



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
NO DISCHARGE EVALUATION

NO DISCHARGE EVALUATION

According to 10 CSR 20-6.010(4)(D), reports for the purpose of constructing a wastewater treatment facility shall consider the feasibility of constructing and operating a no-discharge facility. Per the Antidegradation Implementation Procedure Section II.B.1, for discharges likely to cause significant degradation, applicants must provide an analysis of nondegrading alternatives. No-discharge alternatives may include surface land application, subsurface land application, and connection to a regional treatment facility.

Please refer to the *No-Discharge Evaluation Memo and Matrix* available at dnr.mo.gov/env/wpp/permits/docs/20160217-no-discharge-memo.pdf for examples of information and documentation to provide to justify common reasons for not pursuing no-discharge land application. If sufficient information is not provided on this form to demonstrate that a no-discharge facility is not feasible, a more detailed evaluation of no-discharge options may have to be submitted.

Additional pages may be attached if more room is needed.

1. FACILITY:

NAME	COUNTY
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2. EVALUATION OF NO-DISCHARGE LAND APPLICATION

Check all applicable reasons why no-discharge land application was not pursued:

2.1 Land Availability and Cost:

- A. How many acres are required for land application of the effluent?
- B. What is the cost to purchase any necessary additional land within 1.5 miles of the facility?
- C. Were costs evaluated for transporting and land applying at a location farther from the site? Yes No
- D. What is the capital cost estimate for piping and pumps to transport effluent to a suitable land application site?
- E. Did you evaluate entering a long-term lease with a farmer or other land owner: Yes No
How many land owners were contacted and what restrictions were presented?

Could controls be built into the contract, such as requiring the owner to use a certain percentage of the water annually?

- F. Were increased application rates evaluated in order to use less land? Yes No
- G. Was using multiple application sites evaluated to optimize application rate per site? Yes No
- H. Can the facility do seasonal discharge or seasonal application? Yes No
- I. Was land applying to public use areas, such as golf courses or parks, evaluated? Yes No
- J. Were long-term costs evaluated and compared for upgrading to a mechanical plant with future Water Quality Standards changes (i.e. mussel ammonia, bacteria, TP, TN) versus cost for a land application system? Yes No

2.2 Easements

- A. Were land owners contacted for rights to an easement? Yes No
- B. What is the cost of easement acquisition?

2.3 Zoning or Suitability of Site in Proximity to Neighboring Sites or Waterbodies:

- | | | |
|--|------------------------------|-----------------------------|
| A. Can buffer distances be increased to reduce neighbor complaints? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| B. Was drip or subsurface irrigation evaluated as opposed to surface application? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| C. Does the county ordinance specifically restrict land application, surface and subsurface? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| D. Can a vegetated buffer be installed to reduce necessary buffer distances? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| E. Can higher application rates requiring less land be used? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| F. Are there other steps or considerations that can be made (see 2.1)? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| G. What is the distance to a neighboring county without zoning restrictions? | | |

2.4 Unsuitability of Geology or Soils

- | | | |
|--|------------------------------|-----------------------------|
| A. Is a geohydrologic evaluation, county soils survey map, or other resource showing suitability and application rates included with this application? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| B. Is it cost-effective to bring in additional soils? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| C. Can the application rate be decreased to a suitable rate? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| D. Were subsurface application alternatives (e.g. low pressure pipe, drip) considered? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| E. If collapse potential is a concern, was using a liner or alternative site (see 2.1) evaluated? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

2.5 Summarize why no-discharge land application was not a practicable or economically efficient alternative

3. EVALUATION OF REGIONALIZATION

3.1 Regionalization Feasibility:

- A. What is the distance to connect to the closest municipality's line or other facility's line?
- B. Is there any planning or zoning in the area regarding development and services?
- C. What is the estimated capital cost for piping and pumps to regionalize?
- D. Does a regional facility have the capacity to treat the additional effluent from this project, and if not, what would it cost to upgrade the regional facility?

3.2 Summarize why regionalization was not a practicable or economically efficient alternative

4. DOCUMENTATION

4.1 Is any other written correspondence or documentation included with this application to provide further justification for not pursuing a no-discharge option or regionalization?

No

Yes:

- Correspondence with land owners regarding land for sale or lease or easement rights.
- Letters from the community or a consulting engineer regarding availability, proximity, and location of suitable land and the reasonable cost of such land.
- Documentation of recent land sales or appraisals.
- Calculations for sizing a land application system.
- Detailed cost estimates for a land application system or regionalization including lift stations, piping, easements, liners, and/or connection costs.
- Geohydrologic evaluation or other soils report.
- Copy of a county or city ordinance.
- Council meeting minutes.
- A letter from an existing higher preference continuing authority waiving preferential status where service is not available in accordance with 10 CSR 20-6.0 10 (3) or if capacity is not available.
- A letter from the existing higher preference continuing authority stating that the regional facility has no interest in taking flow from the new or expanded facility.
- A letter from the regional municipality stating that the project area is outside city limits and annexation would be required.
- Verification of funding from State Revolving Fund, which does not fund projects outside city limits.
- Other:

OWNER: I have read and reviewed the prepared documents and agree with this submittal.

NAME AND OFFICIAL TITLES

SIGNATURE

DATE

CONTINUING AUTHORITY: I have read and reviewed the prepared documents and agree with this submittal. The regulatory requirement regarding continuing authority is found in 10 CSR 20-6.010(3) available at sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-6.pdf.

NAME AND OFFICIAL TITLES

SIGNATURE

DATE