EPA’s Blending Rule  
Background Information & Talking Points  
October 2018

What Is Blending?

Sewage treatment plants are designed to handle and treat a certain volume of wastewater. However, during rainstorms, stormwater and groundwater can enter the sewer system because of infiltration through broken pipes and inflow from inappropriate sewer connections (“I/I”). This extra volume can cause the maximum capacity of the treatment plant to be exceeded.

In order to prevent damage to the plant, a portion of the wastewater volume is sometimes diverted around certain treatment units and then recombined or “blended” with fully treated wastewater prior to discharge. Usually, this means routing the full volume through primary treatment (which settles out solid particles) but diverting some portion of the volume away from secondary treatment (which uses biological processes like microbes to break down pollutants). This is done to avoid sudden increases in volume that can stress or wash out the biological organisms needed for secondary treatment, potentially reducing treatment efficiency at the plant for weeks. However, it means that the sewage discharged from the plant is only partially treated.

No comprehensive analyses are available about the water quality and public health impacts of discharging blended wastewater. However, full secondary treatment is uniquely effective at removing bacteria, viruses, and other pathogens, and discharging sewage that foregoes that treatment could put public health at risk.[[1]](#endnote-1) One study found that, during blending, treatment plants are only able to remove 71% of *Cryptosporidium* parasites and 40% to 88% of *Giardia* parasites, while discharging very high levels of fecal coliform and *Enterococcus* bacteria.[[2]](#endnote-2) This pollution can have environmental justice consequences, as wastewater treatment facilities are often sited near low-income communities and communities of color.

How Is Blending Currently Regulated?

Whether or not they engage in blending, all treatment plants must meet effluent limits that restrict the quantity and concentration of pollutants in their discharges. However, these effluent limits do not necessarily address the risks posed by blended sewage, because they often do not set limits on pathogens, or do not express those limits in a way that addresses the acute (short-term) risk faced by a person exposed to blended wastewater.

Another regulatory provision has therefore been relied upon to protect the public from blending impacts. EPA has long considered blending to be a “bypass” as defined in the agency’s regulations. A “bypass” is the “intentional diversion of waste streams from any portion of a treatment facility,” and is prohibited unless there are “no feasible alternatives.”[[3]](#endnote-3) However, in 2013, the U.S. Court of Appeals for the Eighth Circuit ruled, in a case brought by an association representing wastewater utilities, that this interpretation exceeded the EPA’s authority under the Clean Water Act.[[4]](#endnote-4)

EPA views the court’s ruling as binding only in the 7 states within the jurisdiction of the Eighth Circuit. But EPA staff have stated that administering two different regulatory approaches to blending in different regions of the country is not tenable, and that the issue should be resolved through rulemaking.

What Is EPA Proposing to Do Now?

In April 2018, EPA announced that it would undertake a new rulemaking on blending.[[5]](#endnote-5) It is still unclear what changes the agency will make to the regulations.

However, in recent conversations, EPA staff have indicated that under the proposed new rules, blending likely would be explicitly authorized under certain “wet weather” conditions. It appears that EPA intends to establish some sort of broad standard requiring treatment plants to “minimize” the impacts of blending, which would be translated into specific requirements in individual plants’ discharge permits. Examples of such requirements could include the use of alternative treatment process or efforts to address the underlying I/I problems that lead to blending in the first place. The agency intends to move forward with these changes despite the lack of data on what the environmental and public health consequences will be.

It is worth remembering that EPA had previously proposed to authorize blending in 2003 under the Bush administration, but after more than 98,000 public comments were submitted in opposition, the House of Representatives voted overwhelmingly to reject the proposal and EPA withdrew it.[[6]](#endnote-6)

How Can I Get Involved?

EPA is providing for stakeholder input on the direction of the rulemaking before it proposes any specific regulatory changes. The agency has invited members of the public to attend three “listening sessions” on October 16, 2018 (Washington, DC), October 24, 2018 (Lenexa, KS), and October 30, 2018 (online). You can provide oral or written feedback at these sessions. Register for these sessions at <https://www.epa.gov/npdes/peak-flows-sewage-treatment-plants>.

You can also provide written comments to the docket EPA has set up for this rule by October 31, 2018 at <https://www.regulations.gov/docket?D=EPA-HQ-OW-2018-0420>.

Recommended Talking Points

* It is irresponsible to authorize wholesale the practice of blending when we don’t have all the facts about its environmental and health impacts.
* The available evidence we do have shows that blended sewage contains more pathogens than fully-treated sewage.
* EPA should study, monitor, and assess the impacts of blending before coming to a decision.
* In many communities, including environmental justice communities, discharging partially treated sewage could have serious public health consequences.
* If blending is authorized at all, it should only be allowed when absolutely necessary to avoid damage to the treatment plant, rather than any time it rains. In other words, it should be an option of last resort.
* Blending is not a long-term solution, and it should never be authorized unless the utility is also required to address the underlying problems with the collection system that allow excess volume into the system.
* Any authorized blending should be subject to stringent requirements that minimize the discharge of pathogens, including limits on how often treatment plants can discharge blended wastewater.
* Any treatment plant that is authorized to engage in blending must be subject to meaningful health-based permit limits for pathogens that address acute exposure risks.

1. *See* NRDC, *Swimming in Sewage* (2004), <https://www.nrdc.org/sites/default/files/sewage.pdf>. [↑](#endnote-ref-1)
2. EPA, Draft Summary of Blending Practices and the Discharge of Pollutants for Different Blending Scenarios (2014), p. 9, <https://www.epa.gov/sites/production/files/2015-10/documents/sso_lit_review_draft.pdf>. [↑](#endnote-ref-2)
3. 40 C.F.R. 122.41(m). [↑](#endnote-ref-3)
4. *Iowa League of Cities v. EPA*, 711 F.3d 844 (8th Cir. 2013). [↑](#endnote-ref-4)
5. Public Listening Session; Stakeholder Input on Peak Flows Management, 83 Fed. Reg. 44,623 (Aug. 31, 2018), <https://www.gpo.gov/fdsys/pkg/FR-2018-08-31/pdf/2018-19016.pdf>. [↑](#endnote-ref-5)
6. *See* National Pollutant Discharge Elimination System (NPDES) Permit Requirements for Peak Wet Weather Discharges From Publicly Owned Treatment Works Treatment Plants Serving Separate Sanitary Sewer Collection Systems, 70 Fed. Reg. 76,013 (Dec. 22, 2005), <https://www3.epa.gov/npdes/pubs/fr_peak_wet_weather_policy.pdf> (describing the 2003 proposal in the context of a subsequent 2005 policy proposal that was also itself abandoned). [↑](#endnote-ref-6)