March 7, 2005

VIA E-MAIL AND FIRST-CLASS MAIL

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Subject: Draft Section 401 Certification, Upper Saginaw River Dredged Material Disposal Facility

Dear Mr. Saalfeld:

I am writing on behalf of the National Wildlife Federation (“NWF”) in response to the public notice of a proposed Water Quality Certification for the Department of the Army’s Upper Saginaw River Navigational Dredging Project and associated Dredged Materials Disposal Facility. NWF opposes the issuance of this certification by the Michigan Department of Environmental Quality (“DEQ”) for the reasons provided below, as well as for the reasons set forth in the letter of December 17, 2004, to you from Tracy J. Andrews of Olson, Bzdok & Howard, on behalf of Citizens Against Toxic Substances.

NWF is the Nation’s largest member-supported conservation education and advocacy organization. Founded in 1936, NWF works to educate, inspire, and assist individuals and organizations of diverse cultures to conserve wildlife and other natural resources and to protect the environment in order to achieve a peaceful, equitable, and sustainable future. NWF and its members want to maintain and protect the chemical, physical and biological integrity of the Nation’s waters, including those in Michigan. NWF’s members enjoy the beneficial uses provided by wetlands, rivers, and lakes, including their value as habitat for fish and wildlife.
1. **The DEQ may not establish effluent limitations that merely prohibit concentrations higher than those found in the Saginaw River that are effective after March 23, 2007.**

The draft certification includes a condition establishing effluent limitations for the Dredged Material Disposal Facility (“DMDF”). Among other things, this condition establishes effluent limitations of “no net increase” for dioxins/furans, PCBs, and mercury. Condition 3.1. The DEQ explains that the “no net increase” effluent limitations prevent the effluent from having higher concentrations of these chemicals than the concentrations found in the Saginaw River. DEQ Fact Sheet at 3.

Under § 401 of the Clean Water Act (“the Act”), the DEQ must certify that the DMDF’s discharges will comply with applicable effluent limitations, specifically the effluent limitations established pursuant to §§ 301 and 302 of the Act. 33 U.S.C. § 1341(a)(1). “No net addition” limitations may be the current applicable effluent limitations for toxic substances under the DEQ’s rules. See Mich. Admin. Code R. 323.1211(7)(d). Even were such limitations currently applicable, however, no certification may authorize “no net addition” limitations which are effective after March 23, 2007. See 40 C.F.R. § 132, Appendix F, Implementation Procedure 5, § E.3.a.

The DMDF is projected to be used over a 20-year period, at minimum. Therefore, the DEQ may not issue the draft certification without including a set of effluent limitations for dioxins/furans, PCBs, and mercury which become effective after March 23, 2007. Such effluent limitations must be “established in accordance with procedure 5.F.2. of appendix F” of the Water Quality Guidance for the Great Lakes System. 40 C.F.R. § 132, Appendix F, Implementation Procedure 5, § E.3.a.

2. **The DEQ may not authorize a quantification level of 0.2µg/liter for PCBs.**

PCBs are pollutants which will have a water quality-based effluent limitation (“QBEL”) lower than the lowest concentration quantitatively measurable by laboratory procedures, otherwise known as the “quantification level.” To control a toxic pollutant with a QBEL calculated to be less than the quantification level, the U.S. Environmental Protection Agency (“EPA”) required the Great Lakes states to adopt rules requiring the permitting authority to specify the quantification level. See 40 C.F.R. § 132, App. F, Procedure 8: Water Quality-based Effluent Limitations Below the Quantification Level. The permitting authority must specify the quantification level as follows:

The quantification level shall be the minimum level (ML) specified in or approved under 40 CFR part 136 for the method for that pollutant. If no such ML exists, or if the method is not specified or approved under 40 CFR part 136, the quantification level shall be the lowest quantifiable level practicable.
Consistent with the EPA’s requirement, Michigan adopted the following rule:

The quantification level shall be the minimum level (ML) specified in, or approved under, 40 C.F.R. § 136 (1995) for the method for that toxic substance. If no such ML exists, or if the method is not specified or approved under 40 C.F.R. § 136, then the quantification level shall be the lowest quantifiable level practicable as established by procedures approved by the department. When establishing a quantification level, the MDEQ shall consider the achievability of the value by competent commercial laboratories.

See R. § 323.1213(c).

EPA has designated Method 608 as a method for the determination of PCBs. See 40 C.F.R. § 136, App. A (Part 2). Method 608 can be used to determine the following PCB Aroclors: 1016, 1221, 1232, 1242, 1248, 1254, and 1260. See id., at App. A (Part 21), § 1.1. An Aroclor is a mixture of individual PCB compounds, or congeners. The last two digits of each Aroclor indicates the percent by weight of chlorine in the mixture. Thus, Aroclor 1242 contains 42% chlorine by weight.

Method 608 does not specify or approve a minimum level as a quantification level. It only specifies a method detection limit (0.065 \( \text{g/liter} \)), and only for Aroclor 1242. See 40 C.F.R. § 136, App. A (Part 2), Table 1. The method detection limit (“MDL”) “is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the value is above zero.” See id., at App. A (Part 2), § 14.1.

The DEQ did not specify the quantification level for PCBs in accordance with the rules because it has not determined or demonstrated that 0.2\( \mu g/\text{liter} \) is the lowest quantifiable level practicable. In the past, the DEQ has attempted to justify 0.2 \( \mu g/\text{liter} \), explaining that it derived it “by multiplying the MDL for Aroclor 1242 of 0.065 \( \text{g/liter} \), given in USEPA promulgated Method 608, by a factor of 3.18.” See Letter from Peter Ostlund, Chief, Lakes Erie and Huron Permits Unit, Water Division, to Neil S. Kagan, Senior Counsel, National Wildlife Federation (Dec. 4, 2002), at 2. The DEQ claimed, “This is a procedure USEPA currently recommends for establishing quantification levels when minimum levels are not included in a promulgated analytical method.” See id.

In fact, EPA does not recommend any one approach to determining the quantification level. EPA identified the multiplication of the MDL by a factor of 3.18 as one approach to developing a quantification level. See EPA, Water Quality Guidance for
the Great Lakes System: Supplementary Information Document (SID) (EPA-820-B-95-001, Mar. 1995), at 419. But EPA’s guidance does not sanction stopping with the multiplication function. It goes on to say “the permitting authority must demonstrate that any minimum quantification level specified is as close to the WQBEL as practicable.” See id. The DEQ has failed to make that demonstration with regard to the draft certification, contrary to R. § 323.1213(c).

Even if the DEQ had demonstrated that 0.2 µg/liter is the lowest quantifiable level practicable, that level could only be applicable to Aroclor 1242 because the DEQ could only have derived it by multiplying 3.18 times the MDL for that Aroclor. The 0.2 µg/liter level could not be the quantification level for any other Aroclor because Method 608 does not produce MDLs for any others. See 40 C.F.R. § 136, App. A (Part 2), Table 1. Thus, the DEQ failed properly to specify the quantification level for total PCBs, contrary to R. § 323.1213(c).

Finally, the DEQ’s specification of a quantification level for Aroclor 1242 only will not ensure compliance with the quantification level for total PCBs. By basing the quantification level on a particular concentration of only one Aroclor—Aroclor 1242—the DEQ is allowing the Army to ignore the presence of other Aroclors. As a result, the Army would be deemed to be in compliance with the quantification level based only on the concentration of Aroclor 1242, even though the DEQ established 0.2 µg/liter as the quantification level for total PCBs. See Condition 3.7.2 (total PCBs defined as “the sum of the individual analytical results for each of the aroclors [sic] 1016, 1221, 1232, 1242, 1248, 1254, and 1260”) (emphasis added).

3. **Conclusion.**

For the foregoing reasons, the DEQ may not issue the draft certification.

Sincerely,

[Signature]

Neil S. Kagan  
Senior Counsel

NSK/nk

c: Tracy J. Andrews  
Andy Buchsbaum  
Sue Cameron  
Terry Miller