



# The Fertilizer Institute

Nourish, Replenish, Grow

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## **Via Electronic Delivery**

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**RE: The Fertilizer Institute Comments on EPA's Draft *Handbook for Developing Watershed TMDLs (December 2008)***

Dear Mr. Haire:

The Fertilizer Institute (TFI), on behalf of its member companies, submits these comments in response to the U.S. Environmental Protection Agency's (EPA or Agency) request for public comment on the Agency's Draft *Handbook for Developing Watershed TMDLs (December 2008)* (Draft *Handbook*). The Draft *Handbook* was developed to promote a watershed approach to development of total maximum daily load (TMDL) levels for agencies implementing Section 303(d) of the Clean Water Act (CWA). Pursuant to Section 303(d), states, territories and authorized tribes are required to develop a list of "impaired" waters that do not meet the established water quality standards and establish TMDLs (i.e., maximum amount of a pollutant a water can receive and still meet the water quality standards) for the waterbody.

## **Statement of Interest**

TFI represents the nation's fertilizer industry including producers, importers, retailers, wholesalers and companies that provide services to the fertilizer industry. Its membership is served by a full-time Washington, D.C., staff in various legislative, educational and technical areas as well as with information and public relations programs.

Our member companies typically have multiple National Pollutant Discharge Elimination System (NPDES) point source and stormwater permits, and our nutrient products are used on the

majority of cropland, pastureland and forests across the U.S. Therefore, TFI and its members have an interest in EPA's solicitation of comments regarding technical approaches to developing TMDLs across watersheds.

### **TFI General Comments**

TFI agrees with EPA's rationale that watershed-based TMDLs can be an effective tool that coordinates water-protection activities, conserves limited stakeholder time and resources, and can provide some degree of certainty and consistency to those stakeholders implementing strategies for meeting wasteload allocations (WLAs) and load allocations (LAs). TFI supports the use of watershed-based planning and water quality trading for meeting TMDL goals. TFI also understands that the Draft *Handbook* is not a regulation and does not impose legally binding requirements on implementing agencies, who retain the discretion to modify approaches presented in the Draft *Handbook* or implement different approaches.

However, as currently written, the Draft *Handbook* is so vague and theoretical as to raise serious concerns as to whether it can be implemented and provide effective guidance. As discussed in greater detail below in our specific comments, TFI is concerned with the relatively unlimited latitude provided in identifying candidates for watershed TMDLs as well as in data collection and stakeholder involvement for TMDL development and allocation analyses. Finally, TFI is greatly concerned that the Draft *Handbook* contains no discussion on determining the "Margin of Safety," especially given the latitude deferred to TMDL practitioners in defining the TMDL and loading allocations.

### **TFI Specific Comments**

#### **A. Identifying Candidates for Watershed TMDL Development**

Throughout the document, EPA states that a watershed TMDL may address anywhere from two to hundreds (Draft *Handbook*, p. 74) to thousands (Draft *Handbook*, p. 23) of waterbody-pollutant combinations. However, the Draft *Handbook* consistently points to combinations of nutrients, sediments and pathogens for the overwhelming majority of its process tips, examples and success stories. While TFI understands that these parameters are commonly used to list waters as impaired and that these impairments can often be "bundled" for TMDL development, the overall impression left by the Draft *Handbook* is that nutrient, sediment and pathogen-impaired water segments can be automatically bundled into watershed TMDLs.

*TFI requests that EPA either provide a more balanced document by including a greater variety of waterbody-pollutant combinations or some explanatory language that makes clear that this document is intended for more than nutrient, sediment and pathogen pairings.*

In the Draft *Handbook* (p. 29), EPA states that:

States identify the priority rankings for waters included on their 303(d) lists. Similar to having a consent decree specify TMDL development for certain waters, priority rankings might dictate development schedules that hamper addressing the prioritized waters as part of a comprehensive watershed TMDL. Watersheds that contain waters with varying

priority levels might lead the state to focus on the “high” priority waters before addressing the “low” priority waters in the same watershed – resulting in a missed opportunity for a comprehensive, integrated watershed TMDL project. If the impaired waters in a watershed have varied rankings, practitioners might consider using the first screening criterion to evaluate whether these waters have other shared factors that are appropriate for a watershed TMDL process (e.g., have similar impairments and sources). If so, the state could proceed with grouping the waters as part of a watershed TMDL, regardless of the “low” rankings of some of the segments.

*TFI requests additional explanation for how TMDL practitioners will rationalize a watershed TMDL with both “high” and “low” priority waters, as well as the criteria EPA would use to accept these TMDLs and a discussion of how will these TMDLs be deemed “more scientifically defensible and implementable?”*

EPA also identifies “active watershed or stakeholder groups” as a level-3 screening criterion (leveraging existing watershed-based programs or efforts) for identifying watershed-level TMDL candidates. Draft *Handbook*, p. 34. While we agree that “[l]arge watersheds that have active watershed or stakeholder groups can be targeted for TMDL development to capitalize on the ongoing efforts and participation of the groups that already have a defined geographic focus,” TFI cautions that basing watershed identification on activity from groups that do not contribute to TMDL loading can be detrimental to TMDL development and implementation. Specifically, “active” groups that do not include stakeholders responsible for loading allocation goals will have little impact on the ultimate success or failure of TMDL implementation. Further, informal stakeholder groups currently exist and are implementing watershed protection initiatives that would be valuable allies in TMDL development and implementation.

*TFI requests that EPA further refine the discussion on stakeholder identification to include these concepts.*

## **B. Developing Watershed TMDLs**

EPA states that stakeholders can be “...important sources of data (e.g., volunteer monitoring data, knowledge of key watershed characteristics, facility discharge data) and can provide information on the existence and locations of critical sources that might otherwise have been unaccounted for (e.g., historical land uses).” Draft *Handbook*, p. 39.

Later in the Draft *Handbook*, EPA states that:

Because watershed TMDLs are often developed for a broader geographic scale than single-segment TMDLs, it is desirable to have sufficient data to characterize the water quality and sources throughout the watershed and at key locations (e.g., tributary confluences, upstream/downstream of major sources). With the larger area, there is more potential for variations in the amount, type, and quality of data throughout the watershed. Incomparable data can create difficulties in conducting meaningful statistical or modeling analyses. However, data limitations and variations among datasets can be an issue with any TMDL, whether single-segment or watershed. TMDLs are sometimes developed with less than desirable amount, period and spatial distribution of data. Existing TMDL

program guidance (USEPA 1991) suggests that having limited data is not a sufficient reason for not developing a TMDL and recommends that TMDLs be developed with the best available data. If data are limited the TMDL should be developed, recognizing that additional data and information could be used in the future to revise the TMDL as necessary.

Alternatively, although a larger watershed can mean data from a greater number of agencies and of varying types, it also provides more opportunity to extrapolate an understanding of conditions throughout a watershed. When focusing on a single-segment TMDL with insufficient data to characterize the watershed, it might be necessary to evaluate data outside of the study area to make assumptions about the area without a real understanding of how the areas are related or similar. However, developing a watershed TMDL encourages evaluating data for a larger area and the relationships among that data. It provides a stronger foundation for any assumptions about conditions in data-poor areas. Draft *Handbook*, p. 42.

The lack of meaningful discussion on how to review and incorporate data in developing a watershed TMDLs is a serious flaw of the Draft *Handbook*. TFI agrees that “[t]he TMDL developer should balance the level of detail with the goals, priorities, and available data and resources for the project),” some discussion of reviewing data representativeness and quality, coordinating data from various sources, and the impact of data integration on the calculation of the margin of safety is necessary. Draft *Handbook*, p. 50. This is especially important when “[i]dentification and assessment of nonpoint sources are usually based on review of aerial photos, satellite imagery, GIS coverage (e.g., land use/cover, soils), *windshield surveys*, and other maps and available data.” *Id.* (emphasis added). Given the wide latitude provided the TMDL practitioner in using data, assumptions and models/other calculations, TFI is concerned that, as written, the Draft *Handbook* encourages a lack of transparency and consistency in watershed TMDL development.

*Regardless of the assumed technical expertise of the TMDL practitioner for whom the Draft Handbook was intended, TFI requests that some discussion of data manipulation, data integration into modeling or other calculations in the final document be included.*

### **C. Lack of Margin of Safety Discussion**

As noted above, the Draft *Handbook* provides the TMDL practitioner wide latitude in receiving and manipulating data, inclusion of unique assumptions and selection and use of TMDL models and/or calculations. However, the document contains no discussion of how these decisions affect the qualification or quantification of the margin of safety (MOS) in the presentation of the final TMDL.

EPA defines the MOS as “an accounting of uncertainty about the relationship between pollutant loads and receiving water quality. The MOS can be provided implicitly through analytical assumptions or explicitly by reserving a portion of loading capacity.” Draft *Handbook*, p. 1.

Because the TMDL is defined by the equation “ $TMDL = LC = \Sigma WLA + \Sigma LA + MOS$ ,” the MOS comes at the expense of stakeholders with wasteload and the loading allocations. TFI

understands that federal, state and local water quality agencies are under increasing resource and time constraints. However, constraints such as data limitations and variations among datasets or lack of specificity in modeling should not be passed along to stakeholders as lowered WLAs or LAs, as this may place economically unreasonable or technically infeasible conditions on them.

TFI requests that EPA include a discussion of MOS in the final Handbook that addresses resource and time constraints and includes a balanced review of how decisions and assumptions made by the TMDL practitioner affects stakeholder implementation of WLAs and LAs.

## **Conclusion**

TFI appreciates your consideration of these comments on EPA's Draft *Handbook for Developing Watershed TMDLs*. TFI commends EPA on its efforts to advance watershed-level water quality protection. We request that EPA consider and/or incorporate our comments on stakeholder involvement, data quality and integration, watershed TMDL implementation and the margin of safety when revising the document.

Please contact me by telephone at (202) 515-2706 or via e-mail if you would like to further discuss our comments.

Sincerely yours,



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