



WEST VIRGINIA RIVERS

May 19, 2020

West Virginia Department of Environmental Protection
601 57th Street SE
Charleston, WV 25304

Submitted via email to: Laura.k.cooper@wv.gov

Attn: Laura Cooper

Re: Proposed 47 CSR 2 Rule

Ms. Cooper,

West Virginia Rivers Coalition (WV Rivers), on behalf of our members and the eighteen additional organizations that signed below, respectfully submits the following comments on the West Virginia Department of Environmental Protection's (WVDEP's) proposed revisions to the state's Water Quality Standards rule, 47 CSR 2.

I. **Delaying adoption of numerous human health criteria, and empowering a working group to recommend certain criteria, does not meet the legislative mandate in Senate Bill 163.**

The language in Senate Bill 163 was a carefully constructed compromise that delayed legislative action on human health criteria from the 2019 legislative session to the 2021 legislative session. It reads as follows:

On or before April 1, 2020, the Secretary shall propose updates to the numeric human health criteria found in Appendix E., subsection 8.23. Organics and subsection 8.25 Phenolic Materials *to be presented to the 2021 Legislative Session*. The Secretary shall allow for submission of proposed human health criteria until October 1, 2019, and for public comment and agency review for an appropriate time thereafter. (Emphasis added)

Conserving and Restoring West Virginia's Exceptional Rivers and Streams

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Clearly, updates to the human health criteria are required to be presented to the 2021 legislative session. This interpretation of Senate Bill 163 is consistent with the recollection of people, including legislators, who actually negotiated the language. WVDEP's attempt to update only 24 criteria is unacceptable.

WVDEP has provided no explanation of why it chose these 24 pollutants for updated criteria. If the method proposed by WVDEP for these pollutants is scientifically defensible, then the method should also be scientifically defensible for the other pollutants.

Further, pushing criteria development for certain pollutants to a monthly working group will in no way guarantee that they will ever be developed. In fact, there is precedent in West Virginia for a criteria development working group to not complete its work. The Nutrient Criteria Committee, which met monthly for years, developed criteria for lakes and reservoirs. But WVDEP stopped the working group meetings before it proposed criteria for rivers and streams.

II. The establishment of a monthly working group to make additional recommendations puts an unreasonable burden on the public and non-profit stakeholders.

It is WVDEP's job to make decisions about human health criteria, even when these decisions are difficult. The public and non-profit stakeholders have been playing by the rules and meeting the legislatively mandated deadlines to submit proposed human health criteria by October 1, 2019. The public and non-profit stakeholders have participated in public comment processes. We have done our job; now is the time for WVDEP to do its job.

III. We support WVDEP's fish consumption rate.

We commend WVDEP for its use of the U.S. Environmental Protection Agency's (EPA's) recommended national fish consumption rate (FCR) of 22.2 grams/day. Compared with the FCR previously proposed by WVDEP, this FCR provides better protections for both residents and downstream water consumers. Human health water quality criteria calculated using this FCR would allow our residents to have healthier diets because they could eat more fish, not less.

Moving forward, we recommend that WVDEP continue to use EPA’s FCR or EPA’s regional Inland South FCR, which is very similar to the national rate. As we enumerated in our proposal submitted 10/1/19, WVDEP’s previously proposed FCR of 9.9 grams/day, which is based on a 2008 West Virginia survey, is flawed. The FCR of 22.8 grams/day is more appropriate as its methodology and design provide a better estimate of long-term fish consumption habits. We support WVDEP’s decision to use the more appropriate and protective FCR.

IV. We oppose the weakening of any human health criteria.

We oppose WVDEP’s proposal to make 13 existing human health criteria less stringent. Those include 10 pollutants that would become less stringent in both Category A and Category C, two that would become less stringent in Category C only, and one that would become less stringent in Category A only. These chemicals are highly toxic and in use at multiple facilities in the state (Table 1). A review of discharge monitoring reports (DMRs) at several facilities shows that most of those facilities’ discharge levels are below the existing standards with a few exceptions. ICL-IP America is currently exceeding the standard for 2,4 Dimethylphenol. But for most facilities, we found that they are already successful meeting current standards – so why make any of them any less stringent?

Weakening human health criteria would open the door to the discharge of more of these toxins into our drinking water supplies. Weakening of the standards for carcinogens is not acceptable, given that West Virginia already has the third highest cancer death rate in the nation.¹

Table 1. Selected pollutants proposed to be less stringent

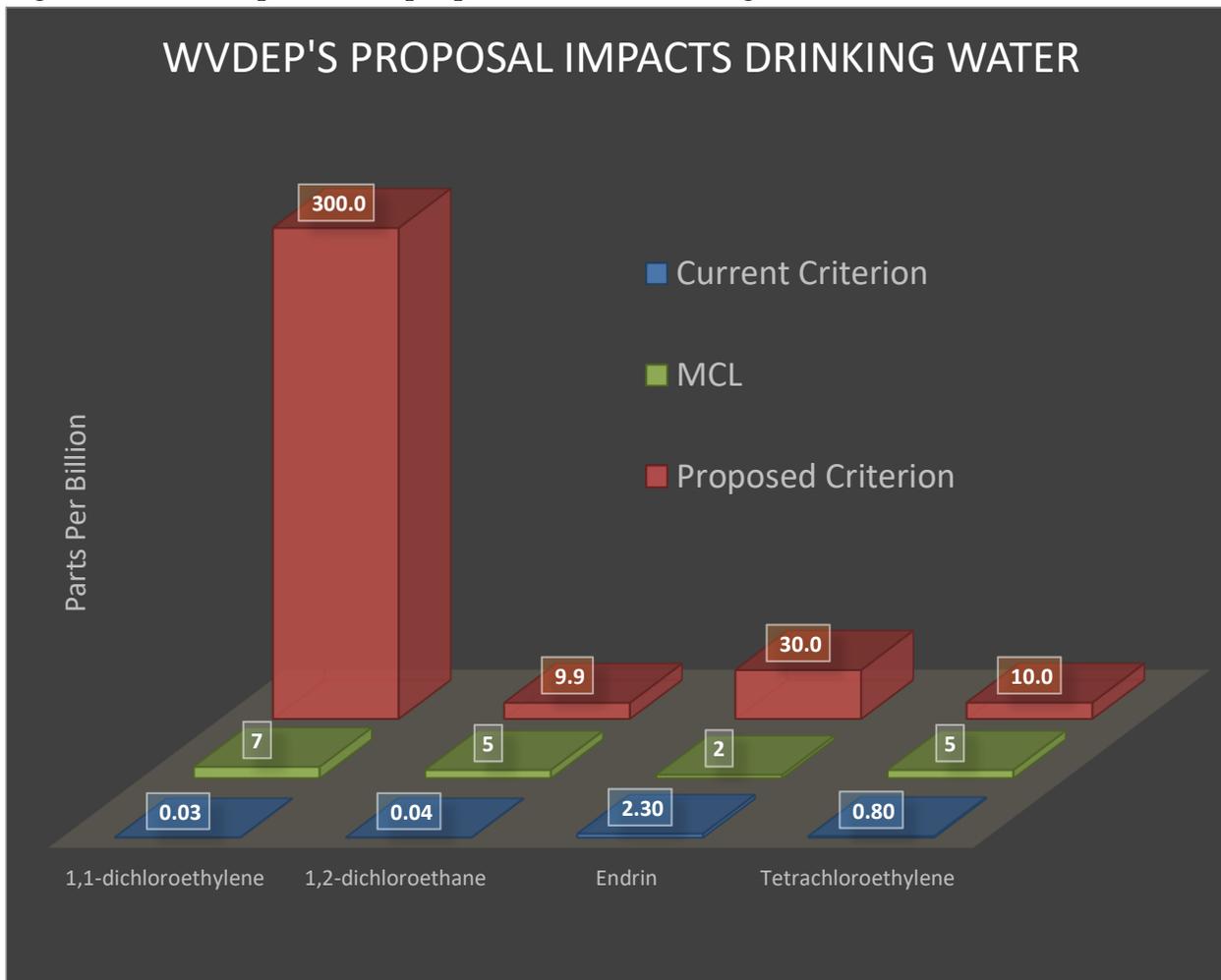
Pollutant	Uses	Health Impacts	# of Facilities Discharging
1,1 Dichloroethylene	Food packaging, flame-retardant	Affects organ development, central	5

¹ US Centers for Disease Control and Prevention

	coatings, adhesive applications	nervous system, and respiratory system	
1,2 Dichloroethane	Plastic manufacturing	Probable carcinogen	6
Acrylonitrile	Plastic manufacturing	Carcinogen, organ development and reproduction	6
Chloroform	Chemical manufacturing, disinfection byproduct	Organ damage, cancer	25
Chlorophenol	Pesticides, herbicides, and disinfectants	Increased risk of cancer, liver damage	5
Tetrachloroethylene	Dry-cleaning operations	Affects central nervous system, liver, kidneys, immune system, and reproductive system	5

Additionally, the weakening of human health criteria would shift the burden of meeting the criteria from industrial dischargers to water utilities. Category A water quality standards for 1,1-dichloroethylene, 1,2-dichloroethane, endrin, and tetrachloroethylene currently fall below Safe Drinking Water Act Maximum Contaminant Levels (MCLs). WVDEP’s proposal would increase the criteria to exceed the MCLs (Figure 1). Instead of industrial facilities being held responsible for removing chemicals from their discharges, the relaxed criteria would transfer the treatment costs to remove toxic chemicals to the water utilities. This is unacceptable, especially given the situation in Paden City where the water utility had to upgrade its water treatment facility to meet the MCL for Tetrachloroethylene. While we oppose relaxing any existing human health criteria, we particularly oppose making any of these criteria less stringent than the pollutant’s MCL.

Figure 1. Selected pollutants proposed to be less stringent than their MCL



V. **We recommend adopting all of EPA’s strengthened criteria.**

We strongly urge WVDEP to adopt all of EPA’s recommended human health criteria that are more stringent than current West Virginia criteria. WVDEP’s 2018 proposed updates included many pollutants that are not included in its 2020 proposal. Some of these chemicals, such as Polycyclic Aromatic Hydrocarbons, are in widespread use and are very damaging to human health. Polycyclic Aromatic Compounds are discharged at 39 facilities in the state and are classified as carcinogens. Several PAHs, are currently being discharged at the Koppers, Inc. facility in Follansbee, West Virginia. Benzo(a)anthracene is being discharged at maximum concentrations of 0.72 µg/L according to their most recent DMR. This concentration is 600 times higher than EPA’s recommended value. Indeno(1,2,3-cd)pyrene is being discharged at a concentration of

2.7 µg/L, exceeding their average daily permit limit and being released into the Ohio River at 2,250 times higher than EPA’s recommended value. Dibenzo(a,h)anthracene is being discharged at 1.0 µg/L, 10,000 times EPA’s recommended value. These PAH pollutants must be included in DEP’s proposed human health criteria updates to set stricter permit limits and reduce risks to public health. Table 2 presents additional information on selected pollutants included in WVDEP’s proposed 2018 rule, but omitted from the current proposal.

Table 2. Selected pollutants included in 2018 but omitted from 2020 updates.

Pollutant	Uses	Health Impacts	# of Facilities Permitted to Discharge
Acenaphthene	Found in coal tar, dyes, and plastic production	Skin irritation, liver damage, infertility	25
Aldrin*	Insecticide	Neurotoxin, carcinogen	1
Chlorobenzene	Solvent, chemical manufacturing	Liver and kidney damage	7
Cyanide	Chemical industry, plastics and mining	Seizures, coma, death, problems in reproduction	120
Dieldrin*	Insecticide	Immunotoxin, suspected carcinogen	1
Ethylbenzene	Petrochemical industry	Kidney damage, cancer	39
Hexachlorobenzene*	Fungicide	Liver disease, skin lesions	6

*Aldrin, Dieldrin and Hexachlorobenzene are included in the “dirty dozen” that were banned in the Stockholm Convention on Persistent Organic Pollutants

VI. We recommend adopting EPA’s proposed criteria that are absent from West Virginia’s current water quality standards rule.

The state has no current criteria for Phthalates, a group of chemicals used to make plastics softer and more flexible. This group of chemicals was included in WVDEP’s 2018 proposed update, but was left out of the 2020 proposal. Di-n-Butyl Phthalate is in use at six facilities in West Virginia. Diethyl phthalate and Dimethyl phthalate are used at five facilities. These chemicals have the most serious health impact on unborn babies and children compared to adults. Bis(2-Ethylhexyl) Phthalate is being discharged at the Koppers Inc facility in Follansbee, WV at a maximum daily concentration of 10 µg/L which is over 30 times EPA’s recommended criteria. Currently, there is no permitted limit for this pollutant, the facility simply reports their discharge concentration.

We recommend that WVDEP adopt EPA-recommended criteria for all pollutants that are currently in use but do not have standards. In our review, we found eight pollutants are currently in use within the state, are included in EPA’s recommended criteria, but do not currently have an associated state water quality standard (Table 3). WVDEP should include these eight pollutants in the proposed rule.

Table 3. EPA’s Human Health Criteria Absent in WV’s Water Quality Standards.

Pollutant	Uses	Health Impacts	# Facilities Discharging
1,2 Dichlorobenzene	Insecticide	Liver and kidney damage	7
1,2 Dichloroethylene	PVC pipes, upholstery, wall coverings, and automobile parts	Damage to liver, heart and lungs	4
Acrolein	Biocide, chemical manufacturing	Irritant to the eyes, respiratory system, stomach, and skin	1
Dinitrophenol	Dyes, wood preservatives, insect control	Blindness, death	4
Hexachlorobutadiene	Solvent, rubber, lubricant, heat transfer liquid, hydraulic fluid	Possible carcinogen, kidney damage	4
Hexachloroethane	fungicide, insecticide, lubricant, and plastics	Carcinogen	2

Isophorone	solvent in printing inks, paints, lacquers, and adhesives	Possible carcinogen, liver damage	1
Nitrobenzene	Lubricating oil	Blood disease	3

VII. WV Rivers recommends adopting human health criteria for PFAS chemicals.

We strongly encourage WVDEP to be proactive and add criteria for per- and polyflouroalkyl chemicals (PFOA and PFOS, broadly known as PFAS chemicals). PFAS chemicals cause health problems even at very low concentrations. A medical study of more than 70,000 people exposed to PFOA, or C8, released by DuPont’s Washington Works plant near Parkersburg, linked exposure to the chemical with multiple health problems from cancer to reduced immune function. The Washington Works facility is currently discharging PFOA at concentrations as high as 28 µg/L.

VIII. The Proposed Water Quality Variances are inappropriate and illegal.

The proposed water quality variances on Squires Creek, Bird’s Creek, Raccoon Creek and their unnamed tributaries are inappropriate and illegal because they do not advance or work towards the achievement of the baseline water quality standards for West Virginia that are otherwise applicable to those streams. Instead, they serve as a de facto replacement standard, a situation that is not allowed under the Clean Water Act.

The proposed variances would relax water quality standards in Squires Creek, Bird’s Creek, Raccoon Creek and their unnamed tributaries and essentially sacrifice these streams to enable DEP’s Special Reclamation Program to save money. The intent behind these variances is plainly expressed in the variance application:

Due to the volume of impaired water resources in the Three Fork Creek watershed from pre-law abandoned coal mines, continuing water treatment at bond forfeiture sites has no measurable impacts on receiving stream water quality, (sic) therefore a waste of time and money. So, the rationale is (sic); by applying for variances in Squires Creek, Birds Creek, and Raccoon Creek, monies saved by turning off OSR sites in these drainages will be better utilized for operation and maintenance at WVDEP in-stream doser facilities.

Three Forks Water Quality Variance Application at 10. In other words, WVDEP's Special Reclamation Program (SRP) would prefer to use its funds elsewhere and thus is willing to sacrifice Squires Creek, Bird's Creek, Raccoon Creek, and their unnamed tributaries. This is made even more abundantly clear by their plan to establish instream NPDES compliance points only at the "mouths of these streams" rather than at the discharge point. *Id.* at 1. If funds in the SRP are not adequate to treat the water, **WVDEP should recommend to the Legislature an increase in the Special Reclamation fees, rather than a weakening of the water quality standard.**

U.S. District Courts have recognized that water quality variances cannot simply serve as temporary, more lenient standards in an attempt to avoid attainment with the otherwise applicable standards. *Upper Missouri Waterkeeper v. United States Environmental Protection Agency*, 377 F.Supp.3d 1156, 1171 (D. Mont. 2019) citing *Micosukee Tribe of Indians of Florida v. United States*, 2008 WL 2967654 (S.D. Fla. July 29, 2008). Rather, the variance must make an attempt to achieve the attainment of baseline water quality standards, and set a definable timeline that ends with such attainment. *Id.* As the Upper Missouri Waterkeeper Court explained, the variance regulation "allows states to establish time-limited designated uses 'to make progress toward the underlying WQS.'" *Id.* at 1169 citing 80 Fed. Reg. at 51,037. This serves the purpose of the Clean Water Act by allowing states a "mechanism to make incremental progress toward restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters." *Id.* citing 80 Fed. Reg. at 51,037.

The proposed water quality variances for Squires Creek, Bird's Creek, Raccoon Creek, and their unnamed tributaries do not implement any procedures or timelines for improving the water quality in those streams. They do not contemplate achieving compliance with base water quality standards at all, much less by the end of the variance period. Because they do not represent an attempt at progress towards base water quality standards, but instead serve simply as more lenient standards to allow for cash savings, these variances are illegal.

IX. WVDEP should promote risk reduction, not risk avoidance.

To summarize, West Virginia Rivers Coalition urges WVDEP to be proactive in protecting the health of West Virginians and ensuring that waters within the state are safe for recreation and for use as sources of drinking water. The agency should make criteria more stringent, not less, in order to remove restraints on healthful activities and return to the restorative and preventative aims of our foundational environmental laws.

We do not believe WVDEP's proposed revisions to the state's water quality standards meet the Legislative mandate of SB163. The formation of the monthly working group would unnecessarily delay any additional updates, which was not the intent of SB163. WVDEP has done its due diligence through its triennial review and public input process on the human health criteria. It is time to act on all updates, and not leave the public at risk any longer. Future triennial reviews are the opportunity to re-evaluate any updates made at this time.

We commend WVDEP for adopting a more appropriate FCR and encourage WVDEP to adopt all EPA-recommended criteria that would be more protective of human health. We are opposed to relaxing standards for any pollutant that is harmful to human health; this would be a step in the wrong direction and increase health risks in a population that is already experiencing one of the highest rates of cancer in the nation. Additionally, the proposed variances are not allowable under the Clean Water Act.

Thank you for your careful consideration of these comments.

Signed,

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