Environmental Protection Agency

Unconventional Oil and Gas Pre Treatment

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Environmental Protection Agency

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C O N T E N T S

P R O C E E D I N G S

MS. MATUSZKO: Good afternoon. Hi, my name is Jan Matuszko. Welcome to the EPA. We appreciate your participation and your presence here today.

We were going to wait a couple more minutes because we had some other people that had pre-registered, but I also want to respect the time of the folks that are here and that actually got here on time. So we're going to go ahead and start.

This is the public hearing on the Proposed Pre Treatment Standards for Unconventional Oil and Gas Extraction. This is a listening session for us. We won't -- we won't be making a presentation, and we won't be responding to any of your issues today. As I said, we are listening to what you-all have to communicate to us.

In addition, this is being transcribed, so anything you say will be ultimately placed in our record. It will also be available on our

website. Once we get it from the transcriber, we'll be putting it on our website so that others can also see what you wanted to communicate today.

In addition, we encourage everyone to submit written comments. We recently extended the comment period to July 17th. So that's now the last date we'll accept public written comments. We will have a Federal Register Notice announcing that extension likely next week -- any day now. And for more information on how to submit written comments, please see the proposal.

And with that, again, thank you for your interest in the rule, and I'll turn it over to Eric.

MR. STRASSLER: Good afternoon. Just some administrative things -- restrooms are off the lobby. If you need to find the restroom, just ask the staff outside, and they'll escort you.

And please turn off cell phones and any other noisemaking devices or put them on vibrate.

Thank you.

So, we have a registration list. We have one speaker at this point. So, Elizabeth Glass, you'll be first. State your name and organization when you start. Thank you.

MS. GELTMAN: Good afternoon. My name is Elizabeth Glass Geltman, and I am an Associate Professor and Director of Environmental and Occupational Health Sciences at Hunter College and the City University of New York School of Public Health. I am also an attorney with 30 years experience in environmental law and policy.

I applaud and encourage efforts by U.S. EPA to regulate pre treatment standards of performance for unconventional oil and gas extraction in both existing and new sources. While oil and gas drilling began in the east coast in 1821, vast expansion of drilling in the Marcellus in the last eight years has transformed the east coast landscape. Large swaths of land that used to be rural agrarian are now peppered with heavy industry constructed to drill natural

gas.

The hydraulic fracturing portion of the extraction process requires the use of vast quantities of water, coupled with sand, and a list of chemicals that are often concealed from both regulators and the public in both name and in quantity in order to preserve trade secrets. Chemicals aside, flowback water typically includes TDS and radioactivity.

Federal pre treatment regulations of oil and gas wastewaters are extremely important to protect drinking water sources as well as to protect workers at our POTWs.

With the advent of groundbreaking technology comes new challenges. Discard of produced and flowback waters from oil and gas drilling operations remains an extremely important challenge that must be addressed to protect public health.

Studies now demonstrate that there are significant environmental and health risks associated with the current disposal methods for

flowback and produced waters. Underground injection of oil and gas wastes is strongly correlated with seismic activity. TDS are elevated in waters by POTWs accepting oil and gas wastes. TENORM is often found in wastewaters and was found in waters downstream of drilling sites and in muds, and sludges, and fill from oil gas waste sent to landfills.

While the extent of waste sent to POTWs is not well documented, the practice has been used in the Marcellus shale in Pennsylvania, Ohio, and West Virginia. U.S. residents cannot rely on state oil and gas laws to protect the water supply of downstream neighbors. Federal regulation is needed.

For example, although Pennsylvania promulgated wastewater treatment effluent standards that targeted TDS and chloride in 2010, Chapter 95 regulations only apply to new or renovated facilities. Facilities permitted prior to the promulgation of Chapter 95 were exempt.

POTWs in Pennsylvania can and indeed must

continue accepting oil and gas wastewater from grandfathered facilities even if acceptance results in a discharge of effluent high in TDS and exceeding the limit set by Chapter 95.

Well, a growing, robust domestic energy supply is a national security interest. Ensuring clean, safe drinking water is also an elemental human right and need. Promulgating pre treatment regulations for new and existing sources that require no discharge of pollutants is an extremely important step in maintaining public health and safety.

Like all regulations, however, the devil is in the details. And in my remaining minute I'd like to address three points that are in need of clarification. First, the pre treatment regulations should clearly specify that TENORM is a regulated pollutant requiring discharge no greater than background levels.

Drilling operators should be required to survey wastewater for radiation before delivery to the POTW. And that's important for both

public health reasons, water safety reasons, and especially important for workers at the POTWs.

Second, the pre treatment standards should not differentiate between conventional and unconventional oil and gas drilling operations. Rather, the standard should require no discharge of a pollutant from oil and gas operations regardless of source.

EPA emphasis should be on ensuring that the oil and gas operators pre treat wastes to ensure water safety and not on what type of oil and gas operation is generating those wastes. Simply said, all waste delivered to POTWs from oil and gas operations should be subject to pre treatment standards regardless of whether the source is a conventional or an unconventional well.

And this is important not just for current technology but as we move forward and we have other technologies making sure that the definition that's espoused is not limiting in terms of what we're trying to do for protections.

Third, with regard to effective date, all discharges from oil and gas operations should be covered. The lesson from Pennsylvania Chapter 95 is that if existing sources are excluded -- and we have a lot of them now -- the public may be left without adequate protection of the water supply.

Thank you for introducing this critical piece of regulation and for giving me an opportunity to sharing my insights and thoughts, and I'm happy to take questions at any time.

MR. STRASSLER: Okay. Thank you.

At this time no other speakers -- no other persons present have asked to speak or registered to speak. If there is anybody else who would like to, they should let the staff at the desk know. And I guess we'll hang around for a few minutes.

But as we said, we're not addressing issues today ourselves. We're doing presentations, so we will just wait here for a few minutes and see if there is anybody else who

would like to speak.

MS. MATUSZKO: Actually, I should have said -- and I apologize for not. I should have introduced the people that are at the desk with me.

Lisa Biddle is actually the Project Manager for this -- for the rule that we're discussing today. And Eric Strassler is one of our comrades who helps us out with various things --

MR. STRASSLER: Infield.

MS. MATUSZKO: -- including pre treatment hearings.

MR. STRASSLER: Utility infield.

MS. MATUSZKO: Are there any of you that are present that would prefer not to speak so that you're -- you know, that it's being transcribed but that you'd just like to speak to us since we're here? Is there anything that you want to communicate to us?

(No response.)

MS. MATUSZKO: Either, you know, in the

public forum or not, we're happy to speak to you not in the -- not in a way that it's transcribed as well.

MR. STRASSLER: Off the record.

MS. MATUSZKO: Off the record.

(Discussion off the record.)

MS. MATUSZKO: Okay. That concludes our public hearing for the day. We will be here for a couple more minutes if -- as I said, if any of you want to talk to us -- quote -- off the record.

Thanks for coming.

MR. STRASSLER: Thank you.

(Recess.)

MS. MATUSZKO: Well, we only had one other speaker, and so we concluded, but if -- yeah, you're --

MS. BIDDLE: Go ahead.

MS. MATUSZKO: -- we're back on line if you want to do it.

MS. BIDDLE: We're online. We'll transcribe. We'll listen. Glad you're here.

MR. NOËL: Yeah. So nobody else --

MS. MATUSZKO: No.

MS. BIDDLE: Yeah, we had a few other people here but nobody else that wanted to speak.

MR. NOËL: So, would I have like -- I'd like two hours to talk?

MR. STRASSLER: Not quite.

(Laughter.)

MS. MATUSZKO: You have five minutes with a little cushion.

MR. NOËL: Okay. I have it in, like, five languages.

MR. STRASSLER: Please start with name and organization.

MR. NOËL: Cool. My name is John Noël; I work for Clean Water Action, the National Oil and Gas Campaign's coordinator. I worked at the EPA for four years before that in the Underground Injection Control Program.

So this is a written statement. It's more general in support, and then we'll -- we'll submit more technical detailed comments to the

docket.

Clean Water Action appreciates the opportunity to submit this statement, and we will be submitting additional technical comments to the docket. Clean Water Action works for strong health and environmental protections and has a long history of work on Clean Water Act implementation.

We are a national citizens' organization of one million members and are active in over a dozen states, several of which we are engaged in work to help address concerns on the impacts of oil and gas development and on water resources.

The majority of our members live in states that are on the forefront of oil and gas drilling and will be directly impacted by the policy being considered here today.

We strongly support the proposed rule that establishes a zero discharge standard and effectively prohibits the industry from sending unconventional oil and gas wastewater to POTWs. The rule provides a regulatory clarity to the

industry and uses existing Clean Water Act authorities to strengthen environmental protections.

EPA's proposed rule is necessary because POTWs were never designed to treat and discharge wastewater created in modern oil and gas development. The rule closes the gap in federal regulations that leave local waterways vulnerable to oil and gas wastewater pollution.

Discharges of wastewater to POTWs have been documented to degrade water quality and threaten drinking water sources for residents living downstream. According to the Groundwater Protection Council and the EPA's own analysis, oil and gas wastewater contains constituents that could interfere with POTW treatment processes or slip through altogether at -- quote -- levels detrimental to the receiving water body -- end quote.

There are multiple contaminants contained in oil and gas wastewater that threaten water quality, aquatic ecosystems, and drinking water

resources. The impacts of high levels of total dissolved solids, contaminants contributing to disinfectant byproducts at downstream drinking water intakes and radioactive materials are of particular concern.

In 2008 the impacts of oil and gas wastewater with very high salt contents discharged into the Monongahela River in Pennsylvania, created a dangerous situation in which 13 drinking water intakes from West Virginia to Pittsburgh violated water quality parameters and put residents downstream at risk.

During the same period, studies by the EPA and the Allegheny County Health Department indicated that 17 drinking water intakes in the Monongahela watershed were at risk of high levels of disinfectant byproducts which are cancer causing and development toxins.

Potential pass-through of bromines and other disinfectant byproduct precursors can increase public health risk for downstream drinking water consumers and lead to treatment

complications and higher cost for downstream public water systems.

Radioactivity is another threat to surface water from wastewater discharges. Oil and gas development, by its very nature, exposes and then concentrates naturally occurring radioactive material which, in return, is not adequately removed by water treatment processes.

As a result, radioactive materials are present in unconventional oil and gas wastewater in potentially dangerous concentrations. Specifically, highly concentrated levels of radium have been detected in the sediment of streams receiving oil and gas wastewater. Radium can accumulate in the body and is considered to pose a greater cancer risk than most other radioactive elements.

We strongly urge EPA to finalize this proposed rule and establish pretreatment standards that would effectively prohibit on-shore unconventional oil and gas extraction discharges to POTWs.

Additionally, we encourage EPA to expedite a rulemaking to update the ELGs for conventional oil and gas facilities sending wastewater to POTWs.

Research has shown there is minimal difference between the constituents in unconventional and conventional wastewater. High TDS contents, precursors to disinfectant byproducts and naturally occurring radioactive materials are present in most wastewater generated during oil and gas development and pose the same challenges to POTWs.

Oil and gas wastewater discharges to POTWs present unacceptable risks to drinking water resources, wildlife, and public health. This common sense rule ensures that the Clean Water Act is updated to reflect the documented hazards of modern oil and gas development wastewater disposal methods.

Thank you for the opportunity to submit this comment. Clean Water Action looks forward to the EPA's publication of this final rule.

I'm also going to take a selfie to contribute to my EPA collection of testimony.

(Laughter.)

MS. MATUSZKO: Thank you very much.

MR. STRASSLER: That won't be on Facebook, will it?

MR. NOËL: No.

MS. MATUSZKO: Does that going into the transcript?

MR. NOËL: No.

MR. STRASSLER: It's not a federal record, I hope.

MS. MATUSZKO: Thank you for the -- thank you for your -- the information and for the good laugh on a Friday afternoon.

MR. NOËL: Yeah, I totally agree. So I'll just give these -- the hard copies -- to --

MS. MATUSZKO: Yeah. Great. Thank you.

MR. NOËL: Thank you.

MR. STRASSLER: We're about to wrap it up, I think.

MS. MATUSZKO: Okay?

MR. STRASSLER: Yeah.

MS. MATUSZKO: Thanks.

MR. STRASSLER: That's all today. Thank you.

(Whereupon, at 1:37 p.m. the public hearing was concluded.)