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July 16, 2015

Water Docket  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave. NW.  
Washington, DC 20460

Attention: Docket ID No. EPA-HQ-OW-2014-0598  
Effluent Limitations Guidelines and Standards for the Oil and Gas  
Extraction Point Source Category

These comments are filed on behalf of the Independent Petroleum Association of America (IPAA), the American Association of Professional Landmen (AAPL), the Association of Energy Service Companies (AESCC), the International Association of Drilling Contractors (IADC), the International Association of Geophysical Contractors (IAGC), the National Stripper Well Association (NSWA), the Petroleum Equipment Suppliers Association (PESA), and the following organizations:

Arkansas Independent Producers and Royalty Owners Association  
California Independent Petroleum Association  
Coalbed Methane Association of Alabama  
Colorado Oil & Gas Association  
East Texas Producers & Royalty Owners Association  
Eastern Kansas Oil & Gas Association  
Florida Independent Petroleum Association  
Idaho Petroleum Council  
Illinois Oil & Gas Association  
Independent Oil & Gas Association of New York  
Independent Oil & Gas Association of West Virginia  
Independent Oil Producers' Agency  
Independent Oil Producers Association Tri-State  
Independent Petroleum Association of New Mexico  
Indiana Oil & Gas Association  
Kansas Independent Oil & Gas Association  
Kentucky Oil & Gas Association  
Louisiana Oil & Gas Association  
Michigan Oil & Gas Association  
Mississippi Independent Producers & Royalty Association  
Montana Petroleum Association  
National Association of Royalty Owners  
Nebraska Independent Oil & Gas Association  
New Mexico Oil & Gas Association  
New York State Oil Producers Association  
North Dakota Petroleum Council

Northern Montana Oil and Gas Association  
Ohio Oil & Gas Association  
Oklahoma Independent Petroleum Association  
Panhandle Producers & Royalty Owners Association  
Pennsylvania Independent Oil & Gas Association  
Permian Basin Petroleum Association  
Petroleum Association of Wyoming  
Southeastern Ohio Oil & Gas Association  
Tennessee Oil & Gas Association  
Texas Alliance of Energy Producers  
Texas Oil and Gas Association  
Texas Independent Producers and Royalty Owners Association  
Utah Petroleum Association  
Virginia Oil and Gas Association  
West Slope Colorado Oil & Gas Association  
West Virginia Oil and Natural Gas Association  
Western Energy Alliance

Collectively, these groups represent the thousands of independent oil and natural gas explorers and producers, as well as the service and supply industries that support their efforts, that will be the most significantly affected by the actions resulting from this regulatory proposal. Independent producers drill about 90 percent of American oil and natural gas wells, produce about 54 percent of American oil, and more than 85 percent of American natural gas.

In addition to the specific comments made herein, we support those comments submitted separately by the participants in these comments.

### **Overview**

These proposed Effluent Limitations Guidelines (ELG) address requirements related to pretreatment standards for unconventional oil and gas (UOG) extraction waste water sent to publicly owned treatment works (POTWs). The Environmental Protection Agency (EPA) essentially makes its decisions in this proposal on four factors:

1. This pretreatment ELG should be consistent with the current oil and gas extraction direct discharge ELG.
2. UOG extraction waste water is managed primarily through the use of Underground Injection Control (UIC) Class II injection wells regulated under the federal Safe Drinking Water Act (SDWA).
3. UOG extraction waste water is utilized in extensive recycling operations to provide source water for hydraulic fracturing operations.
4. The composition of UOG extraction waste water would “interfere” with POTWs waste water treatment.

Based on these factors EPA proposes a no discharge ELG. We believe that EPA’s analysis is flawed and fails to realistically undertake its responsibilities under the Clean Water Act (CWA) to create ELGs that meet not only current circumstances but future needs as well. Consequently, we recommend that EPA withdraw the current proposed pretreatment ELG for UOG extraction waste water, that it conduct a thorough review of actual waste water management technologies,

that it determine best available technology economically achievable (BATEA) and new source performance standards based on these technologies, and that it then repropose an appropriately revised pretreatment ELG.

### **EPA Should Not Rely On A 39 Year Old ELG To Determine Future Management Options**

The current direct discharge ELG (40 CFR Part 435 Subpart C – Onshore Subcategory) was actually promulgated in 1976 as an interim rule and finalized in 1979. The nature of oil and gas extraction is vastly different than it was then. Even then, EPA’s assessment of best practicable control technology (BPCT) currently available, best available technology economically achievable (BATEA) and new source performance standards was largely superficial. Its support documents rapidly discounted all options and focused attention solely on zero discharge technologies – UIC and evaporative ponds.

But the industry in 1976 is not the industry in 2015. In 1976, almost all production occurred in conventional formations and much of that production relied on UIC injection to provide for secondary recovery in these formations using water flooding. A smaller amount of waste water was sent to final disposal in other Class II wells. American oil production had peaked in 1970 and much of the new production was coming from offshore facilities. EPA’s analysis of the industry in its 1976 *Development Document for Interim Final Effluent Limitations Guidelines and Proposed New Source Performance Standards for the OIL & GAS EXTRACTION Point Source Category* projected decreasing production by U.S. onshore facilities. It gave little, if any, attention to future water management challenges. Ultimately, it embraced UIC management with no assessment of future risks. No changes have been made to the direct discharge ELG for the oil and gas extraction onshore subcategory since its adoption.

The oil and gas extraction industry and the circumstances of waste water creation and management in 2015 differ significantly. In fact, the proposed ELG is directed toward unconventional oil and gas extraction, driven almost entirely by the development of shale gas and shale oil. Clearly, the development of American oil and gas has changed expectations regarding future oil and gas production. Correspondingly, extraction waste water management is facing different challenges. Shale formations require fracturing to access the resource and typically utilize water that ultimately is returned from the well bore and will include produced water from the formation itself. However, unlike conventional formations, unconventional formations are not capable of receiving water for secondary recovery.

In part, EPA argues that its decision is based on the pattern that “Generally, EPA designs nationally applicable pretreatment standards for categories of industry (also referred to as categorical pretreatment standards) to ensure that wastewaters from direct and indirect industrial dischargers are subject to similar levels of treatment.” It bases this statement on language in the Conference Report on the 1977 Clean Water Act, stating:

The legislative history of the 1977 CWA amendments explains that pretreatment standards are technology-based and analogous to BAT effluent limitations for the removal of toxic pollutants. As further explained in the legislative history, the combination of pretreatment and treatment by the POTW is intended to achieve the level of treatment that would be required if the industrial source were making a direct discharge.

A careful reading of the statutory language in the CWA suggests that the language has a different purpose. The operative clause of the CWA Section reads:

If, in the case of any toxic pollutant under subsection (a) of this section introduced by a source into a publicly owned treatment works, the treatment by such works removes all or any part of such toxic pollutant and the discharge from such works does not violate that effluent limitation or standard which would be applicable to such toxic pollutant if it were discharged by such source other than through a publicly owned treatment works, and does not prevent sludge use or disposal by such works in accordance with section 1345 of this title, then the pretreatment requirements for the sources actually discharging such toxic pollutant into such publicly owned treatment works may be revised by the owner or operator of such works to reflect the removal of such toxic pollutant by such works.

A plain reading of this statutory language is a directive to EPA that pretreatment requirements could be relaxed if the POTW were removing pollutants that were also being limited under the pretreatment ELG. In this context the Conference Report language could be read as an admonishment to EPA that it should not require excessive treatment when it is unnecessary.

Regardless, the significant differences between 1976 and 2015 demonstrate that EPA should not rely on a discharge limitation standard or an analysis that pertains to the current Onshore Subcategory ELG. If EPA believes it is somehow constrained by those outdated determinations, it would be better served to create a new Subcategory.

### **Current Availability Of UIC Does Not Justify A No Discharge Conclusion**

EPA hinges much of its determination that a zero discharge ELG is appropriate for a pretreatment standard on the current use and availability of UIC. This judgment is predictable given the current wide use of UIC, the environmental benefits of UIC and the 1976 assessment that UIC provided a basis for a zero discharge standard for direct discharges. However, it fails to consider a number of key factors that can make UIC less available.

First, EPA initiated the development of this UOG pretreatment ELG because shale gas produced water had been sent to POTWs in Pennsylvania. The underlying reasons for these actions result from a zero discharge Onshore Subcategory ELG and the lack of UIC capacity in Pennsylvania. Therefore, for at least some regions of the country the assumption that UIC capacity will be available is highly questionable.

Second, as EPA observes, there are approximately 27,000 Class II disposal wells out of approximately 170,000 total Class II wells. The remaining Class II wells are used for secondary recovery in conventional oil wells. Because unconventional wells impermeable formations, like shale, and therefore are not susceptible to secondary recovery injection, their produced water would be injected into disposal wells. The increase in disposal wells over the past several years has led to increased attention on these wells. Some have been alleged as causes of seismic events that result in challenges to their ongoing operations. In fact, as a part of efforts by fossil energy opponents, we have observed increasing attention to Class II well permitting and operation, the delegation process under the SDWA for state primacy of Class II wells, and even which aquifers can be considered eligible for injection. This clearly adversarial atmosphere on fossil energy will continue to threaten the ability to site and use disposal technologies – no matter how historically beneficial their record may be.

Third, while current capacity of Class II wells is adequate and should be capable of managing current volumes of produced water, expanded production will require additional capacity. Neither EPA nor industry can assess today whether that capacity can grow at a necessary rate. Nor can the cost of increasing capacity be readily projected. Additionally, current capacity also reflects the development of recycling projects that have consumed water volumes that would otherwise need disposal. We recognize that robust data on produced water management is difficult to obtain.

However, some data can be indicative of future challenges. In April 2015, the Ground Water Protection Council (GWPC) published a new report, *Produced Water Volumes and Management Practices in 2012*. The report looks at practices in 2007 and 2012 for managing produced water, of which 90 percent or more utilizes Class II UIC. Clearly, the report is looking at available data from both periods and the data are limited. Similarly, UOG development from 2012 to 2014 was significant and included more attention on reuse that would reduce UIC disposal. However, there are some points that are illustrative of the shifts that are beginning to occur. For example, in 2007, the report indicates that 38.5 percent of produced water was injected for disposal. By 2012, the share of UIC for produced water disposal increased to 45.6 percent. This change can be seen in Oklahoma where 2,053 new permits for Class II UIC disposal wells have been issued since 2005. Similarly, the number of Class II UIC disposal wells in Kansas has increased since 2005 from 3561 to 5444.

EPA's analysis on the availability of Class II UIC falls well short of the rigor that should be applied. Consequently, it skews the decision toward a zero discharge conclusion without justification.

### **EPA Should Not Rely On Recycling**

In a similar vein, EPA points to the evolving use of waste water recycling in UOG development. While UOG development has significantly developed recycling of waste water – both flowback and produced water – to provide source water for fracturing, there are identifiable limits to the use of recycling.

First, and foremost, recycling of waste water for use in developing new wells is clearly limited by the pace of development not only nationally but in a specific area. Aggressive recycling has occurred in the past several years because drilling activity has been so intense. Not only has drilling been intense generally, it has been locally as well. Recycling requires the ability to collect adequate volumes of waste water and the ability to move the water efficiently to new wells. Consequently, in areas like the Marcellus Shale or the Eagle Ford, the density of development created the opportunity to gather adequate waste water volumes economically, transport them to new well sites and utilize the water for fracturing.

Second, not all waste water can be recycled. While location and volume are the most significant factors, the quality of the water can be important as well. The same contaminants in waste water that raise concerns about its discharge to receiving waters can affect its utility in recycling. If these contaminants are in concentrations that interfere with the functioning of the fracturing process, the water would have to be treated. Many treatment options exist but the cost could be prohibitive depending on the nature of the contaminants.

Third, in mature areas where recycling is no longer a cost effective, or even plausible, option, an alternative will be essential. If Class II UIC capacity is not available for produced water

management in those areas, the producer could be forced to shut in producing wells. The CWA does not envision such an inappropriate outcome as a part of a BATEA analysis.

As in the case of assessing the UIC option, EPA does not thoroughly assess the limitations of recycling as an alternative to discharges. Consequently, it skews the decision toward a zero discharge conclusion.

### **The Question Of UOG Waste Water Interfering With POTWs Is The Basis For Developing A Pretreatment ELG**

EPA extensively emphasizes the inability of POTWs to treat UOG extraction waste waters. For example, it states:

Most POTWs are designed primarily to treat municipally generated wastewater. POTWs typically provide at least secondary level treatment and, thus, are designed to remove settleable solids, suspended solids and organic material using biological treatment. EPA is not aware of any POTWs that are designed to treat dissolved pollutants in UOG extraction wastewater such as TDS (e.g., chlorides, sulfates, metals) or radioactive elements. As a result, the mass of untreated pollutants would be discharged from the POTW to the receiving water, could disrupt the operation of the POTW (e.g., by inhibiting biological treatment) or could facilitate the formation of harmful DBPs.

When EPA initiated its assessment of whether to develop a pretreatment ELG, it was the concern that the lack of a clear standard led to the potential for less than adequate management of the UOG extraction waste water. But, rather than actually develop a set of specific pretreatment requirements for those circumstances when a POTW option is the only – or most cost effective – one available, EPA chose to merely fall back on a 39 year old determination of a zero discharge standard.

### **EPA Should Develop A Numerical Discharge Pretreatment ELG**

Once EPA initiated the process to develop a pretreatment ELG for UOG extraction waste waters sent to POTWs, it needs to fully assess the potential implications of its actions on current and future management of this waste water. As EPA states:

EPA develops ELGs that are technology-based regulations for specific categories of dischargers. EPA bases these regulations on the performance of control and treatment technologies. The legislative history of CWA section 304(b), which is the heart of the effluent guidelines program, describes the need to press toward higher levels of control through research and development of new processes, modifications, replacement of obsolete plants and processes, and other improvements in technology, taking in to account the cost of controls. Congress has also stated that EPA need not consider water quality impacts on individual water bodies as the guidelines are developed....

There are four types of standards applicable to direct dischargers (facilities that discharge directly to surface waters), and two types of standards applicable to indirect dischargers (facilities that discharge to POTWs), described in detail below.

More specifically, in describing Pretreatment Standards for Existing Sources (PSES) and New Sources (PSNS), EPA states:

...section 307(b) of the Act calls for EPA to issue pretreatment standards for discharges of pollutants from existing sources to POTWs. Section 307(c) of the Act calls for EPA to promulgate pretreatment standards for new sources (PSNS). Both standards are designed to prevent the discharge of pollutants that pass through, interfere with, or are otherwise incompatible with the operation of POTWs. Categorical pretreatment standards for existing sources are technology-based and are analogous to BPT and BAT effluent limitations guidelines, and thus the Agency typically considers the same factors in promulgating PSES as it considers in promulgating BAT. ... Similarly, in establishing pretreatment standards for new sources, the Agency typically considers the same factors in promulgating PSNS as it considers in promulgating NSPS (BADCT)<sup>1</sup>.

These statements clearly envision a process that assesses technology designed to meet specific standards whether they are Best Practicable Technology (BPT) or Best Available Technology (BAT) or BADCT. These concepts include analyses of the technologies that can be applied to the waste water being addressed, evaluating the reductions achieved and the costs. But, EPA did not undertake such a robust analysis in this case. Rather, as EPA states:

EPA does not propose an option with numerical discharge pretreatment requirements prior to discharge to a POTW for the following reasons. First, the existing requirements for direct discharges of UOG extraction wastewater in the Onshore Subcategory require no discharge of pollutants. As explained above, EPA generally establishes requirements for direct and indirect discharges so that the wastewater receives comparable treatment prior to discharge to waters of the U.S.

Second, the option EPA proposes, zero discharge of pollutants in UOG extraction wastewater to POTWs, is widely available, economically achievable and has no incremental (and, therefore, acceptable) non-water quality environmental impacts. Because the proposed zero pollutant discharge requirement is current practice and, therefore, clearly both available and achievable, any option that includes non-zero discharge requirements for any pollutants would potentially increase pollutant discharges from current industry best practices. Such an option would not fulfill the CWA requirement to establish limitations based on “Best Available Technology Economically Achievable” (CWA section 301(b)(2)(A)), or the CWA goals of eliminating the discharge of pollutants in to navigable waters (CWA section 101(a)(1)).

Third, EPA does not have any data to demonstrate that UIC capacity nationwide will be expended and that this current management approach will not be available in the future (DCN SGE00613). In fact, industry has been managing oil and gas extraction wastewater through underground injection for decades. In recent years, industry has greatly expanded its knowledge about the ability to re-use UOG

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<sup>1</sup> Best Available Demonstrated Control Technology

flowback and long-term produced water (the major contributors to UOG extraction wastewater by volume) in fracturing another well. Consequently, while the UOG industry continues to grow and new wells are being fractured, the need for UIC capacity for UOG extraction wastewater is decreasing, even in geographic locations with an abundance of UIC capacity (see TDD Chapter D.2).

Fourth, EPA identified technologies that currently exist to treat dissolved pollutants in UOG extraction wastewater. Relative to underground injection and reuse/recycling to fracture another well (the basis for the preferred option EPA proposes), these technologies are costly, would result in more pollutant discharges, and are energy intensive. While EPA did not attempt to calculate a numerical standard for TDS, data collected for this proposed rulemaking demonstrate that the current technologies are capable of reducing TDS (and other dissolved pollutants) well below 500 mg/L. To the extent that these technologies or others are developed in the future to reduce pollutants in UOG extraction wastewater to enable them to be reused for purposes other than fracturing another well, these pre-treated wastewaters can be used directly for the other applications without going through a POTW.

Looking at each of these reasons separately demonstrates that EPA has not made a plausible argument for failing to develop a numerical standard.

First, while EPA indicates that it “...generally establishes requirements for direct and indirect discharges so that the wastewater receives comparable treatment prior to discharge to waters of the U.S.”, it should recognize that relying on a 39 year old ELG as a basis for action raises a strong signal that a more analytical approach is necessary. Similarly, if the Agency’s decision to imbed its pretreatment ELG in the Onshore Subcategory becomes a barrier to making a more thoughtful approach to define a numerical standard because of this general comparability framework, EPA should create a new Subcategory that would allow for a result that reflects the future more than the past.

Second, while UIC Class II wells are clearly an effective management option for UOG extraction waste waters, injection is not a treatment technology. Rather than assume the availability of UIC as the only technology to be used by the industry to manage its waste water – a decision that relies on unsubstantiated determinations of its widespread future availability – EPA should define a numerical, technology based BATEA for managing UOG extraction waste waters. Once the BATEA is determined, the issue of whether it is more cost effective than UIC will be a determination by the discharger. But, for those instances where UIC is not readily available – such as the circumstances that drove Pennsylvania producers to use POTWs – there would be an alternative that EPA has determined meets the technology standards of the CWA.

Third, EPA’s action hinges on its assumptions that UIC capacity will continue to be a viable and cost effective option for all UOG extraction waste waters. Yet, its supporting material for this conclusion is thinly substantiated. One of its cited documents – DCN SGE00613 – is a Meeting Summary from a February 2013 meeting with industry representatives. IPAA was a participant in the meeting. EPA deduces from this document that “EPA does not have any data to demonstrate that UIC capacity nationwide will be expended and that this current management approach will not be available in the future.” This meeting never delved into a deep discussion that would yield such a conclusion; it was a general briefing to describe the nature of oil and gas



extraction, the technologies that manage waste water for disposal or reuse, and the cost effectiveness of various waste water treatment to manage TDS. The text of the document states:

There is no widespread discussion in the industry about lack of injection for disposal capacity but one area that tends to have lower capacity is the Marcellus region. This is because the states of Pennsylvania and West Virginia require produced water be disposed of in the zone from which it was removed or deeper. Because of its depth, disposal into zones deeper than the Marcellus shale is not feasible.

If anything, this document emphasizes the limitations in certain regions regarding the availability of injection wells. But, it is clearly not a robust assessment of future UIC capacity. EPA also references issues regarding future UIC capacity based on a second document – TDD Chapter D.2<sup>2</sup> – by stating:

Consequently, while the UOG industry continues to grow and new wells are being fractured, the need for UIC capacity for UOG extraction wastewater is decreasing, even in geographic locations with an abundance of UIC capacity.

However, this document does not assess future capacity issues; it merely reports on the current number of Class II disposal wells.

Industry sees a different and much less certain picture of future UIC capacity.

- One, as EPA reports, but later ignores, there are some areas where UOG extraction is intense – such as the Marcellus Shale – where UIC capacity does not exist.
- Two, because UOG extraction well waste water cannot be reinjected for oil or gas recovery, this waste water must be sent to UIC disposal wells or managed. As a result, there will be pressure to expand existing disposal wells or drill new ones.
- Three, EPA discounts this pressure by emphasizing waste water recycling/reuse. Recycling and reuse are viable and valuable but they are not a panacea. Real limits on recycling/reuse include the pace of new well development, the proximity of new wells to the waste water, the adequacy of water volumes in a specific area and the contaminant levels in the water. Moreover, as certain fields become more production-focused, as opposed to having aggressive active exploration, there are greater needs to manage produced water and even fewer opportunities to recycle/reuse it for fracturing operations. As such, recycling/reuse activities are not only driven by the intensity of drilling activities in a certain resource play but by its stage of development. As time progresses, the Marcellus Shale, for example, will experience an even greater need for disposal options.
- Four, in the time period that EPA has been developing this ELG proposal, the regulatory framework for Class II UIC wells has been subjected to new challenges, particularly for disposal wells. As environmental fossil energy/fracturing opponents have failed to show that state regulated fracturing presents unmanageable environmental risks, they have turned to other elements of unconventional oil and gas production. One of these is UIC disposal. Over the past several years issues related to triggered seismicity have been imputed to UIC disposal wells. These allegations threaten new well permits and existing operations whether

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<sup>2</sup> Technical Development Document for Proposed Effluent Limitations Guidelines and Standards for Oil and Gas Extraction, EPA-821-R-15-003, March 2015

caused by technical regulatory constraints or local opposition. Similarly, EPA initiated a review of the process that states use to exempt aquifers from regulation under the SDWA. Aquifers related to oil and gas extraction have historically been excluded from the SDWA scope but if changes are made to areas that are possible disposal sites, future UIC options could be diminished. Primacy delegation under the SDWA is being challenged. Efforts are active to stir up opposition to waste water movement from one state to another. Collectively, these challenges to UIC Class II disposal options can limit future capacity at a time when assumptions about reuse must be cautious not ebullient.

Consequently, EPA’s reliance on the past success of UIC to serve as the basis for a zero discharge ELG is misplaced.

Fourth, EPA too readily dismisses treatment technologies as “...costly, would result in more pollutant discharges, and are energy intensive” compared to UIC or reuse. These technologies may be more costly and result in pollutant discharges. However, the CWA does not demand that BATEA be inexpensive and discharge free. It requires that the technology be what the description says – the best available technology economically achievable. It is EPA reliance on a non-CWA management technology – injection wells under the SDWA – that brings about that comparison. And, as stated above, EPA reaches the conclusion to rely on Class II UIC disposal wells too cavalierly.

Instead, EPA needs to fully assess a variety of technologies – most of which have been developed as a part of the industry recycling and reuse initiatives – to determine their capacity to manage waste water in the context of pretreatment. These technologies might include sedimentation, filtration, chemical precipitation, dissolved air flotation, biological treatment, reverse osmosis (RO), forward osmosis (FO), evaporation (no recovery), evaporation with condensation, membrane distillation, and crystallization. Certainly, these technologies produce different outcomes and are appropriate for different waste waters. Their costs and their effectiveness will differ. But, until EPA evaluates them, no one knows which may constitute BATEA for pretreatment. For example, the following table presents some framework of technologies that might be considered for recycling and reuse. They may bear on a BATEA analysis as well, but EPA needs to make the analysis necessary for such a determination.

Treatment Technology	Max TDS Recommended for Treatment (ppm)	Relative Cost	Commercially Available
Reverse Osmosis Membrane	50,000	\$	Yes
Forward Osmosis Membrane	100,000	\$\$	No
Evaporation*	200,000	\$\$	Yes
Membrane Distillation	280,000	\$\$	No
Crystallization	500,000 +	\$\$\$\$\$	Yes

While EPA may raise questions about whether they are too costly compared to other options, ultimately, it is the producer that will have to make an economic decision among the various

options available. By making no BATEA analysis of technology options, EPA prevents that decision from being considered.

### **Conventional Oil and Gas Extraction Waste Waters**

EPA stipulates in the proposed ELG that it is not addressing the discharge of conventional oil and gas extraction waste waters. We support this position.

### **Centralized Waste Treatment Facilities**

EPA has announced its intent to assess whether it needs to address UOG extraction waste water treated and discharged by Centralized Waste Treatment (CWT) facilities. In doing so, the Agency needs to recognize that such an analysis should be focused on technology to treat waste water because, clearly, if UOG extraction waste water is managed through a CWT, that decision reflects a choice rejecting the use of UIC Class II injection wells. The flawed analysis used in this proposal should not color the assessment that EPA makes in evaluating CWT discharges.

### **Conclusion**

As stated above, these proposed ELG address requirements related to pretreatment standards for UOG extraction waste water sent to POTWs. The Environmental Protection Agency (EPA) essentially makes its decisions in this proposal on four factors:

1. This pretreatment ELG should be consistent with the current oil and gas extraction direct discharge ELG.
2. UOG extraction waste water is managed primarily through the use of UIC Class II injection wells regulated under the federal Safe Drinking Water Act SDWA.
3. UOG extraction waste water is utilized in extensive recycling operations to provide source water for hydraulic fracturing operations.
4. The composition of UOG extraction waste water would “interfere” with POTWs waste water treatment.

Based on these factors EPA proposes a zero discharge ELG.

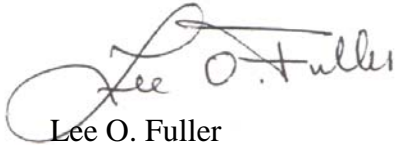
We believe that EPA’s analysis is flawed and fails to realistically undertake its responsibilities under the CWA to create ELGs that meet not only current circumstances but future needs as well. More specifically, EPA should not rely on a 39 year old ELG to determine the standards that should apply to a future environmental management structure that is based on a vastly different production outlook. It overstates the capabilities of UIC capacity and reuse opportunities to justify its zero discharge management choice. In doing so, EPA avoids making the thorough technology analysis it should have made to determine a BATEA pretreatment ELG.

Consequently, we recommend that EPA withdraw the current proposed pretreatment ELG for UOG extraction waste water, that it conduct a thorough review of actual waste water management technologies, that it determine BATEA and new source performance standards based on these technologies, and that it then repropose an appropriately revised pretreatment ELG.

As trade associations representing the oil and gas extraction industry, we appreciate the opportunity to comment on this proposal and commit to working with EPA to obtain the information it needs to undertake the analysis of BATEA for a pretreatment ELG.

If you need additional information, please contact Lee Fuller by email at [lfuller@ipaa.org](mailto:lfuller@ipaa.org) or by phone at 202-857-4722.

Sincerely,

A handwritten signature in black ink that reads "Lee O. Fuller". The signature is written in a cursive style with a large, looping initial "L".

Lee O. Fuller  
Executive Vice President  
Independent Petroleum Association of America