



Division of Surface Water

Response to Comments on Draft Rule

Rule: OAC 3745-32-05 Criteria for decision by director.

Agency Contact for this Package

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On February 19, 2015, Ohio EPA made available for review and comment one Section 401 Water Quality Certification program rule. This document identifies the comments and questions received during the associated comment period, which ended on March 17, 2015.

Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health.

General Comments

Comment 1: Over many years through our involvement in the farming, real estate, and construction industries we have been directly engaged in the evolution of regulatory policy regarding wetlands, streams, endangered species, erosion control and others matters affecting use of land and water resources. Through these experiences, we have gained a healthy appreciation for the interdependency of nature, science, industry and policy.

The mere existence of debate regarding the environmental impact of the sedimentary materials being dredged from our rivers and port areas highlights several factual points that must be considered in current policy making. Everyone agrees that chemicals and organic materials exist in the sediment and that they did not get there naturally. These materials have been carried to their current location by suspension in waters flowing off of upstream watersheds. And most would agree that they are harmful to the perpetuation of healthy ecosystems. In isolation, the explicit practice of placing such dredged sedimentary materials in the Lake Erie basin may not be the singular culprit in the recent incidence of harmful algal blooms. But generally speaking, very few things in our complex engagement with the

natural environment likely on their own can be identified as creating a singular consequential outcome. With this premise, we offer the following observations.

Our family home is located in the middle of the farm fields of central Ohio, far from Lake Erie, but not all that different from the region of Ohio drained by the Maumee River. In over 20 years, little has changed physically within several miles of our property. No significant logging, no mining, no major construction projects. Wood lots dot the surrounding landscape, including one on our property. Streams cross miles of fairly flat terrain to feed ever increasingly larger waterways to drain the watershed and deposit ultimately into the lakes and oceans.

Shag bark trees and other bat roosting habitats are prevalent in the scattered wood lots. In years past, daily at dusk, bats appeared and we could watch them and even entice them to chase tossed bottle caps and pebbles. The roosting habitats remain, but there no longer are bats.

The other thing that is missing; insects. For the past several years, when driving the township roads to and from home, what formerly was the expected windshield splattering at dusk is no longer is an issue. In fact, I can't recall a single bug of consequence on the windshield this entire year. The windshield washer reservoir had been empty all summer and there wasn't a need to refill. The light next to the door is on when we get home in the evenings and we didn't need to dodge the moths and June bugs to get in the house. Neither I, nor my young kids or wife have had to scratch one mosquito bite all year. We haven't had to clean cob webs in the stables. The typical migration of spiders into the house as the weather cools has not occurred. I don't recall our kids asking to collect fireflies, because there have been too few to notice. We don't hear crickets anymore. The invasion of grasshoppers as the farmers harvest the fields has not happened. The annual attack from Japanese beetles on the ornamental trees has not happened for several years. To our surprise, even the large old ash trees that were decimated by the Emerald ash borer have returned to life without any further infestation. I don't remember the last time we saw a butterfly, particularly the once ubiquitous Monarch butterfly. And the barn swallows that formerly dive bombed us in pursuit of the bugs churned up while mowing the pastures, are no more. Not enough insects to eat; no bats.

The other thing that is missing; water plants and aquatic life in the stream running thru our woods. As youngsters we would fish this stream for bluegill, minnows and frogs. None exist now. No plants, animals and other organic matter to aid in filtering the chemicals, fertilizers and particulates that pass from the surrounding fields. Without such filters, these dissolved unnatural elements have no barriers to keep them from accumulating at points of deposit downstream, such as are found at the eastern basin of Lake Erie.

So what has changed since my younger days working on my relative's farms?

- Tiling of fields has expanded dramatically with the invention of flexible, affordable plastic tiling systems. So rainy periods no longer keep ground from being cultivated and therefore is more susceptible to surface erosion during the periods of highest application of chemicals and fertilizers.

- The equipment has also gotten bigger and is now able to work in more extreme weather conditions, particularly in tiled fields.
- Widespread no-till or shallow till farming methods increase soil porosity due to earthworm activity remaining undisturbed. The combination of this and more effective tiling results in much higher rates of runoff entering directly into streams without any benefit of retention and settlement of particulates and chemicals.
- Fence rows and the vegetative buffer they provided are now virtually non-existent. In the past these provided habitat for a variety of both plant and wildlife and fostered filtration of surface runoff and drift from spray applications.
- The crops are pristine. No eaten holes in corn stalks. No defoliation of soybean leaves. No blight. No fungus. The effectiveness of species targeted fertilizers, herbicides, fungicides and insecticides combined with GMO plants is unbelievable when compared to 40 years ago.
- So gone also are the diversity of plants that once either coexisted or at least surrounded crop fields. Drift from herbicides has effectively eliminated previously common plants like daylilies, milkweed, elderberries, wild strawberries, blackberries and many others that supported a diversity of wildlife. Instead, the most offensive of plants such as poison ivy and other chemical resistive woody plants are thriving. These then further choke out the finer leaved plants that inhibit erosion and protect natural diversity near the ground surface.
- And there is ample evidence that the very insects, such as bees, that have a crucial codependency with the success of crops, are being decimated by current practices.

So what then can be surmised by these observations? We have allowed the creation of an extremely limited diversity of flora and fauna over vast watershed areas within states such as Ohio that possess large acreage devoted to farming. Farmed acres comprise as much as 41.7% of all acreage in the state of Ohio (See attached). We further have allowed overwhelming expansion of practices that greatly increase the application of fertilizers and chemicals that assure only targeted plants thrive at the expense of all others. We have created massive regions in which insects are eliminated, either chemically or by destruction of co-dependent plants. This significantly interrupts the fundamental food chain that supports larger species of birds, land and aquatic animals. This further contributes to the disruption of the health of streams and rivers. Which ultimately leads to an imbalance in the ecology in the lakes and oceans into which these waters deposit.

And, unlike every other industry, the agriculture industry is not required to identify and report to the EPA any point sources which discharge into waterways. This specific provision is contained in the **Clean Water Act, Section 502 General Definitions:**

(14) The term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

Such a provision fundamentally negates the aim of the Act by ignoring the massive distribution and release of chemicals across nearly half the surface area of Ohio. Such chemicals (glyphosate and many others) by their very purpose and design specifically target the essential processes that support life.

Rational thought compels critical deliberation of the notion that all of this and more are connected to the particular issue at hand in the eastern basin of Lake Erie. And to the endangerment of many species, including ourselves. (Dwight McCabe, The McCabe Companies)

Response 1: It is clear that polychlorinated biphenyls (PCBs) and other bioaccumulative chemicals of concern (BCCs) come from a variety of sources, most of which are associated with industrial activities including energy production. It is well documented that these chemicals have negatively impacted aquatic life in Lake Erie which has resulted in fish consumption advisories being issued. As a part of the Agency's attempt to improve the underlying environmental condition in Lake Erie, the rule establishes criteria that must be demonstrated in order to allow these types of chemicals from being reintroduced into the Lake once they are removed by dredging activities.

Comment 2: Comments: Proposed language in rule number 3745-32-05 is important to the rule and in regulating open lake dredge material on Lake Erie and contaminated therein. Concern is for first time violators and fine structures appropriate to penalty and violation. Solutions: Concern is for first time violators who should be held to a fine structure. Information to the contrary appears for paperwork violations (ie: fine waivers from ORC 119.14) as per the Business Impact Analysis. A solution would detail some fine or penalty associated with a small business, or a first time violation. (Scott Bushbaum)

Response 2: This rule simply sets forth criteria that the Director of Ohio EPA must consider when evaluating proposed 401 water quality certification applications involving dredged material from harbor or navigation maintenance activities that are proposed to be deposited in any part of Lake Erie that is within the territorial boundaries of the state or in the direct tributaries of Lake Erie within this state. To the extent that someone were to discharge fill material in any water of the state, including Lake Erie, without a lawful permit to do so, it would be a violation of state law and would not be considered a paperwork violation for purposes of Ohio Revised Code (ORC) Section 119.14.

Comment 3: The Ohio Environmental Council (OEC) thanks Ohio EPA and Governor Kasich for opposing open lake disposal of contaminated Cleveland Harbor sediments in Lake Erie. Open lake disposal near Cleveland would increase PCB (Polychlorinated Biphenyl) bioaccumulation in the food chain, ultimately impacting fish and their human and avian consumers.

OEC supports the draft rule amendment proposed by Ohio EPA, which will prohibit 401 certification for open lake disposal projects that could result in a modeled increase in the bioaccumulation of bioaccumulative chemicals of concern. (Ohio Environmental Council)

Response 3: Ohio EPA acknowledges the comment.

Comment 4: The County Engineers Association of Ohio would like to request that the comment period for changes to the Section 401 Water Quality Certification Rule OAC 3745-32-05 be extended 30 days. We would like the opportunity to further explore the impacts this rule has on road and bridge maintenance operations and construction project advancement. These rules would potentially raise project costs in the area of mitigation and delay projects due to review to which we are not currently subject. This could be an unfair burden to local counties and communities in the form of an unfunded mandate and be a detriment to public safety. We also would like to set up a meeting with OEPA before these rules are re-filed at JCARR to understand the full implication to local governments. (County Engineers Association of Ohio)

Response 4: Ohio EPA is choosing not to extend the comment period at this stage of the rulemaking process but has engaged and is willing to have a dialogue with the County Engineers Association of Ohio during the remainder of rulemaking process to better understand its concerns regarding how restrictions on open lake placement of contaminated dredged material from harbor or navigation maintenance activities from Lake Erie may impact its members' projects.

Comment 5: Amendments to the rule focus on increases in "bioaccumulation" of "bioaccumulative chemicals of concern (BCCs)" with respect to the discharge of dredged material in Lake Erie. Please note the following:

1. Clean Water Act (CWA) Section 404(b)(1) Guidelines promulgated by the U.S. Environmental Protection Agency (USEPA) are explicit at 40 CFR 230.11(d) in that they allow for an "increase" of contaminants, including BCCs, and provide for a determination by USACE as to whether such an increase would result in unacceptable adverse effects to the affected aquatic ecosystem. That determination includes consideration of the "material to be discharged, the aquatic environment at the proposed disposal site and the availability of contaminants." Therefore, this aspect of the proposed rule amendments attempts to contravene the intent of, and exceeds, CWA Section 404(b)(1) Guidelines.
2. This aspect of the proposed rule amendment directly pertains to the bioaccumulation of BCCs from sediment, namely dredged material to be discharged back into the Lake Erie Basin. Since it does not pertain to the fate of BCCs that are released from that dredged material to the water column and as such is not directed at water quality, it is beyond the regulatory purview of Section 401 of the Clean Water Act with respect to the issuance of state water quality certification (WQC) and compliance with applicable state water quality standards (WQSs). (U.S. Army Corps of Engineers, Buffalo District)

Response 5: Concerning point No. 1, under the Clean Water Act, States have a clear role in regulating the placement of dredged material that is above and beyond the 404(b)(1) guidelines. This fact and the distinction between 404(b)(1) guidelines and a state's authority to issue a water quality certification is well understood by the Corps as it is fundamental to the interrelationship and distinction between sections 404 and 401 of the Act. If the comment is intended to suggest that a state's water quality requirements can be more stringent than 404(b)(1) guidelines, then the Agency agrees. If the comment is intended to suggest that

the 404(b)(1) guidelines somehow trumps a state's determination of acceptability of material under a 401 water quality certification, then the Agency disagrees with that point.

Concerning point No. 2, the comment would appear to suggest that a state would be without authority to prevent the deposit of BCCs, even in the face of evidence that would show a bioaccumulative effect on aquatic life merely because the chemicals of concern would be in the sediment as opposed to the water column. Ohio EPA disagrees that a state's water quality certification would be limited in such a fashion. The Director's authority under a 401 water quality certification includes consideration of the project's potential impact on aquatic life.

Specific Comments

Comment 6: Section (B)(1) – In reference to bioaccumulation, what do the terms “modeled” and “increase” mean? As noted in General Comment 1, CWA Section 404(b)(1) Guidelines allow for an increase of contaminants associated with the discharge of dredged for fill material at a disposal site within waters of the United States, and there are considerations beyond such increases. BCCs are ubiquitous throughout the Great Lakes in air, water, soil, sediment and biota. Based on that fact, any dredged or fill material discharges, or Section 402 wastewater discharges in the form of effluent, will technically result in an increase in bioaccumulation of BCCs in Lake Erie. Such increases may not be measurable. (U.S. Army Corps of Engineers, Buffalo District)

Response 6: As noted above, Ohio's water quality standards are not intended to be, nor are they required to be, synonymous with the 404(b)(1) Guidelines. As such, Ohio EPA's standards may be more stringent than the Corps' own determinations of environmental acceptability under the 404(b)(1) guidelines. Considering the fact that fish in Lake Erie are already impaired by BCCs, the goal of this provision is to prevent net accumulation of a BCC by an organism. It would be incumbent on an applicant to make that demonstration as part of the 401 application process.

Comment 7: Section (B)(1) – With respect to “Dredged material found to be unsuitable for the deposit of dredged material pursuant to this paragraph,” please note that USACE has the authority to determine whether the discharge of dredged material meets CWA Section 404(b)(1) Guidelines. These guidelines provide the substantive environmental criteria used in evaluating proposed discharges of dredged or fill material into waters of the United States. Section 404 of the CWA requires that the discharge of dredged or fill material into waters of the United States be permitted by the USACE. The USACE evaluates and authorizes fill and dredged material discharge activities for its civil works projects pursuant to Section 404 of the CWA. The issuance of state WQC pursuant to Section 401 of the CWA does not provide states the authority to determine whether the discharge of dredged material meets CWA Section 404(b)(1) Guidelines. (U.S. Army Corps of Engineers, Buffalo District)

Response 7: Ohio acknowledges that the Corps conducts its own evaluation of the suitability of dredged material under the 404(b)(1) guidelines in dredging projects for purposes of determining the “federal standard” and that the Agency has at times disagreed with the Corps'

interpretations of those guidelines. However, an evaluation of a 401 water quality certification application is a completely separate evaluation from any determination by the Corps under the 404(b)(1) guidelines.

Comment 8: Section (B)(1) – With respect to “shall be placed in a confined disposal facility or an upland location determined to be protective of public health and the environment,” the issuance of state WQC pursuant to Section 401 of the CWA does not provide authority to Ohio to direct where dredge material can be placed, whether it be within a water of the United States, confined disposal facility, upland site or other location. Section 404 of the CWA requires that discharge sites in waters of the United States be specified by USACE through the application of the Section 404(b)(1) Guidelines developed by USEAP in conjunction with the USACE. How does such a requirement relate to compliance of a proposed discharge of dredge material with applicable state WQs? (U.S. Army Corps of Engineers, Buffalo District)

Response 8: It is well recognized that 401 certifications can include considerations of both direct and indirect effects on water quality. Under this rule, if the material is determined to be unsuitable for placement in the lake, it is recognized that there are other potential risks to water quality associated with this material if it is not appropriately managed in an upland location. The rule would ensure that potential impacts to water quality are adequately addressed by dictating some review/control over the final disposition of the material.

Comment 9: Section (B)(2) – How does this requirement relate to compliance of a proposed discharge of dredged material with applicable state WQs? (U.S. Army Corps of Engineers, Buffalo District)

Response 9: Currently there are international treaties and agreements between the United States and Canada that address Great Lakes water quality which includes concerns of bioaccumulative chemicals. This provision simply requires that to the extent an internal treaty or interstate compact relating to water quality would preclude the deposit of this material in Lake Erie, then the Director would be prohibited from issuing a certification in violation of that treaty or compact.

Comment 10: Section C – Please note the discharge of dredged material in the form of effluent from confined disposal facilities is not considered de minimis under CWA Section 404(b)(1) regulations (40 CFR 230) and formal Federal guidance. (U.S. Army Corps of Engineers, Buffalo District)

Response 10: The comment is acknowledged. As noted throughout these comments, these requirements are not intended to be synonymous with the 404(b)(1) guidelines.

Comment 11: Section C – As indicated in Specific Comment (2)(a), BCCs are ubiquitous throughout the Great Lakes across all environmental media. Therefore, not unlike external sources such as state permitted CWA Section 402 wastewater discharges and air emissions depositing into Lake Erie, the discharge of effluent from confined disposal facilities would also technically result in an increase in bioaccumulation of BCCs. Such increases may not be measurable. (U.S. Army Corps of Engineers, Buffalo District)

Response 11: Ohio EPA acknowledges that BCCs are ubiquitous throughout the Great Lakes and across all environmental media. This fact has caused significant impacts on aquatic life in Lake Erie and resulted in impairment to fish species. The rule is a step towards correcting this problem but also recognizes that a total elimination of BCCs from the activities covered under this rule would be difficult to achieve.

End of Response to Comments