

Requirements for Determining Important Economic and Social Development

Excerpts from Tetra Tech's June 22, 2007 *Technical Memorandum #2—Stormwater Nondegradation Analysis Project* prepared for the Minnesota Pollution Control Agency

REQUIREMENTS FOR DETERMINING IMPORTANT ECONOMIC AND SOCIAL DEVELOPMENT

In reviewing the state and EPA guidance regarding Tier 2 social and economic analysis (SEA), the following conclusions were noted:

- Few state guidance documents provide any detail on the SEA.
- Where procedures are provided, they are very general and qualitative in nature.
- It is estimated that a large percentage of the application could involve Tier 2 antidegradation review and socioeconomic analysis. Therefore, the tests/procedures must be practical for applicants to use and for the staff to review.
- After presenting modeling approaches to West Virginia Department of Environmental Protection (DEP), the staff indicated that models would not be appropriate for the majority of the applicants because of their complexity, as well as the level of expertise, cost, and time required. They also indicated that WV DEP staff did not have training or expertise to adequately review the applicants' analyses using such models.
- Once economic or social changes are estimated using quantitative or qualitative approaches, the procedure must then help determine the importance or significance of the activity. Selection of any quantitative threshold or weights defining *important development* would be somewhat arbitrary and perhaps indefensible. States generally weigh evidence provided on a case-by-case basis. EPA Region IX's *Antidegradation Guidance* specifically states, "explicit criteria defining important economic or social development have purposely not been developed by EPA, because of the varying environmental, economic, and social conditions of localities throughout the country."
- EPA Region 8 and 9 provide substantial guidance on SEA for Tier 2 surface waters, as do several states.

EPA Region 4 identified factors to be considered in making a determination on whether benefits associated with a lowering of water quality qualify as "Important Social or Economic Activities in the Area in Which the Waters are Located," including the following:

- Employment (increasing, maintaining, or avoiding a reduction in employment)
- Increased production
- Improved community tax base
- Housing
- Correction of an environmental or public health problem.

Other provisions to be included in a state's methodology, according to the Region 4 guidance, include (1) a general description of the administrative process for permit issuance, modification, or denial on the basis of antidegradation Tier II provisions; (2) the name of the entity responsible for submitting information regarding alternatives, and socioeconomic considerations, (3) information on how a proposed decision will be announced in a public notice (including example language of a proposed

determination referencing the state antidegradation policy), (4) the role of the state environmental agency in the review, (5) the entity who will make the final determination, and (6) a description of the process for documenting the final decision, e.g., in an amendment to the Fact Sheet at the time of final permit determination, to allow or deny the activity associated with the proposed lowering of water quality.

The states of Washington, Wyoming, and West Virginia also provide substantive guidance and offer three differing approaches to consider. Below are highlights from each of these states' guidance document regarding the determination of necessity of degrading a Tier2 water and the determination of the importance of the social or economic development caused by the proposed activity. The state of Washington places high importance on water quality impacts. Wyoming is very concerned with the interest of the applicant and West Virginia's policy provides a balance between the two.

Washington

Washington requires that an applicant must consider nine alternatives to the proposed degrading discharge, and the Department of Ecology retains discretion to require that other alternatives be evaluated. This analysis is the primary focus of determining whether to allow a lowering of high-quality water parameters. The purpose is to identify site, structural, or management approaches that can be practically implemented to prevent, or minimize where prevention is not feasible, the lowering of high-quality water parameters. *Practical* and *feasible* are not defined in the guidance document. Necessity is determined on a case-by-case basis.

Then a test of importance is conducted to determine overriding public interest. This analysis considers the qualitative and quantitative benefits and costs of an action. The applicant must describe the economic and social benefits associated with lowering water quality as well as the benefits associated with maintaining high-quality water. Examples are given of factors to consider for each of these two categories. "Significant weight must be given to the value of clean water and the protection of beneficial uses to the general public and to treaty tribes at the local, regional, and statewide scales."

Wyoming

In Wyoming, the test of economic and social importance is done on a case-by-case basis. If the applicant submits evidence that the activity is *important* development, it is presumed important unless information to the contrary is submitted in the public review process. In the public comment period, substantial weight is given to determinations by local governments and land use planning authorities. If the proposed activity is determined not to be important for social and economic development, authorization is denied. If the proposed activity is determined to be important, a determination is then made whether the degradation that would result from the activity is necessary. The degradation is considered acceptable if there are no other water quality controls available that would result in no degradation or less degradation that are economically, environmentally, and technically reasonable. The determination of whether such alternatives are available is based on a reasonable level of analysis by the project proponent and any information submitted by the public. The scope of the alternatives considered is limited to those that would accomplish the proposed activity's purpose. In determining the economic reasonableness of the alternatives, the state considers

- Whether the costs of the alternative significantly exceed the costs of the proposal
- For publicly owned treatment works (POTWs), whether user charges resulting from the alternative would significantly exceed those of similarly situated POTWs

- For any discharge into the state waters, whether the treatment alternative represents costs that significantly exceed cost for other similar discharges or standard industry practices
- Any other environmental benefits

West Virginia

West Virginia evaluates pollutant control alternatives from a list of non-discharge and nondegrading or less degrading alternatives listed in the guidance, the applicant must screen for and propose a list of available, cost-effective alternatives that will be evaluated in detail. The state may require that additional alternatives be analyzed. Environmental impacts that must be addressed are listed, and the cost and reasonableness criteria are defined.

The alternative or suite of alternatives is considered to be cost-effective and reasonable if it is feasible and the cost is less than 110 percent of the base costs of pollution control measures for the proposed activity. The 110 percent cost-effectiveness criterion is a general rule. If pollution control costs for alternatives that would result in substantial water quality benefits slightly exceed the 110 percent threshold, those alternatives may be required. The base cost for NPDES permitted facilities is the cost of treating raw or otherwise untreated wastewater to a level that meets water quality criteria, or the cost of meeting federally required, technology-based requirements, whichever is more stringent and legally applicable. The base cost for activities permitted under section 404 of the CWA is the cost of pollution controls that meet minimum section 404 permit and section 401 water quality certification requirements.

The state will identify the least degrading alternative—or mix of alternatives—that does not exceed the 110 percent cost threshold. This will be the state’s preferred option. If the option will not result in significant degradation, permitting of the activity proceeds. If the preferred option will result in significant degradation, the applicant must conduct a social and economic importance analysis so the state can determine if the activity can be permitted. The applicant then completes a worksheet explaining how the proposed activity affects 12 social and economic factors. The applicant can use other economic and environmental considerations to strengthen its social and economic importance analysis. A number of example considerations are provided.

The state makes a preliminary determination primarily on the basis of the demonstration made by the applicant and may weigh the applicant’s demonstration against counterbalancing socioeconomic costs and projected environmental effects (those determined both in the alternatives analysis and the socioeconomic analysis). The state makes a preliminary determination on the facts on a case-by-case basis. If the information is not sufficient to make a preliminary determination, the state may request the applicant to submit specific information needed. The state then considers views and concerns expressed by the public and selected governmental agencies regarding the preliminary determination in making a final determination. The state makes a final determination on the facts on a case-by-case basis.

