5.

Inspector: _____ Date: _____

Reviewer: _____ Date: _____

Facility Photographs (if applicable) - Attach separately