

# Proposed Effluent Limitations Guidelines and Standards for Oil and Gas Extraction

## Summary

EPA proposes technology-based pretreatment standards under the Clean Water Act for discharges of pollutants into publicly owned treatment works (POTWs) from existing and new unconventional oil and natural gas (UOG) extraction facilities. The proposed rule would better protect public health, the environment, and the operational integrity of POTWs by establishing pretreatment standards that would prevent the discharge of pollutants in wastewater from onshore UOG extraction facilities to POTWs. This proposed rule would fill a gap in existing federal wastewater regulations to ensure that the current practice of not sending wastewater discharges from this sector to POTWs continues into the future.

## Background

Responsible development of America's oil and gas resources offers important economic, energy security, and environmental benefits. EPA is working with states and other stakeholders to understand and address potential impacts of hydraulic fracturing, an important process involved in producing UOG, so the public has confidence that oil and natural gas production will proceed in a safe and responsible manner. EPA is moving forward with several

initiatives to provide regulatory clarity with respect to existing laws and using existing authorities, where appropriate, to enhance public health and environmental safeguards.

UOG extraction wastewater can be generated in large quantities and contain constituents that are potentially harmful to human health and the environment. Wastewater from UOG wells often contains high concentrations of salt content, also called total dissolved solids or TDS. The wastewater can also contain various organic chemicals, inorganic chemicals, metals, and naturally-occurring radioactive materials (also referred to as technologically enhanced naturally occurring radioactive material or TENORM). This potentially harmful wastewater creates a need for appropriate wastewater management infrastructure and practices.

Historically, operators primarily managed their wastewater via underground injection in disposal wells (where available). Where UOG wells were drilled in areas with limited underground injection wells, and/or there was a lack of wastewater management alternatives, it became more common

for operators to look to public and private wastewater treatment facilities to manage their wastewater. Because they are not typical of POTW influent wastewater, some UOG extraction wastewater constituents:

- can be discharged, untreated, from the POTW to the receiving stream
- can disrupt the operation of the POTW (for example, by inhibiting biological treatment)
- can accumulate in biosolids (also called sewage sludge), limiting their use, and
- can facilitate the formation of harmful disinfection by-products.

Based on the information reviewed as part of this proposed rulemaking, this proposed prohibition of discharges to POTWs reflects current industry practice. EPA has not identified any existing onshore UOG extraction facilities that currently discharge wastewater to POTWs. However, because onshore unconventional oil and gas extraction facilities have discharged to POTWs in the past, and because the potential remains that some facilities can consider discharging to POTWs in the future, EPA proposes this rule.

The data reviewed by EPA show that the UOG extraction industry is not currently managing wastewaters by sending them to POTWs. Therefore, the proposed rule causes no incremental change to current industry practice that EPA measured as compliance costs or monetized benefits.

Still, EPA has considered that while states, localities, and POTWs are not currently approving these wastewaters for acceptance at POTWs, some POTWs continue to receive requests to accept UOG extraction wastewater. This proposed rule would provide regulatory certainty and would eliminate the burden on POTWs to analyze such requests.

## For More Information

You can view the Federal Register Notice on EPA's website for Unconventional Extraction in the Oil and Gas Industry at <http://water.epa.gov/scitech/wastetech/guide/oilandgas/unconv.cfm>. In addition, the proposed rule will be available at <http://www.regulations.gov> under Docket ID: EPA-HQ-OW-2014-0598. The public comment period for this proposed rule is 60 days. You may also contact Lisa Biddle at [Biddle.Lisa@epa.gov](mailto:Biddle.Lisa@epa.gov).