



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

December 1, 2022

Shawn Hamilton
Secretary
Florida Department of Environmental Protection
3900 Commonwealth Boulevard M.S. 49
Tallahassee, FL 32399

Dear Secretary Hamilton,

This letter constitutes the U.S. Environmental Protection Agency's (EPA's) Administrator's Determination (Determination), pursuant to Clean Water Act (CWA) Section 303(c)(4)(B), that new and revised water quality standards (WQS) in Florida are necessary to satisfy the requirements of the CWA.¹ Specifically, EPA has determined that new and revised human health criteria (HHC) are needed to protect against adverse human health effects related to pollutants in Florida's surface waters. As explained further below, this Determination is based on information indicating that Florida's current HHC do not protect the State's designated uses and that additional HHC are needed for certain priority toxic pollutants for which Florida currently lacks any HHC.

Florida adopted its current HHC in 1992, based on the science and information available at that time, including a fish consumption rate (FCR) of 6.5 grams per day (g/day). Additionally, EPA promulgated HHC for Florida for a single pollutant – dioxin – in its 1992 National Toxics Rule (40 CFR 131.36) that were similarly based on a FCR of 6.5 g/day. Since 1992, national and regional data have become available that indicate greater levels of fish consumption, particularly among residents of coastal states like Florida. As Florida has recognized in its own efforts to update its HHC, new data have also become available since 1992 on the specific toxic pollutants that are likely to be present in Florida's waters, and how those pollutants may impact Florida's designated uses. New and revised HHC that take into account these updated data will ensure that the State's WQS adequately protect Florida's residents.

The State of Florida has acknowledged that updates to its HHC are necessary and has made considerable efforts to adopt new and revised HHC.² Florida previously developed updated criteria that were based on EPA's most recent national recommendations³ and State-specific data, but these were never finalized or submitted to EPA for review under CWA Section 303(c).⁴

¹ 33 U.S.C. 1313(c); see 40 CFR 131.22(b).

² Florida Department of Environmental Protection. (2016). *Technical Support Document: Derivation of Human Health-Based Criteria and Risk Impact Statement*. https://floridadep.gov/sites/default/files/HH_TSD.pdf

³ See U.S. EPA. (June 29, 2015). *Final Updated Ambient Water Quality Criteria for the Protection of Human Health*, 80 FR 36986.

⁴ Florida Department of Environmental Protection. (2016). *Technical Support Document: Derivation of Human Health-Based Criteria and Risk Impact Statement*. https://floridadep.gov/sites/default/files/HH_TSD.pdf

In its most recent letter to EPA,⁵ Florida explained that its efforts to obtain updated State-specific fish consumption data were delayed by the pandemic, and that the State is currently evaluating its options for updating its HHC. Florida indicated that one option would be to reinstate a Florida-specific fish consumption survey, which would be a multi-year effort.⁶ The State did not otherwise provide any timeline for updates to its HHC. EPA recognizes Florida's awareness of the issue and efforts to ensure that its HHC protect the State's residents from toxic pollutants. EPA is taking this step to make clear that new and revised HHC are necessary in Florida to meet CWA requirements.

I. Statutory and Regulatory Background

CWA Section 101(a)(2) establishes a national goal of "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water," wherever attainable. See also 40 CFR 131.2. EPA interprets "fishable" to mean that, at a minimum, the designated uses promote the protection of fish and shellfish communities and that, when caught, these can be safely consumed by humans.⁷

Under the CWA, states have the primary responsibility for reviewing, establishing, and revising WQS applicable to their waters (CWA Section 303(c)). WQS define the desired condition of a water body, in part, by designating the use or uses to be made of the water (40 CFR 131.2 and 131.10) and by setting the numeric or narrative water quality criteria to protect those uses (40 CFR 131.2 and 131.11). There are two primary categories of water quality criteria: human health criteria and aquatic life criteria. Human health criteria protect designated uses targeted toward human health, such as public water supply, recreation, and fish and shellfish consumption. Aquatic life criteria protect designated uses targeted toward aquatic life, such as survival, growth, and reproduction of fish, invertebrates, and other aquatic species. Water quality criteria "must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use" (40 CFR 131.11(a)(1)).

Section 304(a) of the CWA directs EPA to periodically develop and publish recommended water quality criteria "accurately reflecting the latest scientific knowledge" on the effects of pollutants on human health and welfare, including effects on aquatic life, as well as information on those pollutants, including their concentration and dispersal and how pollutants affect receiving waters (CWA Section 304(a)(1)). Those recommendations are available to states for use in developing their own water quality criteria (CWA Section 304(a)(3)). In 2015, EPA updated its CWA Section 304(a) national recommended criteria for human health for 94 pollutants.⁸ When states establish criteria, EPA's regulation at 40 CFR 131.11(b)(1) specifies that they should establish numeric criteria based on: (1) EPA's CWA Section 304(a) recommended criteria, (2) modified 304(a) recommended criteria that reflect site-specific conditions or (3) other scientifically defensible methods.

⁵ Letter from Adam Blalock, Deputy Secretary, Florida Department of Environmental Protection, to Jeanne Gettle, Deputy Regional Administrator, EPA Region 4. (October 10, 2022).

⁶ *Id.*

⁷ U.S. EPA, Office of Water. (2000). Memorandum #WQSP-00-03. http://water.epa.gov/scitech/swguidance/standards/upload/2000_10_31_standards_shellfish.pdf

⁸ U.S. EPA. (June 29, 2015). *Final Updated Ambient Water Quality Criteria for the Protection of Human Health*, 80 FR 36986. See also U.S. EPA. (2015). *Final 2015 Updated National Recommended Human Health Criteria*. <https://www.epa.gov/wqc/national-recommended-water-quality-criteria-human-health-criteria-table>

CWA Section 303(c)(2)(B), added to the CWA in the 1987 amendments to the Act,⁹ requires states to adopt numeric criteria, where available, for all toxic pollutants listed pursuant to CWA Section 307(a)(1) (i.e., priority toxic pollutants¹⁰) for which EPA has published CWA Section 304(a) recommended criteria, the discharge or presence of which could reasonably be expected to interfere with the states' designated uses. As articulated in EPA's December 12, 1988, *Guidance for State Implementation of Water Quality Standards for CWA Section 303(c)(2)(B)* ('1988 Guidance'), EPA identified three options that states could use to meet the requirements of CWA Section 303(c)(2)(B).¹¹ Option 1 is to adopt statewide numeric water quality criteria for all priority toxic pollutants for which EPA has issued CWA Section 304(a) recommendations, regardless of whether those pollutants are known to be present in a state's waters.¹² Option 2 is to adopt chemical-specific numeric water quality criteria for those priority toxic pollutants for which EPA has issued CWA Section 304(a) recommendations, and "where the State determines based on available information that the pollutants are present or discharged and can reasonably be expected to interfere with designated uses."¹³ Option 3 is to adopt a procedure to be applied to a narrative water quality standard to be used in calculating derived numeric criteria.¹⁴ In the 1992 National Toxics Rule, EPA promulgated water quality criteria for priority toxic pollutants for 14 states based on the Administrator's Determination that new or revised criteria were needed to bring those states into compliance with the requirements of CWA Section 303(c)(2)(B).¹⁵

States are required to hold a public hearing to review applicable WQS at least once every three years and, if appropriate, revise or adopt new standards (CWA Section 303(c)(1); 40 CFR 131.20(a)). This includes adopting criteria for additional priority toxic pollutants and revising existing priority toxic pollutant criteria as appropriate based on new information.¹⁶ Any new or revised WQS must be submitted to EPA for review and approval or disapproval (CWA Section 303(c)(2)(A) and (c)(3)). CWA Section 303(c)(4)(B) independently authorizes the Administrator to determine that a new or revised standard is necessary to meet CWA requirements. The authority to make a Determination under CWA Section 303(c)(4)(B) is discretionary and resides with the Administrator, unless delegated by the Administrator (40 CFR 131.22(b)). For the purposes of this Determination, the Administrator has delegated this authority to EPA's Assistant Administrator for the Office of Water.

II. History of Florida's Water Quality Standards Subject to this Determination

Florida's Existing Human Health Criteria for Priority Toxic Pollutants

Florida elected to comply with CWA Section 303(c)(2)(B) by following Option 2 in EPA's 1988 Guidance.¹⁷ In accordance with Option 2, Florida adopted HHC for 43 priority toxic pollutants in 1992,

⁹ Water Quality Act Amendments of 1987, Pub. L. 100-4, 101 Stat. 7.

¹⁰ See 40 CFR part 423, Appendix A – 126 Priority Pollutants.

¹¹ U.S. EPA. (December 1988). Transmittal of Final "Guidance for State Implementation for Water Quality Standards under CWA Section 303(c)(2)(B)," <https://www.epa.gov/sites/production/files/2014-10/documents/cwa303c-hanmer-memo.pdf>; see also U.S. EPA. (Dec. 22, 1992). *Establishment of Numeric Criteria for Priority Toxic Pollutants*, 57 FR 60848, 60853.

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.* at 60857.

¹⁶ *Id.* at 60873 (Explaining that "EPA expects to request States to continue to focus on adopting criteria for additional toxic pollutants and revising existing criteria in future triennial reviews which new information indicates is appropriate.").

¹⁷ U.S. EPA. (December 1988). Transmittal of Final "Guidance for State Implementation for Water Quality Standards under CWA Section 303(c)(2)(B)," <https://www.epa.gov/sites/production/files/2014-10/documents/cwa303c-hanmer-memo.pdf>

utilizing EPA-recommended procedures and science available at that time.¹⁸ Additionally, as noted above, EPA promulgated HHC for Florida for the priority toxic pollutant dioxin in its 1992 National Toxics Rule (40 CFR 131.36).

Florida's existing HHC apply to five classifications of waterbodies in the State with potable water supply and fish consumption uses (Chapter 62-302, Florida Administrative Code):

Class I	Potable Water Supplies
Class I-Treated	Treated Potable Water Supplies
Class II	Shellfish Propagation or Harvesting
Class III	Fish Consumption; Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife
Class III-Limited	Fish Consumption; Recreation or Limited Recreation; and/or Propagation and Limited Maintenance of a Limited Population of Fish and Wildlife

In 1992, EPA recommended a national default FCR of 6.5 g/day, based on the average per-capita consumption rate of fish from inland and nearshore waters for the U.S. population, for states to consider inputting into their calculation of HHC. Florida used this national default 6.5 g/day FCR, which was not based on any Florida-specific data, to derive its HHC in 1992 and has not revised those HHC since.

Changes in EPA's National Default Fish Consumption Rate

In 2000, EPA published its *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health* (2000 Methodology).¹⁹ The 2000 Methodology encourages the use of an upper percentile of fish consumption data for the target general population rather than an average.²⁰ Accordingly, in 2000 EPA updated its national default FCR to 17.5 g/day, based on the 90th percentile of national survey data from 1994-1996.²¹ EPA updated its national default FCR once again in 2014 to 22 g/day, which represents the 90th percentile consumption rate of fish and shellfish from inland and nearshore waters for the U.S. adult population 21 years of age and older. EPA based the 2014 revised national default FCR on National Health and Nutrition Examination Survey (NHANES) data from 2003 to 2010.²² In addition, EPA's national default FCR is based on the total rate of consumption of fish and shellfish from inland and nearshore waters (including fish and shellfish from local, commercial, aquaculture, interstate, and international sources). This is consistent with a principle that each state does its share to protect people who consume fish and shellfish that originate from multiple jurisdictions.²³

¹⁸ U.S. EPA. (1991). *Amendments to the Water Quality Standards Regulation to Establish the Numeric Criteria for Priority Toxic Pollutants Necessary to Bring All States Into Compliance With Section 303(c)(2)(B)*, 56 FR 58420. <https://www.epa.gov/sites/production/files/2015-06/documents/ntr-proposal-1991.pdf>; see also U.S. EPA. (Dec. 22, 1992). *Establishment of Numeric Criteria for Priority Toxic Pollutants*, 57 FR 60848, 60853.

¹⁹ U.S. EPA. (2000). *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health*. U.S. Environmental Protection Agency, EPA-822-B-00-004. <https://www.epa.gov/sites/default/files/2018-10/documents/methodology-wqc-protection-hh-2000.pdf>

²⁰ *Id.* at 4-24.

²¹ *Id.* ("EPA recommends a default fish intake rate of 17.5 grams/day to adequately protect the general population of fish consumers[.]").

²² U.S. EPA. (2014). *Estimated Fish Consumption Rates for the U.S. Population and Selected Subpopulations* (NHANES 2003-2010), EPA 820-R-14-002. <https://www.epa.gov/sites/default/files/2015-01/documents/fish-consumption-rates-2014.pdf>

²³ U.S. EPA. (January 2013). *Human Health Ambient Water Quality Criteria and Fish Consumption Rates: Frequently Asked Questions*. <https://www.epa.gov/sites/default/files/2015-12/documents/hh-fish-consumption-faqs.pdf>

Florida's Actions to Reexamine its Existing Human Health Criteria

In accordance with CWA Section 303(c)(1) and 40 CFR 131.20, Florida is required to review all of its applicable WQS, including its existing HHC, at least once every three years and, if appropriate, revise those WQS or adopt new WQS. This includes evaluating whether its existing HHC should be updated to account for more recent data on FCRs, and whether additional priority toxic pollutants are now present in or discharged to Florida's waters such that new HHC for those pollutants are warranted.²⁴

In 2016, Florida conducted a review of its criteria using updated science including updated FCRs based on State- and region-specific data.²⁵ In pertinent part, Florida found in 2016 that "more recent fish consumption survey information indicates that consumption patterns have changed over time, necessitating a re-evaluation of the criteria."²⁶ As an example, Florida cited a 1994 FCR study of Florida residents that "suggested that Floridians eat significantly more fish than [EPA's 1992 national default FCR of 6.5 g/day]."²⁷ In addition, in response to public comments, in 2016 Florida evaluated the majority of the priority toxic pollutants for which EPA has national recommendations, and documented the uses of each chemical, data on concentrations of each of the pollutants in Florida's waters and fish, and information on environmental releases of those pollutants in Florida and neighboring states.²⁸ As a result of this review, Florida determined that new HHC for 36 priority toxic pollutants were warranted (in addition to revising its existing HHC for 40 priority toxic pollutants, based on updated science).²⁹

Florida determined that new HHC were not justified for five priority pollutants³⁰ that are banned pesticides with no active, ongoing environmental releases to Florida's waters.³¹ Florida also determined that HHC were not justified for eight priority toxic pollutants³² that were likely present or discharged to Florida's waters, because the State concluded that its existing aquatic life-based or organoleptic criteria for these pollutants are "fully protective of all uses, including human health[.]"³³ Florida determined that HHC were not needed for two priority toxic pollutants for which Florida concluded the current toxicological data did not support development of new HHC at that time (arsenic and thallium).³⁴

²⁴ See 40 CFR 131.20 ("State review and revision of water quality standards"); 40 CFR 131.11(a)(2) ("States must review water quality data and information on discharges to identify specific water bodies where toxic pollutants may be adversely affecting water quality or the attainment of the designated water use or where the levels of toxic pollutants are at a level to warrant concern and must adopt criteria for such toxic pollutants applicable to the water body sufficient to protect the designated use.")

²⁵ Florida Department of Environmental Protection. (2016). *Technical Support Document: Derivation of Human Health-Based Criteria and Risk Impact Statement*. https://floridadep.gov/sites/default/files/HH_TSD.pdf. Note that Florida's 2016 Technical Support Document refers to 43 revised HHC and 39 new HHC, however a small subset of the HHC in each of those groups were for non-priority toxic pollutants.

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.* at 5-7.

²⁹ *Id.*

³⁰ These five priority toxic pollutants are: alpha-hexachlorocyclohexane (HCH), endrin aldehyde, hexachlorobenzene, p,p'-dichlorodiphenyldichloroethane (DDD), and p,p'-dichlorodiphenyldichloroethylene (DDE).

³¹ Florida Department of Environmental Protection. (2016). *Technical Support Document: Derivation of Human Health-Based Criteria and Risk Impact Statement*. https://floridadep.gov/sites/default/files/HH_TSD.pdf

³² These eight priority toxic pollutants are: alpha-endosulfan, beta-endosulfan, gamma-HCH, selenium, toxaphene, cyanide, endosulfan sulfate, and endrin.

³³ Florida Department of Environmental Protection. (2016). *Technical Support Document: Derivation of Human Health-Based Criteria and Risk Impact Statement*. https://floridadep.gov/sites/default/files/HH_TSD.pdf

³⁴ *Id.* EPA did not update its national 304(a) HHC recommendations in 2015 for these priority toxic pollutants, citing outstanding technical issues. See U.S. EPA. (June 29, 2015). *Final Updated Ambient Water Quality Criteria for the Protection of Human Health*, 80 FR 36986.

Additionally, Florida did not evaluate whether new or revised HHC were needed for nine priority toxic pollutants for which EPA has CWA section 304(a) HHC recommendations.³⁵

Florida's 2016 revised and new HHC were never finalized or submitted to EPA. Then again in 2018, Florida initiated a rulemaking to consider proposed revisions to its HHC, stating its intent to conduct a State-wide fish consumption survey "to accurately determine the amount and types of fish commonly eaten by Floridians in advance of criteria development and adoption."³⁶ However, the survey plans were disrupted and ultimately terminated.³⁷

III. Florida's Current Human Health Criteria for Priority Toxic Pollutants Do Not Protect Florida's Designated Uses

As noted above, EPA's regulation at 40 CFR 131.11(a)(1) requires that water quality criteria contain sufficient parameters or constituents to protect the most sensitive designated use. Florida has itself recognized that its existing HHC "need to be updated because they do not reflect current national recommendations or state specific information."³⁸ One of the primary deficiencies with Florida's existing HHC is their reliance on EPA's national default FCR from 1992. As Florida has acknowledged, its existing HHC are based on an FCR that is far lower than national, regional or State-specific studies suggest Floridians consume.³⁹ In fact, the 1994 FCR study that Florida cited in 2016 indicated that Floridians' 90th percentile FCR was 24.18 g/day, and the 99th percentile rate was 32.75 g/day.⁴⁰ This finding is consistent with EPA's 2014 analysis of NHANES data from 2003 to 2010 which indicates that the 90th percentile consumption rate of fish and shellfish from Florida's inland and nearshore waters ranges from approximately 22 g/day to 30 g/day.⁴¹ In 2016, Florida used these same data from EPA's 2014 report⁴² as the basis for the FCRs to derive the HHC that the State ultimately did not finalize.⁴³ Without an updated FCR, Florida is not keeping pace with the current practices of Florida residents, who appear to be eating far more fish than the 6.5 g/day input indicates. Moreover, EPA has placed an emphasis on increased consumption of healthy fish for its human health benefits and is particularly concerned that people eating fish they catch for their sustenance are being disproportionately impacted.

³⁵ These nine priority toxic pollutants are: asbestos, copper, dioxin, methylmercury, nickel, n-nitrosodi-n-propylamine, n-nitrosodimethylamine, n-nitrosodiphenylamine, and zinc. EPA did not update its national 304(a) HHC recommendations in 2015 for these priority toxic pollutants, citing outstanding technical issues. See U.S. EPA. (June 29, 2015). *Final Updated Ambient Water Quality Criteria for the Protection of Human Health*, 80 FR 36986.

³⁶ Florida Department of Environmental Protection. (February 9, 2018). *Notice of Development of Rulemaking: 62-302.530 – Surface Water Quality Criteria*. https://www.flrules.org/Gateway/View_notice.asp?id=20029450 (last accessed September 9, 2022).

³⁷ Florida Department of Environmental Protection. *Fish Consumption Survey Project*. <https://floridadep.gov/dear/water-quality-standards/content/fish-consumption-survey-project> (last accessed September 15, 2022).

³⁸ Florida Department of Environmental Protection 2016. Technical Support Document: Derivation of Human Health-Based Criteria and Risk Impact Statement. See https://floridadep.gov/sites/default/files/HH_TSD.pdf

³⁹ *Id.* at 10 ("At the time the criteria were first adopted, the U.S. EPA assumed fish consumption and surface water drinking rates of 6.5 g/day and 2.0 L/day, respectively. The HHC currently listed in Rule 62- 302.530, F.A.C., were developed based on these point values. However, more recent fish consumption survey information indicates that consumption patterns have changed over time, necessitating a re-evaluation of the criteria.").

⁴⁰ *Id.* at 15.

⁴¹ U.S. EPA. 2014. *Estimated Fish Consumption Rates for the U.S. Population and Selected Subpopulations* (NHANES 2003-2010), EPA 820-R-14-002. <https://www.epa.gov/sites/default/files/2015-01/documents/fish-consumption-rates-2014.pdf>

⁴² *Id.*

⁴³ Florida Department of Environmental Protection 2016. Technical Support Document: Derivation of Human Health-Based Criteria and Risk Impact Statement. See https://floridadep.gov/sites/default/files/HH_TSD.pdf

While a State-wide fish consumption survey may be informative in the future, sufficient evidence exists currently to determine an appropriate FCR for Florida and derive protective HHC.

With respect to the universe of priority toxic pollutants for which Florida has HHC, Florida has also recognized that more priority toxic pollutants are likely present in State waters than originally understood in 1992. As EPA has explained, “the criteria development and the standards programs are iterative,” and states are expected to adopt “criteria for additional toxic pollutants which new information indicates is appropriate.”⁴⁴ Here, as explained above, available information included in the State’s rulemaking record indicates that Florida needs new HHC for 36 additional priority pollutants, beyond the HHC that the State adopted thirty years ago.

EPA has also determined that Florida needs HHC for the priority toxic pollutant methylmercury. EPA has a CWA Section 304(a) recommendation for methylmercury, but Florida does not have HHC for methylmercury. However, Florida developed a Total Maximum Daily Load (TMDL) for methylmercury in 2013 to address waterbodies that are listed as impaired based on fish consumption advisories for mercury issued by the Florida Department of Health.⁴⁵ Florida’s TMDL notes the Florida-specific sources of mercury that exist, and the fact that numerous waterbodies in the State are listed as impaired for methylmercury in fish that people consume indicates that methylmercury is present in Florida’s waters and can reasonably be expected to interfere with Florida’s designated uses.

IV. Clean Water Act Section 303(c)(4)(B) Determination

EPA has reviewed the available data in Florida’s rulemaking record, including the fish consumption data and information regarding the need for HHC for additional priority pollutants, and has reached the same conclusion that the State did in its supporting documents: many of Florida’s existing HHC are no longer protective of the applicable designated uses in accordance with the CWA and EPA’s regulations at 40 CFR 131.11 and therefore new and revised criteria are needed for Florida. Specifically, Florida’s existing HHC for 40 priority toxic pollutants do not reflect the latest scientific knowledge, including a FCR that is representative of the fish consumption patterns of Florida residents. In addition, Florida has no HHC for 37 priority toxic pollutants where available information indicates that those priority toxic pollutants are discharged or are present in the State’s waters and could reasonably be expected to interfere with applicable designated uses.

Accordingly, EPA is determining, pursuant to CWA Section 303(c)(4)(B) and 40 CFR 131.22(b), that new HHC are needed for 37 priority toxic pollutants and revised HHC are needed for 40 priority toxic pollutants to meet the requirements of the CWA for Florida (see appendix).

V. Next Steps

EPA acknowledges and appreciates Florida’s commitment to updating its HHC. This Determination does not preclude Florida from proceeding with its own rulemaking effort. That said, CWA Section 303(c)(4) requires that the Administrator promptly prepare and publish proposed regulations setting forth a new or revised WQS following a Determination that a new or revised WQS is necessary to meet the requirements of the CWA. In the event that Florida adopts and EPA approves new or revised WQS

⁴⁴ 57 FR at 60873.

⁴⁵ FDEP 2013. Final Report: Mercury TMDL for the State of Florida. October 24, 2013. See <https://floridadep.gov/sites/default/files/Mercury-TMDL.pdf>.

that sufficiently address this Determination before EPA proposes or promulgates federal WQS, EPA would no longer be obligated to propose or promulgate those federal WQS.

In this particular case, given the readily available information that Florida generated in its 2016 rulemaking effort⁴⁶ and that EPA published in its most recent national recommendations,⁴⁷ EPA believes that 12 months is a reasonable timeframe for the agency to develop proposed federal regulations setting forth protective HHC for Florida. EPA will seek feedback from Florida, as well as interested stakeholders, on EPA's proposed rulemaking in accordance with 40 CFR 131.22(c) and 131.20(b). After a federal rule is proposed, EPA plans to give full consideration to all comments received before proceeding to the final rule stage.

EPA is committed to working closely and collaboratively with Florida to ensure that the HHC are protective of applicable designated uses, based on sound scientific rationale and responsive to the needs of Florida's residents.

Sincerely,



Radhika Fox
Assistant Administrator

CC:

Daniel Blackman, Regional Administrator, EPA Region 4
Denisse Diaz, Director, Water Division, EPA Region 4

Adam Blalock, Deputy Secretary, Ecosystem Restoration, FDEP
Kim Shugar, Director, Division of Environmental Assessment and Restoration, FDEP

⁴⁶ Florida Department of Environmental Protection. (2016). *Technical Support Document: Derivation of Human Health-Based Criteria and Risk Impact Statement*. https://floridadep.gov/sites/default/files/HH_TSD.pdf

⁴⁷ U.S. EPA. (June 29, 2015). *Final Updated Ambient Water Quality Criteria for the Protection of Human Health*, 80 FR 36986. See also U.S. EPA. (2015). *Final 2015 Updated National Recommended Human Health Criteria*. <https://www.epa.gov/wqc/national-recommended-water-quality-criteria-human-health-criteria-table>

Appendix – Priority Toxic Pollutants Requiring Revised or New Human Health Criteria

Priority Toxic Pollutants Requiring Revised Human Health Criteria

Chemical Name	CAS Number
1,1,2,2-Tetrachloroethane	79345
1,1-Dichloroethylene	75354
2,4,6-Trichlorophenol	88062
2,4-Dichlorophenol	120832
2,4-Dinitrophenol	51285
2,4-Dinitrotoluene	121142
2-Chlorophenol	95578
3,3'-Dichlorobenzidine	91941
Acenaphthene	83329
Acrylonitrile	107131
Aldrin	309002
Anthracene	120127
Antimony	7440360
Benzo(a)anthracene	56553
Benzo(a)pyrene	50328
Benzo(b)fluoranthene	205992
Benzo(k)fluoranthene	207089
Beryllium	7440417
beta-Hexachlorocyclohexane (HCH)	319857
Bromoform	75252
Carbon Tetrachloride	56235
Chlordane	57749
Chlorodibromomethane	124481
Chloroform	67663
Chrysene	218019
Dibenzo(a,h)anthracene	53703
Dichlorobromomethane	75274
Dieldrin	60571
Fluoranthene	206440
Fluorene	86737
Heptachlor	76448
Hexachlorobutadiene	87683
Indeno(1,2,3-cd)pyrene	193395
Methylene Chloride	75092
p,p'- Dichlorodiphenyltrichloroethane (DDT)	50293
PCBs	--
Pentachlorophenol	87865
Pyrene	129000
Tetrachloroethylene	127184
Trichloroethylene	79016

Priority Toxic Pollutants Requiring New Human Health Criteria

Chemical Name	CAS Number
1,1,1-Trichloroethane	71556
1,1,2-Trichloroethane	79005
1,2,4-Trichlorobenzene	120821
1,2-Dichlorobenzene	95501
1,2-Dichloroethane	107062
1,2-Dichloropropane	78875
1,2-Diphenylhydrazine	122667
1,3-Dichlorobenzene	541731
1,3-Dichloropropene	542756
1,4-Dichlorobenzene	106467
2,4-Dimethylphenol	105679
2-Chloronaphthalene	91587
2-Methyl-4,6-Dinitrophenol	534521
3-Methyl-4-Chlorophenol	59507
Acrolein	107028
Benzene	71432
Benzidine	92875
Bis(2-Chloro-1-Methylethyl) Ether	108601
Bis(2-Chloroethyl) Ether	111444
Bis(2-Ethylhexyl) Phthalate	117817
Butylbenzyl Phthalate	85687
Chlorobenzene	108907
Diethyl Phthalate	84662
Dimethyl Phthalate	131113
Di-n-Butyl Phthalate	84742
Ethylbenzene	100414
Heptachlor Epoxide	1024573
Hexachlorocyclopentadiene	77474
Hexachloroethane	67721
Isophorone	78591
Methyl Bromide	74839
Methylmercury	22967926
Nitrobenzene	98953
Toluene	108883
Trans-1,2-Dichloroethylene (DCE)	156605
Vinyl Chloride	75014
Phenol	108952