WATER BUREAU
PERMITS SECTION

Procedure No. 14

Title: Antidegradation / Antibacksliding

Purpose: The purpose of this document is to provide guidance to Department of Environmental Quality (DEQ) Water Bureau (WB) staff regarding certain jurisdictional issues relating to Part 31, Water Resources, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). It is the goal of the WB that decisions made by staff regarding the use of this document be legally correct and consistent, and complement the requirements of the federal Clean Water Act (CWA).

This guidance is intended to clarify certain provisions of Part 31 of the NREPA and provide information to encourage consistent administration of these provisions by WB staff. It is not intended to modify the provisions of Part 31, and should there be any apparent inconsistency between this guidance and statutory and administrative rule requirements, the language in the statute and rules should obviously guide staff decisions.

Antidegradation (Rule 98 of the Part 4 Rules, Title 40 of the Code of Federal Regulations (CFR), Part 131.12, and 40 CFR, Part 132, Appendix E.) applies to any NPDES permit action that is anticipated to result in a new or increased loading of pollutants to the surface waters of the state. If the designated uses of the receiving water are not attained, then there shall be no lowering in water quality with respect to those pollutants causing the nonattainment. For individual pollutants, if the water quality is better than that prescribed by water quality standards, those waters are considered "high quality." **All** waters of the state are probably high quality waters for at least one parameter; therefore, any increased loading of pollutants requires that the applicant demonstrate that the discharge is exempt under Subrule (8) or (9), or provide a demonstration identifying the social or economic development and benefits that will be foregone to the area in which the waters are located if the lowering of water quality is not allowed.

Antibacksliding is the retention of an effluent limitation which otherwise may be appropriately made less stringent. If the limits are relaxed consistent with the antibacksliding regulations, this relaxation will also need to meet the requirements of the antidegradation rule.

This procedure details the necessary steps that will allow you to determine if antidegradation and/or antibacksliding are applicable to an NPDES permitting action.

Antidegradation:

As the Permit Writer is evaluating the application for the proposed discharge, all determinations should be documented on the Antidegradation Demonstration Checklist.

1. Determine if an increase in mass loading to the receiving water will be included in the draft permit (**all** new discharges are considered to be increased loadings). If there is no increase in loading, then no further action is necessary with regards to antidegradation. Any significant increase in discharge flow or mass loading (either specifically authorized load limit or load based on calculation from a concentration limit and flow) will require an Antidegradation Demonstration or exemption to be provided by the applicant. This includes instances when the Department of Environmental Quality (DEQ) makes a determination that a higher load is appropriate (based on a revised WQBEL or TTBEL, for instance).

   The following examples are considered to be an increase in loading, and thus, an Antidegradation Demonstration or statement of exemption is required:

   - A new use.
   - An increase in flow.

- An increase in a mass limit.
- An increase in a concentration limit with no change in flow.
- The addition of a new waste stream that will not require an authorization to increase the flow of the discharge.
- An existing discharger that has never received an effective NPDES permit for discharges at a particular site.

The following examples are not considered to be increases in loading, and thus, an Antidegradation Demonstration would not be needed:

- A change in the WQBEL for mercury or PCBs due to a change in the Water Quality Standard.
- A newly-established limit for a parameter when there has been no action on the part of the permittee to increase the mass loading.
- Limits that are eliminated.

2. Determine if there are additional existing uses which require greater protection than the Water Quality Standard provides for the designated uses. The following examples are considered to be existing uses which may require greater protection:

- The receiving water is a habitat or breeding ground for an endangered, threatened, or sensitive species.
- The existence of a trout population in a stream which has been designated as a warm water stream.

The determination can be made by requesting an evaluation and recommendation from the Surface Water Assessment Section. Any applicable information received during the public comment period can and should be considered prior to a decision being made as to whether or not the Antidegradation Demonstration complies with all the requirements of the rule.

3. Determine if the receiving water meets the Water Quality Standards. A determination can be made by reviewing the 303(d) and 305(b) Reports. If the proposed discharge is to be directed to an impaired waterway, it should be documented on the Antidegradation Demonstration Checklist. If the proposed discharge cannot meet Water Quality Standards or the requirements for an exemption, then denial of the application should be proposed.

4. Determine if the receiving water is an Outstanding State Resource Water (OSRW). OSRWs are listed in Rule 323.1098, Subrule 6(a). If a water body is a designated OSRW, the water quality cannot be lowered. A short-term or temporary (weeks or months) lowering of the water quality may be permitted by the DEQ on a case-by-case basis (refer to Subrule (6) for the list of OSRWs). If the proposed discharge will lower water quality and the requirements for an exemption cannot be met, then denial of the application should be proposed.

5. If the applicant submitted a statement of exemption from the Antidegradation Demonstration requirement, the exemption must comply with Subrules 8 and 9. The following examples do not constitute a lowering of water quality and are therefore exempt from the antidegradation requirements:

- Short-term (weeks to months) or temporary lowering of water quality.
- Bypasses that are not prohibited by regulations set forth in 40 CFR, §122.41(m).
- Response actions undertaken to alleviate a release of pollutants into the environment that may pose an imminent and substantial danger to the public health or welfare.

- Discharges of pollutant quantities from the intake water at a facility, if the intake and discharge are on the same body of water.
- Increases in flow, if the increase is within the design flow of the facility, it is not specifically limited in the current permit, and there is no significant change expected in the characteristics of the wastewater collected.
- Intermittent increased loading related to wet weather conditions.
- New or increased loading due to DEQ-approved controls related to wet weather conditions.
- Discharges authorized by certificates of coverage and notices of coverage, except where it has been determined that an Antidegradation Demonstration is necessary for an individual permit.
- Increased loadings within the authorized levels of a limit in an existing control document, except loadings that result from actions by the permittee that would otherwise require submittal of an increased use request.
- Increased loadings of a pollutant that does not involve a bioaccumulative chemical of concern (BCC) and that uses less than 10 percent of the unused loading capacity that exists at the time of the request.

If the applicant submits a claim of exemption similar to the aforementioned examples, please evaluate the rule for all details. If the exemption is determined to comply with the rules, continue with the NPDES permit process. If it is determined that the proposed discharge is not exempt from the antidegradation requirement, inform the applicant that they must submit an appropriate demonstration. If the applicant fails to produce an Antidegradation Demonstration, propose to deny the applicant an NPDES permit.

6. Was an Antidegradation Demonstration submitted? If it is determined that the proposed discharge is not exempt from the antidegradation requirement, and an Antidegradation Demonstration was not submitted with the application, inform the applicant that they must submit an appropriate demonstration. If the applicant fails to produce an Antidegradation Demonstration, propose to deny the applicant an NPDES permit.

Rule 98, Subrule 4(a), requires the applicant to identify the social and economic development and the benefits that would be forgone if the new or increased loading of pollutant is not allowed. Examples of social or economic development and benefits may include:

- Employment Increases.
- Production Level Increases.
- Employment Reduction Avoidance.
- Efficiency Increases.
- Industrial, Commercial, or Residential Growth.
- Environmental or Public Health Problem Corrections.
- Economic or Social Benefits to the Community.

The applicant needs to provide a thorough and specific identification of the benefits that would be foregone if the lowering of water quality was not allowed. Demonstration of important economic or social development entails two steps. First, the applicant should describe and analyze the current state of economic and/or social development in the area that would be affected. The purpose of this step is to determine the "baseline" economic and/or social status of the affected community, i.e. the measure against which the effect of the water quality downgrade is judged. The following factors should be considered for inclusion in the baseline analysis: population, area employment (numbers employed, earnings, major employers), area income (earnings from employment and transfer payments, if known), manufacturing profile (types, value, employment, trends), residential housing available, and government fiscal base (revenues by source – employment and sales taxes, etc.).

Second, the applicant should then demonstrate the incremental increase in the rate of economic or social development. The applicant should provide an analysis, along with the supporting data used in its preparation, showing the extent to which the factors listed above will benefit from the important economic or social development. The following factors may be included in the analysis: expected plant expansion, employment growth, direct and indirect income effects, increases in residential housing, and increases in the community tax base.

The United States Environmental Protection Agency (EPA) has provided some guidance for this in their publication "Economic Guidance for Water Quality Standards" (EPA, 1995; EPA-823-B-95-002) that should be consulted when preparing this demonstration. The DEQ will use the information the applicant provides in part to determine if the lowering of water quality is necessary to support important social and economic development in the area. The applicant may also wish to provide a statement as to what the current zoning of the property is as an indication of the importance of the development to the area. An Antidegradation Worksheet is attached to provide some guidance to applicants for their demonstrations.

Once the Antidegradation Demonstration has been evaluated for important social or economic benefits to the area, it needs to be documented on the Antidegradation Demonstration Checklist. If the submitted demonstration does not thoroughly and specifically depict the benefits that will be foregone if the proposed discharge is not allowed, inform the applicant that such a demonstration needs to be submitted to allow the DEQ to complete its evaluation of the demonstration.

7. If the proposed discharge has the potential for water quality impairment associated with a thermal discharge, the Antidegradation Demonstration shall be consistent with Section 316 of the CWA. If the proposed discharge appears to have the potential to affect water quality, then a Water Quality Based Effluent Limitation (WQBEL) request should be made to the Surface Water Assessment Section.

8. If the applicant identified any BCC in their proposed wastewater, then a thorough review of Rule 323.1098, Section 4(b), should be conducted. The applicant shall identify the alternatives evaluated and the alternatives to be implemented to comply with Rule 323.1098. The discharger shall implement any cost-effective pollution prevention alternatives or techniques which have been adequately demonstrated to eliminate or significantly reduce the loading of the BCC. If the proposed alternatives or techniques do not eliminate the loading of the BCC, then the discharger shall evaluate alternatives or enhanced treatment techniques that would eliminate the loading of the BCC at a cost that is reasonable relative to the cost of treatment necessary to achieve applicable effluent limitations.

If the loading of a BCC is a point source discharge to a Lake Superior Basin-Outstanding International Resource Water, the discharger shall evaluate and implement the best technology in process and treatment (BTPT) that would eliminate or reduce the loading of the BCC. The BTPT shall be the most advanced treatment techniques which have been adequately demonstrated and which are reasonably available to the discharger. Innovative and experimental technologies shall also be considered if proposed by the discharger. Upon demonstration by the applicant, the requirement to implement the BTPT may be waived by the DEQ if the BCC occur as trace contaminants in naturally occurring raw material at the facility. IN NO EVENT MAY THIS DECISION ALLOW WATER QUALITY TO BE LOWERED BELOW THE MINIMUM LEVEL REQUIRED TO FULLY SUPPORT THE DESIGNATED USES. Be sure to provide a thorough explanation of the situation on the Antidegradation Demonstration Checklist.

9. Evaluate whether or not alternatives to the proposed surface water discharge have been explored. An approvable Antidegradation Demonstration must provide some explanation as to why the discharge is necessary. If the applicant has not looked at other options, they cannot claim that the discharge is necessary. The applicant shall demonstrate that alternatives to a surface water discharge are not feasible. Alternatives to a surface water discharge may include, but are not limited to:

- Groundwater discharges.
- Discharges to available sewerage systems.
- Water reuse.
- Water recycling.
- Pollution prevention alternatives and techniques (including new and innovative technologies) that would minimize or prevent the lowering of water quality.
- Alternative or enhanced treatment techniques that would minimize or prevent the lowering of water quality.

A thorough explanation should be provided as to why discharge alternatives are or are not viable.

10. Is connection to a municipal sewer a viable alternative to a surface water discharge? If a municipal sewer exists and has available capacity, then efforts should be made to direct the proposed discharge to the existing treatment system. Since a viable option to a surface water discharge exists, the application should be prepared for a permit denial.

11. If the application is for a privately-owned treatment system serving the public for the treatment of domestic wastewater from two or more residences, then the application is required to include documentation of the methods established for the ongoing operations and maintenance of the collection and treatment system as required under Section 4107 of Part 41 of Act 451. The applicant will need a resolution from the local unit of government (LUG) or will need to establish alternate means to ensure proper operation and maintenance of the system. If the applicant cannot obtain an agreement from the LUG or establish an alternate means to ensure proper operation and maintenance of the system, then it may indicate that the LUG does not believe that the proposed discharge is considered necessary for important social or economic benefits. The applicant for the proposed facility shall provide an explanation as to why neither of these requirements was met. The explanation will need to comply with the requirements of the Part 41 and 31 Rules. If the applicant cannot comply with these requirements, then the Antidegradation Demonstration should be proposed for denial.

12. An evaluation of the impact to the high quality water as a result of the proposed lowering of water quality needs to be completed by the WB. This evaluation may be qualitative and should consider the impacts to any designated uses. In many cases, there will be minimal, if any, impacts to the designated uses. However, there may be some instances where the proposed discharge will cause substantial impact on certain designated uses, such as important spawning areas or high quality inland lakes, even though the designated uses continue to be fully supported. This evaluation will be compared to the benefits foregone as identified in the demonstration submitted by the applicant, and a recommendation made as to whether the lowering of water quality is necessary to support important social and economic development in the area. Discuss this recommendation with your supervisor and, if appropriate, proceed to public notice, the Antidegradation Demonstration, and the draft permit.

13. During the public comment period, the public may submit comments which relate to the proposed permit or the submitted Antidegradation Demonstration. Any comments relating to the requirements of Rule 323.1098 should be evaluated and considered. If comments are received, they should be documented on the Antidegradation Demonstration Checklist, along with a response addressing the concern.

14. After a thorough review of the submitted Antidegradation Demonstration or exemption, a recommendation to the Permit Decision Maker must be made as to whether or not the requirements of Rule 323.1098 have been met.

If it is determined that the requirements to the rule were not satisfied, then the decision should be documented, either on or attached to the Antidegradation Demonstration Checklist. A letter should then be sent to the applicant, explaining that the submitted demonstration did not satisfy the requirements of

Rule 323.1098, and therefore, the DEQ is preparing to propose a denial of the application for an NPDES permit. Include a statement that explains to the applicant that their due process rights provide them 60 days to challenge the decision of the DEQ.

Antibacksliding

Antibacksliding is a statutory provision that prohibits the renewal, reissuance, or modification of an existing permit that contains limitations or requirements that are less stringent than those established in the previous permit. With some exceptions, a permit may not be reissued or modified to contain effluent limitations that are less stringent than those in the existing permit. In no case may the permit contain an effluent limitation which is less stringent than that required by effluent guidelines in effect at the time the permit is renewed, nor can the implementation of such a limitation result in a violation of water quality standards. The exceptions for making a limit less restrictive are as follows:

- Material/substantial alterations at a facility after permit issuance. *(We consider an increase in production or change in production to fit this category.)*

- New information received which was not available at the time of permit issuance (other than revised regulations, guidance, and test methods) that would have justified the different limits at the time of permit issuance. *(We consider this to include new information used in determining WQBELs.)*

- New regulations (revised ELG, promulgated WQS). In order to qualify under this exception, certain requirements must be met (see 40 CFR 122.62).

- Correction of technical mistakes or mistaken interpretations of law.

- The occurrence of events over which the permittee has no control and for which there is no reasonably available remedy.

- The permittee had installed equipment to meet the old limitations and was operating it properly, but was still unable to meet the limitations. The new limitations can be set to reflect the level of control actually achieved.

- Request for variance under the CWA filed by the permittee within the authorized time frame.

Limits based on Best Professional Judgment (BPJ) cannot be raised based on a promulgation of categorical standards subsequent to the original issuance, except for the following causes:

- Material/substantial alterations at a facility after permit issuance that justify less stringent limits. *(We consider an increase in production or change in production to fit this category, and in this case, they would get an increased load based on the promulgated standards, but only for the net increase in production.)*
- New information not available at the time of issuance (other than revised regulations, guidance, test methods) that would have justified the different limits at the time of issuance; or to correct technical mistakes or mistaken interpretations of law.

- Less stringent limits necessary because of events beyond the control of the permittee for which there is no reasonably available remedy.

- The permittee has received a permit modification for a variance under the CWA.

- The discharger cannot meet the BPJ limits and has met the other requirements of this exception.

In **all** cases, limits **cannot** be raised above the categorical standards as listed in *40 CFR* or the *Michigan Water Quality Standards,* whichever is the most stringent, and an Antidegradation Demonstration will be required. Some examples of how antibacksliding requirements can be applied are as follows.

1. WQBELs for Receiving Waters Not Meeting WQS:

Currently, all waters of the state are not meeting water quality standards for mercury or PCBs. In many cases, this is due to nonpoint sources of these pollutants. For mercury and PCBs, if there is a relaxed WQBEL, it may be used as the effluent limit in reissued or modified permits, based on the following reasons:

- According to 40 CFR 122.44(l)(1) and 122.62(a)(2), new information can be considered in raising these limits. The recalculation of the Rule 57 levels was based on new information.

- Waters of the state are not meeting water quality standards for mercury or PCBs. Consistent with CWA 303(d)(4), because the new WQBEL is the Rule 57 level, it will not affect whether the receiving waters are meeting WQS and will be consistent with any TMDL that is developed now or in the future.

- Since waters are not meeting the WQS, an antidegradation evaluation is not needed for mercury or PCBs.

For other pollutants where the receiving water is not meeting the WQS due to nonpoint sources, the same reasoning could apply to establishing a higher permit limit.

2. WQBELs for Receiving Waters Meeting WQS:

The justification for incorporating less restrictive WQBELs into reissued or modified permits may include:

- According to 40 CFR 122.44(l)(1) and 122.62(a)(2), new information may be considered in relaxing limits. New information includes recalculation of Rule 57 levels, dissolved metals approach, new factors (slope) in D.O. modeling, higher flow rate for receiving stream or effluent, etc. Note: If a discharge involved in a WLA eliminated its wastewater discharges, this would not result in higher limits for the remaining dischargers. This is not considered new information.
- For these pollutants, water quality will be attained; therefore, CWA 303(d)(4) (standards attained) must be considered and any increase must be consistent with antidegradation.

- For higher limits to be allowed by antidegradation, the higher limits must be justified for important economic or social development.

3. Dropping a Current Permit Limit (which was a WQBEL):

Dropping of WQBELs is not subject to antibacksliding or antidegradation since we are not permitting a higher level. The effluent concentration must be lower than the new theoretical WQBEL and not have a reasonable potential to exceed the new theoretical WQBEL.

4. Allowing Less Restrictive Treatment Technology-Based Effluent Limits (TTBELs):

The following justification may be used for allowing less restrictive TTBELs:

- When limits are based on promulgated effluent limit guidelines (ELG), TTBELs may be raised based on production increase (this is an allowed exception under antibacksliding) but is subject to antidegradation.

- When limits are based on BPJ, TTBELs can be raised based on production increase (this is an allowed exception under antibacksliding). This is subject to an antidegradation determination. However, BPJ-based TTBELs cannot be raised based on only promulgation of an ELG.

Applicable Laws, Regulations, and Procedures:

•Part 4 Rules, Rule 98: Antidegradation
•40 CFR 122.44(l): Reissued Permits
•40 CFR 122.62: Modification or Revocation and Reissuance of Permits
•40 CFR 131.12: Antidegradation Policy
•40 CFR 132: Great Lakes Water Quality Initiative Antidegradation Policy
•CWA Section 303, Water Quality Standards (WQS) - (specifically 303(d)(4), Standards Not Attained and Standards Attained)
•Clean Water Act (CWA), Section 402(o), Antibacksliding

Procedure Approved:
4-12-2005
Date

William Creal, Chief
Permits Section
Water Bureau

Attachments:
-Antidegradation Worksheet
-Antidegradation Checklist
-Antidegradation Flowchart

Antidegradation Worksheet

This worksheet has been developed to assist the applicant in addressing the pertinent issues for the demonstration required in the Antidegradation Rule of the Water Quality Standards, Rule 323.1098. The worksheet is derived from guidance provided by the United States Environmental Protection Agency in The Economic Guidance for Water Quality Standards – Workbook, and from various rules and procedures from other states. The following steps provide an outline of the pertinent issues to be considered in developing an Antidegradation Demonstration.

Step 1: Define the Relevant Geographical Area: The geographical area in which the impacts from the development will occur needs to be defined as part of the demonstration. In the case of municipal pollution control projects, the affected community is most often the immediate municipality. The relevant geographic area for evaluating the importance of a private sector development varies with each situation. The area will typically be determined by the area in which the majority of its workers live and where most of the businesses that depend on it are located. In all cases, the geographical area considered must include the area in which the waters are located.

Step 2: Demonstrate that the Discharge is Necessary: Rule 323.1098 allows the Department of Environmental Quality to determine that a lowering of water quality is necessary to accommodate important economic or social developments in the area in which the waters are located. Before an applicant can address the issues as to whether or not the discharge will accommodate any important economic or social developments, the applicant must first demonstrate that the discharge is necessary. To complete this part of the demonstration, the applicant needs to provide an alternative analysis regarding the proposed surface water discharge. The applicant should also address all alternatives to a surface water discharge. Alternatives could include pollution prevention measures, reduction in the scale of a project, water recycling or reuse, process changes, innovative or advanced treatment technologies, seasonal or controlled discharge options, improved operation or maintenance of existing treatment systems, or alternative discharge locations. The alternatives analysis needs to identify the relative proximity of the facility to any existing wastewater collection and treatment systems in the area. The applicant should provide a detailed explanation as to why the surface water discharge has been determined to be the best available option for wastewater disposal.

Step 3: General Considerations: There are no economic ratios per se that determine whether a development would be considered important. Instead, the relative magnitudes of indicators, such as decreases in unemployment, gains to the local economy, changes in household income, changes in tax revenues, and indirect effects on other businesses should be taken into account. The term "important" is intended to convey a general concept regarding the level of social and economic development used to justify a change in high quality waters.

Step 4: Determine the Baseline Economic and/or Social Status: The purpose of this step is to determine the baseline economic and/or social status of the affected community, i.e., the measure against which the effect of any water quality degradation is judged. The following factors should be considered for inclusion in the baseline analysis, depending on the development and benefits to be demonstrated in Step 5: population, area employment (number employed, earnings, and major employers), area income, manufacturing profile (types, value, employment, and trends), residential housing available, and government fiscal base.

Step 5: Demonstrate the Incremental Increase as a Result of the Development: This demonstration should include the incremental increase in the rate of economic or social development, along with supporting data used in the analysis. The following items should be considered for this portion of the worksheet, considering if the proposed activity:

a. Creates or expands employment?
b. Reduces the unemployment rate?
c. Increases median family income?
d. Reduces the number of households below the poverty line?
e. Increases needed housing supply?
f. Increases property values?
g. Increases the community tax base?
h. Provides necessary public services (e.g., fire department, school, and infrastructure)?
i. Corrects a public health or environmental problem?
j. Improves the quality of life for residents in the area?

For each item that is applicable to the activity, there should be an indication as to whether the impact is positive or negative, and a description of the impact, including the magnitude of the impact, including a comparison to the baseline estimate for the defined geographical area.

Antidegradation Demonstration Checklist

Permit Processor: (%_pmt[signature_name]_%) Designated Name: (%_info[designated_name]_%)

Permit No.: (%_nondate[permit_no]_%) Permit Action: (%_type[dm_memo_action2]_%)

Permit ID.v: (%_type_case[permit_id]_%) (%_nondate[version]_%) Priority: (%_type[priority_cd]_%)

1. Application is for a: ☐ New Use ☐ Increased Discharge

2. Are there existing uses which require greater protection than the designated uses?
   ☐ No ☐ Yes – Provide explanation: _____
   _____
   _____

3. Does the receiving water meet Water Quality Standards?
   ☐ Yes ☐ No – Provide explanation as to what parameter is in non-attainment:_____
   _____
   _____

4. Is the proposed discharge directed to an Outstanding State Resource Water (OSRW)?
   ☐ No ☐ Yes – If the proposed discharge cannot meet water quality standards, propose denial of application. Provide explanation: _____
   _____

5. Is applicant exempt from Rule 98 Requirements?
   ☐ No ☐ Yes – Provide explanation, and then skip to line 13: _____
   _____
   _____

6. Identify the social or economic development and benefits to the area that are addressed in the submitted antidegradation statement (check all that apply).
   ☐ (I) Employment Increases
   ☐ (II) Production Level Increases
   ☐ (III) Employment Reduction Avoidance
   ☐ (IV) Efficiency Increases
   ☐ (V) Industrial, Commercial, or Residential Growth
   ☐ (VI) Environmental or Public Health Problem Corrections
   ☐ (VII) Economic or Social Benefits to the Community
   ☐ Other – Provide explanation: _____
   _____
   _____

   Did the applicant provide a thorough and specific identification of benefits that would be foregone if the lowering of water quality was not allowed? ☐ Yes ☐ No – Inform the applicant that additional information will be needed, or the application will be considered incomplete.

   Does the information submitted by the applicant appear to support the notion that the proposed discharge will provide important social or economic benefits? ☐ Yes ☐ No – Provide an explanation as to why the submitted information is contradictory to the proposed demonstration: _____
   _____
   _____

7. Is there a potential for lowering of the water quality associated with a thermal discharge?
   ☐ No ☐ Yes – Provide explanation: _____
   _____

8. Does the application indicate the presence of any Bioaccumulative Chemicals of Concern (BCC)?

☐ No ☐ Yes – Provide explanation as to what implications Rule 323.1098 may have on this proposed discharge with regards to the BCC: _____

9. Did the applicant provide an explanation as to why the proposed discharge is necessary over other alternatives?
   ☐ No – Inform applicant that alternatives need to be addressed.
   ☐ Yes – Provide explanation: _____

10. Is connection to an existing municipal treatment system a viable alternative to a surface water discharge (i.e., distance, available capacity)? ☐ Yes – Advise applicant to connect to the existing treatment system.
    ☐ No – Provide explanation: _____

11. Is the application for a privately-owned treatment system serving the public for the treatment of domestic wastewater from two or more residences? ☐ No, proceed to #12 ☐ Yes
    If Yes – Has the applicant provided a resolution for continuation of service from the local unit of government (LUG) or have alternate means to ensure proper operation and maintenance of the treatment system been established?

    ☐ Yes – If alternate means, explain: _____

    ☐ No – Contact LUG and provide brief explanation of circumstances behind the decision: _____

12. Will the proposed discharge cause substantial impact on certain designated uses, such as important spawning areas or high quality inland lakes, even though the designated uses continue to be fully supported?
    ☐ No ☐ Yes – Provide an explanation as to which uses will be impacted. Discuss the situation with your supervisor and document what decisions were made: _____

13. Were any comments received from the public regarding Antidegradation? PN date: _____
    ☐ No ☐ Yes – Provide brief description of comments: _____

14. Does the submitted demonstration satisfy the requirements of Rule 323.1098?
    ☐ Yes ☐ No – Provide explanation: _____

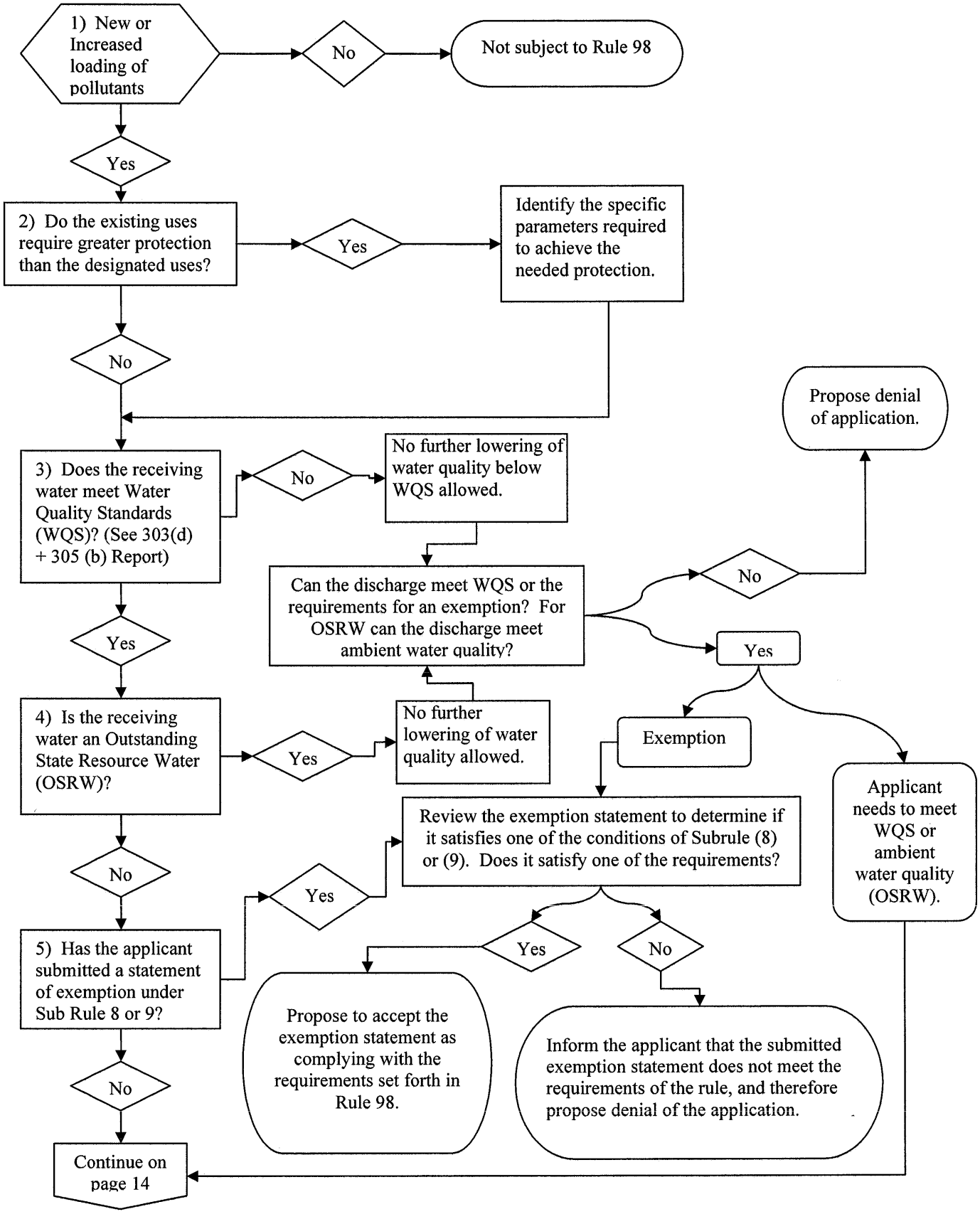
[Sign and Submit with Decision Maker Packet]
Antidegradation Demonstration reviewed by:

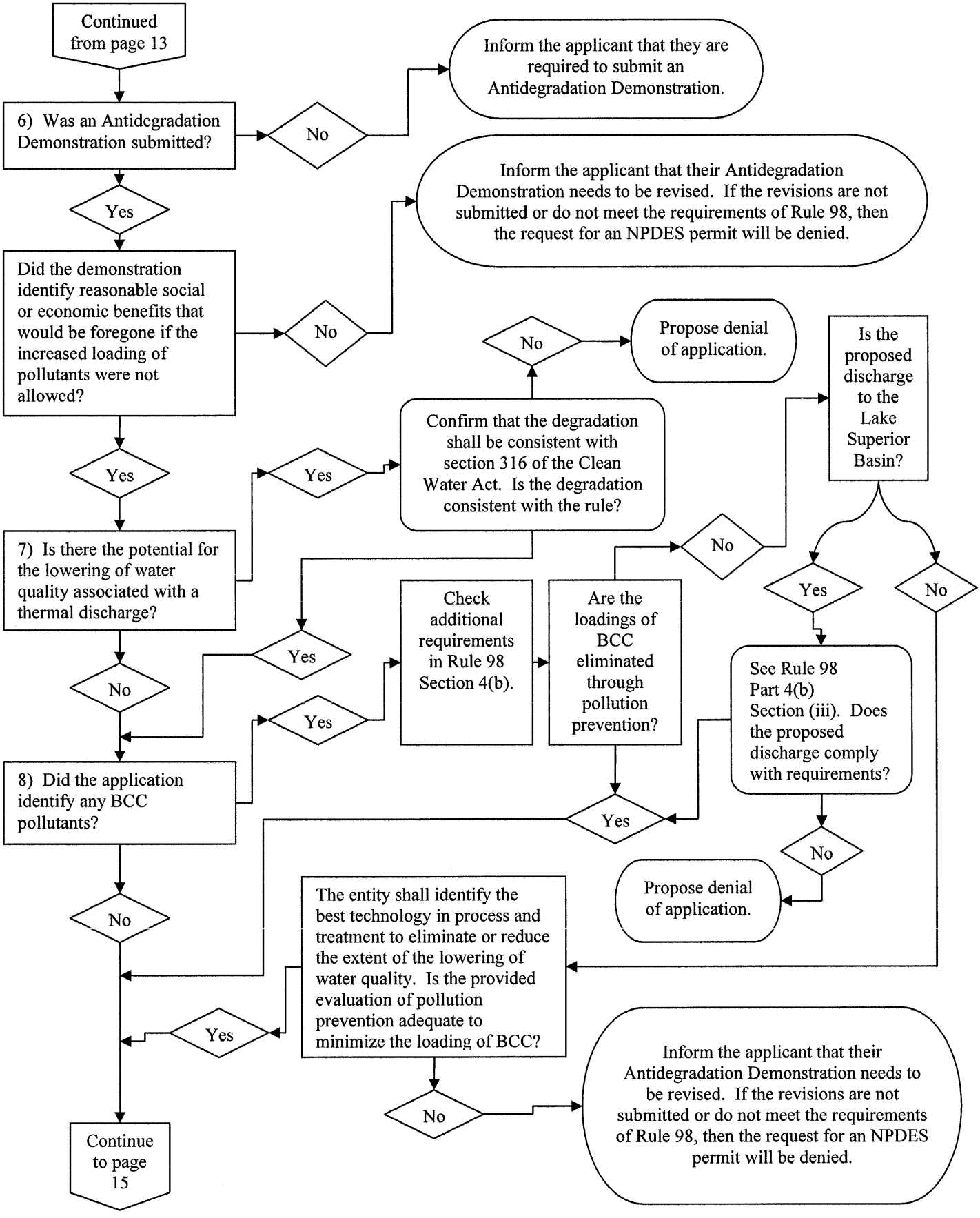
_____ _____
(%_pmt[signature_name]_%) Date
Permit Processor

[Sign Prior to Issuance or Denial]
Antidegradation Demonstration approved by:

_____ _____
William Creal, Chief Date
Permits Section

Antidegradation Demonstration Procedural Flow Chart




Continued from page 13
6) Was an Antidegradation Demonstration submitted?
No
Inform the applicant that they are required to submit an Antidegradation Demonstration.
Yes
Did the demonstration identify reasonable social or economic benefits that would be foregone if the increased loading of pollutants were not allowed?
No
Inform the applicant that their Antidegradation Demonstration needs to be revised. If the revisions are not submitted or do not meet the requirements of Rule 98, then the request for an NPDES permit will be denied.
Yes
7) Is there the potential for the lowering of water quality associated with a thermal discharge?
Yes
Confirm that the degradation shall be consistent with section 316 of the Clean Water Act. Is the degradation consistent with the rule?
No
Propose denial of application.
Yes
No
Is the proposed discharge to the Lake Superior Basin?
Yes
No
Check additional requirements in Rule 98 Section 4(b).
Yes
Are the loadings of BCC eliminated through pollution prevention?
No
Yes
See Rule 98 Part 4(b) Section (iii). Does the proposed discharge comply with requirements?
No
Propose denial of application.
8) Did the application identify any BCC pollutants?
Yes
No
The entity shall identify the best technology in process and treatment to eliminate or reduce the extent of the lowering of water quality. Is the provided evaluation of pollution prevention adequate to minimize the loading of BCC?
Yes
No
Inform the applicant that their Antidegradation Demonstration needs to be revised. If the revisions are not submitted or do not meet the requirements of Rule 98, then the request for an NPDES permit will be denied.
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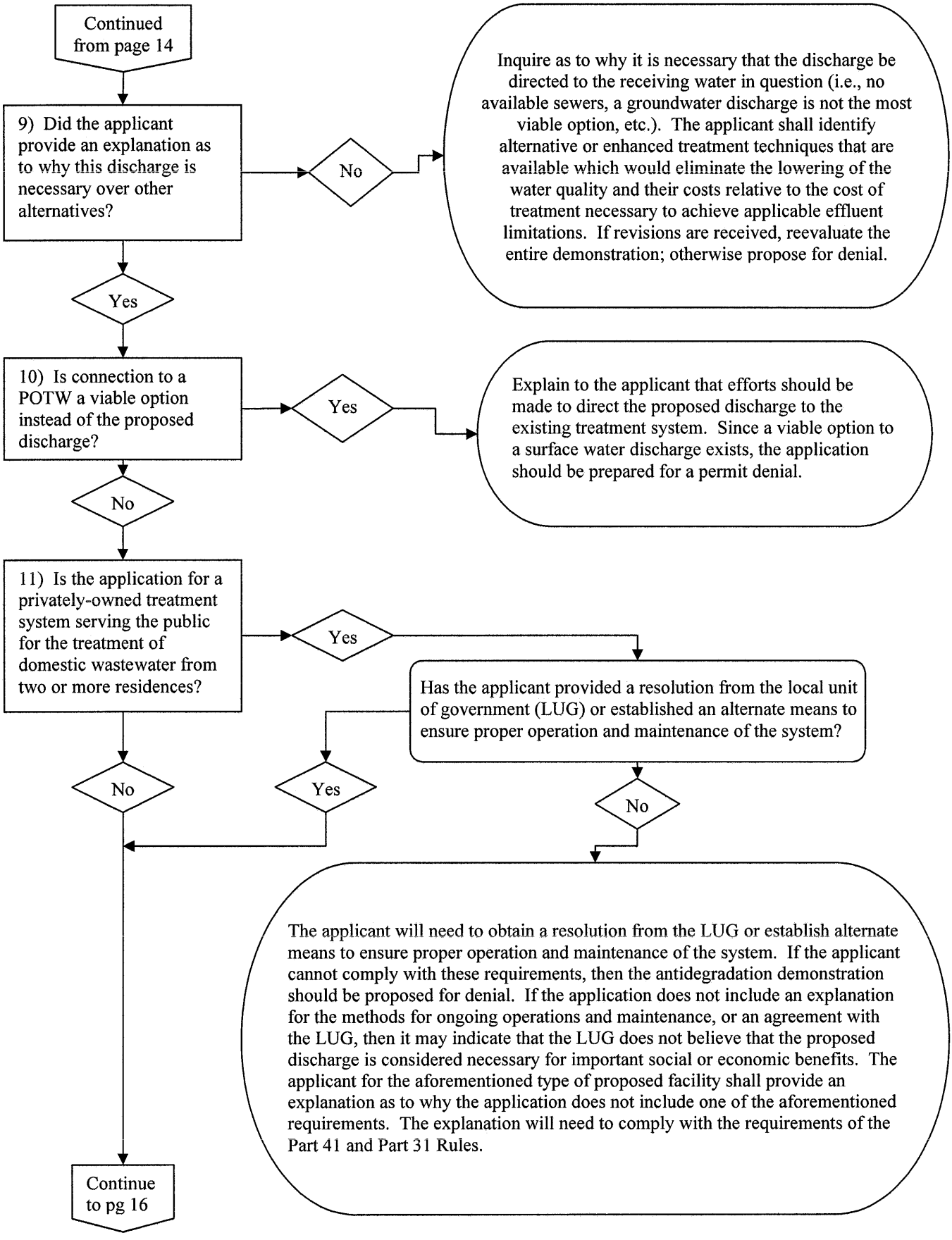
Continued from page 14
9) Did the applicant provide an explanation as to why this discharge is necessary over other alternatives?
No
Inquire as to why it is necessary that the discharge be directed to the receiving water in question (i.e., no available sewers, a groundwater discharge is not the most viable option, etc.). The applicant shall identify alternative or enhanced treatment techniques that are available which would eliminate the lowering of the water quality and their costs relative to the cost of treatment necessary to achieve applicable effluent limitations. If revisions are received, reevaluate the entire demonstration; otherwise propose for denial.
Yes
10) Is connection to a POTW a viable option instead of the proposed discharge?
Yes
Explain to the applicant that efforts should be made to direct the proposed discharge to the existing treatment system. Since a viable option to a surface water discharge exists, the application should be prepared for a permit denial.
No
11) Is the application for a privately-owned treatment system serving the public for the treatment of domestic wastewater from two or more residences?
Yes
Has the applicant provided a resolution from the local unit of government (LUG) or established an alternate means to ensure proper operation and maintenance of the system?
No
Yes
No
The applicant will need to obtain a resolution from the LUG or establish alternate means to ensure proper operation and maintenance of the system. If the applicant cannot comply with these requirements, then the antidegradation demonstration should be proposed for denial. If the application does not include an explanation for the methods for ongoing operations and maintenance, or an agreement with the LUG, then it may indicate that the LUG does not believe that the proposed discharge is considered necessary for important social or economic benefits. The applicant for the aforementioned type of proposed facility shall provide an explanation as to why the application does not include one of the aforementioned requirements. The explanation will need to comply with the requirements of the Part 41 and Part 31 Rules.
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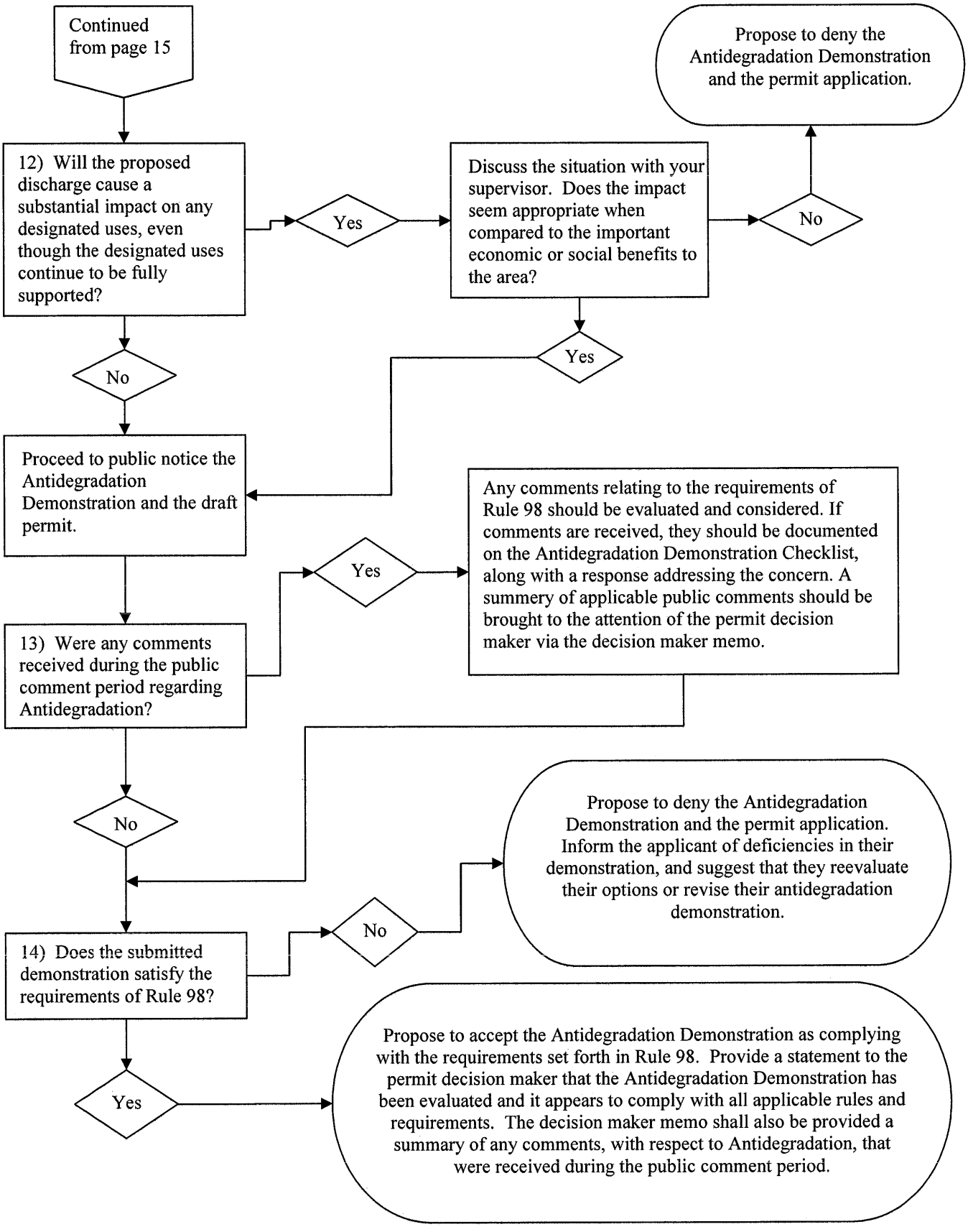
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12) Will the proposed discharge cause a substantial impact on any designated uses, even though the designated uses continue to be fully supported?
Yes
Discuss the situation with your supervisor. Does the impact seem appropriate when compared to the important economic or social benefits to the area?
No
Propose to deny the Antidegradation Demonstration and the permit application.
Yes
No
Proceed to public notice the Antidegradation Demonstration and the draft permit.
Any comments relating to the requirements of Rule 98 should be evaluated and considered. If comments are received, they should be documented on the Antidegradation Demonstration Checklist, along with a response addressing the concern. A summery of applicable public comments should be brought to the attention of the permit decision maker via the decision maker memo.
Yes
13) Were any comments received during the public comment period regarding Antidegradation?
No
Propose to deny the Antidegradation Demonstration and the permit application. Inform the applicant of deficiencies in their demonstration, and suggest that they reevaluate their options or revise their antidegradation demonstration.
No
14) Does the submitted demonstration satisfy the requirements of Rule 98?
Yes
Propose to accept the Antidegradation Demonstration as complying with the requirements set forth in Rule 98. Provide a statement to the permit decision maker that the Antidegradation Demonstration has been evaluated and it appears to comply with all applicable rules and requirements. The decision maker memo shall also be provided a summary of any comments, with respect to Antidegradation, that were received during the public comment period.