COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ENVIRONMENTAL QUALITY BOARD

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IN RE: PUBLIC HEARING ON WATER QUALITY STANDARDS FOR MANGANESE & IMPLEMENTATION

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BEFORE:

BRIAN CHALFANT, Chair

Darek Jagiela, Member

0CT - 5 2020

Jennifer Swan, Member

Independent Regulatory Review Commission

Laura Griffin, Member

HEARING:

Wednesday, September 9, 2020

6:00 p.m.

LOCATION:

WebEx Meeting

WITNESSES: Terry Schmidt, Mike Clark, Charlie Carlson

Reporter: Derek Richmond

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		2
1	INDEX	
2		
3	OPENING REMARKS	
4	By Brian Chalfant 4 - 12	
5	TESTIMONY	
6	By Terry Schmidt 12 - 16	
7	TESTIMONY	
8	By Mike Clark 17 - 21	
9	TESTIMONY	
10	By Charlie Carlson 21 - 23	
11	DISCUSSION AMONG PARTIES 23 - 26	
12		
13		
14		
15	*	
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
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3
1
                       EXHIBITS
2
3
                                           Page
                                                     Page
4
   Number Description
                                        Offered Admitted
5
                         NONE OFFERED
6
7
8
9
10
11
12
13
14
15
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PROCEEDINGS

MR. CHALFANT: Good evening,
everybody. I would like to welcome you to the
Environmental Quality Board's public hearing on the
proposed rulemaking for Water Quality Standard for
Manganese and the implementation of that standard.

My name is Brian Chalfant, Deputy
Policy Director for the Department of Environmental
Protection. And representing the Environmental
Quality Board, EQB, at today's hearing assisting me
is Laura Griffin and Darek Jagiela. I officially
call this hearing to order at 6:00 p.m. and this
public hearing will be recorded in its entirety.

The purpose of this hearing is to formally accept testimony on the proposed rulemaking. I am going to read a summary of the rulemaking and then go through some logistics of the hearing and then we'll get to the testimony.

So this proposed rulemaking was adopted by the EQB at its meeting on December 17, 2019. The proposed rulemaking includes amendments to two chapters of Title 25 of the Pennsylvania Code; Chapter 93 relating to water quality standards and Chapter 96 relating to water quality standards

implementation. Water quality standards are instream water quality targets that are implemented by imposing specific regulatory requirements and permit conditions such as treatment requirements, effluent limitations, and best management practices on individual sources of water pollution. Water quality standards include the existing and designated uses of the surface waters of the Commonwealth, along with the specific numeric and narrative criteria necessary to achieve and maintain those uses, as well as anti-degradation requirements.

The purpose and goals of this proposed rulemaking are, first, to comply with Act 40 of 2017; second, to delete the existing manganese numeric water quality criteria of 1.0 milligrams per liter from Table 3 and Section 93.7, which was established for the protection of the potable water supply use; third, to add manganese - to add a manganese criterion of 0.3 milligrams per liter to Table 5 and Section 93.8(c), designed to protect human health from the neurotoxicological effects of manganese which will also ensure adequate protection of all water uses; and fourth, to identify the point of compliance for the criterion.

The amendments propose two

alternatives for a point of compliance with the
manganese water quality standard; first, the point of
compliance for the point of all existing or planned
surface water - surface potable water supply
withdrawals; or second, all surface waters, meaning
at or near the point of discharge.

Act 40 of 2017 added subsection (j) to Section 1920-A of the Administrative Code of 1929, which directed the EQB to propose regulations requiring that the water quality criteria for manganese established under Chapter 93 be met consistent with the exceptions in Section 96.3(b).

In other words, Act 40 directed the Board to propose regulations that moved the point of compliance for manganese drinking water quality criterion from the point of discharge to the point of any downstream public drinking water intake. The proposed regulation considers the provisions of Act 40 in addition to several other statutory obligations the Department and the EQB must consider when evaluating water quality criteria and points of compliance for the criteria, including Pennsylvania's Clean Streams Law, Safe Drinking Water Act and the Federal Clean Water Act.

The proposed changes will affect all

persons, groups or entities with proposed or existing point source discharges of manganese into surface waters of the Commonwealth who must comply with the regulation. Persons who discharge wastewater containing manganese from mining will be affected by the change in the proposed criteria and by its implementation at the proposed second alternative point of compliance near the point of discharge. mining industry will likely need to add treatment to 10 meet the new limit if the point of compliance is at 11 the discharge location.

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Additionally, other sectors that currently have water quality based effluent limits for manganese and their discharge permits may be affected by the regulation. Such facilities include landfills, wastewater treatment plants and power plants.

Besides dischargers, public water suppliers of drinking water and other water supply users of surface water for production activities could be affected if the proposed first point of alternative compliance is - the first alternative point of compliance is applied to the proposed manganese criterion. These other wastewater supply uses may include food and beverage production or

preparation, paper and textile manufacturing, aqua culture and irrigation. Under this alternative, the point of compliance for the manganese criteria will be at the point of any planned or existing potable water supply withdrawal.

Water suppliers will likely need to conduct additional source water monitoring at their facilities to determine the effects of increased source water manganese levels on their operations.

Additionally, as the levels of manganese change in surface water based on discharges, public water suppliers of drinking water may require facility upgrades or additional chemical usage to continue achieving the secondary maximum contaminant level for manganese, 0.05 milligrams per liter. Any upgrades to drinking water treatment will likely result in water fee increases for the water supply ratepayers.

This concludes the summary of the rulemaking. If you would like to access a more detailed explanation of the regulatory amendments in this rulemaking, you can visit the Department's e-comment system on DEP's webpage. Just select regulations from the main DEP homepage.

Now I would like to go through some

logistics and ground rules for the hearing. In order to give everyone an equal opportunity to comment on this proposal, I would like to establish the following ground rules. I will call on the witnesses who have registered to testify at the hearing. All who have registered were assigned a number indicating the order in which witnesses will be called to speak.

Only those who registered as indicated on the EQB webpage will be called upon to provide testimony. Testimony is limited to five minutes for each witness. Please note that written and spoken testimony carry the same weight. If you should run out of time for your spoken testimony, we will - we will read the rest of your comments from your written testimony.

As advised in registration correspondence, please provide a copy of your written testimony to REGcomments@pa.gov. I put that e-mail address in the chat box as well. Your e-mail must note that you are submitting testimony for proposed rule - for proposed rulemaking Water Quality Standard for Manganese and Implementation, along with your first and last name, mailing address, e-mail address and if you are commenting on behalf of an organization.

Testimony is not required to be five minutes long. If others who provide testimony before you are making similar statements to yours, feel free to abbreviate or summarize your verbal testimony and still provide the full testimony via e-mail. This will help us hear from more commenters at the hearing. You do not have to provide verbal testimony in order to be included in the public record. All written testimony submitted to REGcomments@pa.gov will also be reviewed by the EQB and the Department and included in the public record.

The public comment period on this proposed rulemaking closes on September 25th. Public comments will not be accepted for the public record on this proposed rulemaking after that date. Through the registration process, prospective commenters were requested to designate one witness to present testimony of behalf of an organization. Please state your name, address and affiliation, if applicable, for the record prior to presenting your testimony.

The EQB would appreciate your help by spelling out your name and terms that may not be generally familiar so the transcript can be as accurate as possible. Because the purpose of a hearing is to receive comments on the proposal, EQB

members and department staff cannot address questions about the proposed rulemaking during the hearing. addition to or in place of verbal testimony presented at today's hearing, interested persons may also submit written comments on the proposal. Again, written and verbal comments hold the same weight when considered in finalization of this proposed rulemaking.

All testimony and written comments provided become a part of the official public record. All comments must be received by the EQB on or before September 25th, 2020. There are a few different ways to submit written comments which are separate from testimony.

Comments can be submitted through the e-comment system that the Department has. Again, if you go to the Department's website and click on the e-comment link, it will take you right to that system, or comments may be submitted by e-mail at the previously mentioned e-mail address

REGcomments@pa.gov. The subject heading of the proposed rulemaking and a return name and address must be included in each e-mail with comments.

Comments may also be sent through US Postal mail to the Environmental Quality Board, P.O.

Box 8477, Harrisburg, Pennsylvania 17105-8477.

All testimony received at this hearing, as well as written comments received by September 25th, 2020, will be considered by the EQB and will be included in the comment response document which will be prepared by DEP and reviewed by the EQB prior to the EQB taking its final action on this regulation.

Now I would like to call the first commenter which we - there were two individuals who pre-registered to provide testimony. First, Terry Schmidt and second, Mike Clark, I believe both who are online and made successful unmuting tests. So Terry, if you are available you may begin your comments, your testimony.

MR. SCHMIDT: Sure. My name is Terry Schmidt. I am with EARTHRES, P.O. Box 468, Pipersville, PA 18947. Again my name is Terry Schmidt. I work at EARTHRES where we employ nearly 100 people. I am a lifelong resident of Pennsylvania and grew up in southwestern Pennsylvania enjoying the outdoors including fishing in areas where some local streams were impacted by pre-law pollution.

One personal goal of my 35-plus year career was to help achieve improvements that can turn

lifeless streams into thriving reproducing trout streams which had been achieved at several locations. I became familiar with manganese and manganese treatment in the late 1970s and early 1980s while working in the coal mining industry. Through to my graduate assistantship at Penn State in the late 1980s, I worked with the Pennsylvania Department of Environmental Protection, Environmental Protection Agency and others to develop Greenmine, a computer program used to estimate treatment costs for mining sites in an effort to encourage mining which would result in environmental improvement.

During my engineering consulting career, I designed over 100 treatment systems. Many of these systems were designed using government funding mechanisms to treat pre-law discharges and improve stream quality.

Additionally, I have designed treatment systems for NPDES discharges where the primary design challenge was to meet existing manganese discharge limits. Manganese is a very common element on earth, and there are locations in Pennsylvania where ambient background levels of manganese in the streams are greater than the proposed limits. Manganese is generally not

considered toxic to aquatic organisms below two milligram per liter.

I have worked on treatability studies where conventional treatment was used to treat manganese to predetermined levels and then subsequently subjected to whole effluent toxicity tests where neither acute nor chronic toxicity was observed at levels much higher than two milligrams per liter.

Based on everything I've learned throughout my career, there is no risk or benefit to the receiving streams by lowering manganese discharge limits. Regulation of manganese in surface waters initially followed the Environmental Protection Agency's 1972 and 1977 Clean Water Acts, where resulting manganese concentrations were limited in range of two to four milligrams per liter.

The Environmental Protection Agency's mid-1970s report of coal mining effluent guidelines indicated treating waters to these limits also ensured other trace elements were controlled as manganese acted as a surrogate for other elements.

Manganese was selected because when manganese was present, other priority pollutants were also present.

And when manganese was removed during conventional

treatment to two milligrams per liter, other priority pollutants were also removed.

Conventional treatment typically involves adding alkalinity to raise pH and precipitating the metals in the settling area. However, this technology may require the Ph to be raised to over ten standard units to precipitate manganese, followed by a chemical re-acidification of the water in order to discharge the water at a pH below nine.

Manganese treatment involves a careful balance between chemical dosage to control pH while carefully managing the total suspended solids and aluminum levels to ensure a compliant discharge. This regulation would have significant economic impacts and create a domino effect. I have designed treatment systems that consistently reduce manganese to less than two or one milligram per liter. However, these systems simply cannot — are not capable of treating manganese to a level below 0.3 milligrams per liter on a consistent basis.

There are many challenges to meeting a limit of 0.3 milligram per liter at the NPDES discharge point. This limit may cause bankruptcies and bond forfeitures resulting in the discharges

becoming the responsibilities of the state. Many of these discharges are perpetual and will not stop once the industrial activity has ceased. The regulation would also limit new investment and cost Pennsylvania jobs.

The additional costs to meet proposed limits can be more like doubling or tripling the costs, not just a small increase in percent of that cost. This is particularly the case when large discharges are being treated. In addition, lowering manganese limits would put an additional financial burden on Pennsylvania as the state is already responsible for treating water from all previous bond forfeited sites.

In summary, this regulation will come at both a high cost to industry and an increased cost to the State of Pennsylvania. The substantial cost is just not justified by an environmental backset. I oppose changing the current limit and support the point of compliance as being at the intake to the first downstream public water supply per Act 40 of 2017. Thank you for the opportunity to present this testimony.

MR. CHALFANT: Thank you for your testimony, Terry. Next up is Mike Clark, and Mike,

before you get going, I just wanted to mention that
if there is anybody else on the line who did not

pre-register to testify who would like to offer

testimony after Mike, if you could indicate that in

the chat box, that you would like to testify, that

would be the way to do that.

So we will go ahead and get to Mike here and again, if anybody else after Mike would like to provide testimony and didn't preregister, go ahead and indicate that in the chat box.

Mike, are you with us?

MR. CLARK: Yes, I am.

MR. CHALFANT: Okay.

Go ahead.

MR. CLARK: Okay.

Good evening. My name is Mike Clark, I'm vice president for production services for New Enterprise Stone and Lime Company. New Enterprise is headquartered at 3912 Brumbaugh Road, New Enterprise, Pennsylvania. New Enterprise is a fifth generation family owned company and has been helping to build a stronger infrastructure system across Pennsylvania for more than 90 years.

We are a vertically integrated construction material supplier and heavy highway

construction contractor headquartered in Bedford County. We have operations across the entire Commonwealth and employ over 2,500 local people, and pay state, local and federal taxes. We are a strong supporting member in the communities we serve. NESL expends considerable resources to preserve and improve our environment every day. Our capacity to do this is limited by our business economy and our Given these circumstances, we market conditions. like to spend our resources as effectively as possible.

In reducing the NPEDS manganese discharge limits, we don't believe that the DEP has chosen an appropriate goal. The benefit to the environment and the public is not demonstrated with the proposed rulemaking package making the substantial cost and effort to achieve compliance inappropriate.

NESL has 51 NPDES permits at various locations across the State of Pennsylvania. Of these permits, eight of them currently have conditions limiting discharge of manganese. We have done significant monitoring and sampling around our sites. Background sampling of monitoring wells upstream and downstream locations and various surface points of

these eight locations demonstrates elevated manganese levels commonly exceeding our discharge levels. With the current one milligram per liter DEP regulations, we can keep these eight permits in compliance with treatment costing approximately \$150,000 per year for all the sites combined.

The proposed change in the limit from 1 to .3 milligrams per liter will mean that six of the eight sites will no longer be able to comply without additional treatment. Unfortunately, many of these sites also have low pH and elevated aluminum.

Treatment for manganese removal is complicated by these factors, making it a much more complex and expensive process to achieve compliance for manganese, aluminum and pH together.

Additionally, to ensure no violations we will need to reach the target below .3 and possibly down to .15 milligrams per liter. We anticipate capital costs of \$320,000 to expand the treatment footprint of some of the sites and to install necessary treatment equipment to all our sites.

Additional operating costs for all sites combined is expected to rise to about \$450,000 per year. Two of the sites have serious footprint

issues, and by that I mean we may not have the space to expand. The other four sites will need on - size expanded to ensure that we meet the target reliably. And they will need to increase the treatment or new chemical systems.

The projected costs are comprised of engineering, construction, treatment systems, power systems and automation systems as necessary for each site. It is possible we will need additional personnel to manage the additional treatment systems as well. We do not expect to be able to recoup-erate (sic) these costs by increasing our prices at these locations. As mentioned earlier, for our sites, the background manganese levels are typically higher than our current discharge levels.

It is also common to find upstream manganese levels that are higher than our discharge, while our discharge is higher than the downstream manganese levels. This data supports the idea that manganese may be dropping out naturally. None of our sites have a public drinking water supply that is sourced within five miles of our discharge points.

Manganese is a very common mineral in the earth. It is dropping out naturally long before reaching the public water supply. We don't believe

that there is any point in consuming resources to remove manganese when those same resources could otherwise be used for projects with more return on investment for the general public.

We oppose reducing the manganese limits and believe the point of compliance should be at the point of intake of the downstream water supplier. Thank you for the opportunity to be heard. I can take any questions if you have them.

MR. CHALFANT: All right. Thank you for your testimony, Mike. I am not seeing anybody else has indicated they would like to provide testimony in that chat. Darek, are you seeing anything on your end?

MR. JAGIELA: Yes, I did. I got a request from a Charlie Carlson.

MR. CHALFANT: Okay.

Charlie, are you unmuted?

 $\underline{\mathsf{MR. CARLSON:}}$ Can you hear me?

 $\underline{\mathtt{MR.}}$ CHALFANT: Yes, we can.

MR. CARLSON: Okay.

So I have a brief question about - you know, if point of compliance is moved to the -. I'm sorry. I'll introduce myself. I'm Charlie Carlson.

25 I am a student at Duquesne University. I am

currently a senior majoring in biology and minoring in chemistry, and I work with the Ecology Club and I work with some of the streams out in Pittsburgh. So I was kind of curiously interested about this whole proposed change of the rule. And I have a quick question about - if point of compliance is moved to these water intakes, what happens to the price of water for Pittsburghers? I mean, you guys talk about economic - you know, the economic impacts if point of compliance is moved to the sites of discharge, but what happens if we move that into these water intakes?

And also, what happens to the greater ecological environment? I remember I heard Terry say that, you know, there is not many known toxic effects of manganese, if heard that correctly. I don't want to misquote you there, but just for reading the proposed rule change on the <u>Bulletin</u>, you know, they seemed to mention that there were toxic effects for, you know, specifically humans and the cognitive impacts on development.

So I wonder what's going to happen if people are in the water, you know, on the Monongahela or the Allegheny? What's going to happen to them if they swallow some water?

And also, are we so sure about there not being toxic effects to other organisms, not just humans but beyond? Thank you for your time. I know I didn't give a preplanned testimony, but if you could answer any of those questions, that would be great.

MR. CHALFANT: So thank you for your questions and your engagement, Charlie. Because this is a public hearing, Department staff or Environmental Quality Board members are not able to respond to questions about the rulemaking. This is just to receive testimony, but if you would like — well, your testimony and your comments there will be entered into the public record and responses will be provided when — so as part of the rulemaking process, there will be a comment response document put together that will respond to all the testimony that was provided during tonight's hearing, as well as the two other public hearings that are being held on this proposed rulemaking.

So we are not able to provide responses to your questions tonight, but as part of the public record and the testimony received on these, responses will be provided after the public comment period closes and when that comment response

1 document is put together and published. 2 MR. CARLSON: Okay. 3 Thank you, Brian. MR. CHALFANT: Yep, thank you, 4 5 Charlie. 6 Darek, are we seeing anybody else 7 indicating they would like to provide testimony? 8 MR. JAGIELA: That was it. 9 MR. CHALFANT: Okav. 10 One last call. If there is anybody 11 else on the line who would like to provide testimony, 12 please indicate so in that chat box in the next, I 13 don't know, 30, 40 seconds. Otherwise, we'll call it 14 a hearing. 15 MS. GRIFFIN: Brian, it's Laura. 16 forgot to - hopefully, Charlie is still on the line. 17 If he can just e-mail us his name? That way we have his contact information, so he'll be notified then 18 19 when we do complete the - we do deliver the final 20 rulemaking. 21 Okay. MR. CHALFANT: 22 Yeah, so Charlie if you could e-mail 23 that e-mail address to REGcomments@pa.gov with your 24 e-mail address and any other contact information you 25 want to provide, yes, we can provide that

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   notification as Laura just mentioned.
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                   MR. CARLSON:
                                  Great. What was the
 3
   e=mail again?
 4
                   MR. CHALFANT: It's REGcomments, so
 5
   it's R-E-G, abbreviation for regulations.
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                   MR. CARLSON: Got it.
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                   MR. CHALFANT:
                                 REGcomments, all one,
8
   you know, one string, @pa.gov.
 9
                   MR. CARLSON:
                                 Awesome.
                                           Okay.
                   Thank you.
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11
                   MS. GRIFFIN: If you can just give us
   your name and address, please, that would be really
12
13
   helpful, thank you.
14
                   MR. CARLSON:
                                 Sure.
                                         Yeah.
                                                My name is
15
   Charlie Carlson as listed on Webex, and then my
16
   address is 17 -.
17
                   MS. GRIFFIN: Oh, you can e-mail it to
18
   us. You can e-mail it. You don't have to -
19
                   MR. CARLSON:
                                 Okay.
20
                   No problem.
21
                   MS. GRIFFIN: - give the public all
22
   that information.
                      Thank you, Charlie.
23
                   MR. CHALFANT: All right.
                                               So Darek,
24
   are you seeing anybody else indicating in the chat
25
   they would like to provide testimony?
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1	MR. JAGIELA: No.
2	MR. CHALFANT: All right. So I think
3	that is it for the night. So at - with no other
4	commenters present on behalf of the EQB, I hereby
5	adjourn this hearing at 6:27 p.m.
6	* * * * * *
7	HEARING CONCLUDED AT 6:27 P.M.
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CERTIFICATE

I hereby certify that the foregoing proceeding was reported by me on 09/09/2020 and that I, Derek Richmond, read this transcript, and that I attest that this transcript is a true and accurate record of the proceeding.

Dated the 25th day of September, 2020

Derek Richmond,

Court Reporter