Castaneda, Pam, NMENV

From: moiraohanlon@gmail.com
Sent: Wednesday, October 14, 2015 4:14 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Moira O'Hanlon
po box 40
Arroyo Seco, NM 87514

Castaneda, Pam, NMENV

From: info@judithphillipsdesignoasis.com
Sent: Tuesday, October 13, 2015 2:03 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as a New Mexico educator and citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing to ask that you do not weaken water quality standards for businesses even temporarily. I only takes on "accident" to make water unpotable in a time when development is increasing demands on an already strained resource. I also ask that you adopt stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

The New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. In addition to threats to human health, this would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Judith Phillips
1840 Zearing Avenue NW
Albuquerque, NM 87104

Castaneda, Pam, NMENV

From: 108paule@gmail.com
Sent: Tuesday, October 13, 2015 11:34 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Paule Marx
921 Francis Road
Taos, NM 87571

Castaneda, Pam, NMENV

From: ssdog@me.com
Sent: Tuesday, October 13, 2015 11:36 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I spend a lot of time traveling around the world, and presentty am in transit on the way to asia. I know how important clean water is to the citizens of a nation and how it affects everything, throught the country, when it is not protected. This is whay I am writing you now.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mr. Stephen Schmdt
21 Calle Debra
Santa Fe, NM 87507

Castaneda, Pam, NMENV

From: deerheaven@mac.com
Sent: Tuesday, October 13, 2015 11:36 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am a Roswell, New Mexico resident and I cares deeply about water quality in New Mexico's rivers, streams, and lakes. I urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations, my children and grandchildren. It is time, and long past time, to put at the forefront our actions, consideration for the welfare of our future generations.

I support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems.

I urge you to reject the New Mexico Environment Department's short sited temporary standards proposal. This proposal would allow polluters to receive (weaker) water quality standards for the rivers and streams into which they discharge. Why? Again think about the future of our beautiful state for our children, not about the short term profit for a few greedy individuals.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Diane Marsh
PO Box 2064
Roswell, NM 88202

Castaneda, Pam, NMENV

From: dottieandstanbutler@gmail.com
Sent: Tuesday, October 13, 2015 11:31 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mrs. Dottie Butler
227 Gallina Canyon Rd, HC 66 Box 332
Valdez, NM 87580

Castaneda, Pam, NMENV

From: bbird@wildearthguardians.org
Sent: Tuesday, October 13, 2015 11:29 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Bryan Bird
516 Alto Street
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: design@latenitegrafix.com
Sent: Tuesday, October 13, 2015 11:37 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mr. Gary Cascio
22 Mimosa Road
Santa Fe, NM 87508

Castaneda, Pam, NMENV

From: drenos@milagroherbs.com
Sent: Tuesday, October 13, 2015 11:39 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Dr. Tomas Enos
419 Orchard Drive
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: bvergien@hotmail.com
Sent: Tuesday, October 13, 2015 11:43 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Dr. Bradley Vergien
1600 Milda St
Gallup, NM 87301

Castaneda, Pam, NMENV

From: ebear.socorro@gmail.com
Sent: Tuesday, October 13, 2015 12:13 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mr. Eric K Albrecht
1772 Main St.
San Antonio, NM 87832

Castaneda, Pam, NMENV

From: cascabel@gilanet.com
Sent: Tuesday, October 13, 2015 12:27 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Jan McCreary
POB 3042
Silver City, NM 88062

Castaneda, Pam, NMENV

From: springing2day@yahoo.com
Sent: Tuesday, October 13, 2015 12:28 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Jessica Hinton Hazlett
320 state rd 230
Valdez, NM 87575

Castaneda, Pam, NMENV

From: jeffcolledge@hotmail.com
Sent: Tuesday, October 13, 2015 12:32 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mr. Jeffrey Colledge
PO Box 455
Truchas, NM 87578

Castaneda, Pam, NMENV

From: nicoled009@comcast.net
Sent: Tuesday, October 13, 2015 12:41 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Nicole de Jurenev
201 Alamo Drive
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: nicoled009@comcast.net
Sent: Tuesday, October 13, 2015 12:41 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Nicole de Jurenev
201 Alamo Drive
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: nicoled009@comcast.net
Sent: Tuesday, October 13, 2015 12:41 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Nicole de Jurenev
201 Alamo Drive
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: nicoled009@comcast.net
Sent: Tuesday, October 13, 2015 12:41 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Nicole de Jurenev
201 Alamo Drive
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: nicoled009@comcast.net
Sent: Tuesday, October 13, 2015 12:41 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Nicole de Jurenev
201 Alamo Drive
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: sunmtnsft@aol.com
Sent: Tuesday, October 13, 2015 12:51 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mr. Peter Roche
2916-C Avenida Alamosa
Santa Fe, NM 87507

Castaneda, Pam, NMENV

From: mpriogrande@gmail.com
Sent: Tuesday, October 13, 2015 1:00 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Meg Scherch Peterson
#73 State Road 570 Pilar Route
Embudo, NM 87531

Castaneda, Pam, NMENV

From: kdelanal@comcast.net
Sent: Tuesday, October 13, 2015 1:00 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission Members

I am writing to you as New Mexico citizen who cares deeply about water quality in New Mexico's rivers, streams and lakes and to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically, I support stronger Aluminum water quality standards. As you know, New Mexico has the weakest aluminum standards in the nation, and it is time to change that.Therefore, I support strengthening the state's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos.

New Mexico's ecosystems and economy depend on healthy aquatic ecosystems. Trout and mussels especially are sensitive to Aluminum pollution, and the current hardness- based Aluminum standard is not protecting these sensitive species. We need to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I also urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Kay Lockridge
2742 La Silla Dorada
Santa Fe, NM 87505

Castaneda, Pam, NMENV

From: pvb@taosnet.com
Sent: Tuesday, October 13, 2015 1:30 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

Do not weaken water quality standards in New Mexico--for streams, rivers, ponds, lakes: every water entity. Make the standards stronger. I don't want New Mexico to become a dumping ground for people who are basically getting away with murder. I also urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. Thank you for being independent, courageous public servants.

Sincerely,

Dr. Peggy Beck
148 Camino del Medio
San Cristobal, NM 87564

Castaneda, Pam, NMENV

From: cwells@newmex.com
Sent: Tuesday, October 13, 2015 1:31 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Dr. Christine Wells
12 Circulo de Vistas
Arroyo Seco, NM 87514

Castaneda, Pam, NMENV

From: kaycfoster@icloud.com
Sent: Tuesday, October 13, 2015 1:47 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as a New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations. I live in the Pecos Valley where my neighbors' families have depended on the river for generations for their livelihood. Once the rivers are despoiled, their way of life is over, and the health of the entire ecosystem is endangered.

Kay Foster

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mrs. Kay Foster
49 Estrella Drive
Villanueva, NM 87583

OCTOBER 13, 2015

STATE OF NEW MEXICO
WATER QUALITY CONTROL COMMISSION

IN THE MATTER OF:
PROPOSED AMENDMENTS TO STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS, 20.6.4 NMAC **WQCC 14-05 (R)**

NON-TECHNICAL STATEMENT FOR THE RECORD

As Mayors of the Village of Ruidoso and the City of Ruidoso Downs, we are writing to support the New Mexico Environment Department's proposal for "Temporary Standards." This provision would be added to the Water Quality Control Commission's Standards for Interstate and Intrastate Surface Water at 20.6.4.10.F NMAC. We believe this provision could assist our communities as we work with the Department to improve water quality in the Rio Ruidoso.

By way of background, our two municipalities, through our Regional Wastewater Treatment Plant Joint Use Board, finished construction of our new wastewater treatment plant (New Plant) in 2011. This state-of-the-art facility, which discharges into the Rio Ruidoso, is an enhanced biological and chemical

removal process generally referred to as a Bardenpho membrane biological reactor (MBR). In addition to utilizing a state-of-the-art process, the New Plant has performed well in comparison with other plants utilizing the same MBR process. The performance of the New Plant in removing nutrients (both Total Phosphorus and Total Nitrogen) from effluent is matched by only about 2% of MBR facilities.

Despite the excellent performance of the New Plant, it will be unable to meet the effluent limit of 1.0 milligram per liter for Total Nitrogen scheduled to take effect on July 31, 2017 under the current NPDES Permit. An upgrade to the New Plant would not be economically feasible or environmentally wise. An estimate for reverse osmosis, the most likely technology, is a capital cost of about $26 million and an annual operating cost of about $2.7 million. In addition, reverse osmosis produces a large volume of spent brine that requires disposal and results in a substantial decrease in treated flow that would otherwise be added to the Rio Ruidoso stream flow.

Because Ruidoso has done everything reasonably possible to construct and efficiently operate a state-of-the-art wastewater treatment plant, we are now focusing on other initiatives to improve water quality in the Rio Ruidoso. A portion of the existing sanitary sewer system is located within and next to the Rio Ruidoso. We are working with the Federal Emergency Management Agency (FEMA) to relocate this system away from the Rio Ruidoso to reduce the chance of damage to the system from flooding and to reduce leakage of wastewater into the stream. We are also developing a master plan to identify improvements to other portions of

the existing wastewater collection system. Part of this effort will be to extend the system into areas now served by septic systems and to remove those septic systems in an effort to improve water quality in the Rio Ruidoso.

We believe the proposed Temporary Standards provision could provide a mechanism for Ruidoso to continue our efforts to improve water quality in the Rio Ruidoso without violating the federal Clean Water Act. A temporary standard for Total Nitrogen could be reflected in an achievable Total Nitrogen effluent limit in the New Plant's NPDES Permit. Ruidoso would then be able to continue operating the New Plant at maximum efficiency while complying with the NPDES Permit and focusing our attention on the reduction of nonpoint sources of contamination. Specifically, we could continue to improve the water quality of the Rio Ruidoso by reducing contamination from wastewater collection systems and septic systems without the distraction, time and expense of addressing Clean Water Act compliance issues.

We appreciate the Commission's consideration of our Statement.

Respectfully submitted:

Gary Williams
Mayor
City of Ruidoso Downs

Tom Battin
Mayor
Village of Ruidoso

Castaneda, Pam, NMENV

From: garybrooker@hotmail.com
Sent: Tuesday, October 13, 2015 2:46 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Gary Brooker
550 Canyon Rd
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: LauranceJohnston@msn.com
Sent: Tuesday, October 13, 2015 2:47 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Laurance Johnston
5901J Wyoming NE #268
Albuquerque, NM 87109

Castaneda, Pam, NMENV

From: sidash@aol.com
Sent: Tuesday, October 13, 2015 3:34 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Dr. Sidney Ash
1708 Quail Run CT NE
Albuquerque, NM 87122

Castaneda, Pam, NMENV

From: goodkaz@newmexico.com
Sent: Tuesday, October 13, 2015 5:29 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Arifa Goodman
PO Box 303
San Cristobal, NM 87564

Castaneda, Pam, NMENV

From: sjmoore26@gmail.com
Sent: Tuesday, October 13, 2015 5:34 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mr. Scott Moore
188 Miranda Canyon Rd.
Ranchos de Taos, NM 87557

Castaneda, Pam, NMENV

From: networks@networkearth.org
Sent: Tuesday, October 13, 2015 5:57 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. ShannYn Sollitt
220 A Irvine Street
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: bwof1944@gmail.com
Sent: Tuesday, October 13, 2015 8:32 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015Dear Water Quality Control Commission, As a citizen of New Mexico since 1978 and as one who cares deeply about water quality in New Mexico's rivers, streams, and lakes, I am writing to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations. Water is precious. Water is life. Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. In this high desert environment, New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness-based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria. I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges. Thank you for your time and attention to my comments.

Sincerely,

Ms. Betsy Wolf
POBox 524
Taos, NM 87571

Castaneda, Pam, NMENV

From: marigrana@cybermesa.com
Sent: Tuesday, October 13, 2015 9:22 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 13, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Mary Grana
104 Lorenzo Rd
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: gsfletch@newmexico.com
Sent: Wednesday, October 14, 2015 7:07 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams.This is a regressive and harmful idea, at a time when all our efforts should be to strengthen clean water laws....not weaken them.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Glenda Fletcher
675 County Rd. 57
Velarde, NM 87582

Castaneda, Pam, NMENV

From: mcoca44@comcast.net
Sent: Wednesday, October 14, 2015 7:35 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Diane Paolazzi
2313 callejon Hermoso
Santa Fe, NM 87505

Castaneda, Pam, NMENV

From: alfordjohnson@taosnet.com
Sent: Wednesday, October 14, 2015 9:48 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mr. Alford Johnson
P.O. Box 588
Arroyo Hondo, NM 87513

Castaneda, Pam, NMENV

From: jeanstevens@hotmail.com
Sent: Wednesday, October 14, 2015 10:02 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Jean Stevens
P.O. Box 1212
Ranchos de Taos, NM 87557

Castaneda, Pam, NMENV

From: Crutkaus@gmail.com
Sent: Wednesday, October 14, 2015 1:42 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Christina Rutkaus
Box 818
Arroyo Seco, NM 87514

Castaneda, Pam, NMENV

From: kristinagrayfisher@gmail.com
Sent: Wednesday, October 14, 2015 2:52 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission,

As a New Mexican who cares deeply about our state's rivers, streams, lakes, and the wildlife and human communities that depend on them, I am writing to urge you to adopt strong water quality standards that will protect New Mexico's water for future generations.

Specifically, I am writing to ask you to do three things:

1) Reject the NMED's "temporary standards" proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges. As written, there are no time limits to these standards, so a "temporary" weaker standard could easily become permanent. In addition, the draft language does not even require a public hearing, meaning that communities' water could be endangered without their having an opportunity to voice their concerns.

2) Adopt stronger water quality standards for Aluminum. New Mexico currently has the weakest aluminum standards in the nation. I urge you to strengthen our state's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness-based Aluminum standard is not protecting these sensitive species. Please protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

3) Protect small ponds and wetlands. These small bodies of water are often found in the headwaters of rivers and if they are polluted, that pollution will flow to all downstream users -- including agricultural irrigators and municipal water systems. Please do not agree to the industry proposal to allow water quality to be degraded in small bodies of water.

Thank you very much for considering my comments.

Sincerely,

Ms. Kristina Fisher
1608 Camino la Canada
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: sselbin@hotmail.com
Sent: Wednesday, October 14, 2015 7:09 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission:

A a New Mexico citizen who cares deeply about water quality in New Mexico's rivers, streams, and lakes, I urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

I support adoption of stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! Strengthen New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos.

New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I also urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Dr. Susan Selbin
3014 Colonnade Ct. NW
Albuquerque, NM 87107

Castaneda, Pam, NMENV

From: esunz@yahoo.com
Sent: Wednesday, October 14, 2015 8:14 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Dr. Eric Unzicker
1949 Hopi Road
Santa Fe, NM 87505

Castaneda, Pam, NMENV

From: pittray@gilanet.com
Sent: Wednesday, October 14, 2015 9:26 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 14, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mrs. Carol Pittman
103 Ary Road
Datil, NM 87821

Castaneda, Pam, NMENV

From: wildmushroomsoup@gmail.com
Sent: Thursday, October 15, 2015 7:07 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 15, 2015

Dear Water Quality Control Commission,

New Mexico's waterways are the basis of all life in this state. Please hold polluters accountable to the highest standards of protection. I am distressed to hear that the NM Environemtn Department is allowing polluters of our streams and rivers to continue discharging toxic waste using the Department's 'temporary standards proposal'. These pollluters have already reaped profits for years at the expense of our communal environment. If they failed to set aside funds from these profits to upgrade their processes to prevent further pollution, this is their fault and their problem, not the people of New Mexico's. They must be held to the current legal standard, not allowed to continue polluting at will.

I am also writing to urge you to adopt stronger protections regarding aluminum in our waterways. This element is particularly toxic to trout and mussels. and current standards do not sufficiently protect these species.Our state has the weakest aluminum standards in the nation. Please strengtheni the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos.

Thanks for your time and attention, and all you do to protect the health of our water.

Sincerely,

Ms. Beth Enson
PO Box 503
Arroyo Seco, NM 87514

Castaneda, Pam, NMENV

From: vseal@mac.com
Sent: Thursday, October 15, 2015 8:46 AM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 15, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. victoria seale
369 Montezuma Ave
Santa Fe, NM 87501

Castaneda, Pam, NMENV

From: kerry@QuailRoostFoundation.org
Sent: Thursday, October 15, 2015 4:41 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 15, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Mr. kerry Heubeck
HC 70 Box 28
Ocate, NM 87734

Castaneda, Pam, NMENV

From: alan@alanrogersmd.com
Sent: Monday, July 18, 2016 9:37 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

July 18, 2016

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Dr. Alan Rogers
530-A Harkle Road
Santa Fe, NM 87505

SIGN-IN SHEET
Water Quality Control Commission
October 14, 2015
PLEASE PRINT LEGIBLY

NAME	MAILING ADDRESS	Do you wish to make public comment? Yes or No
Konstantin Parkhomenko	1239 Pasco de Peralta	N
Bob Gensemer	GEI Consultants	N
Amy Spears	LANL	N
Jody Kougioulis	NMED SWQB	
Kris Pintado	" "	"
Mike Saladen	LANL	N
GENE TURNER	DOE ~ LANL	NO
Rachel Conn	Amigos Bravos	
Charles Nylander	7 Grillo Loco, Santa Fe, N.M. 87506	No
Susan Gordon	Multicultural Alliance for a Safe Environment	Yes
[illegible]	NMED / SWQB	
Joseph S. Meyer	414 Anvil Way Golden CO 80401	No
Susan Rodriguez	7224 Carson Trl NW ABQ 87120	Yes
[illegible]	215 Hartline SW Alb NM CARD	Yes

SIGN-IN SHEET
Water Quality Control Commission
October 14, 2015
PLEASE PRINT LEGIBLY

NAME	MAILING ADDRESS	Do you wish to make public comment? Yes or No
Brad Knecht	10722 Timothys Rd. Conifer CO 80433	No
Eric Patterson	Box 334 Valdez, NM 87580	Yes

SIGN-IN SHEET
Water Quality Control Commission
October 14, 2015
PLEASE PRINT LEGIBLY

NAME	MAILING ADDRESS	Do you wish to make public comment? Yes or No
Kristina G. Fisher	1608 Camino la Canada Santa Fe NM 87501	

SIGN-IN SHEET
Water Quality Control Commission
October 15, 2015
PLEASE PRINT LEGIBLY

NAME	MAILING ADDRESS	Do you wish to make public comment? Yes or No
Amy Spears	LANL	No
Jodey Kougioulis	NMED SWQB	
Kris Pintado	" "	
GENE TURNER	DOE-LANL	NO
Bryan Dail	NMED -SWQB	
Janet Greenwald	215 Hartline SW, Alb 87105	no
Sylvana Diaz d'Ouville	505 831-6562 PO Box 743 Alb NM 87194	No
Karen Bonime	715 Truman SE, Albq. 87108	
ALEX PUGLISI	801 W. SAN Mateo, CITY OF SF	NO
James P. Morgan	Box 897, Springer, NM 87747	yes
Jon Klingel	47 Star Vista Rd. Santa Fe 87505	Yes
Michael Flood	PO BOX 406, Angel Fire NM 87710	yes
Meg Peterson	Box 6B Pilar Rt Embudo 87531	yes

SIGN-IN SHEET
Water Quality Control Commission
October 15, 2015
PLEASE PRINT LEGIBLY

NAME	MAILING ADDRESS	Do you wish to make public comment? Yes or No
Kathy Sanchez	PO Box 397 Santa Cruz, NM	yes
Evelyn Naranjo	#19 KO Pin Po SFe N. Mexico 87506	Yes
Elizabeth Chavez	Po box 916 Ohkay owingeh NM	yes
Stacey Loretto	PO Box 774 Thoreau, NM 87323	Yes
Marian Naranjo	627 Flower Road, Espanola NM 87532	yes
Zachary Vigil	#147 Upper San pedro rd	yes
Veronica Ramirez	P.O. Box 4929 Fairview	yes
Peter Cata		yes
Beata Tsosie-Peña	107 Greasewood Mark Esp. NM. 87532	yes
Mayor P.	107 Greasewood Mark	yes
Frank Brewer	P.O. Box 1893 Espanola, NM 87532	Yes

SIGN-IN SHEET
Water Quality Control Commission
October 15, 2015
PLEASE PRINT LEGIBLY

NAME	MAILING ADDRESS	Do you wish to make public comment? (Yes) or No
Robert Chaney		

SIGN-IN SHEET
Water Quality Control Commission
October 16, 2015
PLEASE PRINT LEGIBLY

NAME	MAILING ADDRESS	Do you wish to make public comment? Yes or No
Jodey Kougioulis	NMED SWQB	
Kris Pintado	" "	
Shelly Lemon	" "	
Bryan Dail	" "	
Mike Saladen	LANL	No
ALEX PUGLISI	CITY OF SF	No

FCX - J

Adoption

From left: Lela, 12; Michael, 10; and Asia, 13

Talkative and energetic, **Lela** will keep you entertained whether your shared activity is sporty or shopping.

Michael is helpful and responsible and wants a father to do "guy stuff" with him.

Thoughtful and responsible, **Asia** is a hard worker and has a great sense of humor.

Lela, Michael, and Asia need a family that is busy and active, but knows when it is time to slow down and take time to bond. There needs to be a lot of patience, versatility and flexibility.

They are all doing well in school, and enjoy sports and sharing a great enchilada dinner. They also welcome and enjoy pets, excluding snakes.

Individual activities, one-to-one parenting, and their own space to spend quality alone time is a good way to support them.

This family will benefit from individual and family therapy to help heal and repair the bonds between these children and to support their new bonds as a family.

NOTE: For more information about foster or adoptive parenting through the New Mexico Children, Youth and Families Department, call 1-800-432-2075 or visit www.cyfd.org.

EL DEPARTAMENTO DEL MEDIO AMBIENTE DE NUEVO MÉXICO

y

CHINO MINES COMPANY

GRUPO DE TRABAJO DE LA COMUNIDAD

El Grupo de Trabajo de la Comunidad (CWG, por sus siglas en inglés) es un panel de miembros de la comunidad interesados en proporcionar recomendaciones informadas para las decisiones tomadas conforme a la Orden Administrativa de Consentimiento de Chino (AOC, por sus siglas en inglés). La AOC es un acuerdo voluntario pero vinculante entre el Departamento del Medio Ambiente de Nuevo México y Chino Mines Company para evaluar los efectos potenciales a la salud y al medio ambiente como resultado de las actividades mineras pasadas en las siguientes áreas alrededor de la Mina de Chino, y en caso necesario, remediar esas áreas:

Suelo de Hurley	**Arroyo Whitewater**
Suelo del área del horno de fundición	**Arroyo Hanover**
Suelo del área de relave	**Área de Lampbright**

La próxima reunión del CWG será el
martes, 16 de septiembre de 2014
7:00 p.m.

en el centro comunitario de Bayard

-PROGRAMA-

Elección de los funcionarios

Presentación de 2014 los remediación para jardines residenciales por la unidad investigadora de los suelos de Hurley

Presentación de desarrollo de los criterios cobre específicos del sitio para drenajes dentro por la unidad investigadora del Suelos del horno de fundición y de relaves

sitio web vínculo para drenaje el informe a ser presentado:
http://www.fcx.com/chino/pdf/2013/100313.pdf

PARA MAYOR INFORMACIÓN, LLAME A

Matt Schultz
Departamento del Medio Ambiente de Nuevo México
(575) 956-1550

Pam Pinson
Departamento de Medio Ambiente de Chino Mines
(575) 912-5213

(Press Staff Photo by Benjamin Fisher)

Applying Window Exhibits

Alex Mahl, with J&J Signs, spent Thursday applying window exhibits to the panes of the Silver City Museum along Pinos Altos Street, between Broadway and Yankie Street. The window exhibits, funded by the New Mexico Historic Preservation Division, feature scenes of Silver City's past with historical photographs and stories. The exhibits were designed in a collaboration between Charmeine Wait, museum curator of education, and Flor y Canto Art and Design. The museum is also adding window exhibits to the courtyard area. "Now, even if the museum is closed, people will have something to enjoy," Wait said. One of the windows shows a photo from 1937 of a fire engine exiting a building. That window is on the very same door out of which the photographed engine is exiting.

Cyberattack compromises med center

From The Roswell Daily Record

ROSWELL — A Tennessee-based company that operates Eastern New Mexico Medical Center reported a data breach that occurred earlier this year.

Community Health Systems Professional Services Corp. has confirmed its computer network had been the target of an external, criminal cyberattack in April and June. The majority of patients of clinics and hospital-based physicians affiliated with CHSPSC were not affected by the breach, the company said in a news release.

The company said individuals whose information was taken in the cyberattack will be mailed a letter informing them about the data breach and how to enroll in free identity theft protection and credit monitoring services.

The data taken includes patients' names, addresses, birth dates, Social Security numbers, the names of employers or guarantors and, in some cases, telephone numbers, the company said.

CYBERATTACK Page 16

Honor guard captures first place at Military Honors Burial Conference

The Gaffney-Oglesby Detachment 1328 Marine Corps League Honor Guard Detail recently captured first place at the New Mexico Department of Veterans' Services annual Military Honors Burial Conference at Veterans Memorial Park in Albuquerque.

Participating in the competition for Detachment 1328 were Commandant Frank Donohue, Honor Guard Detail Commander Larry Himes, Senior Vice Commandant Ben Collins, Junior Vice Commandant George Morrison, Adjutant-Paymaster Jeffery Larkin, Judge Advocate Christian Malacrea and Bugler Richard "Cos" Erwin.

Judging was conducted by United States military personnel from the New Mexico National Guard, Air Force and Marine Corps, military personnel from Kirkland Air Force Base in Albuquerque, and officials from New Mexico Veterans' Affairs.

Judging was based on professional military appearance, flag fold execution, firing party weapons maintenance, command execution, and firing party execution and synchronicity, according to a news release. A bugle competition was also conducted at the end of the honor guard competition.

Attending were honor guards from American Legion posts in Albuquerque, Cuba, Española, Silver City and Alameda; Marine Corps League detachments from Albuquerque, Silver City and Las Cruces; American Legion Riders from Santa Fe; veterans organizations from Tohatchi, Fruitland, Roswell and Prewitt; and Veterans of Foreign Wars honor details from Grants and Shiprock.

(Courtesy Photo)

Members of the Gaffney-Oglesby Detachment 1328 Marine Corps League Honor Guard Detail were awarded first place at the New Mexico Department of Veterans' Services annual Military Honors Burial Conference in Albuquerque. Seated above is Richard "Cos" Erwin. Back, from left, are Ben Collins, Chris Malacrea, Jeff Larkin, Larry Himes, George Morrison and Frank Donohue.

The New Mexico Department of Veterans' Services conducts the Military Honors Burial Conference each year for certification of burial honor guards and competition, the release stated. The New Mexico Legislature earmarks funds to the NMDVS to support the training and performance of burial honor guard teams — 32 of these teams perform burial services throughout New Mexico in appreciation to the veterans who have served their country, often having to defend freedom in armed combat and sometimes sacrificing their lives for the cause of liberty.

"Burial honor guard details give these veterans the dignity and honor that their service and sacrifice merit from their grateful countrymen," according to the release.

Cyberattack...

From Page 10

The company said that, to the best of its knowledge, no credit card information was taken and no medical or clinical information was accessed.

CHSPSC recommends patients remain vigilant for incidents of fraud and identity theft by reviewing their credit reports and accounts for unauthorized activity.

CHSPSC said it believes the attacker was an "advanced persistent threat" group originating from China, which used highly sophisticated malware technology to attack its systems.

Artist...

From Page 9

ited in such venues as The New Museum in New York, the Museum of Contemporary Art in Chicago, and the Museum of Fine Arts in Santa Fe.

The public is invited to attend free of charge.

For more information, contact the MRAC offices at 1201 Pope St., call 538-2505, or visit the website www.mimbresarts.org.

Chino Administrative Order on Consent
New Mexico Environment Department
And
Freeport-McMoRan Chino Mines Company

COMMUNITY WORK GROUP MEETING ANNOUNCEMENT

The Community Work Group (CWG) is a panel of community members interested in providing informed recommendations to decisions made under the Chino Administrative Order on Consent (AOC). The AOC is a voluntary, yet binding agreement between the New Mexico Environment Department (NMED) and Freeport-McMoRan Chino Mines Company to evaluate potential health and environmental effects from past mining activities in the following areas around the Chino Mine, and if necessary, remediate those areas:

Hurley Soil	**Whitewater Creek**
Smelter Area Soil	**Hanover Creek**
Tailing Area Soil	**Lampbright Area**

The next meeting of the CWG will be held on
Tuesday, September 16, 2014
7:00 p.m.
Bayard Community Center

-AGENDA-

Election for CWG Officials

Presentation on 2014 Hurley Soils Yard Remediation

Presentation of the Development of the Site Specific Copper Criteria for Drainages within the Smelter/Tailing Soils Investigation Unit

Web page link to Drainages Report to be presented:
http://www.fcx.com/chino/pdf/2013/100313.pdf

FOR MORE INFORMATION, PLEASE CALL

Matt Schultz	Pam Pinson
NMED	Chino Mines
(575) 956-1550	(575) 912-5213

UNM could face fines for not complying with Clery Act

By JYLLIAN ROACH
New Mexico Daily Lobo

ALBUQUERQUE — The University of New Mexico could be looking at heavy fines if the Department of Education turns its eye on the university.

According to an internal auditor's report released in mid-August, UNM is "not substantially compliant" with the Clery Act, which requires schools to properly communicate and monitor campus safety issues.

The school is working immediately to resolve the issues, said Deputy UNM Police Chief Christine Chester, who was also named interim Clery coordinator based on the auditor's recommendation.

But if the Department of Education audits the school before all of the problems are solved, it's anyone's guess whether there will be fines.

"The Department of Education has put 55 schools on their radar, and fortunately we have not been contacted for an audit," she said. "But if they did come, we would be in non-compliance and subject to fines."

Those fines run up to $35,000 per instance of noncompliance, according to the Clery Act Handbook, but Chester said every recommendation from the internal auditor should be implemented by June 2015.

In the report, the auditor found that UNM had not effectively communicated the importance of Clery Act compliance, had not created an organized system to verify crime, disciplinary, fire or safety information, nor clearly defined the locations of UNM properties.

The Clery Act states that any location owned by a university, regardless of its use as a learning facility, must be part of the areas monitored for safety. This would include locations in other countries, preserves and other university holdings.

Chester said the auditor's report also recommended creating a Clery steering committee. While this is not a Clery Act mandate, UNM's eight-person Clery Steering Committee had its first meeting shortly after the auditor's report was released.

Another area of concern in the auditor's report was the lack of an evacuation plan for the entire campus, but UNMPD Lt. Tim Stump said the department is creating that plan now.

"They have given us several recommendations because of how involved Clery has become. Before it was just crime reporting but now several different things have grown," he said in an email.

Part of the problem, Chester said, is that, traditionally, compliance with the Clery Act has fallen to a school's security or police team. However, as the act has been amended to add more requirements, it has become too big for any one department to monitor.

"Early on, the Clery Act was primarily focused on crime statistics and so it pretty much fell on the police department's shoulders to ensure those crime statistics were reported annually. With the new amendments, it just became an overwhelming task to do on its own. For Clery compliance, it's got to be a collaborative university-wide effort," she said.

The most recent amendment to the Clery Act came in 2013 when additional requirements were added to include the Violence Against Women Act. That amendment requires universities to also monitor things like stalking and dating violence on or near the campus.

Stump said UNMPD already monitors those things and will be able to easily include them in the report.

"In the next annual security and fire safety report that

UNM Page 16

FCX - K

AOC COMMUNITY WORK GROUP MINUTES

September 16, 2014

CALL TO ORDER

A meeting of the CWG at the Bayard Community Center was called to order.

INTRODUCTIONS

CWG MEMBERS- PRESENT:
Eduardo Arguello
Carol Beth Elliott
Jesse Franklin-Owens
Jessica Hobbs
Nathan Hobbs
Richard Houck
J. Paul Massey
Donna Meyer- secretary
Tom Meyer- Chair
Sally Smith

Absent
Tom Caddel- excused
Carlos Merino
Peta Sanchez- EPA
Joseph Fox- NMED
Ned Hall- FCX-AOC

GUESTS
Mary Dowse- WNMU
Barry Fulton - ARCADIS

Others Present:
Matthew Schultz- NMED
Pam Pinson- Chino-AOC

MEMBERSHIP

The CWG has a quorum. We were able to hold elections. By acclamation we voted for Nathan Hobbs to be chairman, Paul Massey to be vice-chair, and Jessica Hobbs to be secretary. We appreciate them for volunteering for the ensuing year.

Carol Beth proposed utilizing software to generate transcripts as minutes from voice recordings – group discussion followed and Jessica volunteered to be secretary, thus software not needed.

CHANGES TO AGENDA

Pam Pinson will be adding two presentations to the agenda concerning the 2014 Hurley Remedial Action that occurred in early spring and summer. This will be followed by a presentation on the technical report for surface water

under the Smelter/Tailing Soils IU that will be submitted to the Triennial Review process.

MINUTES

The minutes from the previous meeting was not read, so was tabled for the next meeting. Pam will bring copies and email out the May minutes for the next meeting for those who had not read them.

DISCUSSION ITEM

Matthew Schultz presented a brief update of highlights on the AOC Documents report. Papers were handed out to the members present. Handouts of the Quarterly report and printout of the online web page were also provided to the group by Matt.

AOC DOCUMENT REPORT

Smelter Tailings Soil Investigation Unit

As mentioned last time, this will be an eventful year for the STSIU as a number of studies associated with the draft feasibility study work plan are nearing completion such as the amendment plot study and pH study. Once those individual studies are completed, the draft feasibility study will be made available. The vegetation monitoring report for the Golf Course interim remedial action completed in 2008 was submitted earlier in May, which assesses the vegetation condition in the remediated areas by compared to canopy cover goals established in the final report. That report is also noteworthy since it was the first report of the Chino AOC distributed by electronic means, in addition to the traditional post cards and hard copies. This report was later approved by NMED.

On another matter, in response to recent EPA comments and discussions with NMED, Chino is revising the Use Attainability Analysis report ahead of the triennial review scheduled for early next year. The Use Attainability Analysis is based on the application of the hydrology protocol on Smelter Tailing Soils IU drainages to distinguish between ephemeral and non-ephemeral hydrologic regimes and the applicable water quality standard.

Chino is in the process of petitioning the Water Quality Control Commission

for a hearing on the site specific copper criteria pursuant to Section D of 20.6.4.10 NMAC. This would propose changing the water quality standard for certain Smelter Tailing Soils IU drainages from the current hardness-based metal water quality standard that generally applies statewide to a site-specific water quality standard based on a water effect ratio involving dissolved organic carbon and alkalinity. We will learn more about this tonight thanks to Barry Fulton. Sally asked: Is there a date for a hearing for the Water Quality Control Commission? Matt responded that Chino is currently putting together a draft petition which will be separate from the triennial review. So far as we can tell, the hearing will not be until early next year. There has been a delay due to the hearing officer retiring. They are looking for a replacement. This CWG meeting is part of the public outreach portion of the petition..

The phytotoxicity study is an update of an earlier sitewide baseline ecological risk assessment study involving agricultural species. This particular update involves native species seed collected from the site tested across a gradient of pCu values from soil also collected from the site. The greenhouse experiment and vegetation community study components of the phytotoxicity study are underway and the results should be made available in the near future, after some additional work is conducted this fall.

Sally asked where the impacted soil that was removed from Razorback Ridge was deposited, that it was not just sitting somewhere. Pam responded that it was used as fill material for the Lake One closure.

<u>Hanover-White Water Creek IU</u>

The 2013 water quality report for the Ground Hog #5 stockpile showed some water quality standard exceedances for total dissolved solids and sulfate. In response, NMED requested a draft workplan for additional characterization and monitoring. Chino provided the draft workplan that was later approved by the Department, which includes a seepage collection system. This seepage collection system was installed before the monsoon season and now we're waiting for enough precipitation to report to the collection system for further analysis.

The draft ERA is nearing finalization, and will be released for public comment soon. The preliminary findings were presented at the January 2014 CWG meeting

Lampbright Investigation Unit

The draft final ecological risk assessment is nearing the finalization process, and this will be released to the public and Chino to review soon.

Hurley Soils Investigation Unit

Another component that was recently achieved for the HSIU was a concerted outreach effort by members of the Technical Group to approach property owners of Hurley that earlier had declined sampling and or remediation. Because of these efforts, 5 properties in 2014 were sampled and/or remediated, leaving only 6 out of a total of 684 properties that need sampling and/or remediation.

Pam gave a power point presentation on the yard remediation/soil removal for the 5 properties in Hurley during the spring of 2014. There still remains 6 properties whose owners abstained from participating in the remedial action required by the NMED Record of Decision for the town of Hurley.

POWER POINT PRESENTATIONS

Pam Pinson presented a powerpoint presentation of the Hurley Interim Remedial Action. She showed pictures of some of the properties that were remediated, before, during and after the remediation. There were 523 properties remediated out of 532 properties that potentially required remediation with 100% of the alleys and assessments completed. This sure improved the looks of the properties completed.

Rick asked if there were any complaints of damage during the remediation. Pam responded that there were no complaints.

Sally asked since no title attachments concerning remediation, are folks contacting Chino concerning remediation status of property. Pam responded that new residents and realtors were contacting her concerning remediation status.

Nate asked if a process was in place to address remaining refusals? Matt responded that we are keeping tabs on ownership changes but its volunteer

participation only, no state or fed enforcement. City cannot necessarily enforce this either.

The second presentation was given by Barry Fulton (ARCADIS). This was on the Smelter/Tailings Soils Investigation Unit Development of Site-Specific Copper Criteria (SSC). The STSIU is one of several IU studies. He explained about water quality criteria and its importance along with metal bio-availability. Water quality is designed to protect aquatic life at the site based on the specific conditions of the site.

CWG members asked a variety of questions during the presentation such as:

- What kind of factors buffer or increase bioavailability?
- How does bioavailability change, increase or decrease, with rain events?
- What is the alternative criteria if you do not use site specific and why did you pick this criteria? Barry explained that there would be exceedances under the hardness criteria, but poor indicators of actual aquatic health.
- Would that be just specific to the STSIU and how big would the area be?
- Will the WQCC hearing decision set a precedent for the state?
- Does the sample data when compared to this criteria, all be below the standard? Barry explained that not every sample that could be collected within STSIU would necessarily be below SSC, just the samples used in the study to develop the criteria.
- Questions asked about where sample site locations were on the presentation maps. And when was the sampling conducted and were there any pools sampled.
- Questions asked about carbon and copper content and hardness in the different sites and kind of drainages, such as seasonal runoff versus year round running streams.

CWG may provide comments to NMED on the STSIU Copper Toxicity Model Report available on the Chino AOC web page at: (http://www.fcx.com/chino.pdf/2013/100313.pdf)

SET AGENDA

The next CWG meeting was set for 7pm on Tuesday, January 20, 2015 at the Bayard Community Center. See proposed agenda below;

Call to Order
Introductions
Membership
Public Comment
Changes to Agenda
Approval of Minutes
AOC update from Matt Schultz, NMED
Set agenda for next meeting Adjournment

ADJOURNMENT

The meeting was adjourned.
Minutes prepared by Donna Meyer, CWG secretary

FCX - 1

AOC Community Work Group Minutes

September 17, 2013

CALL TO ORDER

A meeting of the CWG at Bayard City Hall was called to order.

INTRODUCTIONS

CWG Members Present:

Tom Caddel
Jesse Franklin-Owens
Richard Houck
Paul Massey
Tom Meyer-CWG Chair
Donna Meyer-CWG Secretary
Sally Smith

Absent:

Carol Beth Elliott
Nate Hobbs
Jessica Munk
Richard Houck excused
Earl J. Montoya

Others Present:

Mary E. Dowse- WNMU guest; Joseph Fox-NMED, Matt Schultz-NMED, Ned Hall- FCX-AOC, and Pam Pinson-Chino-AOC.

MEMBERSHIP

The CWG had a quorum for this meeting.

PUBLIC COMMENT

Matt Schultz Comments were, "He will be known as the new Phil. Was here at the last meeting, was looking into the CWG. Phil Harrigan was sure Matt was interested in the job, and to attend one of the CWG meetings. This he did last meeting and came away very impressed. Matt Is looking forward in working with us in the future. I previously worked for the New Mexico Environmental Department Surface Water Quality Department Bureau for the last five years at the Silver City office. Some of you might know Dave Menzie, my co-worker. Between Dave and I, we did a lot of Monitoring assessments of surface water, bodies around the southwestern portion of the state, which lead to the monitoring assessments, water shed planning and also oversight water quality Improvement projects. That gave us a strong familiarity with the area. Before that I lived and worked in Colorado. I was part of the Colorado State University restoration ecology lab. Which use to be known as the Center for Ecological Risk Assessment under Dr. Redente, performing a lot of work across the West. I'm very familiar with the remedial Investigation state risk assessments as well as the remedial planning and monitoring assessment projects. I look forward to being part of this project which has generated a lot of interest concerning these investigative units. I appreciate Phil, now retired have followed his tracks; he left a wonderful organizational system." You can make contact with Matt Schultz at the Silver City NMED office (388-1934).

Gonzales, Jacqueline

From:	Pinson, Pam D.
Sent:	Wednesday, January 15, 2014 2:25 PM
To:	Gonzales, Jacqueline
Subject:	FW: AOC CWG January 21, 2014 (Tuesday) Meeting
Attachments:	CWG Sept 17 2013 Meeting.docx

From: Pinson, Pam D.
Sent: Wednesday, January 15, 2014 2:19 PM
To: 'mayor@townofhurleynm.us'; 'sallys@gilanet.com'; 'paganlady718@yahoo.com'; 'dowsem@silver.wnmu.edu'; 'fos@signalpeak.net'; 'johnlvanvig@yahoo.com'; 'n4cyv@arrl.net'; 'jtrumm@trummengineering.com'; Aguilera, Armando; 'macewa@aol.com'; 'olddog01@comcast.net'; Munk, Jessica; Hobbs, Nathan; 'charlesRMerino@gmail.com'; 'TDMeyer@Juno.com'
Cc: Schultz, Matthew, NMENV; 'Fox, Joseph, NMENV'; Hall, E. L. (Ned); 'sanchez.petra@epa.gov'
Subject: AOC CWG January 21, 2014 (Tuesday) Meeting

CWG members and participants,

Attached are the minutes from the September 2013 CWG meeting. The January 21, 2014 meeting will be at **the Hurley Community Center** at the usual time of 7:00 pm. The Bayard Community Center is under renovations until February 2014.

NMED and their risk assessor will be presenting the Ecological Risk Assessment for the Hanover/Whitewater Creeks Investigative Unit. Please respond to this email or call (RSVP) to advise if you can attend this important meeting. See my contact information below. You can also contact Matt Schultz, NMED, at 388-1934.

Happy New Year and hope to see you Tuesday evening!
Pam

Pam Pinson
Senior Environmental Engineer
Chino Mines Company
P.O. Box 10
Bayard, NM 88023

Pamela_Pinson@fmi.com
Phone: (575) 912-5213

CHANGES TO AGENDA

There were no changes.

APPROVAL of MINUTES

The minutes of the May 21, 2013 were approved as published and read.

DISCUSSION ITEM

The AOC Documents were handed out to the people in attendance.

There was a gap between Phil's retirement and Matt, but he has tried to make updates on all of the information. The information should look familiar, because it uses Phil's format. Matt's business card is attached with his contact information.

AOC Documents

The spreadsheet with the AOC documents, the main publication from the last quarter was the second quarter report which has detailed line items Matt will cover briefly. Majority of the activity has been under the Smelter/Tailing Soils Investigative Units. There are ongoing studies, amendment plot and soil pH monitoring. This is the fifth year and fourth year reporting, respectively. There has been a lot of research and monitoring involving the investigations units, the amendment studies, the pH study and the study of surface water quality from Matt's old bureau, as to looking at the hydrologic protocol, seeing if the non-primal water bodies qualify as ephemeral rather than intermittent. There is a difference in the water quality standard (palmer index, short term climatic conditions). To have an accurate assessment, this was performed by an environmental consulting firm and the Surface Water Quality Bureau. They review this to release this for public comment, and pass that on to the EPA for their technical approval, and back to the EPA then to the Water Quality Control Commission.

Another initiative on that front is the effect of the copper criteria, and which is looking at developing sites specific for the criteria for the water quality in terms of toxicity. Right now the Surface Water Quality Bureau uses a hardness based standard for metals. That is a blanket application for some of these water bodies and FMI has been looking at other water quality constituent issues that factor into levels of toxicity so that the current model has multiple regression analysis, looking at not only hardness but also alkalinity, total dissolved solids, and organic carbon. They have also gotten some remarkable R square values to show levels of correlation between some of these constituents and how much confidence we have in the analysis. That is moving forward as well. There has been a lot of correspondence between Chino and the Surface Water Quality Bureau. These have been placed in the repositories at the libraries. Right now Chino is reviewing and revising these study reports. The review of the Surface Water Quality Bureau correspondence is on their web-site not in the AOC depository, so they are doing a parallel path with our AOC process and have incorporated those into the AOC repository. They are available online with the Surface Water Bureau with the exchange in documents, with the hydrologic protocol efforts and site specific copper criteria. So EPA every three years has a triennial review were they open up the surface water quality standards for reviewing changes, so once they pass the technical approval process with the EPA and Water Surface Bureau, it will go to the Water Quality Control Commission under the precepts of a triennial review. That is where they make adjustments to a lot of different segments specific water quality standards under that time, so they are looking at a lot of various water quality standards. It is not unusual to change the water quality standard and taking a closer look at some of the designated uses, so

that all has to be approved by the Water Quality Control Commission.

All these various studies will be rolled eventually into the draft feasibility study, under the Smelter/Tailings Soils and other investigative units. Hanover Whitewater Creek Investigative Unit is currently revising the ecological risk assessment, so that is in progress. The Formation group is currently revising after the latest round of Chino comments. That is where it left off when Phil Harrigan retired. So Matt has started moving on that again to finalize. Formation plans to present to the CWG in the first quarter of 2014. Matt anticipates that the risk assessment report will be under review about this same time by Chino and under the public review process. The Pre-FS remedial action criteria will precede after the ecological risk assessment is finalized.

The Hurley Soils Investigation Unit

The five year review reports was published while Harrigan was still on board and NMED press release went out not too long ago. This will be followed by the next five year report. Chino is making an outreach program, working through a networking system to get the rest of the homes to sign onto the Hurley program. Right now Chino is in the process of communications with residents who refused to participate in the original Hurley soils removal project. Out of more than 500 properties, there are ten that did not allow soil removal.

Lamp-Bright Investigative Unit

The draft ecological risk assessment was publicly presented last meeting. Formation is currently revising the draft ecological assessment and also getting some input. That is the other document that will be finalized soon. This is something expected in the future to be released for public comment following review.

Matt Schultz had also presented the Chino AOC Quarterly Report, Second Quarter 2013; which details where Phil Harrigan left off with some of the efforts he had underway.

SET AGENDA

The next CWG meeting was set for 7 pm on Tuesday, January 21, 2014 in the Hurley Community Center. See notes below.

Call to Order
Introductions
Membership
Public Comment
Changes to Agenda
Approval of Minutes
AOC update from Matt Schultz, NMED
CWG tour of HWCIU November 2, 2013
HWCIU Ecological Risk Assessment Presentation by Formation
Set Agenda for Next Meeting
Adjournment

Pam Pinson mentioned because the Bayard Community Center is renovating their building we are using

the Bayard City Hall meeting room. NOTE: JANUARY 2014 MEETING HAS BEEN MOVED TO THE HURLEY COMMUNITY CENTER.

Under the Smelter/Tailing Soils IU, no reports or correspondence will be finalized but there is a lot of effort in the field, and sampling and working towards the feasibility study.

Planning for the next meeting in January to have NMED's consultant, Formation, come down to present the "Hanover-Whitewater Creek IU Ecological Risk Assessment". Pam proposed to have the annual CWG tour this October, instead of a meeting, as a group, go out and visit Hanover-Whitewater Creek in preparation for this ecological risk assessment presentation. Tour was set for November 2, 2013. CWG to meet at the Bayard Community Center at 9:00 am. Tour will start at the top of the investigative unit near Hwy 152, and some accessible points along the route, traveling down to North Hurley, then parts of lower White-Water Creek. The actual investigative unit starts at Hwy 152, crosses Hwy 180 south of Hurley and ends at San Vincente Arroyo. This will help prepare the group for Formation's powerpoint presentation.

A discussion on putting AOC documents online led to an offer by Ned Hall to have a Company sponsored website containing AOC related documents.

ADJOURNMENT

The meeting was adjourned.

Minutes prepared by Donna Meyer, CWG secretary

FCX - M

AOC COMMUNITY WORK GROUP MINUTES

May 20, 2014

CALL TO ORDER

A meeting of the CWG at the Bayard Community Center was called to order.

INTRODUCTIONS

CWG MEMBERS- PRESENT:

Carol Beth Elliott
Jessica Hobbs
Nathan Hobbs
J. Paul Massey
Donna Meyer- secretary
Sally Smith

ABSENT:

Tom Caddel
Franklin-Owens
Richard Houck- excused
Carlos Merino
Tom Meyer- excused

Others Present: Petra Sanchez- EPA, Matthew Schultz- NMED, Joseph Fox- NMED, and Pam Pinson-Chino-AOC. Ned Hall- FCX-AOC- absent.

MEMBERSHIP

The CWG did not have a quorum for this meeting.

CHANGES TO AGENDA

Pam Pinson will be giving a power point presentation on the five-year vegetation monitoring report the Mine submitted to the state.

MINUTES

Minutes were read. Could not be approved due to lack of quorum, but found no changes to the minutes.

DISCUSSION ITEM

Matthew Schultz will present a brief update of highlights on the repository presentation, the AOC Documents report, and the Hurley Golf course monitoring report. Papers were handed out to the members present.

AOC DOCUMENTS

There has been quite some activity on several fronts as judged by the number of new documents in the repository. Schultz will get into this later in the meeting

Smelter Tailings Soil Investigation Unit:

The main deliverable that NMED has received recently is the vegetation monitoring report on the golf course interim remedial action, which was completed in 2008. This particular report assesses the condition of the vegetation after five years in the remediated areas compared to the canopy cover goals set out in the final interim remedial action completion report.

This report is also noteworthy because it will be the first report to be distributed electronically.

The current phytotoxicity study work plan is an update of the sitewide baseline ecological risk assessment (BERA) phytotoxicity study that was done previously. This particular update includes native plant species and seeds collected from the Chino mine site tested across a gradient of pCu values from soil also collected from the Chino mine site. Collection of the soil and the seeds was given conditional approval last fall, and recently the remainder of the work plan was approved. This included a greenhouse experiment and a vegetation community study, as was approved earlier this year. The greenhouse and the vegetation community study are underway. The results on this study will be available later this year.

This will be an eventful year for the Smelter Tailings Soil IU, because a lot of the studies and reports that are associated with the feasibility study are in the process of wrapping up. The draft feasibility study should be out later in the year. Also happening with this particular IU is that Chino will be presenting a site specific copper toxicity model before the triennial review of the Water Quality Control Commission this year. Also, the EPA is in the process of reviewing the use attainability analysis (UAA) study for the Smelter Tailing Soils IU ephemeral drainages, and there has been one round of comments and responses between the EPA and the New Mexico Environment Department Surface Water Quality Bureau.

Hanover-White Water Creek IU

New documents are available in the repository for the Groundhog #5 stockpile. The water quality submittal for the Ground Hog #5 stockpile from 2013 (even after purging) showed some exceedances of water quality standards for sulfate and total dissolved solids. In response the department requested a draft work plan for further monitoring and characterization of the site. That workplan has been submitted and is currently under review.

The draft ecological risk assessment, which was presented in a preliminary fashion at the last meeting in January, is in the process of being finalized. This will be released for public review and comments soon.

Lampbright Investigation Unit

The draft final LIU ecological risk assessment is in the process of putting on the finishing touches for quality assurances before it is released for public comment.

Hurley Soils Investigation Unit

As a followup to the Hurley five-year review, a concerted effort by Chino and NMED to contact property owners, that earlier declined sampling for remediation, has successfully contacted 5 of the remaining 11. The work has already begun. Golder is providing support services and RCM out of California are conducting remedial work. Once this is completed only 6 out of the 684 total properties in Hurley will require sampling or remediation, if necessary.

Question: It was asked if there was a pH report on the last two "milky" rains that happened in Silver City in April. Matt and Pam response: This is a rare event, but no reports were shown on this recent phenomenon.

Repositories

The new AOC repository webpage can be accessed online, either with your own computer or computers at the Bayard or WNMU libraries. It was proposed and moved to take the filing cabinets from the Silver City library, since it took up too much room and they no longer wanted them, to the WNMU library. The AOC online repository webpage to access digital AOC files is in a simple format and easily accessible on the computer. Matthew Schultz will still file hardcopies at the physical repositories in Bayard, Silver City (WMNU Miller Library) and Santa Fe, but larger reports will be placed on CD's. You can also obtain a hard copy from Schultz's office.

Question: Where is the Razorback Ridge and what are these fill material used for?

Pam Pinson response: Razorback Ridge is located east of Lake One project. It was identified early on in the AOC process, that it exceeded the human health criteria of 5,000 parts per million copper. When Chino proposed to do the Hurley golf course, we also were going to address Razorback Ridge in that area. But Chino reclamation asked if the AOC could delay remediating the ridge, since it was needed as borrow fill material to close out Lake One which was scheduled for a later date. So instead of removing the top 3 to 6 inches only which would meet remediation requirements, reclamation planned to incorporate the whole site as borrow material underneath as well. Thus, only the golf course remediation was performed in 2008. A lot of fill material was needed and obtained from Razorback Ridge. The 85 acres of soil from Razorback Ridge impacted soils and approximately an additional 20 acres east of the ridge was excavated and used as fill material. The top soil and the material underneath, which is unimpacted, was used as fill material, and the deeper material as a growth medium cap. For the Lake One closure plan, the fill material can be anything that meets engineering specifications, such as proximal wind blown tailings.

The final design for Lake One is to shed stormwater runoff and required much borrow material in order to be reshaped for drainage. On the south end, and east of James Canyon Dam, Razorback Ridge was dropped 80 ft. down in elevation. On the north end of the ridge, the steep slope off the mesa was too dangerous to address.

HURLEY GOLF COURSE IRA POWER POINT PRESENTATION

Pam Pinson presented slides of the Hurley Golf Course five year vegetation monitoring report that was submitted to the state. These areas had exceeded copper criteria for human health risk prior to remediation in which removal of soil from the golf course and satellite areas occurred. Razorback Ridge required the same remediation but was delayed as previously discussed.

Chino mainly focused on reseeding with a form of hydro seeding to stabilize the site for dust control following soil removal. Some long time Hurley residence probably remember what those areas were like prior to remediation. The history of the golf course dates back to the 30's to 40's, where the employees of Chino operated their own golf course, which is why this project refers to it as the Hurley Golf Course IRA. Even though some areas are located near the railroad tracks as well.

What we found was magnetite tailings used as the "greens" and tailings sand used for the sand pits. Lots of golf balls that still can be found. Mayor Diaz brought Chino a cartoon drawn map of the golf course when he heard of the pending remediation. It depicted how to play the course, and where the holes were with humorous stick figures representing the old employees, snakes, sand pits, and even cows in the way. This is one of a kind picture Pam is proud to own.

Chino started monitoring quarterly just to make sure that the vegetation growth in the soil, and drainage were developing properly. We didn't want future dust issues while the vegetation was re-establishing.

Pam showed the seeding event in 2009 and also photos of the sites a year later: scarification and formation of plants starting to take hold and grow on the east and west of Hwy. 180. Before the drought in 2011, there were some really good rains. So in 2010, there was a major difference in the vegetation from the seeding taking hold. We did have some volunteer vegetation outside of the hydro seeding, lawn grasses and shrubs starting to come back west of the railroad tracks. This took really well, lot of lush grass growing in the area.

Now in 2013, in the same area, it was a little more sparse, this is the result of the drought season. Overall, it did very well.

Summarizing, in the last five years these sights have returned with the native species. The vegetation, using seed mixes that the reclamation utilized, to establish a community, and to control erosion, and were encouraged with a lot of volunteer plants. Pam was glad this was successful.

SET AGENDA

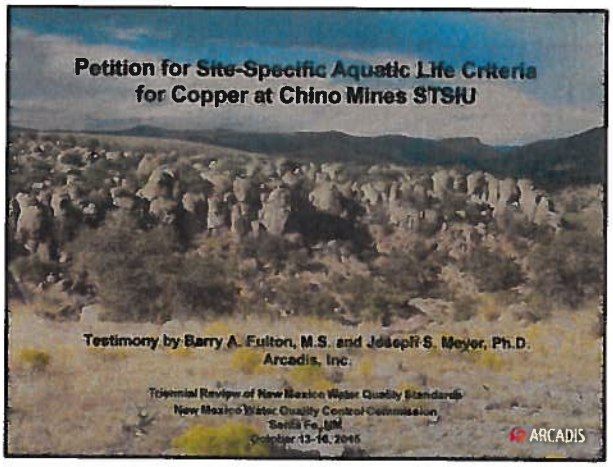
The next CWG meeting was set for 7pm on Tuesday, September 16, 2014 at the Bayard Community Center. See notes below;

Call to Order
Introductions
Membership
Public Comment
Changes to Agenda
Approval of Minutes
AOC update from Matt Schultz, NMED
Set agenda for next meeting Adjournment

ADJOURNMENT

The meeting was adjourned.

Minutes prepared by Donna Meyer, CWG secretary

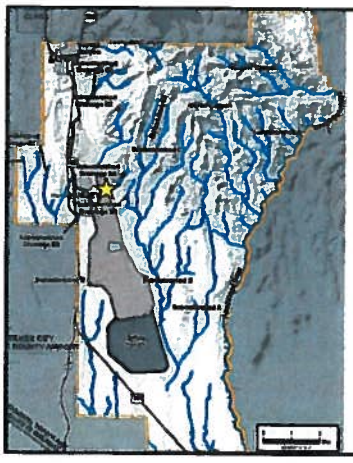


Overview

Petition to revise 20.6.4 NMAC

- **Site-specific aquatic life criteria (SSC) for copper in drainages in the Chino Mines Smelter Tailings Soils Investigation Unit (STSIU) near Bayard and Hurley**

ARCADIS



STSIU

- One of several Investigation Units (IU) at Chino Mines
- STSIU includes areas affected primarily by historical windblown smelter emissions
- STSIU does not include:
  - Hanover/Whitewater Creeks IU
  - Hurley Soils IU
  - Lampbright IU

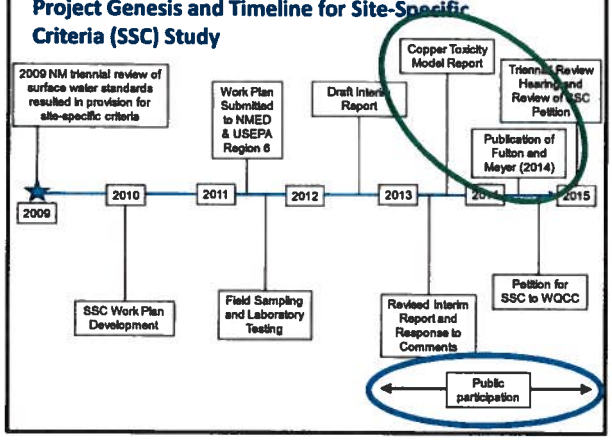
Overview

Petition to revise 20.6.4 NMAC

- Site-specific aquatic life criteria (SSC) for copper in drainages in the Chino Mines Smelter Tailings Soils Investigation Unit (STSIU) near Bayard and Hurley
- SSC are to be calculated by use of a multiple-regression equation that includes two water chemistry parameters (alkalinity and dissolved organic carbon concentration)
- Critical habitat for Chiricahua Leopard Frog is excluded from the petitioned waters

ARCADIS

Project Genesis and Timeline for Site-Specific Criteria (SSC) Study



Overview

Iterative, Stepwise Process with Review/Comment from NMED SWQB

- Collected water samples from STSIU drainages in Aug. and Sept. 2011
- Conducted chemistry analyses and copper toxicity tests in those waters and in laboratory waters, according to USEPA guidance
- Calculated Water Effect Ratios (WERs) from toxicity results, according to USEPA guidance
- Developed a multiple-regression model to predict site-specific toxicity of copper across range of water chemistries found in STSIU waters
- Proposing that regression model to calculate SSC for STSIU waters

ARCADIS

Metal Bioavailability
What is it and why is it important?

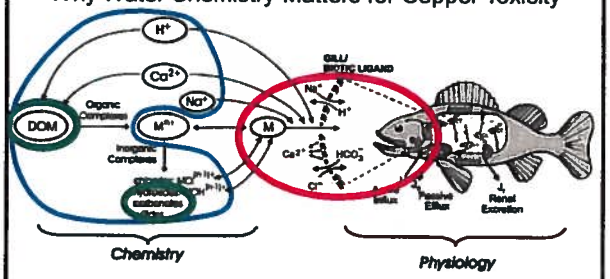
Bioavailability: The proportion of metal that is available for an organism to accumulate

- Copper bioavailability depends on water chemistry (beyond just water hardness), and is decreased when:
  - Metals bind to particles or solids
  - Metals bind to dissolved substances

Bioavailability can be incorporated into site-specific assessments

- Toxicity tests are used to evaluate metal bioavailability
- As bioavailability decreases, toxicity also decreases
- Therefore, site-specific criteria can justifiably be increased when water chemistry decreases metal bioavailability
- And importantly, "a site-specific criterion does not change the intended level of protection of aquatic life at the site" (USEPA, Water Quality Standards Handbook)

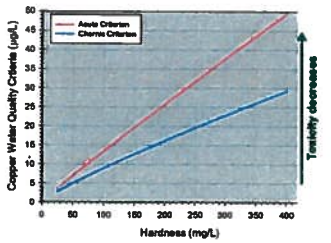
Bioavailability and Water Chemistry:
Why Water Chemistry Matters for Copper Toxicity



From Paquin et al. (2002)

Default Hardness-Based Copper Criteria

- Utilizes only hardness as the parameter influencing copper bioavailability
- Derived from toxicity tests conducted in "synthetic" laboratory water
  - De-ionized water with commercial salts added



Note: As water hardness concentrations increase, the copper criteria also increase.

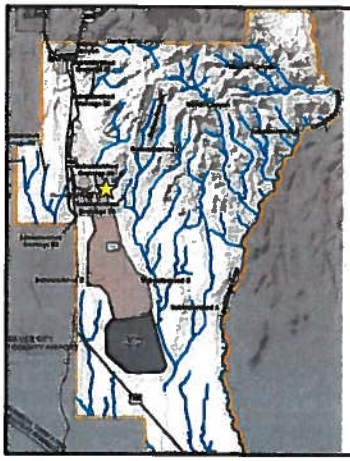
- Demonstrates protective effect of hardness on copper bioavailability / toxicity

Options for Site-Specific Water Quality Criteria

USEPA procedures for Site-Specific Criteria:

- Recalculation Procedure:
  focus on species that occur at a site
- Water-Effect Ratio (WER) Procedure:
  directly based on results of toxicity tests
- Resident Species Procedure:
  combines WER & recalculation
- Biotic Ligand Model (BLM):
  computer model based on complete water chemistry

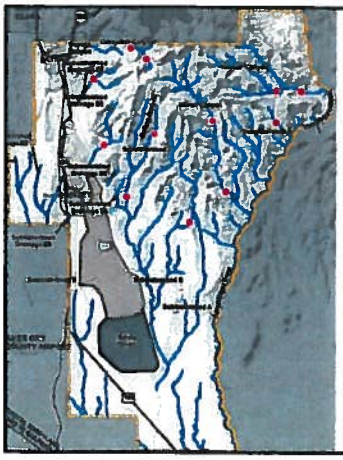
➢ All of these approaches are options for site-specific water quality criteria in 20.6.4.10.D.4 NMAC



Site Setting

- STSIU
  - Mountainous terrain
  - Numerous small, ephemeral drainages mainly with "flashy" flow in response to monsoonal moisture
  - July – September
  - Some isolated bedrock pools
- Historic operation of smelter
  - 1939 – 2000
  - Diffuse windblown distribution of copper
- 9 sub-watersheds within STSIU
  - Water chemistry gradient

ARCADIS



WER Study Design Overview

Objective: Develop site-specific Cu criteria for STSIU surface waters based on bioavailability of copper

- 12 sample locations (mostly ephemeral)
  - Spatially diverse
  - Range of chemistries
- Two rounds of sampling
  - 1st round: Spatially robust
  - 2nd round: Subset
- Samples split for analytical chemistry & toxicity tests
  ⇒ linked results allowed derivation of a toxicity-predictor equation

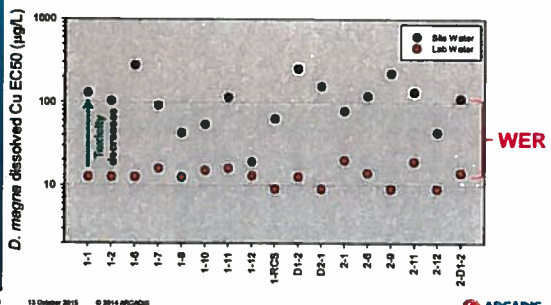
12

Water Effect Ratio (WER): Procedure

- Toxicity tests in Site and hardness-matched Lab waters, per USEPA guidance
  - Cu added to Site and Lab waters
  - Test species
    - *Daphnia magna*
    - Fathead minnow (*Pimephales promelas*)
  - Measure of toxicity (the median effects concentration [EC50] of Cu) is calculated in Site and Lab waters
  - Conducted side-by-side
- Any differences in toxicity are attributed to non-hardness chemistry differences between Site and Lab waters
- WER = $EC50_{Site\ water}$ / $EC50_{Lab\ water}$
- SSC = WER * Hardness-based criterion

  ARCADIS

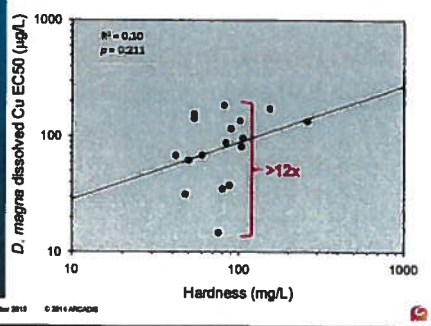
WER Results: EC50s



  ARCADIS

Toxicity and Chemistry: Hardness

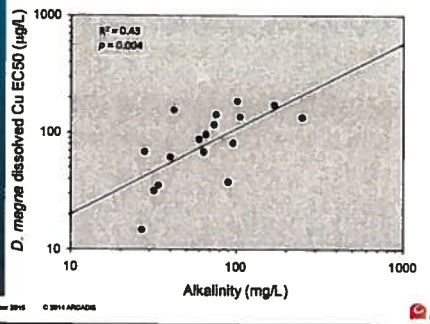
- Despite being the basis for the default criteria, water hardness is not a strong predictor of Cu toxicity in these Site waters



  ARCADIS

Toxicity and Chemistry: Alkalinity

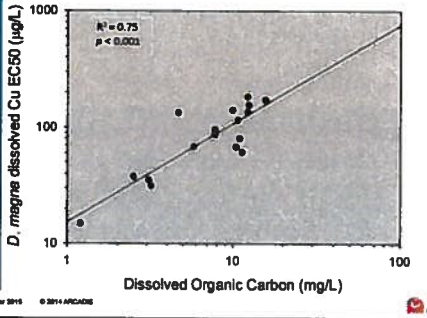
- Alkalinity ions (HCO_3^- and CO_3^{2-}) form aqueous complexes with Cu^{2+}, thus decreasing Cu bioavailability to organisms



  ARCADIS

Toxicity and Chemistry: DOM

- Dissolved organic matter (DOM) forms aqueous complexes with Cu^{2+}, thus decreasing Cu bioavailability to organisms
- Dissolved organic carbon (DOC) concentration is a common measure of DOM



  ARCADIS

Site-specific WER Regression Model

- Combination of DOC concentration and alkalinity provide a strong predictor of *Daphnnia magna* EC50 (R^2 = 0.85)

$$WER = \frac{\text{Site-Water EC50}}{\text{Lab-Water EC50}}$$

Regression-Predicted EC_{50} (µg/L)

Species Mean Acute Value (SMAV) = 19.31 µg/L

$$\text{Regression-Predicted } EC_{50} = 10^{\{0.588+(0.733*\log DOC)+(0.395*\log Alkalinity)\}}$$

  ARCADIS

Site-specific WER-based Copper Criteria

- WER is applied to acute and chronic criteria, per USEPA guidance
- WER is applicable in perennial, intermittent, and ephemeral waters
- Acute criteria apply in all waters; chronic criteria apply only in perennial and intermittent waters, per NMAC

$$SSC = WER * \text{Hardness-based copper criteria at sample hardness}$$

- **Regression "caps" on maximum alkalinity and DOC, to safeguard against unjustifiably high WERs**
  - **Alkalinity: 250 mg/L as $CaCO_3$**
  - **DOC: 16 mg C/L**
- **Additionally, no lower limit on alkalinity and DOC, to ensure needed protection**

19 13 October 2015 © 2014 ARCADIS

ARCADIS

Analogies Between Hardness-based and WER-based Criteria

- Both are based on a regression equation
  - ln(current criteria) = $\beta_0 + \beta_1$*ln(hardness)
  - log(WER) = $\beta_0 + \beta_1$*log(DOC) + β_2*log(alkalinity)
- Both can be calculated easily from one or two water quality parameters
- Both have regression "caps" to not extend beyond range of data used generate the regression
  - Current criteria: hardness at 400 mg/L
  - WER-based criteria: DOC at 16 mg/L and alkalinity at 250 mg/L

But DOC and alkalinity predict copper toxicity better than hardness (10% vs. 85% of variance in toxicity accounted for)

20 13 October 2015 © 2014 ARCADIS

ARCADIS

Conclusions

- Regression-based WER model provides a useful criteria-adjustment tool
  - Accounts for water chemistry and mechanisms of Cu toxicity
  - Provides a more accurate prediction of Cu toxicity than current hardness-based criteria
- Water chemistry plays an important role
  - Modifies the Cu toxicity in Site waters
  - Metal-speciation concepts in Biotic Ligand Model provide a mechanistic basis to explain toxicity results

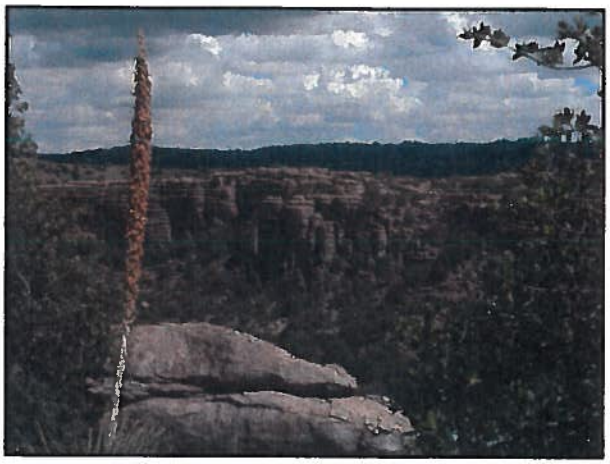
21 13 October 2015 © 2014 ARCADIS

ARCADIS

Summary

- Petition to designate SSC for drainages in Chino Mines STSIU, but excludes CLF critical habitat
- SSC are allowed by USEPA and in NMAC
- WER procedure (allowed in NMAC) was used to provide supporting data
- USEPA WER guidance was followed
- Multiple-regression model was fit to WER results to develop a WER-prediction equation, based on alkalinity and DOC concentration
- Default hardness-based criteria are multiplied by WER to calculate SSC

  ARCADIS



FEDERAL REGISTER

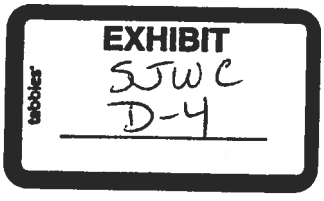
Vol. 80 Friday,
No. 162 August 21, 2015

Part IV

Environmental Protection Agency

40 CFR Part 131

Water Quality Standards Regulatory Revisions; Final Rule



regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. What is the statutory and regulatory history of the federal WQS regulation?

The Clean Water Act (CWA or the Act)—initially enacted as the Federal Water Pollution Control Act Amendments of 1972 (Pub. L. 92–500) and subsequent amendments—determined the basic structure in place today for regulating pollutant discharges into waters of the United States. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," and to achieve "wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water" (CWA sections 101(a) and 101(a)(2)).

The CWA establishes the basis for the water quality standards (WQS or standards) regulation and program. CWA section 303 addresses the development of state and authorized tribal WQS that serve the CWA objective for waters of the United States. The core components of WQS are designated uses, water quality criteria that support the uses, and antidegradation requirements. Designated uses establish the environmental objectives for a water body and water quality criteria [2] define the minimum conditions necessary to achieve those environmental objectives. The antidegradation requirements provide a framework for maintaining and protecting water quality that has already been achieved.

CWA section 301 establishes pollutant discharge restrictions for point sources. Specifically, it provides that "the discharge of any pollutant by any person shall be unlawful" except in compliance with the terms of the Act, including industrial and municipal effluent limitations specified under CWA sections 301 and 304 and "any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedule of compliance, established pursuant to any [s]tate law or regulations."

The CWA gives states and authorized tribes discretion on how to control pollution from nonpoint sources. Although the CWA includes specific requirements for the control of pollution from certain discharges, state and authorized tribal WQS established pursuant to CWA section 303 apply to the water bodies themselves, regardless of the source(s) of pollution/pollutants. Thus, the WQS express the desired condition and level of protection for a water body, regardless of whether a state or authorized tribe chooses to place controls on nonpoint source activities, in addition to point source activities required to obtain permits under the CWA. Section 303(c) of the Act also requires that states and authorized tribes hold a public hearing to review their standards at least once every three years (*i.e.*, triennial review), and that EPA review and approve or disapprove any new or revised state and authorized tribal standards. Furthermore, if EPA disapproves a state's or authorized tribe's WQS under CWA sections 303(c)(3) and 303(c)(4)(A), or if the Administrator makes a determination under CWA section 303(c)(4)(B) that a new or revised WQS is necessary, EPA must propose and promulgate federal standards for a state or authorized tribe, unless the state or authorized tribe develops and EPA approves its own WQS first.

EPA established the core of the WQS regulation in a final rule issued in 1983. That rule strengthened provisions that had been in place since 1977 and codified them as 40 CFR part 131.[3] In support of the 1983 regulation, EPA issued a number of guidance documents, such as the *Water Quality Standards Handbook* (WQS Handbook),[4] that provide guidance on the interpretation and implementation of the WQS regulation and on scientific and technical analyses that are used in making decisions that would impact WQS. EPA also developed the *Technical Support Document for Water Quality-Based Toxics Control* [5] that provides additional guidance for implementing state and authorized tribal WQS.

EPA modified the 40 CFR part 131 regulation twice since 1983. First, in 1991 pursuant to section 518 of the Act, EPA added §§ 131.7 and 131.8 which extended to Indian tribes the opportunity to administer the WQS program and outlined dispute resolution mechanisms.[6] Second, in 2000, EPA finalized § 131.21(c)–(f), commonly known as the "Alaska Rule," which specifies that new and revised standards adopted by states and authorized tribes and submitted to EPA after May 30, 2000, become applicable standards for CWA purposes only when approved by EPA.[7]

In 1998, EPA issued an Advance Notice of Proposed Rulemaking (ANPRM) to discuss and invite comment on over 130 aspects of the federal WQS regulation and program, with the goal of identifying specific changes that might strengthen water quality protection and restoration, facilitate watershed management initiatives, and incorporate evolving water quality criteria and assessment science into state and authorized tribal WQS programs.[8] Although EPA chose not to move forward with a rulemaking after the ANPRM, EPA identified a number of high priority issue areas for which the Agency developed guidance, provided technical assistance, and continued further discussion and dialogue to ensure more effective program implementation. This action is part of EPA's ongoing effort to clarify and strengthen the WQS program.

C. What environmental issues do the final changes to the federal WQS regulation address?

Since EPA first established the WQS regulation in 1983, the regulation has acted as a powerful force to prevent pollution and improve water quality by providing a foundation for a broad range of water quality management programs. Since 1983, however, diverse and complex challenges have arisen, including new types of contaminants, pollution stemming from multiple sources, extreme weather events, hydrologic alteration, and climate change-related impacts. These challenges necessitate a more effective, flexible and practicable approach for the implementation of WQS and protecting water quality. Additionally, extensive experience with WQS implementation by states, authorized tribes, and EPA revealed a need to update the regulation to help meet these challenges.

This rulemaking revises the requirements in six program areas: (1) Administrator's determination that new or revised WQS are necessary, (2) designated uses, (3) triennial reviews, (4) antidegradation, (5) WQS variances, and (6) permit compliance schedule authorizing provisions.

The provisions related to designated uses help states and authorized tribes restore and maintain resilient and

[2] Under CWA section 304(a), EPA publishes recommended water quality criteria guidance that consists of scientific information regarding concentrations of specific chemicals or levels of parameters in water that protect aquatic life and human health. CWA section 303(c) refers to state and authorized tribal water quality criteria that are subject to EPA review and approval or disapproval.

[3] 54 FR 51400 (November 8, 1983).

[4] First edition, December 1983; second edition, EPA 823–B–94–005a, August 1994.

[5] First edition, EPA 440/4–85–032, September 1985; revised edition, EPA 505/2–90–001, March 1991.

[6] 56 FR 64893 (December 12, 1991).

[7] 65 FR 24641 (April 27, 2000).

[8] 63 FR 36742 (July 7, 1998).

II. Rule Revisions Addressed in This Rule

EPA provides a comparison document showing the revisions made by this final rule, and a second document showing the revisions made between the proposed and final rule. EPA has posted both documents at *http://water.epa.gov/lawsregs/lawsguidance/wqs_index.cfm.*

A. Administrator's Determinations That New or Revised WQS Are Necessary

What does this rule provide and why?

Open communication among states, tribes and EPA facilitates the sharing of information to ensure that WQS continue to adequately protect waters as new challenges arise. However, the public has occasionally mistaken such communication from EPA for a "determination" by the Administrator that new or revised WQS are necessary under CWA section 303(c)(4)(B) (hereafter referred to as "Administrator's determination").[10]

With the clarification provided by this rule, stakeholders and the public can readily distinguish Administrator's determinations from routine EPA communications on issues of concern and recommendations regarding the scope and content of state and authorized tribal WQS. This rule minimizes the potential for stakeholders to misunderstand EPA's intent with its communications and allows EPA to provide direct and transparent feedback. It will also preserve limited resources that would otherwise be spent resolving the confusion through litigation.

An Administrator's determination is a powerful tool, and this rule ensures that it continues to be used purposefully and thoughtfully. This rule contains two requirements related to an Administrator's determination at § 131.22(b). The first requirement provides that, in order for a document to constitute an Administrator's determination, it must be signed by the Administrator or duly authorized delegate. The second requirement is that such a determination must include a statement that the document is an Administrator's determination for purposes of section 303(c)(4)(B) of the Act. This requirement makes clear that this provision applies to Administrator's determinations made under CWA section 303(c)(4)(B) rather than determinations made under CWA section 303(c)(4)(A).

Section 303(c)(4) of the Act provides two different scenarios under which the Administrator has the authority to "promptly prepare and publish proposed regulations setting forth a revised or new water quality standard for the navigable waters involved" following some sort of determination. Section 303(c)(4)(A) of the Act gives EPA the authority to propose regulations where states or authorized tribes have submitted new or revised WQS that the Administrator "determines" are not consistent with the Act. In this instance, EPA disapproves new or revised WQS and specifies the changes necessary to meet CWA requirements. If a state or authorized tribe fails to adopt and submit the necessary revisions within 90 days after notification of the disapproval determination, EPA must promptly propose and promulgate federal WQS as specified in CWA section 303(c)(4)(A) and 40 CFR 131.22(a). This action does not address or affect this authority.

Absent state or authorized tribal adoption or submission of new or revised WQS, section 303(c)(4)(B) of the CWA gives EPA the authority to determine that new or revised WQS are necessary to meet the requirements of the Act. Once the Administrator makes such a determination, EPA must promptly propose regulations setting forth new or revised WQS for the waters of the United States involved, and must then promulgate such WQS, unless a state or authorized tribe adopts and EPA approves such WQS first.

Commenters expressed concern that the proposed rule was not clear with respect to which of these authorities was addressed in this rule. EPA's final rule makes clear that these requirements only refer to Administrator's determinations under CWA section 303(c)(4)(B).

Based on comments, EPA reviewed the use of the term "states" throughout the regulation and found that, in § 131.22(b), this term did not accurately describe the scope of waters for which the CWA provides authority to the EPA Administrator. Thus, consistent with CWA section 303(c)(4), this rule provides that the Administrator may propose and promulgate a regulation applicable to one or more "navigable waters," as that term is defined in CWA section 502(7) after determining that new or revised WQS are necessary to meet the requirements of the CWA. Consistent with the statute's plain language, this authority applies to all navigable waters located in any state or in any area of Indian country.[11]

What did EPA consider?

EPA considered finalizing the revision to § 131.22(b) as proposed. However, EPA decided it was important to clarify that this provision only addresses Administrator's determinations made pursuant to section 303(c)(4)(B) of the Act, which was not clear given the comments received. EPA also considered foregoing revisions to § 131.22(b) altogether. However, this option would not meet EPA's policy objective, described previously, which many commenters supported.

What is EPA's position on certain public comments?

Some commenters requested that EPA clarify whether this revision will affect the petition process under section 553(e) of the Administrative Procedure Act (APA) (5 U.S.C. 553(e)). This action does not affect the public's ability to petition EPA to issue, amend, or repeal a rule. Nor does this action affect the Agency's obligations for responding to an APA petition or the ability of a petitioner to challenge the Agency for unreasonable delay in responding to a petition. In the event that the Administrator grants a petition for WQS rulemaking and makes an Administrator's determination that new or revised WQS are necessary, this provision does not affect the obligation the Agency has to promptly propose and promulgate federal WQS.

Some commenters requested that EPA clarify how the Administrator delegates authority. The laws, Executive Orders, and regulations that give EPA its authority typically, but not always, indicate that "the Administrator" shall or may exercise certain authorities. In order for other EPA management officials to act on behalf of the Administrator, the Administrator must delegate the authority granted by Congress or the Executive Branch. The Administrator may do so by regulation or through the Agency's delegation process by signing an official letter that is then maintained as a legal record of authority.

B. Designated Uses

What does this rule provide and why?

CWA section 303(c)(2)(A) requires that new or revised WQS shall consist

[10] A listing of Administrator's determinations that new or revised WQS are necessary to meet the requirements of the CWA pursuant to section 303(c)(4)(B) can be found at: *http://water.epa.gov/scitech/swguidance/standards/wqsregs.cfm#federal* under the heading "Federal Clean Water Act Determinations that New or Revised Standards Are Necessary." EPA intends to post future Administrator's determinations pursuant to CWA section 303(c)(4)(B) to its Web site.

[11] Indian country is defined at 18 U.S.C. 1151. A prior example of federally promulgated WQS in Indian country can be found at 40 CFR 131.35, federally promulgated WQS for the Colville Confederated Tribes Indian Reservation (54 FR 28625, July 6, 1989).

uses specified in section 101(a)(2) of the Act.[16] EPA revises § 131.10(j)(2) to clarify that a UAA is required when removing or revising a use specified in section 101(a)(2) of the Act as well as when removing or revising a sub-category of such a use. These revisions also clarify that when adopting a sub-category of a use specified in section 101(a)(2) of the Act with less stringent criteria, a UAA is only required when the criteria are less stringent than the previously applicable criteria. EPA made corresponding revisions to § 131.10(g) to explicitly reference § 131.10(j). This rule also includes editorial changes to § 131.10(g) that are not substantive in nature. Lastly, EPA establishes a new § 131.10(k)(1) and (2) to explain when a UAA is not required.

To ensure that states and authorized tribes adopt WQS that continue to serve the Act's goal of water quality that provides for the uses specified in section 101(a)(2) of the CWA to the extent attainable and enhance the quality of the water, this rule revises § 131.10(g) to provide that where states and authorized tribes adopt new or revised WQS based on a required UAA, they must adopt the HAU as defined at § 131.3(m). These new requirements make clear that states and authorized tribes may remove unattainable uses, but they must retain and designate the attainable use(s). The final regulation does not prohibit states and authorized tribes from removing a designated use specified in CWA section 101(a)(2) or a sub-category of such a use, altogether, where demonstrated to be unattainable. For example, a state or authorized tribe may remove an aquatic life use if it can demonstrate through a UAA that no aquatic life use or sub-category of aquatic life use is attainable. EPA expects such situations to be rare; however to clarify that this outcome is possible, EPA adds a sentence to the definition of HAU at § 131.3(m) to make explicit that where the state or authorized tribe demonstrates the relevant use specified in section 101(a)(2) of the Act and sub-categories of such a use are not attainable, there is no required HAU to be adopted. If a state or authorized tribe removes the designated use, altogether, and in the same action adopts another designated use in a different broad use category (*e.g.*, agricultural use, recreational use), it may appear as though the state or authorized tribe intends the newly adopted use to be the HAU. In fact, this is a separate state or tribal decision in the same rulemaking.

The concept of HAU is fundamental to the WQS program. Adopting a use that is less than the HAU could result in the adoption of water quality criteria that inappropriately lower water quality and could adversely affect aquatic ecosystems and the health of the public recreating in and on such waters. For example, a state or authorized tribe may be able to demonstrate that a use supporting a particular class of aquatic life is not attainable. However, if some less sensitive aquatic organisms are able to survive at the site under current or attainable future conditions, the state's or authorized tribe's WQS are not continuing to serve the goals of the CWA by removing the aquatic life use designation and applicable criteria altogether without adopting an alternate CWA section 101(a)(2) use or sub-category of such a use that is feasible to attain, and the criteria that protect that use. EPA's regulation at §§ 131.5(a)(2), 131.6(c), and 131.11(a) explicitly requires states and authorized tribes to adopt water quality criteria that protect designated uses.

Commenters expressed concern that the proposed definition of HAU used overly subjective terminology that would make it difficult for states and authorized tribes to adopt an HAU that would not be challenged by stakeholders. The definition of HAU at § 131.3(m) includes specific terms to ensure that the resulting HAU is clear to states, authorized tribes, stakeholders and the public.

First, the word "modified" makes clear that when adopting the HAU, the state or authorized tribe is adopting a different use within the same broad CWA section 101(a)(2) use category, if any such use is attainable. For example, if a state or authorized tribe removes a warm water aquatic life use, then the HAU is a modified version of the warm water aquatic life use, such as a "limited warm water aquatic life use." The definition makes clear that states and authorized tribes are not required to determine whether one broad use category is better than another (*e.g.*, to determine that a recreation use is better than an aquatic life use).

Second, EPA adds the phrase "based on the evaluation of the factor(s) in § 131.10(g) that preclude(s) attainment of the use and any other information or analyses that were used to evaluate attainability" to the final HAU definition to be clear that the HAU is the attainable use that results from the process of determining what is not attainable. For example, where the state or authorized tribe demonstrates that a use cannot be attained due to substantial and widespread economic and social impacts, the state or authorized tribe may then determine the HAU by considering the use that is attainable without incurring costs that would cause a substantial and widespread economic and social impact consistent with § 131.10(g)(6). Although the definition continues to include the terms "highest" and "closest to," which some commenters said were subjective terms, the new definition does not necessarily mean that the use with the most numerically stringent criteria must be designated as the HAU. The CWA does not require states and authorized tribes to adopt designated uses to protect a level beyond what is naturally occurring in the water body. Therefore, a state's or authorized tribe's determination of the HAU must take into consideration the naturally expected condition for the water body or waterbody segment. For example, Pacific Northwest states provide specific levels of protection for different life stages of salmonids. While the different life stages require different temperature criteria, the designated use with the most numerically stringent temperature criterion may not be required under § 131.11(a) to protect the HAU, if the life stage that temperature criterion protects does not naturally occur in that water body or waterbody segment.

When conducting a UAA and soliciting input from the public, states and authorized tribes need to consider not only what is currently attained, but also what is attainable in the future after achievable gains in water quality are realized. EPA recommends that such a prospective analysis involve the following:

- Identifying the current and expected condition for a water body;
- Evaluating the effectiveness of best management practices (BMPs) and associated water quality improvements;
- Examining the efficacy of treatment technology from engineering studies; and
- Using water quality models, loading calculations, and other predictive tools.

The preamble to the proposed rule also provided several examples of how states and authorized tribes can articulate the HAU. These examples include using an existing designated use framework, adopting a new statewide sub-category of a use, or adopting a new sub-category of a use that uniquely recognizes the limiting condition for a specific water body (*e.g.*, aquatic life limited by naturally high levels of copper).

One example of where a state adopted new statewide sub-categories to protect

[16] This provision includes situations where a state or authorized tribe adopts for the first time, or previously designated, only non-101(a)(2) uses.

segment, overview of land use patterns, summary of available water quality data and/or stream surveys, physical information, information from public comments and/or public meetings, anecdotal information, etc.),

- Attainability information (*i.e.*, the § 131.10(g) factors as described previously, if applicable),
- Value and/or benefits (including environmental, social, cultural, and/or economic value/benefits) associated with either retaining or removing the use, and
- Impacts of the use removal on other designated uses.

As an example of what a use and value demonstration for a non-101(a)(2) use can look like, consider a small water body that a state or authorized tribe generically designated as a public water supply as part of a statewide action. The state or authorized tribe decides there is no use and value in retaining such a use for that water body. The state or authorized tribe could provide the public and EPA with documentation that public water supply is not an existing use (*e.g.*, there is no evidence that the water body was used for this purpose and the water quality does not support this use); the nearby population uses an alternative drinking water supply; and projected population trends suggest that the current supply is sufficient to accommodate future growth. States and authorized tribes must make this documentation available to the public prior to any public hearing, and submit it to EPA with the WQS revision.

What did EPA consider?

In developing this rule, EPA considered foregoing the revisions to § 131.10(g), (j), and (k), but this option would not clarify when a UAA is or is not required and thus not accomplish the Agency's objectives. EPA considered finalizing the revisions to § 131.10(g), (j), and (k)(1) and (2) as proposed; however, in response to comments received, EPA made revisions to better accomplish its objectives.

EPA considered foregoing the HAU requirement at § 131.10(g), but this option would not support the adoption of WQS that continue to serve the purposes of the Act and enhance the quality of the water. EPA also considered finalizing the requirement as proposed but not finalizing a regulatory definition; however, the absence of a regulatory definition could lead to confusion and hinder environmental protection.

EPA considered not specifying what is required when removing or revising a non-101(a)(2) use in the final rule; however, multiple commenters indicated that EPA's proposed rule only specified that a UAA is not required to remove or revise a non-101(a)(2) use and did not specify what is required. Given the confusion about existing requirements, EPA decided to make the requirement explicit in § 131.10(a) and (k)(3).

What is EPA's position on certain public comments?

Numerous commenters disagreed with EPA's position that the consumption of aquatic life is a use specified in section 101(a)(2) of the Act and requested that EPA document the rationale for this position. Based on the CWA section 303(c)(2)(A) requirement that WQS protect public health, EPA interprets the uses under section 101(a)(2) of the Act to mean that not only can fish and shellfish thrive in a water body, but when caught, they can also be safely eaten by humans.[20]

EPA first articulated this interpretation in the 1992 National Toxics Rule.[21] For example, EPA specified that all waters designated for even minimal aquatic life protection (and therefore a potential fish and shellfish consumption exposure route) are protected for human health. EPA also described its interpretation in the October 2000 Human Health Methodology.[22] Consistent with this interpretation, most states have adopted human health criteria as part of their aquatic life uses, as the purpose of the criteria is to limit the amount of a pollutant in aquatic species prior to consumption by humans. However, states and authorized tribes may also choose to adopt human health criteria as part of their recreational uses, recognizing that humans will consume fish and shellfish after fishing, which many states consider to be a recreational use. EPA leaves this flexibility to states and authorized tribes as long as the waters are protecting humans from adverse effects of consuming aquatic life, unless the state or authorized tribe has shown that consumption of aquatic life is unattainable consistent with EPA's regulation.

EPA also received comments requesting clarification on existing uses. EPA notes that in addressing these comments, EPA is not reopening or changing the regulatory provision at § 131.10(h)(1). The proposed change to § 131.10(g) simply referred back to the requirement that is housed in § 131.10(h)(1) and was not intended to change requirements regarding existing uses. This is also the case in the final rule. The WQS regulation at § 131.3(e) defines an existing use as "those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards." EPA provided additional clarification on existing uses in the background section of the proposed preamble,[23] as well as in a September 2008 letter from EPA to the State of Oklahoma.[24] Specifically, EPA explained that existing uses are known to be "actually attained" when the use has actually occurred *and* the water quality necessary to support the use has been attained. EPA recognizes, however, that all the necessary data may not be available to determine whether the use actually occurred or the water quality to support the use has been attained. When determining an existing use, EPA provides substantial flexibility to states and authorized tribes to evaluate the strength of the available data and information where data may be limited, inconclusive, or insufficient regarding whether the use has occurred and the water quality necessary to support the use has been attained. In this instance, states and authorized tribes may decide that based on such information, the use is indeed existing.

Some commenters expressed concern that this interpretation supports the removal of a designated use in a situation where the use has actually occurred but the water quality necessary to protect the use has never been attained, as well as in a situation where the water quality has been attained but the use has not actually occurred. Such an interpretation may be contrary to a state's or authorized tribe's environmental restoration efforts or water quality management goals. For example, a state or authorized tribe may designate a highly modified water body for primary contact recreation even though the water quality has never been attained to support such a use. In this situation, if the state or authorized tribe exercises its discretion to recognize such an existing use, then consistent with EPA's regulation the designated use may not be removed.

[20] *http://water.epa.gov/scitech/swguidance/standards/upload/2000_10_31_standards_shellfish.pdf.*

[21] 57 FR 60859 (December 22, 1992). See also 40 CFR 131.36.

[22] *http://water.epa.gov/scitech/swguidance/standards/criteria/health/methodology/index.cfm; Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health*, see pages 4–2 and 4–3.

[23] 78 FR 54523 (September 4, 2013).

[24] *http://water.epa.gov/scitech/swguidance/standards/upload/Smithee-existing-uses-2008-09-23.pdf.*

more stringent or less stringent than the state's or authorized tribe's applicable criteria because all stakeholders should know how the state or authorized tribe considered the CWA section 304(a) criteria recommendations when determining whether to revise their own WQS following a triennial review. A state's or authorized tribe's explanation may be situation-specific and could involve consideration of priorities and resources. EPA will not approve or disapprove this explanation pursuant to CWA section 303(c) nor will the explanation be used to disapprove new or revised WQS that otherwise meet the requirements of the CWA. Rather, it will inform both the public and EPA of the state's or authorized tribe's plans with respect to adopting new or revised criteria in light of the latest science. EPA strongly encourages states and authorized tribes to include their explanation on a publically accessible Web site or some other mechanism to inform the public of their decision.

The second revision addresses confusion expressed in public comments regarding the meaning of § 131.20(a) so that states, authorized tribes and the public are clear on the scope of WQS to be reviewed during a triennial review. By not addressing this issue directly in the proposal, EPA may have inadvertently created ambiguity by implying that the only criteria states and authorized tribes need to re-examine during a triennial review are those criteria related to the parameters for which EPA has published new or updated CWA section 304(a) criteria recommendations. However, EPA's intent was not to qualify the initial sentence in § 131.20(a) regarding "applicable water quality standards" (which are all WQS either approved or promulgated by EPA for a state or tribe) but to supplement it by adding more detail regarding the triennial review of any and all existing criteria established pursuant to 40 CFR 131.11. Thus, the final rule clarifies what the regulation means by "applicable water quality standards." [27]

When conducting triennial reviews, states and authorized tribes must review all applicable WQS adopted into state or tribal law pursuant to §§ 131.10–131.15 [28] and any federally promulgated WQS.[29] Applicable WQS specifically include designated uses (§ 131.10), water quality criteria (§ 131.11), antidegradation (§ 131.12), general policies (§ 131.13), WQS variances (§ 131.14), and provisions authorizing the use of schedules of compliance for WQBELs in NPDES permits (§ 131.15).[30] If, during a triennial review, the state or authorized tribe determines that the federally promulgated WQS no longer protect its waters, the state or authorized tribe should adopt new or revised WQS. If EPA approves such new or revised WQS, EPA would withdraw the federally promulgated WQS because they would no longer be necessary.

Some states and authorized tribes target specific WQS during an individual triennial review to balance resources and priorities. The final rule does not affect states' or authorized tribes' discretion to identify such priority areas for action. However, the CWA and EPA's implementing regulation require the state or authorized tribe to hold, at least once every three years, a public hearing [31] for the purpose of reviewing applicable WQS, not just a subset of WQS that the state or authorized tribe has identified as high priority. In this regard, states and authorized tribes must still, at a minimum, seek and consider public comment on all applicable WQS.

What did EPA consider?

EPA considered finalizing the revision to § 131.20(a) as proposed. However, given public commenters' confusion and concerns, as discussed previously, EPA ultimately rejected this option. EPA also considered foregoing revisions to § 131.20(a) altogether. However, this option would not ensure that states and authorized tribes adopt criteria that reflect the latest science, and thus EPA rejected it.

What is EPA's position on certain public comments?

One commenter requested a longer period than three years for states and authorized tribes to consider new or updated CWA section 304(a) criteria recommendations because it was neither reasonable nor feasible to conduct a comprehensive review and rulemaking in this timeframe, including the public participation component. Other commenters suggested that EPA allow triennial reviews to occur "periodically," while some suggested that nine or 12 years would be a more appropriate frequency of review.

Although EPA acknowledges the challenges (*e.g.*, the legal and administrative processes, resource constraints) that states and authorized tribes may experience when conducting triennial reviews, the three-year timeframe for triennial review comes directly from CWA section 303(c)(1). EPA has no authority to provide a longer timeframe for triennial reviews.

D. Antidegradation

One of the principal objectives of the CWA is to "*maintain* the chemical, physical and biological integrity of the Nation's waters." [32] Congress expressly affirmed this principle of "antidegradation" in the Water Quality Act of 1987 in CWA sections 101(a) and 303(d)(4)(B). EPA's WQS regulation has included antidegradation provisions since 1983. In particular, 40 CFR 131.12(a)(2) includes a provision that protects "high quality" waters (*i.e.*, those with water quality that is better than necessary to support the uses specified in section 101(a)(2) of the Act.)

Maintaining high water quality is critical to supporting economic and community growth and sustainability. Protecting high water quality also provides a margin of safety that will afford the water body increased resilience to potential future stressors, including climate change. Degradation of water quality can result in increased public health risks, higher treatment costs that must be borne by ratepayers and local governments, and diminished aquatic communities, ecological diversity, and ecosystem services. Conversely, maintaining high water quality can lower drinking water costs, provide revenue for tourism and recreation, support commercial and recreational fisheries, increase property values, create jobs and sustain local communities.[33] While preventing degradation and maintaining a reliable source of clean water involves costs, it can be more effective and efficient than

[27] EPA published the *What is a New or Revised Water Quality Standard Under CWA 303(c)(3) Frequently Asked Questions* (EPA–820–F–12–017, October 2012) to consolidate EPA's interpretation (informed by the CWA, EPA's implementing regulation at 40 CFR part 131, and relevant case law) of what constitutes a new or revised WQS that the Agency has the CWA section 303(c)(3) authority and duty to approve or disapprove (*http://water.epa.gov/scitech/swguidance/standards/upload/cwa303faq.pdf*).

[28] Definitions adopted by states and authorized tribes are considered WQS when they are inextricably linked to provisions adopted pursuant to §§ 131.10–131.15.

[29] Any WQS that EPA has promulgated for a state or tribe are found in 40 CFR part 131, subpart D. See also: *http://water.epa.gov/scitech/swguidance/standards/wqsregs.cfm#proposed*.

[30] This rule finalizes § 131.14 (WQS Variances) and § 131.15 (Provisions Authorizing the Use of Schedules of Compliance for WQBELs in NPDES permits). For detailed discussion about these sections, see sections II.E and II.F of this document, respectively.

[31] For detailed discussion about this final rule for § 131.20(b), related to public participation, see section II.G of this document.

[32] See CWA section 101(a) (emphasis added).

[33] *http://water.epa.gov/polwaste/nps/watershed/upload/economic_benefits_factsheet3.pdf; Economic Benefits of Protecting Healthy Watersheds* (EPA 841–N–12–004, April 2012).

recommends states and authorized tribes document their evaluation of the Tier 2 decision, including the factors considered and how those factors were weighed. The case of *Ohio Valley Envtl. Coalition* v. *Horinko* demonstrates why it is important for states and authorized tribes to articulate the rationale for their decisions.[34] In this case, the U.S. District Court for the Southern District of West Virginia considered whether the record contained sufficient evidence to justify EPA's approval of the state's exclusion of particular water bodies from Tier 2 protection. The state had classified some CWA section 303(d) listed waters as waters to receive Tier 2 protection, while it had excluded other similar waters with similar impairments from Tier 2 protection. The Court found the administrative record insufficient to support EPA's decision to approve the state's classification because the state's CWA section 303(d) listing was the only evidence related to the water quality of those river segments. The Court did not opine on whether, in a different factual situation, categorically excluding waters from Tier 2 protection based on CWA section 303(d) impairments would be consistent with the CWA.

To minimize the administrative processes associated with this rule, EPA uses the phrase "opportunity for public involvement" rather than "public participation." "Public participation" at 40 CFR 131.20(b) [35] refers to a state or authorized tribe holding a public hearing for the purpose of reviewing WQS. With this rule, EPA provides states and authorized tribes the flexibility to engage the public in a way that suits the state or authorized tribe and the public. For example, a state or authorized tribe could develop lists of waters that will and will not receive Tier 2 protection along with descriptions of the factors considered in making each of those decisions and post that information on its Web site. To obtain public input, the state or authorized tribe could share these lists during a triennial review and/or during revision of antidegradation implementation methods. Such an approach has the advantage of streamlining both the decision-making and public involvement processes. As another example, a state could use the NPDES process to engage the public at the time it drafts a permit that would allow a lowering of water quality. The state would document the relevant information related to its decision in the permit fact sheet provided to the public and specifically request comment on its Tier 2 protection decision.

States and authorized tribes can provide additional avenues for public involvement by providing structured opportunities for the public to initiate antidegradation discussions. For example, a state or authorized tribe could provide a petition process in which citizens request Tier 2 protection for specific waters, and those citizens could provide data and information for a state's or authorized tribe's consideration. Also, states and authorized tribes can establish a process to facilitate public involvement in identifying waters as Outstanding National Resource Waters (ONRWs).

An additional requirement at § 131.12(a)(2)(i) provides that states and authorized tribes must not exclude a water body from the protections in § 131.12(a)(2) solely because water quality does not exceed levels necessary to support all of the uses specified in CWA section 101(a)(2). For a discussion on why such an approach is inconsistent with the Act, see the preamble to the proposed rule at 78 FR 54527 (September 4, 2013). Thus, when considering whether to exclude waters from Tier 2 protection, states and authorized tribes must consider the overall quality of the water rather than whether water quality is better than necessary for individual chemical, physical, and biological parameters to support all the uses specified in CWA section 101(a)(2). The rule provides for a decision-making process where states and authorized tribes consider water quality and reasons to protect water quality more broadly. This can lead to more robust evaluations of the water body, and potentially more waters receiving Tier 2 protection. To make a decision to exclude a water body from Tier 2 protection, states and authorized tribes must identify the factors considered which should include factors that are rooted in the goals of the CWA, including the chemical, physical, and biological characteristics of a water body. Where states and authorized tribes wish to consider CWA section 303(d) listed impairments, it would be important that they also consider all other relevant available data and conduct an overall assessment of a water's characteristics. It would also be important that states and authorized tribes consider the public value of the water. This includes the water's impact on public health and welfare, the existing aquatic and recreational uses, and the value of retaining ecosystem resilience against the effects of future stressors, including climate change. For additional information on this overall assessment, see the preamble to the proposed rule at 78 FR 54527 (September 4, 2013).

This requirement is consistent with the proposed rule. However, to accurately articulate the requirement, and to remain consistent with § 131.12(a)(2), the final rule text reflects that for a water to have available assimilative capacity for which to provide Tier 2 protection, the water quality must "exceed" the levels necessary (*i.e.*, be better than necessary) to support the uses specified in CWA section 101(a)(2). Commenters stated that some members of the public could misinterpret the phrase "high quality waters" in the proposal to include waters that *meet* but do not *exceed* the water quality necessary to support the uses specified in CWA section 101(a)(2). The final rule replaces "high quality waters" with the phrase "waters for the protections described in (a)(2) of this section." The final rule also says waters cannot be excluded from Tier 2 protection solely "because water quality does not exceed levels necessary to support all of the uses specified in section 101(a)(2) of the Act" instead of "because not all of the uses specified in CWA section 101(a)(2) are attained," as stated in the proposal.

Where water quality is better than necessary to support all of the uses specified in CWA section 101(a)(2), § 131.12(a)(2) requires states and authorized tribes to provide Tier 2 protection. Where water quality is not better than necessary to support all of the uses specified in CWA section 101(a)(2), the final rule does not require states and authorized tribes to provide Tier 2 protection for the water body. However, in instances where states and authorized tribes lack data and information on the water quality to make individual water body conclusions, EPA recommends that they provide all or a subset of their waters with Tier 2 protection, by default. Doing so will increase the probability that these waters will maintain a level of resiliency to future stressors.

This rule requires states' and authorized tribes' antidegradation policies (which are legally binding state and authorized tribal provisions subject to public participation) to be consistent with the new requirements related to identifying waters for Tier 2 protection. Since states and authorized tribes must provide for public participation on their antidegradation policies, placing their requirements for identification of high quality waters in their antidegradation policies increases accountability and transparency. The proposed rule

[34] *Ohio Valley Envtl. Coal.* v. *Horinko*, 279 F. Supp. 2d 732, 746–50 (S.D. W. Va. 2003).

[35] See section II.G for more information on the final rule change related to public participation.

other entities may be best positioned to analyze the alternatives. The final rule language allows states and authorized tribes to rely on analyses prepared by third parties (*e.g.*, a permit applicant). This preserves appropriate flexibility for states' and authorized tribes' decision-makers, and can bring additional resources and expertise to the analysis. States and authorized tribes remain ultimately responsible for making findings to allow degradation and for basing their decisions on adequate analyses. If the state or authorized tribe deems an initial analysis of alternatives insufficient to support a finding that a lowering of high water quality is "necessary," it can request additional analyses of alternatives from the permit applicant or other entities. A state or authorized tribe can also obtain information on common practicable alternatives appropriate for a proposed activity from additional existing resources.[36]

The final rule specifies that states and authorized tribes must analyze "practicable alternatives that would prevent or lessen the degradation," rather than "non-degrading and minimally degrading practicable alternatives that have the potential to prevent or minimize the degradation," as proposed. While non-degrading or minimally degrading alternatives preserve high water quality to a greater extent, in cases where no minimally-degrading alternatives exist, a less degrading alternative will still provide a margin of protection for the high quality water. The final rule requires a broader, more complete analysis.

To enhance clarity and provide for consistency in implementation, this rule finalizes a definition of the word "practicable." The definition embodies a common sense notion of practicability—*i.e.*, an alternative that can actually be implemented under the circumstances. Because "practicable" appears in other contexts related to water quality, the definition at § 131.3(n) is only applicable for § 131.12(a)(2)(ii). This definition is consistent with the one articulated in the preamble to the proposed rule,[37] but eliminates redundancy and omits "at the site in question" in response to commenters' concern that relocation of a proposed activity may be a less degrading alternative that the state or authorized tribe can consider.

Section 131.12(a)(2)(ii) provides for preservation of high water quality by requiring a less degrading practicable alternative to be selected for implementation, if available, before states and authorized tribes may find that a lowering of water quality is necessary. This requirement applies even if the analysis identifies only one alternative. States and authorized tribes must still make a finding that a lowering is necessary if the analysis does not identify any practicable alternatives that lessen degradation. On the other hand, if the analysis results in choosing an alternative that avoids degradation, a state or authorized tribe need not make a finding. Regardless of the number of alternatives identified, the analysis should document a level of detail that reflects the significance and magnitude of the particular circumstances encountered, to provide the public with the necessary information to understand how the state or authorized tribe made its decision.

EPA chose not to require implementation of the least degrading practicable alternative to allow states and authorized tribes the flexibility to balance multiple considerations. Some alternatives to lowering water quality can have negative environmental impacts in other media (*e.g.*, air, land). For example, incinerating pollutants rather than discharging the pollutants to surface waters could adversely impact air quality and energy use, and land application of pollutants could have adverse terrestrial impacts. EPA recommends that states and authorized tribes consider cross-media impacts and, where possible, seek alternatives that minimize degradation of water quality and also minimize other environmental impacts.

The final rule requires states' and authorized tribes' antidegradation policies (which are legally binding provisions subject to public participation) to be consistent with the new requirements related to analysis of alternatives. As with the provision on identification of waters for Tier 2 protection at § 131.12(a)(2)(i), EPA determined that antidegradation policies must be consistent with the federal regulation on analysis of alternatives at § 131.12(a)(2)(ii) to increase accountability and transparency.

What did EPA consider?

EPA considered finalizing the proposed rule without alteration. EPA did not choose this option in light of commenters' suggestions to clarify the language in order to avoid confusion as to who is responsible for conducting the analysis. EPA also rejected an option to forego any revisions related to an analysis of alternatives, as this would not provide clarification regarding what type of analysis supports states' or authorized tribes' decisions that a lowering of water quality is "necessary," thus risking a greater loss of water quality.

Antidegradation Implementation Methods

What does this rule provide and why?

The rule at § 131.12(b) requires states' and authorized tribes' antidegradation implementation methods (whether or not those methods are adopted into rule) to be consistent with their antidegradation policies and with § 131.12(a). This rule also requires states and authorized tribes to provide an opportunity for public involvement during the development and any subsequent revisions of antidegradation implementation methods, and to make the methods available to the public.

Finally, this rule adds § 131.5(a)(3) to explicitly specify that EPA has the authority to determine whether the states' and authorized tribes' antidegradation policies and any adopted antidegradation implementation methods[38] are consistent with the federal antidegradation requirements at § 131.12. This revision does not expand EPA's existing CWA authority, rather it ensures § 131.5 is consistent with §§ 131.6 and 131.12.

The public involvement requirement at § 131.12(b) increases transparency, accountability, and consistency in states' and authorized tribes' implementation. EPA proposed a requirement that implementation methods be publicly available. As EPA discussed in the preamble to the proposed rule, CWA section 101(e) provides that "public participation in the development, revision, and enforcement of any regulations, standard, effluent limitation, plan, or program established . . . under this Act shall be provided for, encouraged, and assisted . . ." Thus, this rule also provides for public involvement during development or revision of implementation methods. A state or authorized tribe may decide to offer more than one opportunity to most effectively engage the public. States and authorized tribes can use various mechanisms to provide such

[36] E.g., EPA's Municipal Technologies Web site, which presents technology fact sheets to assist in the evaluation of different technologies for wastewater (*http://water.epa.gov/scitech/wastetech/mtb_index.cfm*).

[37] See 78 FR 54528 (September 4, 2013).

[38] See *http://water.epa.gov/scitech/swguidance/standards/cwa303faq.cfm. What is a New or Revised Water Quality Standard Under CWA 303(c)(3) Frequently Asked Questions* (EPA–820–F–12–017, October 2012).

is genuinely *de minimis* or one of administrative necessity."[42] Accordingly, this authority only applies "when the burdens of regulation yield a gain of trivial or no value."[43] Finally, a "determination of when matters are truly *de minimis* naturally will turn on the assessment of particular circumstances, and the agency will bear the burden of making the required showing."[44]

Unless a state or authorized tribe can provide appropriate technical justification, it should not create categorical exemptions from Tier 2 review for specific types of activities based on a general finding that such activities do not result in significant degradation. States and authorized tribes should also consider the appropriateness of exemptions depending on the types of chemical, physical, and biological parameters that would be affected. For example, if a potential lowering of water quality contains bioaccumulative chemicals of concern, a state or authorized tribe should not apply a categorical *de minimis* exclusion because even extremely small additions of such chemicals could have a significant effect. For such pollutants, it could be possible to apply a *de minimis* exclusion on a case by case basis, but the state or authorized tribe should carefully consider any such proposed lowering prior to determining that it would be insignificant. States and authorized tribes should also consider the potential effects of cumulative impacts on the same water body to ensure that the cumulative degradation from multiple activities each considered to have a *de minimis* impact will not cumulatively add up to a significant impact. Finally, if a state or authorized tribe intends to use *de minimis* exclusions, then EPA recommends that it describe how it will use *de minimis* in its antidegradation implementation methods. This guarantees that states and authorized tribes will inform the public ahead of time about how they will use *de minimis* exemptions.

EPA also encourages states and authorized tribes to consider other ways to help focus limited resources where they may result in the greatest environmental protection. A state or authorized tribe should consider whether it will require more effort and resources to justify a *de minimis* exemption than it would take to actually complete a Tier 2 review for the activity. EPA encourages states and authorized tribes to develop ways to streamline Tier 2 reviews, rather than seeking to exempt activities from review entirely.

E. WQS Variances

What does this rule provide and why?

This rule establishes an explicit regulatory framework for the adoption of WQS variances that states and authorized tribes can use to implement adaptive management approaches to improve water quality. States and authorized tribes can face substantial uncertainty as to what designated use may ultimately be attainable in their waters. Pollutants that impact such waters can result from large-scale land use changes, extreme weather events, or environmental stressors related to climate change that can hinder restoration and maintenance of water quality. In addition, pollutants can be persistent in the environment and, in some cases, lack economically feasible control options. WQS variances are customized WQS that identify the highest attainable condition applicable throughout the WQS variance term. For a discussion of why it is important for states and authorized tribes to include the highest attainable condition, see the preamble to the proposed rule at 78 FR 54534 (September 4, 2013). States and authorized tribes could use one or more WQS variances to require incremental improvements in water quality leading to eventual attainment of the ultimate designated use.

While EPA has long recognized WQS variances as an available tool, the final rule provides regulatory certainty to states and authorized tribes, the regulated community, and the public that WQS variances are a legal WQS tool. The final rule explicitly authorizes the use of WQS variances and provides requirements to ensure that WQS variances are used appropriately. Such a mechanism allows states and authorized tribes to work with stakeholders and assure the public that WQS variances facilitate progress toward attaining designated uses. When all parties are engaged in a transparent process that is guided by an accountable framework, states and authorized tribes can move past traditional barriers and begin efforts to maintain and restore waters. As discussed in the preamble to the proposed rule at 78 FR 54531 (September 4, 2013), a number of states have not pursued WQS variances. For WQS variances submitted to EPA between 2004 and 2015, 75% came from states covered by the "Water Quality Guidance for the Great Lakes System" rulemaking at 40 CFR part 132. EPA attributes the Region 5 states' success in adopting and submitting WQS variances to the fact that the states and their stakeholders have had more specificity in regulation regarding WQS variances than the rest of the country. This final rule is intended to provide the same level of specificity nationally.

EPA's authority to establish requirements for WQS variances comes from CWA sections 101(a) and 303(c)(2). This rule reflects this authority by explicitly recognizing that states and authorized tribes may adopt time-limited WQS with a designated use and criterion reflecting the highest attainable condition applicable throughout the term of the WQS variance, instead of pursing a permanent[45] revision of the designated use and associated criteria. WQS variances serve the national goal in section 101(a)(2) of the Act and the ultimate objective of the CWA to restore and maintain the chemical, physical, and biological integrity of the Nation's waters because WQS variances are narrow in scope and duration and are designed to make progress toward water quality goals. When a WQS variance is in place, all other applicable standards not addressed in the WQS variance continue to apply, in addition to the ultimate water quality objectives (*i.e.*, the underlying WQS). Also, by requiring the highest attainable condition to be identified and applicable throughout the term of the WQS variance, the final rule provides a mechanism to make incremental progress toward the ultimate water quality objective for the water body and toward the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters.

This rule adds a new regulatory section at § 131.14 that explicitly authorizes the use of WQS variances when the applicable designated uses are not attainable in the near-term but may be attainable in the future. The rule clarifies how WQS variances relate to other CWA programs and specifies the information that the state and authorized tribe must adopt in any WQS variance, including the highest attainable condition. States and authorized tribes must submit to EPA supporting documentation that demonstrates why the WQS variance is

[42] *Id.* (quoting *Ala. Power.* v. *Costle*, 636 F.2d. 323, 361 (D.C. Cir. 1979)).

[43] *Id.* (quoting *Greenbaum* v. *U.S. Envtl Prot. Agency*, 370 F.3d 527, 534 (6th Cir. 2004)).

[44] *Id.* (quoting *Greenbaum* v. *U.S. Envtl Prot. Agency*, 370 F.3d 527, 534 (6th Cir. 2004)).

[45] "Permanent" is used here to contrast between the time-limited nature of WQS variances and designated use changes. In accordance with 40 CFR 131.20, waters that "do not include the uses specified in section 101(a)(2) of the Act shall be re-examined every 3 years to determine if new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the [s]tate shall revise its standards accordingly."

criterion for purposes of deriving the NPDES WQBEL and developing the NPDES permit limits and requirements for the facility covered by the WQS variance. For this example, assume the permitting authority is developing the NPDES permit without allowing dilution (*i.e.*, applying the criterion end of pipe). In this case, the facility will need 15 years to implement the activities necessary to meet the limit based on the 3 mg/L. The permitting authority could include a 15 year compliance schedule with a final effluent limit based on 3 mg/L and an enforceable sequence of actions that the permitting authority determines are necessary to achieve the final effluent limit. As discussed later in this section, the documentation that a state or authorized tribe provides to EPA justifying the term of the WQS variance informs the permitting authority when determining the enforceable sequence of actions.

This rule requires states and authorized tribes to provide a quantifiable expression of the highest attainable condition. This requirement is an important feature of a WQS variance that facilitates development of NPDES permit limits and requirements and allows states, authorized tribes, and the public to track progress. This rule provides states and authorized tribes the flexibility to express the highest attainable condition as numeric pollutant concentrations in ambient water, numeric effluent conditions, or other quantitative expressions of pollutant reduction, such as the maximum number of combined sewer overflows that is achievable after implementation of a long-term control plan or a percent reduction in pollutant loads.

The final rule at § 131.14(b)(1)(ii) provides states and authorized tribes with different options to specify the highest attainable condition depending on whether the WQS variance applies to a specific discharger(s) or to a water body or waterbody segment. For a discharger(s)-specific WQS variance, the rule allows states and authorized tribes to express the highest attainable condition as an interim criterion without specifying the designated use it supports. EPA received comments suggesting that identifying both an interim use and interim criterion for a WQS variance is unnecessary. EPA agrees that the level of protection afforded by meeting the highest attainable criterion in the immediate area of the discharge(s) results in the highest attainable interim use at that location. Therefore, the highest attainable interim criterion is a reasonable surrogate for both the highest attainable interim use and interim criterion when the WQS variance applies to a specific discharger(s). For similar reasons, as explained in the preamble to the proposed rule, states and authorized tribes may choose to articulate the highest attainable condition as the highest attainable interim effluent condition.[51] Neither of these options, however, is appropriate for a WQS variance applicable to a water body or waterbody segment. Such a WQS variance impacts the water body or waterbody segment in a manner that is similar to a change in a designated use and, therefore, must explicitly articulate the highest attainable condition as the highest attainable interim designated use and interim criterion. A state's or authorized tribe's assessment of the highest attainable interim designated use and interim criterion for this type of WQS variance necessarily involves an evaluation of all pollutant sources.

Where the state or authorized tribe cannot identify an additional feasible pollutant control technology, this rule provides options for articulating the highest attainable condition using the greatest pollutant reduction achievable with optimization of currently installed pollutant control technologies and adoption and implementation of a Pollutant Minimization Program (PMP). The rule makes this option available for a WQS variance that applies to a specific discharger(s) as well as a WQS variance applicable to a water body or waterbody segment. EPA defines PMP at § 131.3(p) as follows: "*Pollutant Minimization Program,* in the context of § 131.14, is a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loadings . . . ." Pollutant control technologies represent a broad set of pollutant reduction options, such as process or raw materials changes and pollution prevention technologies, practices that reduce pollutants prior to entering the wastewater treatment system, or best management practices for restoration and mitigation of the water body. This option requires states and authorized tribes to adopt the PMP along with other elements that comprise the highest attainable condition. As part of the applicable WQS, the permitting authority must use the PMP (along with the quantifiable expression of the "greatest pollutant reduction achievable") to derive NPDES permit limits and requirements.

As discussed later in this section, states and authorized tribes must reevaluate WQS variances on a regular and predictable schedule. To ensure that a WQS variance reflects the highest attainable condition throughout the WQS variance term, states and authorized tribes must adopt a provision specifying that the applicable interim WQS shall be either the highest attainable condition initially adopted, or a higher attainable condition later identified during any reevaluation. The rule requires such a provision only for WQS variances longer than five years. This provision must be self-implementing so that if any reevaluation yields a more stringent attainable condition, that condition becomes the applicable interim WQS without additional action. Upon permit reissuance, the permitting authority will base the WQBEL on the more stringent interim WQS consistent with the NPDES permit regulation at § 122.44(d)(vii)(A). Where the reevaluation identifies a condition less stringent than the highest attainable condition, the state or authorized tribe must revise the WQS variance consistent with CWA requirements and obtain EPA approval of the WQS variance before the permitting authority can derive a WQBEL based on that newly identified highest attainable condition.

Third, to ensure EPA has sufficient information to determine whether the WQS variance is consistent with EPA's WQS regulation, states and authorized tribes must provide documentation to justify why the WQS variance is needed, the term for the WQS variance, and the highest attainable condition. For a WQS variance to a designated use specified in CWA section 101(a)(2) and sub-categories of such uses, states and authorized tribes must demonstrate that the use and criterion are not feasible to attain on the basis of one of the factors listed in § 131.10(g) or on the basis of the new restoration-related factor in § 131.14(b)(2)(i)(A)(*2*). EPA added this new factor for when states and authorized tribes wish to obtain a WQS variance because they expect a time-limited exceedance of a criterion when removing a dam or during significant wetlands, lake, or stream reconfiguration/restoration efforts. EPA includes "lake" in the regulatory language for this factor, on the basis of public comments suggesting that the rule also apply to lake restoration activities. States and authorized tribes may only use this factor to justify the time necessary to remove the dam or the length of time in which wetland, lake, or stream restoration activities are actively on-going. Although such a WQS

[51] 78 FR 54534 (September 4, 2013).

this section, states and authorized tribes must also adopt a provision that ensures the WQS variance reflects the highest attainable condition initially adopted or any more stringent highest attainable condition identified during a reevaluation that is applicable throughout the WQS variance term.

EPA proposed a maximum allowable WQS variance term of 10 years to ensure that states and authorized tribes reevaluate long-term WQS challenges at least every 10 years before deciding whether to continue with a WQS variance. EPA explained in the preamble to the proposed rule that the purpose of this maximum WQS variance term was as follows: "Establishing an expiration date will ensure that the conditions of a [WQS] variance will be thoroughly reevaluated and subject to a public review on a regular and predictable basis to determine (1) whether conditions have changed such that the designated use and criterion are now attainable; (2) whether new or additional information has become available to indicate that the designated use and criterion are not attainable in the future (*i.e.*, data or information supports a use change/refinement); or (3) whether feasible progress is being made toward the designated use and criterion and that additional time is needed to make further progress (*i.e.*, whether a [WQS] variance may be renewed)." [52]

Some commenters suggested that 10 years is too long and does not provide adequate assurance that the state or authorized tribe will periodically reevaluate a WQS variance in a publicly transparent manner. Other commenters suggested that 10 years is too short because states often adopt WQS variances through conventional rulemaking processes and that such a maximum term would result in unnecessary rulemaking burden where it is widely understood that long-term pollution challenges require more time to resolve. A 10-year maximum could also discourage the use of WQS variances.

In response, EPA concludes that establishing specific reevaluation requirements for WQS variances longer than five years is the best way to achieve EPA's policy objective of active, thorough, and transparent reevaluation by states and authorized tribes while minimizing rulemaking burden. The reevaluation requirements in this rule eliminate the need to specify a maximum WQS variance term because they ensure the highest attainable condition is always the applicable WQS throughout the WQS variance term, thus driving incremental improvements toward the underlying designated use. These requirements also ensure the public has an opportunity to provide input throughout the WQS variance term. EPA chose five years as the maximum interval between reevaluations because five years is the length of a single NPDES permit cycle, allowing the reevaluation to inform the permit reissuance process. Although this rule does not specify a maximum WQS variance term, states and authorized tribes must still identify the WQS variance term and provide documentation demonstrating that the term is only as long as necessary to achieve the highest attainable condition. EPA will use this information to determine whether to approve or disapprove the WQS variance submitted for review, based on the requirements in § 131.14.

WQS variances remain subject to the triennial review and public participation requirements specified in § 131.20. The final rule requirements ensure that the public has the opportunity to work with states and authorized tribes in a predictable and timely manner to search for new or updated data and information specific to the WQS variance that could indicate a more stringent highest attainable condition exists than the state or authorized tribe originally adopted. "New or updated data and information" include, but are not limited to, new information on pollutant control technologies, changes in pollutant sources, flow or water levels, economic conditions, and BMPs that impact the highest attainable condition. Where there is an EPA-approved WQS variance, the permitting authority must refer to the reevaluation results when reissuing NPDES permits to ensure the permit implements any more stringent applicable WQS that the reevaluation provides. States and authorized tribes can facilitate this coordination by publishing and making accessible the results of reevaluations.

While this rule only requires reevaluations of WQS variances with a term longer than five years, states and authorized tribes must review all WQS variances during their triennial review. If a state or authorized tribe synchronizes a WQS variance reevaluation with permit reissuance, the reevaluation must occur on schedule even if there is a delay in the permit reissuance.

EPA previously promulgated specific variance procedures when EPA established federal WQS for Kansas (§ 131.34(c)) and Puerto Rico (§ 131.40(c)). To provide national consistency, this rule authorizes the Regional Administrator to grant WQS variances in Kansas and Puerto Rico in accordance with the provisions of § 131.14.

What did EPA consider?

In addition to considering the option EPA proposed, EPA considered options that provide a maximum WQS variance term more than or less than 10 years. EPA rejected these options because retaining a maximum term of any duration does not accomplish EPA's goal of a balanced approach that ensures both flexibility and accountability as effectively as requiring periodic reevaluations of the WQS variance. Additionally, on the basis of commenters' suggestions, EPA considered requiring identification and documentation of cost-effective and reasonable BMPs for nonpoint sources for all WQS variances and not just for WQS variances applicable to a water body or waterbody segment. To achieve EPA's policy objectives, EPA chose instead to add a requirement for all WQS variances that states and authorized tribes describe the pollutant control activities to achieve the highest attainable condition (see § 131.14(b)(2)(ii)).

What is EPA's position on certain public comments?

EPA received comments that suggested confusion between WQS variances and NPDES permit compliance schedules. WQS variances can be appropriate to address situations where it is known that the designated use and criterion are unattainable today, but progress could be made toward attaining the designated use and criterion. Typically, a permit authority grants a permit compliance schedule when the permittee needs additional time to modify or upgrade treatment facilities in order to meet its WQBEL based on the applicable WQS (*i.e.*, designated use and criterion). After the effective date of this rule, a permit authority could also grant a permit compliance schedule when the permittee needs additional time to meet its WQBEL based on the applicable WQS variance (*i.e.*, highest attainable condition) such that a schedule and resulting milestones will lead to compliance with the effluent limits derived from the WQS variance "as soon as possible." If a WQS variance is about to expire and a state or authorized tribe concludes the underlying designated use is now attainable, it is not appropriate for the state or authorized tribe to adopt a subsequent

[52] 78 FR 54536 (September 4, 2013).

Finally, some commenters questioned the level of "scientific rigor" required for a WQS variance as compared to a UAA required for changes to 101(a)(2) uses. Section 40 CFR 131.5(a)(4) provides that EPA's review under section 303(c) involves a determination of whether the state's or authorized tribe's "standards which do not include the uses specified in section 101(a)(2) of the Act are based upon appropriate technical and scientific data and analyses. . . ." Because WQS variances are time-limited designated uses and criteria, this requirement applies to WQS variances. States and authorized tribes must adopt WQS variances based on appropriate technical and scientific data and analyses. Therefore, the level of rigor required for a WQS variance is no different than for a designated use change. That said, the appropriate technical and scientific data required to support a designated use change and WQS variance can vary depending on the complexity of the specific circumstances. EPA recognizes that the data and analyses often needed to support adoption of a WQS variance could be less complex and require less time and resources compared to removing a designated use because many WQS variances evaluate only one parameter for a single permittee for a limited period of time. The level of effort a state or authorized tribe needs to devote to a WQS variance will in large part be determined by the complexity of the water quality problem the state or authorized tribe seeks to address.

F. Provisions Authorizing the Use of Schedules of Compliance for WQBELs in NPDES Permits

What does this rule provide and why?

In 1990, EPA concluded that before a permitting authority can include a compliance schedule for a WQBEL in an NPDES permit, the state or authorized tribe must affirmatively authorize its use in its WQS or implementing regulations.[54] EPA approval of the state's or authorized tribe's permit compliance schedule authorizing provision as a WQS ensures that any NPDES permit WQBEL with a compliance schedule derives from and complies with applicable WQS as required by § 122.44(d)(1)(vii)(A). Because the state's or authorized tribe's approved WQS authorize extended compliance, any delay in compliance with a WQBEL pursuant to an appropriately issued permit compliance schedule is consistent with the statutory implementation timetable in CWA section 301(b)(1)(C).

The use of legally-authorized permit compliance schedules by states and authorized tribes provides needed flexibility for many dischargers undergoing facility upgrades and operational changes designed to meet WQBELs in their NPDES permits. This flexibility will become increasingly important as states and authorized tribes adopt more stringent WQS, including numeric nutrient criteria, and address complex water quality problems presented by emerging challenges like climate change.

Some states have adopted compliance schedule authorizing provisions but have not submitted them to EPA for approval as WQS pursuant to CWA section 303(c). Other states have not yet adopted compliance schedule authorizing provisions. A permit could be subject to legal challenge where a state and authorized tribe decide to authorize permit flexibility using permit compliance schedules, but do not have a compliance schedule authorizing provision approved by EPA as a WQS.

Section 131.15 in this final rule requires that if a state or authorized tribe intends to authorize the use of compliance schedules for WQBELs in NPDES permits, it must first adopt a permit compliance schedule authorizing provision. The authorizing provision must be consistent with the CWA and is subject to EPA review and approval as a WQS. This rule adds § 131.5(a)(5) to explicitly specify that EPA has the authority to determine whether any provision authorizing the use of schedules of compliance for WQBELs in NPDES permits adopted by a state or authorized tribe is consistent with the requirements at § 131.15. This rule also includes a number of non-substantive editorial changes.

By expressly requiring that the state or authorized tribe adopt a permit compliance schedule authorizing provision, the first sentence of the final regulation at § 131.15 ensures that the state or authorized tribe has expressly made a determination that, under appropriate circumstances, it can be lawful to delay permit compliance. Formal adoption as a legally binding provision ensures public transparency and facilitates public involvement.

Some commenters expressed concern that the proposed regulatory language regarding state and authorized tribal adoption could be interpreted to refer to permit compliance schedules themselves, rather than their authorizing provisions. To address that concern, the final rule refers to "the use of" schedules of compliance. The phrase "the use of" indicates that the mere adoption of an authorizing provision, by itself, does not extend the date of compliance with respect to any specific permit's WQBEL; rather, its adoption allows the state or authorized tribe *to use* schedules of compliance, as appropriate, on a case-by-case basis in individual permits.

The second sentence of the final regulation at § 131.15 provides that states' and authorized tribes' authorizing provisions must be consistent with the CWA and are WQS subject to EPA review and approval. By incorporating the authorizing provision into the state's or authorized tribe's approved WQS, the state or authorized tribe ensures that a permitting authority can then legally issue compliance schedules for WQBELs in NPDES permits that are consistent with CWA section 301(b)(1)(C). Only the permit compliance schedule authorizing provisions are WQS subject to EPA approval; individual permit compliance schedules are not. The final rule provides flexibility for a state or authorized tribe to include the authorizing provision in the part of state or tribal regulations where WQS are typically codified, in the part of state or tribal regulations dealing with NPDES permits, or in other parts of the state's or authorized tribe's implementing regulations. Regardless of where the authorizing provision is codified, as long as the provision is legally binding, EPA will take action on it under CWA section 303(c). If a state or authorized tribe has already adopted an authorizing provision that is consistent with the CWA, it need not readopt the provision for purposes of satisfying the final rule. Instead, the state or authorized tribe can submit the provision to EPA with an Attorney General or appropriate tribal legal authority certification. Moreover, consistent with § 131.21(c), any permit compliance schedule authorizing provision that was adopted, effective, *and submitted* to EPA before May 30, 2000, is applicable for purposes of § 131.15.

This final rule does not change any permit compliance schedule requirements at § 122.47.

Other judicial and administrative mechanisms issued pursuant to other authorities, such as an enforcement order issued by a court, can delay the need for compliance with WQBELs. This rule does not address those other mechanisms.

What did EPA consider?

EPA considered finalizing § 131.15, as proposed. Given the comments

[54] *In the Matter of Star-Kist Caribe, Inc.* 3 EAD 172 (April 16, 1990).

the challenges that states and authorized tribes may experience when planning and conducting a public hearing, the requirement to hold hearings for the purposes of reviewing, and as appropriate, modifying and adopting WQS comes directly from CWA section 303(c)(1). Further, meaningful involvement of the public and intergovernmental coordination with local, state, federal, and tribal entities with an interest in water quality issues is an important component of the WQS process. States and authorized tribes have discretion to use other outreach efforts in addition to fulfilling the requirement for a public hearing.

A "public hearing" may mean different things to different people. At a minimum, per § 131.20(b), states and authorized tribes are required to follow the provisions of state or tribal law and EPA's public participation regulations at 40 CFR part 25. EPA's public participation regulation, at 40 CFR 25.5, sets minimum requirements for states and authorized tribes to publicize a hearing at least 45 days prior to the date of the hearing; provide to the public reports, documents, and data relevant to the discussion at the public hearing at least 30 days before the hearing; hold the hearing at times and places that facilitate attendance by the public; schedule witnesses in advance to allow maximum participation and adequate time; and prepare a transcript, recording, or other complete record of the hearing proceedings. See 40 CFR 25.5 for the actual list of federal public hearing requirements. State and tribal law may include additional requirements for states and authorized tribes to meet when planning for and conducting a hearing. In addition to meeting the requirements of state and tribal law and 40 CFR part 25, states and authorized tribes may also choose to gather public input using other formats, such as public meetings and webinars.

III. Economic Impacts on State and Authorized Tribal WQS Programs

EPA evaluated the potential incremental administrative burden and cost that may be associated with the final rule, beyond the burden and cost of the WQS regulation already in place. EPA's estimate is higher than the estimate of the proposed rule for two reasons unrelated to any substantive change in requirements. First, EPA obtained more precise estimates of burden and costs. EPA received many comments suggesting that EPA underestimated the burden and cost of the proposed rule. States specifically requested to meet with EPA to provide additional information for EPA to consider. EPA engaged the states and incorporated the information provided into the final economic analysis. The higher estimate is also partly due to EPA using known data to extrapolate burden and costs to states, territories and authorized tribes where data were unavailable. EPA describes the method of extrapolation in detail in the full economic analysis available in the docket of the final rule. EPA's economic analysis focuses on the potential administrative burden and cost to all 50 states, the District of Columbia, five territories, the 40 authorized tribes with EPA-approved WQS, and to EPA. While this rule does not establish any requirements directly applicable to regulated point sources or nonpoint sources of pollution, EPA acknowledges that this rule may result in indirect costs to some regulated entities as a result of changes to WQS that states and authorized tribes adopt based on the final rule. EPA is unable to quantify indirect costs and benefits since it cannot anticipate precisely how the rule will be implemented by states and authorized tribes and because of a lack of data. States and authorized tribes always have the discretion to adopt new or revised WQS independent of this final rule that could result in costs to point sources and nonpoint sources. EPA's economic analysis and an explanation for how EPA derived the cost and burden estimates are documented in the *Economic Analysis for the Water Quality Standards Regulatory Revisions (Final Rule)* and can be found in the docket for this rule.

EPA assessed the potential incremental burden and cost of this final rule using the same basic methodology used to assess the potential incremental burden and cost of EPA's proposed rule, including: (1) Identifying the elements of the final rule that could potentially result in incremental burden and cost; (2) estimating the incremental number of labor hours states and authorized tribes may need to allocate in order to comply with those elements of the final rule; and (3) estimating the cost associated with those additional labor hours.

EPA identified four areas where differences between the proposed and final rules affected burden and cost estimates. First, when states and authorized tribes submit the results of triennial reviews to EPA, they must provide an explanation when not adopting new or revised water quality criteria for parameters for which EPA has published new or updated CWA section 304(a) criteria recommendations. Second, when developing or revising antidegradation implementation methods and when deciding which waters would receive Tier 2 antidegradation protection under a water body-by-water body approach, states and authorized tribes must provide an opportunity for public involvement. States and authorized tribes must also document and keep in the public record the factors they considered when making those decisions. Third, the final rule no longer includes a maximum WQS variance duration of 10 years and thus eliminates the burden and cost associated with renewing a WQS variance when the state or authorized tribe can justify a longer term. Fourth, the final rule requires states and authorized tribes to proactively reevaluate WQS variances that have a term longer than five years no less frequently than every five years and to submit the results of each reevaluation to EPA within 30 days of completion. EPA also revised certain economic assumptions based on additional information obtained independently by EPA and in response to stakeholder feedback.

The potential incremental burden and cost of the final rule include five categories: (1) One-time burden and cost associated with state and authorized tribal rulemaking activities when some states and authorized tribes may need to adopt new or revised provisions into their WQS (*e.g.*, review currently adopted water quality standards to determine if the new requirements necessitate revisions, such as modifying antidegradation policy, revising WQS variance procedures if the state or authorized tribe has chosen to adopt such a procedure, or adopting a permit compliance schedule authorizing provision); (2) recurring burden and cost associated with removing uses specified in CWA section 101(a)(2) because states and authorized tribes must identify the HAU; (3) recurring burden and cost associated with triennial reviews whereby states and authorized tribes must prepare and submit an explanation when not adopting new or revised water quality criteria for parameters for which EPA has published new or updated CWA section 304(a) criteria recommendations; (4) recurring burden and cost associated with antidegradation requirements, including providing the opportunity for public involvement when developing and subsequently revising antidegradation implementation methods; providing the opportunity for public involvement when deciding which waters will receive Tier 2 antidegradation protection when using a water body-by-water body approach; documenting and

EPA also evaluated the potential benefits associated with this rule. States and authorized tribes will benefit from these revisions because the WQS regulation will provide clear requirements to facilitate the ability of states and authorized tribes to effectively and legally utilize available regulatory tools when implementing and managing their WQS programs. Although associated with potential administrative burden and cost in some areas, this rule has the potential to partially offset these burdens by reducing regulatory uncertainty and increasing overall program efficiency. Use of these tools to improve establishment and implementation of state and authorized tribal WQS, as discussed throughout the preamble to this rule, provides incremental improvements in water quality and a variety of economic benefits associated with these improvements, including the availability of clean, safe, and affordable drinking water sources; water of adequate quality for agricultural and industrial use; and water quality that supports the commercial fishing industry and higher property values. Nonmarket benefits of this rule include greater recreational opportunities and the protection and improvement of public health. States, authorized tribes, stakeholders and the public will also benefit from the open public dialogue that results from the additional transparency and public participation requirements included in this rule. Because states and authorized tribes implement their own WQS programs, EPA could not reliably predict the control measures likely to be implemented and subsequent improvements to water quality, and thus could not quantify the resulting benefits.

IV. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to OMB recommendations have been documented in the docket. EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis, *Economic Analysis for the Water Quality Standards Regulatory Revisions (Final Rule),* is summarized in section III of the preamble and is available in the docket.

B. Paperwork Reduction Act (PRA)

The information collection activities in this rule have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that EPA prepared has been assigned EPA ICR number 2449.02. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

The core of the WQS regulation, established in 1983, requires EPA to collect certain information from states and authorized tribes and has an approved ICR (EPA ICR number 988.11; OMB Control number 2040–0049). This rule requires states and authorized tribes to submit certain additional information to EPA. This mandatory information collection ensures EPA has the necessary information to review WQS and approve or disapprove consistent with the rule. The goals of the rule can only be fulfilled by collecting this additional information. Due to the nature of this rule, EPA assumes that all administrative burden associated with this rule, summarized in section III, is associated with information collection.

Respondents/affected entities: The respondents affected by this collection activity include the 50 states, the District of Columbia, five territories, and 40 authorized tribes that have EPA-approved WQS. The respondents are in NAICS code 92411 "Administration of Air and Water Resources and Solid Waste Management Programs," formerly SIC code #9511.

Respondent's obligation to respond: The collection is required pursuant to CWA section 303(c), as implemented by the revisions to 40 CFR part 131.

Estimated number of respondents: A total of 96 governmental entities are potentially affected by the rule.

Frequency of response: The CWA requires states and authorized tribes to review their WQS at least once every three years and submit the results to EPA. In practice, some states and authorized tribes choose to submit revised standards for portions of their waters more frequently.

Total estimated burden: EPA estimates a total annual burden of 124,575–439,080 hours and 3,176 to 5,096 responses per year. Burden is defined at 5 CFR 1320.3(b). A "response" is an action that a state or authorized tribe would need to take in order to meet the information collection request provided in the rule (*e.g.,* documentation supporting a WQS variance). See also the "Information Collection Request for Water Quality Standards Regulatory Revisions (Final Rule)" in the docket for this rule.

Total estimated cost: Total estimated annual incremental costs range from $6.13 million to $21.51 million.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR, the Agency will announce the approval in the **Federal Register** and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. State and authorized tribal governments responsible for administering or overseeing water quality programs may be directly affected by this rulemaking, as states and authorized tribes may need to consider and implement new provisions, or revise existing provisions, in their WQS. Small entities, such as small businesses or small governmental jurisdictions, are not directly regulated by this rule. This rule will not impose any requirements on small entities.

D. Unfunded Mandates Reform Act (UMRA)

This rule does not contain a federal mandate that may result in expenditures of $100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any one year. EPA estimates total annual costs to states and authorized tribes to range from $5.24 million to $19.73 million per year. Thus, this rule is not subject to the requirements of sections 202 or 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

E. Executive Order 13132: Federalism

This rule does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various

Act and attainable, based on the evaluation of the factor(s) in § 131.10(g) that preclude(s) attainment of the use and any other information or analyses that were used to evaluate attainability. There is no required highest attainable use where the State demonstrates the relevant use specified in section 101(a)(2) of the Act and sub-categories of such a use are not attainable.

(n) *Practicable*, in the context of § 131.12(a)(2)(ii), means technologically possible, able to be put into practice, and economically viable.

(o) A *water quality standards variance* (WQS variance) is a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the WQS variance.

(p) *Pollutant Minimization Program*, in the context of § 131.14, is a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loadings.

(q) *Non-101(a)(2) use* is any use unrelated to the protection and propagation of fish, shellfish, wildlife or recreation in or on the water.

- 4. In § 131.5:
- a. Revise paragraphs (a)(1) and (2).
- b. Redesignate paragraphs (a)(3) through (5) as paragraphs (a)(6) through (8).
- c. Add paragraphs (a)(3) through (5).
- d. Revise newly designated paragraph (a)(6).
- e. Revise paragraph (b).

The revisions and additions read as follows:

§ 131.5 EPA authority.

(a) * * *

(1) Whether the State has adopted designated water uses that are consistent with the requirements of the Clean Water Act;

(2) Whether the State has adopted criteria that protect the designated water uses based on sound scientific rationale consistent with § 131.11;

(3) Whether the State has adopted an antidegradation policy that is consistent with § 131.12, and whether any State adopted antidegradation implementation methods are consistent with § 131.12;

(4) Whether any State adopted WQS variance is consistent with § 131.14;

(5) Whether any State adopted provision authorizing the use of schedules of compliance for water quality-based effluent limits in NPDES permits is consistent with § 131.15;

(6) Whether the State has followed applicable legal procedures for revising or adopting standards;

* * * * *

(b) If EPA determines that the State's or Tribe's water quality standards are consistent with the factors listed in paragraphs (a)(1) through (8) of this section, EPA approves the standards. EPA must disapprove the State's or Tribe's water quality standards and promulgate Federal standards under section 303(c)(4), and for Great Lakes States or Great Lakes Tribes under section 118(c)(2)(C) of the Act, if State or Tribal adopted standards are not consistent with the factors listed in paragraphs (a)(1) through (8) of this section. EPA may also promulgate a new or revised standard when necessary to meet the requirements of the Act.

* * * * *

Subpart B—Establishment of Water Quality Standards

- 5. In § 131.10:
- a. Revise paragraphs (a), (g) introductory text, (j), and (k).
- b. Remove and reserve paragraph (e).

The revisions read as follows:

§ 131.10 Designation of uses.

(a) Each State must specify appropriate water uses to be achieved and protected. The classification of the waters of the State must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial, and other purposes including navigation. If adopting new or revised designated uses other than the uses specified in section 101(a)(2) of the Act, or removing designated uses, States must submit documentation justifying how their consideration of the use and value of water for those uses listed in this paragraph appropriately supports the State's action. A use attainability analysis may be used to satisfy this requirement. In no case shall a State adopt waste transport or waste assimilation as a designated use for any waters of the United States.

* * * * *

(e) [Reserved]

* * * * *

(g) States may designate a use, or remove a use that is *not* an existing use, if the State conducts a use attainability analysis as specified in paragraph (j) of this section that demonstrates attaining the use is not feasible because of one of the six factors in this paragraph. If a State adopts a new or revised water quality standard based on a required use attainability analysis, the State shall also adopt the highest attainable use, as defined in § 131.3(m).

* * * * *

(j) A State must conduct a use attainability analysis as described in § 131.3(g), and paragraph (g) of this section, whenever:

(1) The State designates for the first time, or has previously designated for a water body, uses that do not include the uses specified in section 101(a)(2) of the Act; or

(2) The State wishes to remove a designated use that is specified in section 101(a)(2) of the Act, to remove a sub-category of such a use, or to designate a sub-category of such a use that requires criteria less stringent than previously applicable.

(k) A State is not required to conduct a use attainability analysis whenever:

(1) The State designates for the first time, or has previously designated for a water body, uses that include the uses specified in section 101(a)(2) of the Act; or

(2) The State designates a sub-category of a use specified in section 101(a)(2) of the Act that requires criteria at least as stringent as previously applicable; or

(3) The State wishes to remove or revise a designated use that is a non-101(a)(2) use. In this instance, as required by paragraph (a) of this section, the State must submit documentation justifying how its consideration of the use and value of water for those uses listed in paragraph (a) appropriately supports the State's action, which may be satisfied through a use attainability analysis.

- 6. In § 131.11, revise paragraphs (a)(2) and (b) introductory text to read as follows:

§ 131.11 Criteria.

(a) * * *

(2) *Toxic pollutants.* States must review water quality data and information on discharges to identify specific water bodies where toxic pollutants may be adversely affecting water quality or the attainment of the designated water use or where the levels of toxic pollutants are at a level to warrant concern and must adopt criteria for such toxic pollutants applicable to the water body sufficient to protect the designated use. Where a State adopts narrative criteria for toxic pollutants to protect designated uses, the State must provide information identifying the method by which the State intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria. Such information may be included as part of the standards or may be included in documents generated by the State in response to the Water

either the highest attainable condition identified at the time of the adoption of the WQS variance, or the highest attainable condition later identified during any reevaluation consistent with paragraph (b)(1)(v) of this section, whichever is more stringent.

(iv) The term of the WQS variance, expressed as an interval of time from the date of EPA approval or a specific date. The term of the WQS variance must only be as long as necessary to achieve the highest attainable condition and consistent with the demonstration provided in paragraph (b)(2) of this section. The State may adopt a subsequent WQS variance consistent with this section.

(v) For a WQS variance with a term greater than five years, a specified frequency to reevaluate the highest attainable condition using all existing and readily available information and a provision specifying how the State intends to obtain public input on the reevaluation. Such reevaluations must occur no less frequently than every five years after EPA approval of the WQS variance and the results of such reevaluation must be submitted to EPA within 30 days of completion of the reevaluation.

(vi) A provision that the WQS variance will no longer be the applicable water quality standard for purposes of the Act if the State does not conduct a reevaluation consistent with the frequency specified in the WQS variance or the results are not submitted to EPA as required by (b)(1)(v) of this section.

(2) The supporting documentation must include:

(i) Documentation demonstrating the need for a WQS variance.

(A) For a WQS variance to a use specified in section 101(a)(2) of the Act or a sub-category of such a use, the State must demonstrate that attaining the designated use and criterion is not feasible throughout the term of the WQS variance because:

(*1*) One of the factors listed in § 131.10(g) is met, or

(*2*) Actions necessary to facilitate lake, wetland, or stream restoration through dam removal or other significant reconfiguration activities preclude attainment of the designated use and criterion while the actions are being implemented.

(B) For a WQS variance to a non-101(a)(2) use, the State must submit documentation justifying how its consideration of the use and value of the water for those uses listed in § 131.10(a) appropriately supports the WQS variance and term. A demonstration consistent with paragraph (b)(2)(i)(A) of this section may be used to satisfy this requirement.

(ii) Documentation demonstrating that the term of the WQS variance is only as long as necessary to achieve the highest attainable condition. Such documentation must justify the term of the WQS variance by describing the pollutant control activities to achieve the highest attainable condition, including those activities identified through a Pollutant Minimization Program, which serve as milestones for the WQS variance.

(iii) In addition to paragraphs (b)(2)(i) and (ii) of this section, for a WQS variance that applies to a water body or waterbody segment:

(A) Identification and documentation of any cost-effective and reasonable best management practices for nonpoint source controls related to the pollutant(s) or water quality parameter(s) and water body or waterbody segment(s) specified in the WQS variance that could be implemented to make progress towards attaining the underlying designated use and criterion. A State must provide public notice and comment for any such documentation.

(B) Any subsequent WQS variance for a water body or waterbody segment must include documentation of whether and to what extent best management practices for nonpoint source controls were implemented to address the pollutant(s) or water quality parameter(s) subject to the WQS variance and the water quality progress achieved.

(c) *Implementing WQS variances in NPDES permits.* A WQS variance serves as the applicable water quality standard for implementing NPDES permitting requirements pursuant to § 122.44(d) of this chapter for the term of the WQS variance. Any limitations and requirements necessary to implement the WQS variance shall be included as enforceable conditions of the NPDES permit for the permittee(s) subject to the WQS variance.

■ 9. Add § 131.15 to read as follows:

§ 131.15 Authorizing the use of schedules of compliance for water quality-based effluent limits in NPDES permits.

If a State intends to authorize the use of schedules of compliance for water quality-based effluent limits in NPDES permits, the State must adopt a permit compliance schedule authorizing provision. Such authorizing provision is a water quality standard subject to EPA review and approval under section 303 of the Act and must be consistent with sections 502(17) and 301(b)(1)(C) of the Act.

Subpart C—Procedures for Review and Revision of Water Quality Standards

■ 10. In § 131.20, revise paragraphs (a) and (b) to read as follows:

§ 131.20 State review and revision of water quality standards.

(a) *State review.* The State shall from time to time, but at least once every 3 years, hold public hearings for the purpose of reviewing applicable water quality standards adopted pursuant to §§ 131.10 through 131.15 and Federally promulgated water quality standards and, as appropriate, modifying and adopting standards. The State shall also re-examine any waterbody segment with water quality standards that do not include the uses specified in section 101(a)(2) of the Act every 3 years to determine if any new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State shall revise its standards accordingly. Procedures States establish for identifying and reviewing water bodies for review should be incorporated into their Continuing Planning Process. In addition, if a State does not adopt new or revised criteria for parameters for which EPA has published new or updated CWA section 304(a) criteria recommendations, then the State shall provide an explanation when it submits the results of its triennial review to the Regional Administrator consistent with CWA section 303(c)(1) and the requirements of paragraph (c) of this section.

(b) *Public participation.* The State shall hold one or more public hearings for the purpose of reviewing water quality standards as well as when revising water quality standards, in accordance with provisions of State law and EPA's public participation regulation (40 CFR part 25). The proposed water quality standards revision and supporting analyses shall be made available to the public prior to the hearing.

* * * * *

■ 11. In § 131.22, revise paragraph (b) to read as follows:

§ 131.22 EPA promulgation of water quality standards.

* * * * *

(b) The Administrator may also propose and promulgate a regulation, applicable to one or more navigable waters, setting forth a new or revised standard upon determining such a standard is necessary to meet the requirements of the Act. To constitute an Administrator's determination that a

Multicultural Alliance for a Safe Environment

www.masecoalition.org
PO Box 4524 Albuquerque NM 87196
505-577-8438

COMMENTS to the
NEW MEXICO TRIENNIAL REVIEW OF WATER QUALITY STANDARDS
October 13, 2015

The Bluewater Valley Downstream Alliance (BVDA) and the Multicultural Alliance for a Safe Environment (MASE) offer the following comments based on our experience living next to the uranium mill tailings Superfund site owned by Homestake-Barrick Gold for over 40 years. The site is located north of Milan, New Mexico.

Water quality regulations were non-existent when the mill tailings were first deposited next to our communities south and west of the Homestake-Barrick Gold site. The tailings piles have leached radioactive and toxic pollutants into ground water, creating a contaminant plume that has leaked into 4 aquifers. BVDA and MASE hope to protect its last remaining fresh water regional aquifer - the San Andres-Glorieta Aquifer - from Homestake-Barrick Gold's contaminant plume. The San Andres aquifer supplies fresh domestic water for the municipalities of Grants and Milan, as well as the communities represented in the Bluewater Valley Downstream Alliance.

Other uranium mining companies and mills in the Ambrosia Lake area were allowed to discharge radioactive contaminants and toxic chemical pollutants into New Mexico's surface waters and arroyos with virtually no regulation until the 1970s. United States Government Accountability Office, *Uranium Contamination: Overall Scope, Time Frame and Cost Information is Needed for Contamination Cleanup on the Navajo Reservation*, GAO-14-323 at 3 (May 2014) ("GAO Uranium Report"), available at: http://www.gao.gov/products/GAO-14-323. Corrective state and federal water quality regulations since then are continually being relaxed to meet the needs of the uranium industry when they are unable to comply with the existing regulatory framework.

Homestake-Barrick Gold has been conducting ground water remediation at the Superfund site since 1977. A ground water Corrective Action Plan for remedial activities at the site was approved by the Nuclear Regulatory Commission (NRC) in 1986. Amendments to the plan are still under review by the NRC. In 2014, NMED renewed Discharge Permit (DP-200) for Homestake-Barrick Gold, allowing the injection of water into the subsurface that exceeded the NRC-approved Ground Water Protection Standards (GWPS) in Condition 35B of License No. SUA-1471.

MASE and BVDA contend that this ongoing circuit of non-compliance and weakening of the regulatory standards threatens our present and future water supplies for domestic and agricultural uses, contrary to the letter and intent of New Mexico's water quality standards. 20-6-2 et seq. NMAC Over-pumping of hydrologically connected ground water by Homestake-

Barrick Gold means that our critical water needs, both present and future, will depend solely on regional ground water aquifers as surface flows within the San Mateo Creek Basin are depleted. BVDA estimates that enough water has already been lost in the Ambrosia Lake area to supply all of Albuquerque's water for at least 7 years, perhaps longer.

We are appalled that the New Mexico Environment Department would compound its mistake and its complicity with past polluters by proposing to allow future polluters to apply for weaker standards in the waters into which they discharge. The proposed changes will result in weaker permit limits and increased pollution into New Mexico's rivers and streams. New Mexico cannot afford to sacrifice the remaining fresh water supplies that our children and grandchildren will need to live, work, and raise their families.

The proposed regulations do not even require a public hearing when an applicant requests temporary (weaker) standards. In addition, the absence of a time limit on "temporary" standards will lead to a permanent weakening of water quality standards, contrary to the preservation of New Mexico's scarce water supplies in an era of extreme weather and climate change.

The federal Clean Water Act allows variances from existing water quality standards, for specified periods of time, to resolve questions concerning the appropriateness of specific criteria. Variances are generally not renewable, but may be reissued upon adequate justification following public review and EPA approval. Clean Water Act, Section 301 *et seq.*

If the New Mexico Water Environment Department is simply trying to ease the corporate burdens of cleanup for its corporate citizens then these proposals might make sense. But BVDA and MASE believe the Water Quality Control Commission is concerned about the viability of New Mexico's future water supplies, much of which has already been sacrificed for Cold War era uranium production in northwestern New Mexico. We urge the Commission to REJECT these proposed revisions and to ADOPT the proposal to strengthen the Aluminum standard, as put forth by Amigos Bravos.

Respectfully,

Jonnie Head and Candace Head-Dylla
Bluewater Valley Downstream Alliance
<headjonnie@gmail.com> <cheaddylla@gmail.com>

Susan Gordon
Multicultural Alliance for a Safe Environment
On Behalf of MASE Core Groups:
Bluewater Valley Downstream Alliance (BVDA)
Post-71 Uranium Workers Committee
Laguna-Acoma Coalition for a Safe Environment (LACSE)
Eastern Navajo Dine Against Uranium Mining (ENDAUM)
Red Water Pond Road Community Association (RWPRCA)

Attachment submitted:

- Inter-American Commission on Human Rights: Questionnaire Chapter IV.A - United State of America; Prepared by the New Mexico Environmental Law Center

Amigo Bravos Proposal:
The current hardness based Aluminum standard is more than 8 (acute) and 27(chronic) times less protective than previous standard and Amigos Bravos proposed standard for the Red River. Pre 2010 NM Aluminum Standard for Red River (EPA Recommended):
750ug/L (acute) and 87 ug/L (chronic)
Current NM Aluminum Standard (with hardness of 150mg/L1) for Red River:
5,960ug/L (acute) and 2,378 ug/L (chronic)
Amigos Bravos proposal to revert to EPA recommended standard:
750ug/L (acute) and 87 ug/L (chronic)

New Mexico
Environmental Law Center

Inter-American Commission on Human Rights
1889 F Street, NW
Washington DC, 20006

Re: Questionnaire Chapter IV.A - United States of America

August 30, 2015

Dear Commissioners:

On behalf of the Red Water Pond Road Community Association ("RWPRCA"), please accept the following responses to the Inter-American Commission's questionnaire on the right to water. RWPRCA is a grassroots organization of Diné families who have experienced and lived with the impacts of uranium mining and milling in the Churchrock mining area since the 1960s. Its mission is to restore the land and water contaminated by uranium mining, improve the health of community members, and protect and preserve the natural and cultural environment in which its members live. The Red Water Pond Road community is located between two abandoned uranium mines: the Northeast Churchrock Mine and the Quivira Mine. The Red Water Pond Road community is also less than a mile north of an inactive uranium mill. The attached map (Exhibit 1) shows the geographic location of each mine and the mill in relation to the Red Water Pond Road community. RWPRCA is a nonprofit organization recognized under Navajo Nation laws including Fundamental Laws of the Diné, Title 1, Chapter 2.

1. List the main provisions in the national and/or local laws and regulations, public policies, and programs that address the right to water in the country in question.

In the United States, there are no laws that establish a *right* to basic access to good quality water.[1] Therefore, access to a clean, affordable and dependable drinking

[1] Water use in most states in the western United States is governed by the prior appropriation doctrine, which is founded on the right and obligation to put water to a "beneficial use". *See, e.g., Walker v. U.S.*, 142 N.M. 45, 51-53 (N.M. 2007). However, water rights under this legal framework are property rights, in contrast to the human right of access to potable water. *Id.* at 51. Hence, unlike the human right to water,

1405 Luisa Street, Suite 5 Santa Fe, NM 87505
Phone (505) 989-9022 Fax (505) 989-3769 nmelc@nmelc.org

Surface water on Navajo tribal lands is governed by the Navajo Nation Clean Water Act, 4 N.N.C §§ 1301 *et. seq.* and the federal Clean Water Act, 33 U.S.C. §§ 1251 *et. seq.* Surface water on non-tribal lands in New Mexico is governed by the federal Clean Water Act. Additional relevant statutes and regulations are described in the response to Question #4, below.

2. Indicate whether it is possible to measure the number of persons who lack sustainable access to drinking water nationally and/or locally. In particular, provide the respective statistics.

Data on the number of people without sustainable access to safe drinking water are difficult to locate, both on a national and particularly on a local scale. *See,* Wescoat, L. et. al., *Water and Poverty in the United States,* http://www.eoearth.org/view/article/156916/ . Based on recent reporting, the Navajo Nation has estimated that 54,000 tribal members reservation-wide lack access to reliably clean water. *See,* http://www.azcentral.com/longform/news/arizona/investigations/2014/08/05/uranium-mining-poison-wells-safe-drinking-water/13635345/. In a 2014 report, the Government Accountability Office ("GAO") estimated that between 15% and 30% of Navajos do not have piped, regulated drinking water systems in their homes. United States Government Accountability Office, *Uranium Contamination: Overall Scope, Time Frame and Cost Information is Needed for Contamination Cleanup on the Navajo Reservation,* GAO-14-323 at 3 (May 2014) ("GAO Uranium Report"), available at: http://www.gao.gov/products/GAO-14-323. In 1999, a community organization in Churchrock, which is located adjacent to the Red Water Pond Road community, conducted a survey of residents in connection with community efforts to resist new uranium development. According to that survey, 48% of Churchrock residents lacked running water in their homes. United States Nuclear Regulatory Commission Docket No. 40-8968-ML, Testimony of Robert D. Bullard, attached as Exhibit 1 to Eastern Navajo Diné Against Uranium Mining's and Southwest Research and Information Center's Brief in Opposition to Hydro Resources, Inc.'s Application for a Materials License with Respect to Environmental Justice Issues at 16, 18 (Feb. 17, 1999).

3. Specify existing measures for ensuring equal access, or access to at least basic levels of drinking water, especially in the case of persons and groups who have historically suffered discrimination. If applicable, note the main structural, social, and cultural challenges that prevent women from having equal access to water; in addition, identify whether there are specific groups of women and children who are at risk in terms of enjoyment of this right.

In the case of the Red Water Pond Road community, and minority communities in northwestern New Mexico in general, contamination from uranium mining has jeopardized significant existing and potential drinking water resources. Uranium impacted communities are faced with two primary issues: 1) clean up of legacy uranium mining and milling waste and 2) preventing new uranium mining and processing from contaminating land and water.

Legacy waste: Historically, few, if any, steps were taken to protect natural water sources from contamination from uranium mining and milling Uranium was mined by either digging a pit, typically hundreds of acres in area and hundreds of feet deep, in the ground, or by digging underground tunnels, usually thousands of feet deep. GAO Uranium Report at 11, Fig. 3. All this earth moving created millions of pounds of waste rock and debris that was disposed of in waste piles. GAO Uranium Report at 10. These large piles of waste rock contain not only waste that is radioactive, but also waste that contains high concentrations of heavy metals such as arsenic, mercury, cadmium, and selenium, among others. *Id.* Waste rock piles were left exposed to the elements and as a result, radiation and heavy metals washed into surface water and leached into groundwater. Arnold, Carrie, *Once Upon a Mine: The Legacy of Uranium on the Navajo Nation*, 122 Environmental Health Perspectives A45, A47 (Feb. 2014) ("Once Upon a Mine"), available at: http://ehp.niehs.nih.gov/122-a44/. Further, uranium mining operations discharged liquid waste containing radioactive and toxic pollution into surface waterways and arroyos. Some of these pollutants leached into groundwater and some deposited along waterway banks, often remobilizing during heavy rains.

After uranium ore was mined, it was processed at uranium mills. Uranium mills in New Mexico generated millions of tons of additional radioactive and heavy metal waste called tailings. GAO Uranium Report at 10. Like waste piles, tailings piles also leached radioactive and toxic pollutants into groundwater. *Id.* Also, like uranium mines, uranium mills discharged radioactive and toxic liquid waste into surface waters and arroyos.

The carcinogenic effects of uranium are well documented. Once Upon a Mine at A46-A47. However, recent research is beginning to demonstrate an association between living near abandoned uranium mines and diseases such as kidney disease, hypertension, heart disease, and autoimmune dysfunction. *Id.* at A48. These diseases are a likely result of drinking water contaminated with uranium and other heavy metals. *Id.*

In its 2014 report on uranium contamination on the Navajo Nation, the GAO noted that in the eastern part of the Navajo Nation, there are approximately 84

by a private party. *Id.* at 19, fn. 23; http://www.epa.gov/region6/6sf/newmexico/united_nuclear/index.html.[2]

Notwithstanding the complex regulatory framework, actual progress on restoring contaminated groundwater is slow and inconsistent. In the case of the Red Water Pond Road community, despite decades of community complaints to government agencies that the nearby abandoned Northeast Churchrock and Quivira uranium mines and a historic uranium mill were causing illnesses in the community, EPA took no steps to begin removal or remediation under Superfund until 2005 when the Navajo Nation government requested it do so. The EPA's lack of response is particularly shocking given the close proximity of the Red Water Pond Road community to two abandoned uranium mines and an inactive uranium mill. *See,* Exhibit 1.

Further, the EPA's cleanup efforts under the Superfund law do not include restoring groundwater that the Northeast Churchrock and Quivira mines have contaminated. U.S EPA Region 9, *Engineering Evaluation/Cost Analysis, Northeast Churchrock Mine Site, Gallup, New Mexico* at 10, § 1.5.4 (May 30, 2009), available at: http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/3dc283e6c5d6056f88257426007417a2/f453d4346e384945882575cf007fd4bf!OpenDocument; *In the Matter of Quivira Mine Site, Navajo Nation, New Mexico*, EPA CERCLA Docket No. 9-2012-08, Unilateral Administrative Order for the Red Water Pond Road Removal Action at the Quivira Mine Site at Appendix B (Scope of Work), ¶ 1(Aug. 2012), available at: http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/3dc283e6c5d6056f88257426007417a2/cfc2433b2e953b5088257a7f0002b5cc!OpenDocument. While groundwater remediation at the UNC Churchrock Mill is ongoing, it has been ineffective and significant groundwater contamination persists. EPA Region 6, United Nuclear Corporation Mill Progress Update Fact Sheet, available at: http://www.epa.gov/region6/6sf/newmexico/united_nuclear/united-nuclear-nm-02042015.pdf.

Even without attempting to remediate mine contaminated groundwater near the Red Water Pond Road community, progress on surface remediation is slow, signaling that water remediation progress will likewise be slow, if it even ever occurs. The 2014 GAO Uranium Report concluded that while the U.S. Government realized some of the

[2] The UNC Churchrock Mill is also the site of the largest nuclear accident in U.S. history. On July 16, 1979, an earthen dam on a mill tailings impoundment broke, releasing 93 million gallons of radioactive sludge down the Rio Puerco. https://en.wikipedia.org/wiki/Church_Rock_uranium_mill_spill.

Finally, it is important to note that the federal government has remediated uranium mine and mill waste quickly in more affluent and non-minority communities. Uranium mill waste piles in the predominantly non-minority community of Durango, Colorado, for example, were moved to a site away from the town over a period of four years. U.S. Department of Energy, Office of Legacy Management, Durango, Colorado Processing and Disposal Sites Fact Sheet, available at: www.lm.doe.gov/**Durango** /Fact Sheet **Durango**.pdf . Similarly, in predominantly non-minority Moab, Utah, mill wastes are being moved to a permanent location 30 miles away from the community. *See*, http://www.moabtailings.org/.

Because government cleanup efforts under CERCLA are largely inadequate, eight families in the RWPRCA have requested that they be relocated to a traditional use area approximately two miles north of the current Red Water Pond Road community. *See*, Exhibit 1. However, one of the primary obstacles to a relocation effort is the unwillingness of governmental authorities to provide drinking water and other critical infrastructure to the relocated community.

Contemporary uranium mining: Unfortunately, recognition of the devastation caused by historic uranium mining is not reflected in current governmental policy toward new uranium extraction. Current governmental policy, both on the federal and state level is to allow uranium mining irrespective of its impacts on water resources.

For example, near the Red Water Pond community, a company - Colorado based Uranium Resources, Inc. ("URI") - is proposing a uranium mine in an aquifer that has not yet been contaminated by past uranium mining. The proposed mine would use *in situ* leach or ISL technology. In its undisturbed state, uranium is immobile in an aquifer, because it is chemically bonded with soil particles within the aquifer. The water in the uranium ore bodies contains high concentrations of chemicals such as uranium, radon and radium. However, because these ore bodies are isolated and the uranium is immobile, surrounding groundwater may have very low concentrations of these chemicals. Thus, an aquifer with a mineralized ore zone may also have drinking water quality groundwater nearby, which is the case with the aquifer in Churchrock.

ISL mining involves injecting chemicals into an aquifer hosting uranium ore bodies. The chemicals react with the uranium, severing the bonds to the soil in the aquifer and mobilizing the uranium throughout the aquifer. The uranium laden water is then pumped to the surface and the uranium is removed. However, only about 75% of uranium is removed, and once the aquifer is exposed to the mining chemicals, its chemical composition is forever altered, and the remaining uranium and toxic heavy metals continue to spread throughout the aquifer for years. *See generally,*

The GAO Uranium Report provides additional figures. According to the GAO, during the Five-Year Plan period between 2008-2013, EPA provided between $1.8 and $7.8 million annually to the Region 9 Superfund program for its work in the Navajo Nation. GAO Uranium Report at 31. During this same period IHS provided $1 million from its budget to establish a uranium health related program.

Overall, the federal agencies involved in uranium contamination reported spending $121 million on cleanup during the period between 2008-2013. *Id.* at 34. In the five years prior to 2008, these same agencies spend $42 million. *Id.* Note that only a portion of these figures were spent on water restoration.

Future uranium contamination remediation efforts will likely be funded with the proceeds from the settlement of two lawsuits. First, the EPA received $12 million in the Tronox, Inc. bankruptcy case to use uranium contamination cleanup. *Id.* at 33, footnote 39. Second, EPA and Navajo Nation will receive $1 billion from as a result of a federal fraud case against the Anandarko Corporation, to be used for uranium contamination remediation. *See,* http://indiancountrytodaymedianetwork.com/2014/04/04/navajo-nation-get-1-billion-historic-kerr-mcgee-515-billion-cleanup-settlement-154317 . Despite these apparent financial windfalls, conservative estimates of uranium mine and mill contamination cleanup costs just within the Navajo run into the hundreds of millions of dollars, and Navajo Nation estimates costs will be multiple billions of dollars

RWPRCA was unable to locate figures for NTUA's annual budget.

6. Specify the nature of the institution responsible for planning the delivery of drinking water services, for evaluating and monitoring the infrastructure, and for management accountability.

There are two institutions primarily responsible for insuring delivery of drinking water services to the Red Water Pond Road community. The Navajo Tribal Utility Authority is responsible for operating and maintaining drinking water infrastructure to the Red Water Pond Road community. NTUA is a tribally owned non-profit utility.

The United States Indian Health Service Division of Sanitation Facilities, which is an agency of the federal government, is responsible for constructing and maintaining drinking water infrastructure to the Red Water Pond Road community.

7. Identify the measures adopted by the State to ensure the supply of drinking water, and indicate whether the access to this supply is paid or free. In the case of paid access, indicate if there are measures to ensure the continuity of the service, in

The primary water supply project affecting the RWPRCA is the Navajo-Gallup Water Supply Project. http://www.usbr.gov/uc/rm/navajo/nav-gallup/index.html. This river diversion project is intended to divert approximately 37,000 acre feet (approximately 12 billion gallons) annually from the San Juan River to the eastern part of the Navajo Nation, the Jicarilla Apache Nation, and the city of Gallup. The rationale for this water project was to supplant dwindling groundwater resources. The Navajo Nation, however, does not view this water delivery as a replacement for groundwater use. *See,* Navajo Nation Department of Water Resources, Water Management Branch, *Conjunctive Groundwater Development Plan* (2010), available at: http://www.frontiernet.net/~nndwr_wmb/PDF/NGWSP_Conjunctive_GW_Plan_march 2010.pdf.

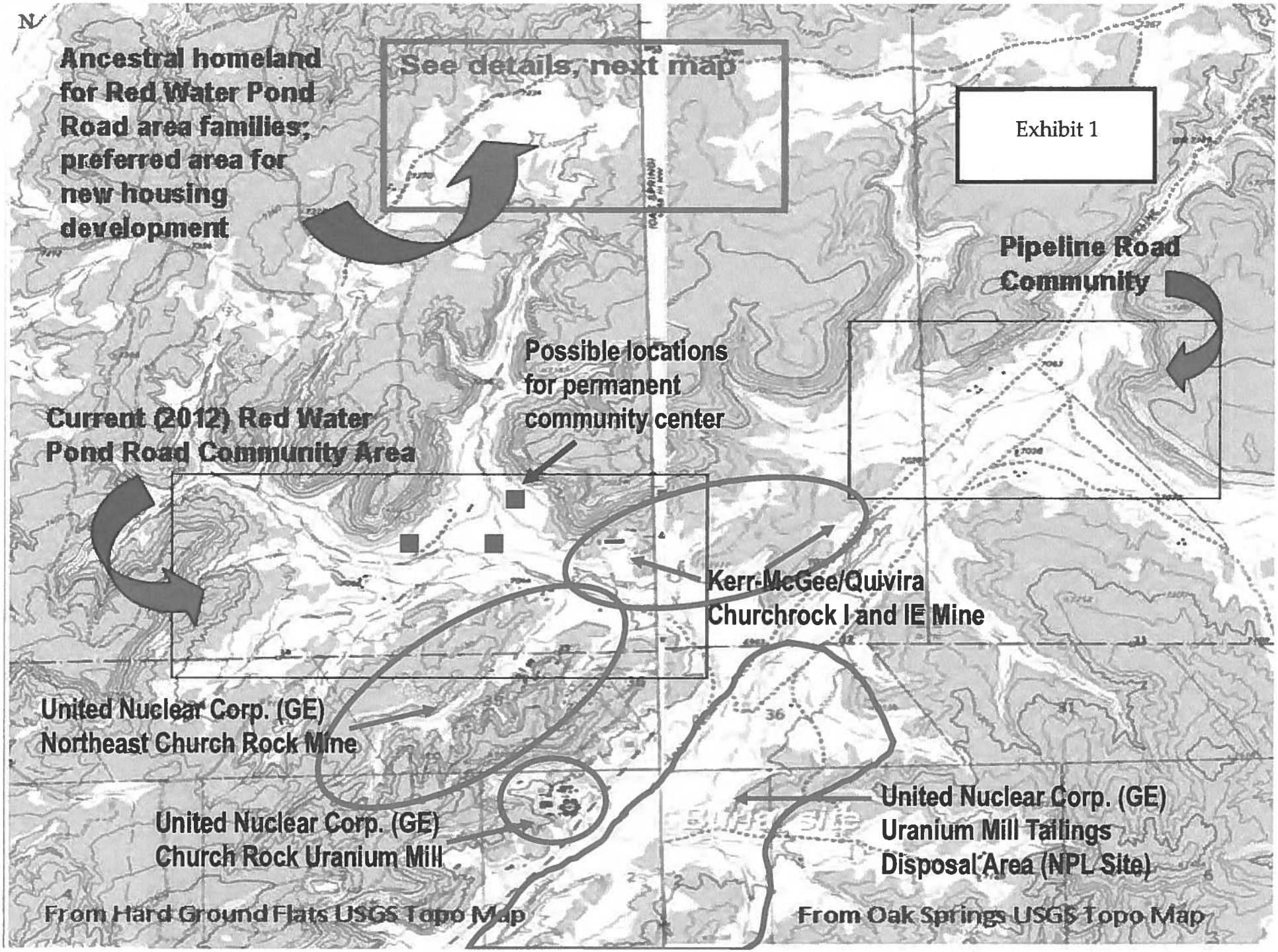
9. Identify measures or actions that have been adopted at the national level and that can be considered progressive or regressive in this area.

RWPRCA is only aware of the measures mentioned in its response to Question #8, above. RWPRCA does not consider any of these measures progressive.

10. Indicate whether there are any active transparency mechanisms in place to keep the population continually updated on the quality of water and waterways that supply water treatment plants.

The federal Safe Drinking Water Act requires utilities that are subject to the SDWA's provisions to provide annual data on drinking water quality. 40 C.F.R. § 141.151. *et. seq.* Utility customers are also notified when circumstances result in changes in water quality that may affect human health or safety. 40 C.F.R. § 141.201 *et. seq.*

Publically available comprehensive groundwater quality information is virtually non-existent in New Mexico. Individuals getting their drinking water from private wells must test their own water quality. Additionally, some mining companies take groundwater samples as part of their licensing process. Some groundwater quality information is also available from the United States Geological Survey's National Water Information System, but those data are limited and many are outdated. *See,* http://waterdata.usgs.gov/nm/nwis/gw. Finally, some groundwater quality information is available pursuant to CERCLA and UMTRCA cleanup efforts. *See, e.g.* Chester Engineers, *Annual Review Report - 2013 Groundwater Corrective Action, Churchrock Site, New Mexico United Nuclear Corporation Churchrock Tailing Site* (Jan. 2014), available at: http://www.epa.gov/region6/6sf/newmexico/united_nuclear/06-698979.pdf.


N
Ancestral homeland for Red Water Pond Road area families; preferred area for new housing development
See details, next map
Exhibit 1
Pipeline Road Community
Possible locations for permanent community center
Current (2012) Red Water Pond Road Community Area
Kerr-McGee/Quivira Churchrock I and IE Mine
United Nuclear Corp. (GE) Northeast Church Rock Mine
United Nuclear Corp. (GE) Church Rock Uranium Mill
United Nuclear Corp. (GE) Uranium Mill Tailings Disposal Area (NPL Site)
From Hard Ground Flats USGS Topo Map
From Oak Springs USGS Topo Map

From: Carol Virden <cvirden@ruidosodowns.us>
Sent: Tuesday, October 13, 2015 2:14 PM
To: pam.castaneda@state.nm.us
Cc: kathryn.becker@state.nm.us; john.verheul@state.nm.us; dim@gknet.com; germaine.chappelle@gknet.com; sbutzier@modral.com; eriksg@westernlaw.org; tiskel@westernlaw.org; jmccaleb@taylormccaleb.com; Irose@montanand.com; Ikatz@montand.com; tdolan@lanl.gov; lisa.cummings@nnsa.doe.gov; John Underwood; DebiLee@ruidoso-nm.gov; Edmund H. Kendrick; Tom Battin; Mayor Gary L. Williams; IrmaDevine@ruidoso-nm.gov
Subject: In The Matter of Proposed Amendments To Standards For Interstate and Intrastate Surface Waters, 20.6.4. NMAC WQCC 14-05 (R)
Attachments: 2015-10-13 Non-Technical Statement for the Record WQCC.pdf

Importance: High

Dear Ms. Castaneda,

Attached please find the Village of Ruidoso and the City of Ruidoso Downs Non-Technical Statement For The Records to support the New Mexico Environment Department's proposal for "Temporary Standards."

Thanking you in advance.

Carol Virden, MMC
City Clerk/Treasurer
PO Box 348
Ruidoso Downs, NM 88346
Telephone: (575) 378-4422 Ext. 1029
Fax: (575) 378-4586
cvirden@ruidosodowns.us

OCTOBER 13, 2015

STATE OF NEW MEXICO
WATER QUALITY CONTROL COMMISSION

IN THE MATTER OF:
PROPOSED AMENDMENTS TO STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS, 20.6.4 NMAC **WQCC 14-05 (R)**

NON-TECHNICAL STATEMENT FOR THE RECORD

As Mayors of the Village of Ruidoso and the City of Ruidoso Downs, we are writing to support the New Mexico Environment Department's proposal for "Temporary Standards." This provision would be added to the Water Quality Control Commission's Standards for Interstate and Intrastate Surface Water at 20.6.4.10.F NMAC. We believe this provision could assist our communities as we work with the Department to improve water quality in the Rio Ruidoso.

By way of background, our two municipalities, through our Regional Wastewater Treatment Plant Joint Use Board, finished construction of our new wastewater treatment plant (New Plant) in 2011. This state-of-the-art facility, which discharges into the Rio Ruidoso, is an enhanced biological and chemical

removal process generally referred to as a Bardenpho membrane biological reactor (MBR). In addition to utilizing a state-of-the-art process, the New Plant has performed well in comparison with other plants utilizing the same MBR process. The performance of the New Plant in removing nutrients (both Total Phosphorus and Total Nitrogen) from effluent is matched by only about 2% of MBR facilities.

Despite the excellent performance of the New Plant, it will be unable to meet the effluent limit of 1.0 milligram per liter for Total Nitrogen scheduled to take effect on July 31, 2017 under the current NPDES Permit. An upgrade to the New Plant would not be economically feasible or environmentally wise. An estimate for reverse osmosis, the most likely technology, is a capital cost of about $26 million and an annual operating cost of about $2.7 million. In addition, reverse osmosis produces a large volume of spent brine that requires disposal and results in a substantial decrease in treated flow that would otherwise be added to the Rio Ruidoso stream flow.

Because Ruidoso has done everything reasonably possible to construct and efficiently operate a state-of-the-art wastewater treatment plant, we are now focusing on other initiatives to improve water quality in the Rio Ruidoso. A portion of the existing sanitary sewer system is located within and next to the Rio Ruidoso. We are working with the Federal Emergency Management Agency (FEMA) to relocate this system away from the Rio Ruidoso to reduce the chance of damage to the system from flooding and to reduce leakage of wastewater into the stream. We are also developing a master plan to identify improvements to other portions of

the existing wastewater collection system. Part of this effort will be to extend the system into areas now served by septic systems and to remove those septic systems in an effort to improve water quality in the Rio Ruidoso.

We believe the proposed Temporary Standards provision could provide a mechanism for Ruidoso to continue our efforts to improve water quality in the Rio Ruidoso without violating the federal Clean Water Act. A temporary standard for Total Nitrogen could be reflected in an achievable Total Nitrogen effluent limit in the New Plant's NPDES Permit. Ruidoso would then be able to continue operating the New Plant at maximum efficiency while complying with the NPDES Permit and focusing our attention on the reduction of nonpoint sources of contamination. Specifically, we could continue to improve the water quality of the Rio Ruidoso by reducing contamination from wastewater collection systems and septic systems without the distraction, time and expense of addressing Clean Water Act compliance issues.

We appreciate the Commission's consideration of our Statement.

Respectfully submitted:

Gary Williams
Mayor
City of Ruidoso Downs

Tom Battin
Mayor
Village of Ruidoso

Castaneda, Pam, NMENV

From: cisco@losriosriverrunners.com
Sent: Friday, October 16, 2015 4:16 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 16, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Francisco Guevara
4003 state RD #68
Ranchos de Taos, NM 87557

From:	Carol Virden <cvirden@ruidosodowns.us>
Sent:	Tuesday, October 13, 2015 2:14 PM
To:	pam.castaneda@state.nm.us
Cc:	kathryn.becker@state.nm.us; john.verheul@state.nm.us; dim@gknet.com; germaine.chappelle@gknet.com; sbutzier@modral.com; eriksg@westernlaw.org; tiskel@westernlaw.org; jmccaleb@taylormccaleb.com; Irose@montanand.com; Ikatz@montand.com; tdolan@lanl.gov; lisa.cummings@nnsa.doe.gov; John Underwood; DebiLee@ruidoso-nm.gov; Edmund H. Kendrick; Tom Battin; Mayor Gary L. Williams; IrmaDevine@ruidoso-nm.gov
Subject:	In The Matter of Proposed Amendments To Standards For Interstate and Intrastate Surface Waters, 20.6.4. NMAC WQCC 14-05 (R)
Attachments:	2015-10-13 Non-Technical Statement for the Record WQCC.pdf
Importance:	High

Dear Ms. Castaneda,

Attached please find the Village of Ruidoso and the City of Ruidoso Downs Non-Technical Statement For The Records to support the New Mexico Environment Department's proposal for "Temporary Standards."

Thanking you in advance.

Carol Virden, MMC
City Clerk/Treasurer
PO Box 348
Ruidoso Downs, NM 88346
Telephone: (575) 378-4422 Ext. 1029
Fax: (575) 378-4586
cvirden@ruidosodowns.us

OCTOBER 13, 2015

STATE OF NEW MEXICO
WATER QUALITY CONTROL COMMISSION

IN THE MATTER OF:
PROPOSED AMENDMENTS TO STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS, 20.6.4 NMAC **WQCC 14-05 (R)**

NON-TECHNICAL STATEMENT FOR THE RECORD

As Mayors of the Village of Ruidoso and the City of Ruidoso Downs, we are writing to support the New Mexico Environment Department's proposal for "Temporary Standards." This provision would be added to the Water Quality Control Commission's Standards for Interstate and Intrastate Surface Water at 20.6.4.10.F NMAC. We believe this provision could assist our communities as we work with the Department to improve water quality in the Rio Ruidoso.

By way of background, our two municipalities, through our Regional Wastewater Treatment Plant Joint Use Board, finished construction of our new wastewater treatment plant (New Plant) in 2011. This state-of-the-art facility, which discharges into the Rio Ruidoso, is an enhanced biological and chemical

removal process generally referred to as a Bardenpho membrane biological reactor (MBR). In addition to utilizing a state-of-the-art process, the New Plant has performed well in comparison with other plants utilizing the same MBR process. The performance of the New Plant in removing nutrients (both Total Phosphorus and Total Nitrogen) from effluent is matched by only about 2% of MBR facilities.

Despite the excellent performance of the New Plant, it will be unable to meet the effluent limit of 1.0 milligram per liter for Total Nitrogen scheduled to take effect on July 31, 2017 under the current NPDES Permit. An upgrade to the New Plant would not be economically feasible or environmentally wise. An estimate for reverse osmosis, the most likely technology, is a capital cost of about $26 million and an annual operating cost of about $2.7 million. In addition, reverse osmosis produces a large volume of spent brine that requires disposal and results in a substantial decrease in treated flow that would otherwise be added to the Rio Ruidoso stream flow.

Because Ruidoso has done everything reasonably possible to construct and efficiently operate a state-of-the-art wastewater treatment plant, we are now focusing on other initiatives to improve water quality in the Rio Ruidoso. A portion of the existing sanitary sewer system is located within and next to the Rio Ruidoso. We are working with the Federal Emergency Management Agency (FEMA) to relocate this system away from the Rio Ruidoso to reduce the chance of damage to the system from flooding and to reduce leakage of wastewater into the stream. We are also developing a master plan to identify improvements to other portions of

the existing wastewater collection system. Part of this effort will be to extend the system into areas now served by septic systems and to remove those septic systems in an effort to improve water quality in the Rio Ruidoso.

We believe the proposed Temporary Standards provision could provide a mechanism for Ruidoso to continue our efforts to improve water quality in the Rio Ruidoso without violating the federal Clean Water Act. A temporary standard for Total Nitrogen could be reflected in an achievable Total Nitrogen effluent limit in the New Plant's NPDES Permit. Ruidoso would then be able to continue operating the New Plant at maximum efficiency while complying with the NPDES Permit and focusing our attention on the reduction of nonpoint sources of contamination. Specifically, we could continue to improve the water quality of the Rio Ruidoso by reducing contamination from wastewater collection systems and septic systems without the distraction, time and expense of addressing Clean Water Act compliance issues.

We appreciate the Commission's consideration of our Statement.

Respectfully submitted:

Gary Williams
Mayor
City of Ruidoso Downs

Tom Battin
Mayor
Village of Ruidoso

Comments on 20.6.4.16 NMAC

I am a member of Trout Unlimited and a practicing physician in New Mexico, where I grew up and have seen the populations of our state fish, the Rio Grande Cutthroat Trout change from very uncommon when I was a teenager to extremely difficult to find as a senior citizen, and then only with long drives over rough roads followed by a hike. These fish evolved to take advantage of conditions in New Mexico, and were very good at it, being present in every trickle, river, and lake in the Rio Grande, Pecos, and upper Canadian River watersheds and as far away as west Texas. Their decline is absolutely because of reproductive factors in competing with introduced species of non-native trout, which must be removed from waters where they are to be found if they are to survive.

I have been involved in their recovery since returning to New Mexico in 1998, and have given scientific and medical testimony at all the hearings regarding rotenone application to restore cutthroat trout, and spoken also at public meetings regarding these restorations. I agree completely with the written testimony by the presidents of the Gila Rio Grande and Truchas Chapters of Trout Unlimited, both of whom are chemists and know what they are talking about. I further affirm that the rotenone treatments as currently performed by the trained, licensed, and experienced restoration team members from the NM Dept of Game and Fish and other involved agencies are both safe and effective, and have been performed without complications. In the concentrations used, 40-50 parts per *billion*, which is like a teaspoon of sugar in an Olympic swimming pool, there is no danger to anything that doesn't have gills, and it is actually not only safe to drink the water and eat the fish, but the chemical breaks down into water and carbon dioxide even if not neutralized after the treatment, which is done to limit spread beyond the treated area.

These points are always brought out at the WQCC hearings that have been used to permit individual treatments, and are presented at NPDES discharge permit hearings which also have ample opportunities for public comment and discussion. Public information and opportunity for discussion is always important, and I can't imagine a treatment which would not involve informing the local public. I agree that additional hearings after approval by NPDES would be expensive, redundant, and serve no useful purpose.

Arnold Atkins, MD
Past Chairman
New Mexico Council, Trout Unlimited

The City of
RUIDOSO DOWNS

Gary L. Williams, Mayor

October 14, 2015

Pam Castaneda, Administrator
Water Quality Control Commission
1190 St. Francis Dr., Suite S-2100
Santa Fe, New Mexico 87502

Re: Non-Technical Statement for the Record

Dear Ms. Castaneda:

Attached please find original Non-Technical Statement for the Record for the Village of Ruidoso and the City of Ruidoso Downs to support the New Mexico Environment Department's proposal for "Temporary Standards."

Sincerely,

Carol Virden, MMC
City Clerk/Treasurer

Cc: Edmund H. Kendrick, JUB Attorney
H. John Underwood, City of Ruidoso Downs Attorney
Erica Anderson, Village of Ruidoso Attorney

OCTOBER 13, 2015

STATE OF NEW MEXICO
WATER QUALITY CONTROL COMMISSION

IN THE MATTER OF:
PROPOSED AMENDMENTS TO STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS, 20.6.4 NMAC **WQCC 14-05 (R)**

NON-TECHNICAL STATEMENT FOR THE RECORD

As Mayors of the Village of Ruidoso and the City of Ruidoso Downs, we are writing to support the New Mexico Environment Department's proposal for "Temporary Standards." This provision would be added to the Water Quality Control Commission's Standards for Interstate and Intrastate Surface Water at 20.6.4.10.F NMAC. We believe this provision could assist our communities as we work with the Department to improve water quality in the Rio Ruidoso.

By way of background, our two municipalities, through our Regional Wastewater Treatment Plant Joint Use Board, finished construction of our new wastewater treatment plant (New Plant) in 2011. This state-of-the-art facility, which discharges into the Rio Ruidoso, is an enhanced biological and chemical

removal process generally referred to as a Bardenpho membrane biological reactor (MBR). In addition to utilizing a state-of-the-art process, the New Plant has performed well in comparison with other plants utilizing the same MBR process. The performance of the New Plant in removing nutrients (both Total Phosphorus and Total Nitrogen) from effluent is matched by only about 2% of MBR facilities.

Despite the excellent performance of the New Plant, it will be unable to meet the effluent limit of 1.0 milligram per liter for Total Nitrogen scheduled to take effect on July 31, 2017 under the current NPDES Permit. An upgrade to the New Plant would not be economically feasible or environmentally wise. An estimate for reverse osmosis, the most likely technology, is a capital cost of about $26 million and an annual operating cost of about $2.7 million. In addition, reverse osmosis produces a large volume of spent brine that requires disposal and results in a substantial decrease in treated flow that would otherwise be added to the Rio Ruidoso stream flow.

Because Ruidoso has done everything reasonably possible to construct and efficiently operate a state-of-the-art wastewater treatment plant, we are now focusing on other initiatives to improve water quality in the Rio Ruidoso. A portion of the existing sanitary sewer system is located within and next to the Rio Ruidoso. We are working with the Federal Emergency Management Agency (FEMA) to relocate this system away from the Rio Ruidoso to reduce the chance of damage to the system from flooding and to reduce leakage of wastewater into the stream. We are also developing a master plan to identify improvements to other portions of

the existing wastewater collection system. Part of this effort will be to extend the system into areas now served by septic systems and to remove those septic systems in an effort to improve water quality in the Rio Ruidoso.

We believe the proposed Temporary Standards provision could provide a mechanism for Ruidoso to continue our efforts to improve water quality in the Rio Ruidoso without violating the federal Clean Water Act. A temporary standard for Total Nitrogen could be reflected in an achievable Total Nitrogen effluent limit in the New Plant's NPDES Permit. Ruidoso would then be able to continue operating the New Plant at maximum efficiency while complying with the NPDES Permit and focusing our attention on the reduction of nonpoint sources of contamination. Specifically, we could continue to improve the water quality of the Rio Ruidoso by reducing contamination from wastewater collection systems and septic systems without the distraction, time and expense of addressing Clean Water Act compliance issues.

We appreciate the Commission's consideration of our Statement.

Respectfully submitted:

Gary Williams
Mayor
City of Ruidoso Downs

Tom Battin
Mayor
Village of Ruidoso

Castaneda, Pam, NMENV

From: sphelps@taosnet.com
Sent: Sunday, October 18, 2015 4:27 PM
To: Castaneda, Pam, NMENV
Subject: Triennial Review

October 18, 2015

Dear Water Quality Control Commission,

I am writing to you as New Mexico citizen that cares deeply about water quality in New Mexico's rivers, streams, and lakes, to urge you to adopt water quality standards that will protect our aquatic ecosystems for future generations.

Specifically I am writing in support of adopting stronger Aluminum water quality standards. New Mexico has the weakest aluminum standards in the nation and it is time to do something to change that! I write in support of strengthening the New Mexico's standard to the EPA's nationally recommended standard of 750ug/L (acute) and 87ug/L (chronic) as proposed by Amigos Bravos. New Mexico's ecosystems and economy depends on healthy aquatic ecosystems. Trout and mussels are especially sensitive to Aluminum pollution and the current hardness based Aluminum standard is not protecting these sensitive species. I urge you to protect New Mexico's trout and freshwater mussel populations by strengthening New Mexico's Aluminum criteria.

I am also writing to urge you to reject the New Mexico Environment Department's temporary standards proposal. This proposal would allow polluters to receive individually tailored (weaker) water quality standards for the rivers and streams into which they discharge. This would allow them to discharge at levels that are harmful to the aquatic life and other uses of these rivers and streams. At the very least, I urge you to limit the temporary standards proposal so that it can't apply to new discharges.

Thank you for your time and attention to my comments.

Sincerely,

Ms. Sally Phelps
221 Gallina Canyon Road
Valdez, NM 87580