

State of Georgia
Department of Natural Resources
Environmental Protection Division
Watershed Protection Branch

National Pollutant Discharge Elimination System (NPDES)
Industrial Antidegradation Analysis

SECTION 1. PROJECT INFORMATION

SECTION 2. ALTERNATIVES ANALYSIS

- 2.1 Provide the alternatives considered that could result in no degradation of surface waters. If the applicant selects an alternative that results in no degradation, the following sections are not required.
- 2.2 Provide the alternatives considered that could lessen degradation to surface waters. Identify which alternative(s) is/are technologically possible, able to be put into practice, and economically viable.

SECTION 3 SOCIAL OR ECONOMIC DEMONSTRATION - For each factor provide a discussion of expected positive and negative impacts. Include appropriate support documentation.



SECTION 4. PRACTICABLE ALTERNATIVE CHOSEN

SECTION 5. CERTIFICATION

Name and Title: Indicate the name and title of the person signing the form.
Telephone No.: Provide the telephone number of the person signing the form.
Date: Indicate the date that the form was signed.

This form is an attached part of the NPDES permit application and must be signed in accordance with Georgia Rule 391-3-6-.06(5). Please refer to Georgia EPD's Antidegradation Analysis Guidelines for additional guidance in completing this form.

Please attach additional pages and/or documentation as needed.

 <p>GEORGIA DEPARTMENT OF NATURAL RESOURCES</p>	<p>National Pollutant Discharge Elimination System (NPDES)</p>	 <p>GEORGIA DEPARTMENT OF NATURAL RESOURCES ENVIRONMENTAL PROTECTION DIVISION</p>
<p>Industrial Antidegradation Analysis</p>		

Section 1. Project Information

Facility Name:	NPDES Permit Number:
Location:	County:
Receiving Waters Impacted:	Stream Classification:

Section 2.1 Alternatives Analysis - Provide the alternatives considered that could prevent degradation of surface waters

A. Discharge to other treatment systems:
 Discuss the availability of either public or private treatments systems with sufficient capacity and sophistication to treat the wastewaters generated by this project. Compare the feasibility and costs of such options with the feasibility and costs of the proposed treatment system.

B. 100% Reuse & 100% Recycle:
 Discuss the potential of 100% year round urban water reuse and use of a 100% recycle system. Outline potential reuse customers &/or ways to recycle all of the generated wastewater. Provide feasibility and costs.

C. Land Disposal Treatment System:

Land treatment includes subsurface, drip irrigation, reuse and spray irrigation systems. Consideration should be given to the wastewater characteristics and whether the constituents are conducive to land application. Provide the following:

- 1) An estimate of the best case hydraulic loading rate based on County Soil Surveys or from a soil evaluation performed by a soil scientist should be provided. Acreage requirements may be driven by either hydraulics or agronomics.
- 2) Calculations showing hydraulic loading rate and total area of land needed for the land disposal system, including buffers.
- 3) The availability and cost of land and the cost of transporting the wastewater to a suitable, available site.
- 4) Overall feasibility and cost of use of land treatment.

D. No Increase In Pollutant Loading:

Expanding systems only - Evaluate the installation of a wastewater treatment system resulting in no increase in pollutant loading to the surface waters.

Section 2.2 Alternatives Analysis - Provide the alternatives considered that could lessen degradation to surface waters

E. Treatment system design and selected technology:

Provide the preliminary treatment system design and selected technology/technologies to meet the wasteload allocation (WLA). Describe each candidate technology including the efficiency and reliability in pollutant removal and the capital and operational costs to implement those candidate technologies. Justify the selection of the proposed treatment technology. Provide feasibility and costs.

F. Flow minimization

Evaluate potential water conservation opportunities (partial recycling and/or reuse opportunities of wastewater) including the feasibility of implementation and the costs. Indicate which of these may be implemented.

G. Pollution reduction measures:

Discuss the pollution prevention measures evaluated including the feasibility of those measures and the cost. Measures to be addressed include but are not limited to changes in processes, source reductions or substitution with less toxic substances. Indicate which measures are to be implemented.

H. The use of best management practices (BMPs) to minimize impacts:

Discuss the consideration and use of best management practices that will assist in minimizing impacts to water quality from the proposed permitted activity.

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Discuss the consideration and use of best management practices that will assist in minimizing impacts to water quality from the proposed permitted activity.

Section 3. Social or Economic Demonstration

A. Define the boundary of the affected community:

Specify the geographic region the proposed project is expected to affect. Include the name of all cities, towns, and counties. This geographic region must include the proposed receiving water.

B. The effect on employment in the affected community:

Compare current unemployment rates in the affected community to current state and national unemployment rates. Discuss how the proposed project will positively or negatively impact those rates, including quantifying the number of jobs created and/or continued and the quality of those jobs.

C. The effect on median household income levels in the affected community:

Compare current median household income levels with projected median household income levels. Discuss how the proposed project will positively or negatively impact the median household income in the affected community including the number of households expected to be impacted within the affected community.

D. The effect on tax revenues of the affected community:

Compare current tax revenues of the affected community with the projected increase in tax revenues generated by the proposed project. Discuss the positive and negative social and economic impacts on the affected community by the projected increase.

E. The effect on existing environmental issues in the affected community:

Discuss how the proposed project will have a positive or negative impact on existing environmental issues.

F. Discuss any other economic or social benefit to the affected community:

Discuss any positive or negative impact on the economy of the affected community including direct and or indirect benefits that could occur as a result of the project. Discuss any positive or negative impact on the social benefits to the community including direct and indirect benefits that could occur as a result of the project.

G. Economic Analysis

Provide valid cost comparisons of the alternatives analysis as compared to the practicable alternative chosen for implementation. The analysis should include all monetary costs associated with construction, startup, and annual operation and maintenance of a facility.

H. Return Flow Considerations (Optional):

Demonstrate that water quantity in the receiving water is limited and there are potential water quantity gaps under low flow conditions, then the water quantity benefits of allowing a surface water discharge outweigh the effects of lower water quality resulting from the discharge provided the water quality to protect the existing uses will be maintained. This demonstration might include, but is not limited to, references to surface water flow needs identified in an applicable Regional Water Plan, TMDL, applicable recommendations for water management or the need to support aquatic life and drinking water supplies.

Section 4. Practicable Alternative Chosen – include rationale

Section 4. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:	Date:
Title:	Telephone:
Signature:	