

**Summary Minutes of the
STATE ENVIRONMENTAL COMMISSION (SEC)**

Meeting of October 6, 2009, 10:00 AM

Video Conference between
NDEP Carson City Office
901 S. Stewart St
Tahoe Conference Room
and
NDEP Las Vegas Office
2030 E. Flamingo Rd, Ste 230
Red Rock Conference Room

Members Present:

Lewis Dodgion, Chairman
Kathryn Landreth
Frances Barron
Harry Shull
(Eugene) Jim Gans
Stephanne Zimmerman

Members Absent:

Alan Coyner, Vice Chairman
Pete Anderson
Tony Lesperance
Kenneth Mayer
Tracy Taylor

SEC Staff Present:

Rose Marie Reynolds, SEC/DAG
John Walker, Executive Secretary
Kathy Rebert, Recording Secretary

BEGIN SUMMARY MINUTES

The meeting was called to order at 10:00 am by Chairman Dodgion who declared there was a quorum. Chairman Dodgion introduced newly appointed Commissioner Kathryn Landreth who fills the position with expertise in conservation as required by the last Legislature. The Chairman announced two agenda items would be switched to different times in the meeting (agenda item numbers remain the same).

1) Approval of minutes from the June 17, 2009 SEC hearing

Because there were only 3 members present at today's meeting who attended the June 17 meeting and Ms. Landreth informed the Chairman she would be abstaining from the vote on the minutes, the Chairman suggested postponing approval of the June 17th minutes until the December 9 meeting. The remaining Commissioners concurred.

Air Pollution Control / Air Quality Planning Regulation

3) Permanent Regulation R088-09: Adopt by Reference Federal Regulations

(Begin prepared remarks of Mr. Matthew Deburle)

Mr. Chairman, members of the Commission, for the record my name is Matthew DeBurle. I'm the Permitting Supervisor of the Bureau of Air Pollution Control. I'm here today to provide you

with a brief overview of the proposed amendments contained in Petition R088-09. The Commission considered the bulk of these regulations at their June 2009 meeting as temporary regulations. I am here today to present these regulations as permanent regulations.

Since you have heard most of these before, I will be brief. The NDEP is updating its adopt by reference regulation to align some state definitions with federal definitions and update the date of the federal Code of Federal Regulations to the most recent publication date. This adopt by reference package includes those regulations newly adopted at the June hearing. Additionally, many references to the Federal Register are being removed as those changes are now included in the most recent publication of the Code of Federal Regulations.

This Petition also seeks to add to the adoption specific ASTM standard practices and test methods. Most of these ASTM procedures are for characterization of coal, including coal sampling procedures and various methods for determining heat content. Other ASTM methods are for characterizing the sulfur content of natural gas and the concentration of mercury in flue gas. Some of these methods have been cited in permits and/or have been used in stack test protocols.

As with all of our proposed regulation changes, a workshop was held to review the proposed amendments. Since the language of the proposed rule differed from what was adopted in June, we held a workshop in Carson City on August 13th, 2009. No verbal or written comments were received.

With that, I recommend that the Commission adopt Petition R088-09. I'd be happy to answer any questions you may have.

Mr. Gans asked if there had been any negative reaction to the proposed regulation or if this was just routine "housekeeping". Mr. DeBurle answered that this is routine "housekeeping". There being no public comment or further Commission comment, the Chairman asked for the motion.

Motion: Mr. Gans moved to approve the regulation. The motion was seconded by Mr. Shull and approved unanimously.

Safe Drinking Water

2) Regulation R194-08: Public Water Systems

Summarized below are the testimonies of Jennifer Carr and Andrea Seifert, Bureau of Safe Drinking Water staff. For their complete, written testimonies, see **ATTACHMENT 1**. There also was a handout provided (**ATTACHMENT 2**).

Ms. Jennifer Carr, Chief of the Bureau of Safe Drinking Water, introduced the petition, saying with the petition, the Bureau of Safe Drinking Water was proposing to adopt two new federal rules, amend certain existing regulations in order to continue to seek and obtain primary enforcement responsibility (for drinking water) approval from the US EPA, and perform additional cleanup on language that was necessitated in part by the 2005 Legislative transfer of the safe drinking water program from the Health Division to the NDEP. Ms. Carr explained primacy and outlined the petition's five general purposes. Ms. Carr also discussed the public notifications, information opportunities utilized, and workshops conducted relating to the proposed regulation.

Next, Ms. Andrea Seifert, Staff Engineer in the Bureau of Safe Drinking Water, provided details and background on the two federal regulations proposed for adoption. Ms. Seifert said the proposed revisions were associated with the Disinfectants and Disinfection Byproducts Rule (Stage 2) and the Surface Water Treatment Rule (Long Term 2 or LT2). Ms. Seifert reported the rules and requirements and described risks to public health by various contaminants as well as approaches and processes proposed for public protection. Also discussed were methods to provide cost savings to water systems and compliance monitoring.

Ms. Seifert detailed the third overall purpose of the proposed amendments to revise certain Nevada regulations to ensure they are no less stringent than the USEPA regulations, and to attain primacy approval for previously adopted NACs.

Ms. Carr then spoke about USEPA's concerns with the NACs that outline general conditions and procedures for granting Variances, including language related to Best Available Technology (BAT). She noted that it is anticipated that the proposed revisions will permit the USEPA Region 9 to approve the NDEP Primacy application for Variances and Exemptions.

Ms. Carr also explained the Lead and Copper Rule Minor Revisions, the clean up of "Health Division" or "Health Authority" to Division of Environmental Protection" or "Division", in the regulations and the remaining miscellaneous amendments.

At the conclusion of the testimonies, Chairman Dodgion asked the Commission if there were any questions.

Mr. Gans asked about critical deadline requirements and compliance with those. Ms. Seifert answered that all water systems were in compliance with the deadlines. Mr. Gans also asked about economic impact on the four systems out of compliance with Stage 2 disinfection. Ms. Seifert explained that those four are out of compliance with the existing regulation and that the revisions will not place additional burden on them.

There was a short discussion on systems requiring capital improvements under the LT2 Rule and the types of funding that may be available to them through State loans or grants administered by the Division of Environmental Protection.

Mr. Gans asked Ms. Carr if in the future there may be a burden on staff to administer and monitor these regulations. Ms. Carr answered that currently the Safe Drinking Water bureau is maintaining their level of responsiveness to the regulated community regarding EPA imposed regulations. She noted that due to the downturn in the economy, there has been a decrease in the receipt of fees related to design and plan review of water systems; however the current staffing has been maintained in the bureau. She did say, however, that if certain fees don't recover to prior levels or if additional rules are implemented by EPA, then additional positions and/or increase in fees will have to be considered by the Division.

There were no public comments on this agenda item.

Motion: Mr. Gans moved proposed Regulation R194-08 be approved. The motion was seconded by Ms. Landreth and passed unanimously.

Chairman Dodgion moved to agenda item 5.

5. Public Comment

There were no public comments.

4. Administrator's Briefing to the Commission

Mr. Leo Drozdoff, NDEP Administrator, gave an overview and status of how the division was implementing the American Recovery and Reinvestment Act (ARRA) stimulus funds. Mr. Drozdoff named the five Recovery Act Grants awarded by US EPA for which NDEP is eligible: Clean Water State Revolving Loan Fund, Drinking Water State Revolving Loan Fund, Clean Water Act 604(b) Planning, Diesel Emissions Reduction Program (State Clean Diesel Grants), and Leaking Underground Storage Tank Trust Fund. Mr. Drozdoff provided a brief overview of the five programs and included new requirements and timelines added in the Recovery Act. He also described the types of work for which the ARRA funds will be used. **ATTACHMENT 3** contains slides related to the information in Mr. Drozdoff's presentation.

Mr. Drozdoff next apprised the Commission on what NDEP has been doing to work with local governments. He said one staff position has been appointed as liaison to local governments in an effort to open up communication and enhance outreach. He noted that NDEP will be conducting annual meetings with all seventeen counties and it is hoped this will also extend to some of the larger cities. He said the intent is to clarify the limits of NDEP's function, explain NDEP's regulatory processes and find out any concerns from counties and city officials. NDEP would be able to provide expertise on any issue or project that may be of concern to the local governments. The Commissioners expressed their pleasure with the plan.

Ms. Barron asked Mr. Drozdoff for an update on mercury at the Hawthorne Munitions Depot. Mr. Drozdoff gave a brief history of the Department of Defense's plan to consolidate the nation's mercury stockpile at Hawthorne. As a result, in 2006 the SEC approved a petition allowing the Division to develop a permitting program for mercury storage at Hawthorne; the division's Chemical Acts and Prevention Program has developed and is now implementing the permitting program. In addition, Mr. Drozdoff noted that the Legislature passed a law that mirrored the division's regulation.

There being no other questions for Mr. Drozdoff, Chairman Dodgion asked Mr. Walker if there was anything else that needed to come before the Commission. Mr. Walker reminded the Commission of the December 9 hearing which will be in Reno at NDOW.

Chairman Dodgion closed the meeting at 11:34 am.

ATTACHMENTS

- ATTACHMENT 1: Written testimony for Jennifer Carr and Andrea Seifert on R194-08
- ATTACHMENT 2: Handout related to R194-08
- ATTACHMENT 3: Slides Related to Presentation by Leo Drozdoff regarding American Recovery and Reinvestment Act (ARRA) stimulus funds

ATTACHMENT 1

Written testimony for Jennifer Carr and Andrea Seifert on R194-08

(26 pages)

Regulatory Petition R194-08/Public Water System Regulations

[Jennifer]

Good Morning, Mr. Chairman, Members of the Commission.

For the Record, I am Jennifer Carr, Chief of the NDEP Bureau of Safe Drinking Water. With me today is Andrea Seifert, an Engineer with our program, and the drafter of a significant portion of the regulations before you today. As we begin this morning, I will be describing some of the overall background on this petition; then, Andrea will review the proposed amendments that include two new Safe Drinking Water regulatory programs; and finally, I will conclude the discussion with a description of additional language revisions and cleanup amendments in this petition.

Due to the nature of the two new program elements and the number of actions proposed today, we wanted to let you know that we anticipate that our testimony this morning will be at least an hour, during which, we plan to provide you with an understanding of the public health protections that the provisions afford, and an review of the proposed amendments. Because of the various discrete actions that this petition covers, and the way it is formatted, we do not believe it would be fruitful to go through this 132 page petition section-by-section. Rather, to facilitate this rather lengthy discussion, I refer you to the handouts that we have provided today. The handout is a general outline of our testimony for your reference as we go along. We do not plan to mention each slide number, but we believe that you will be able to follow the content as we progress through the discussion.

{Slide 2}

With this petition, the Bureau of Safe Drinking Water is proposing to adopt two new Federal Rules, amend certain existing regulations in order to continue to seek and obtain Primary Enforcement Responsibility approvals from the USEPA, and perform additional clean-up on language necessitated, in part, by the 2005 Legislative transfer of the Safe Drinking Water Program from the Health Division to NDEP.

I would like to make a few comments on Primacy: The Safe Drinking Water Program regulates public drinking water systems using a combination of State regulations, and Federal regulations adopted by reference. It is important to note that water systems are required to comply with federal regulatory requirements, regardless of whether or not Nevada adopts the federal programs; and the Federal regulations are enforceable by the USEPA. However, since 1978 when Nevada was granted primary enforcement responsibility for the Safe Drinking Water Act in Nevada, it has been the desire of the State and the regulated community that Nevada be the enforcement authority for federal regulations pertaining to drinking water. In order to retain primary enforcement responsibility for federal drinking water programs (which I will hereafter refer to as “Primacy”), the NDEP submits “Primacy package” revision applications for USEPA approval for each new drinking water regulation promulgated by the federal government. The Primacy packages must prove to the USEPA that the State regulations are no less stringent than the federal regulations. Unlike some NDEP programs, Primacy for the Safe Drinking Water Act is not a “pick-and-choose” program. In order to retain primacy, Nevada has to adopt each new

regulatory program, apply for revision of our Primacy program, and receive EPA approval of our Nevada Administrative Code language. It is a lengthy, repeating, process that we are, fortunately, reaching conclusion on in several areas.

{Slide 3}

To review this petition in a little more detail, the proposed amendments serve five general purposes:

- 1) To update our adoption by reference date to bring in two new federal regulations promulgated between July 1, 2005 and July 1, 2006. Once adopted, the NDEP can continue the process of submitting the primacy revision packages to the USEPA for review and approval. No other amendments to the Federal Regulations were published between July 1, 2005 and July 1, 2006.
- 2) The second general purpose is to amend certain portions of the existing NACs for public water system Design, Construction, Operation and Maintenance that are necessary for overall implementation of the two new rules.
- 3) The third general purpose of this petition is to amend the NACs in order to submit final primacy package applications to the USEPA for previously adopted regulations which the USEPA has reviewed, and has requested modification to, prior to their legal approval.
- 4) The fourth purpose of this petition is to perform administrative name changing, primarily in the Design, Construction, Operation and Maintenance regulations, necessitated by the 2005 Legislative transfer of the Safe Drinking Water program from the Health Division to the NDEP.
- 5) And finally, this petition performs certain miscellaneous language cleanups to provisions identified by the NDEP or the Legislative Council Bureau as needing amendment.

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In order to inform and involve the regulated community of the proposed regulations, numerous outreach opportunities have been utilized since the new Federal programs were promulgated in 2006. NDEP staff took advantage of opportunities at several annual Nevada Rural Water Association Conferences, we also participated in Distance Learning Broadcast trainings through the UNR Extension Service and also scheduled or attended small group meetings and trainings with identified major stakeholders such as the Southern Nevada Water Authority, the National Park Service, the Truckee Meadows Water Authority and the Tahoe Water Suppliers Association. The NDEP also involved our contracted Counties who aid in program implementation, and the USEPA in Region 9. As required by process, notifications of the regulation adoption Workshops were posted in all requisite library locations. In addition, the Workshop notice was mailed to 1,771 individuals, including all public water systems, all certified water system operators, and a large number engineering companies on file with the Bureau. The workshops were held in Las Vegas with 9 attendees, in Carson City with 20 attendees, and Elko with 2 attendees. A cross-section of the regulated community was well represented with both filtered water systems and filtration avoidance water systems represented, Community and Non-Community public water systems were represented, small and large water systems were represented, technical assistance providers and the engineering community were also represented. The three hour workshop went into detail on each modification proposed. As a result of this process, a few comments were received which were considered prior to submitting the July 21, 2009, agency draft to the Legislative Council Bureau (or LCB).

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You may have noticed in your detailed agenda that there was a minor reference to an amendment of regulations related to Fluoridation of Public Water Systems. Since the 2005 move of the drinking water program from the Health Division to the NDEP, a section of this petition was originally included to perform certain administrative name changes and other minor amendments in our program NACs to clarify current roles and responsibilities for the Fluoridation program between the State Health Division and the NDEP. However, after the July 2009 submittal of the petition to LCB, discussions among the NDEP, the Health Division, and LCB attorneys resulted in the removal of the section. The LCB decided that since the driving authority for Fluoridation of water systems resides with the State Board of Health, and their oral health program, that it would be best if the Board of Health review those proposed amendments. There is no longer a section in this petition related to fluoridation of water systems and we apologize for the oversight in preparing the wording of your agenda documents.

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At this point, Andrea Seifert will spend some time explaining the two new federal regulations that are proposed for adoption, related to Surface Water Treatment Rules and Disinfectants and Disinfection Byproducts Rules.

[Andrea]

Good Morning, Mr. Chairman, Members of the Commission. I'm going to delve right into the proposed revisions associated with the Surface Water Treatment Rules and Disinfectants and Disinfection Byproducts Rules.

In January of 2006, two new regulations were promulgated by the federal government as a result of the 1996 Amendments to the Safe Drinking Water Act, these being the Stage 2 Disinfectants

and Disinfection Byproducts Rule and the Long Term 2 Enhanced Surface Water Treatment Rule. The adoption of the Stage 2 Disinfectants and Disinfection Byproducts Rule has been made by reference, and, therefore, you will not see additional language in this petition addressing specific Rule requirements. The Long Term 2 Enhanced Surface Water Treatment Rule adoption has also been made by reference in this petition. In addition, you will see sections in this petition that have been created, and others enhanced, associated with this new regulation. I will now go into more detail on each of these regulations, giving you an overview of their history, purpose, and implications to the regulated community and NDEP implementation.

Stage 2 Disinfectants and Disinfection Byproducts Rule

During this discussion, I will refer to the Stage 2 Disinfectants and Disinfection Byproducts Rule as “the Stage 2 Rule” or “Stage 2”.

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The Stage 2 Rule impacts water systems that add a disinfectant to their water or purchase water from a wholesaler who disinfects their water. For Nevada, there are approximately 220 water systems that are impacted by this regulation. For at least five water systems, it will be the first time they are required to comply with disinfectant residuals and disinfection byproduct levels. These systems were not previously regulated because they do not add a disinfectant but purchase water that has been disinfected. We currently have four systems which do not comply with the current regulation, one that treats to comply, and four that may have to make capital improvements to comply with the new Stage 2 Rule.

In drinking water, disinfection practices are utilized by both surface water and groundwater systems to provide protection from microbial pathogens, such as bacteria and *Giardia*, in their source water and distribution systems. The presence of excess quantities of disinfectants such as chlorine, chloramines, and chlorine dioxide are associated with risks to public health. In addition, disinfectants can combine with organic and/or inorganic matter in the water to produce harmful byproducts such as Trihalomethanes, Haloacetic acids, bromate, and chlorite. Due to the health risks associated with disinfection, both disinfectants and disinfection byproducts are required to be monitored and remain below the prescribed maximum residual disinfectant levels, or MRDLs, and maximum contaminant levels, or MCLs.

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Disinfectants cause the following risks to public health:

- 1) Chlorine and chloramines above the MRDL pose a chronic health risk and can cause irritation to nose and eyes and stomach discomfort, and chloramines can, additionally, cause anemia.
- 2) Chlorine Dioxide above the MRDL poses an acute health risk for infants, children and fetuses and can cause problems with the nervous system, and some people may experience anemia.

Disinfection Byproducts cause the following risks to public health:

- 1) Total Trihalomethanes above the MCL pose a chronic health risk and cause problems with the liver, kidneys, and central nervous system, and are associated with an increased risk of cancer.

- 2) Haloacetic acids and Bromate above the MCL pose a chronic health risk and are associated with an increased risk of cancer; and
- 3) Chlorite above the MCL poses an acute health risk for infants, children and fetuses and can cause problems with the nervous system. Some people may experience anemia.

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Disinfection byproducts have been regulated since 1979 with the regulation of Total Trihalomethanes. In 1998, the regulation of additional disinfection byproducts was required by the promulgation of the Stage 1 Disinfectants and Disinfection Byproducts Rule, or Stage 1. This included the regulation of Total Trihalomethanes at a reduced MCL, 5 Haloacetic Acids, bromate, and chlorite. At this time, residual disinfectant levels, or MRDLs, began to be regulated. The promulgation of the Stage 2 Rule, in January 2006, further regulates the same contaminants as those under the Stage 1 Rule; however, it expands the protection of public health by:

- 1) Requiring all consecutive water systems to comply,
- 2) Ensuring that the locations in the distribution system with the highest concentrations are monitored, and
- 3) Ensuring that each portion of the distribution system is compliant.

With the promulgation of Stage 2, the EPA also clarifies reduced monitoring criteria, deletes Rules that are no longer in effect, modifies analytical methods, updates existing regulations to include the new Stage 2 rule provisions, and cleans-up federal regulatory language and references associated with previous regulations. Since the promulgation of Stage 2 in January of

2006, the NDEP has been working with EPA and Nevada water systems on complying with the new requirements.

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The expansion of protection to public health by the Stage 2 Rule is accomplished with a two-stepped approach—first the Initial Distribution System Evaluation and second Compliance Monitoring.

The first major section of the Stage 2 rule is called the **Initial Distribution System Evaluation**.

Two factors prompted the need to re-address the sampling locations established under Stage 1.

The first was based on new research indicating that the formation of Haloacetic Acids was different from what was understood in Stage 1. Second, the monitoring locations did not all represent highest risk locations.

A process was then established for water systems with historic data, indicating a moderate presence of disinfection byproducts in their distribution system, to perform a one-year evaluation. The theory behind the evaluation requirements is for systems to acquire adequate information about disinfection byproduct levels in their distribution system and, then, to select the highest risk locations for compliance monitoring. This evaluation, along with historic data, is utilized to determine the new compliance monitoring locations for Stage 2.

EPA established a method to provide cost savings to water systems. Small water systems and those with historically low disinfection byproduct levels were able to avoid the one-year evaluation. The evaluation was an early implementation activity and has been nearly completed by all water systems in Nevada.

{Still on Slide 10}

This brings us to the second major section of Stage 2—**Compliance Monitoring**. Public health protection is increased under Stage 2 compliance monitoring by:

- 1) Including compliance by all consecutive systems,
- 2) Requiring more equitable monitoring based on population,
- 3) changing the method for sample site selection to include the sites with the highest risk for disinfection byproducts, and
- 4) requiring compliance at each location in the distribution system rather than averaging compliance data throughout the distribution system.

Consecutive Systems—Stage 1 did not specifically address consecutive systems that did not re-disinfect. Consecutive systems purchase their water from a wholesaler. The consecutive system is often at the furthest reaches of the distribution line. Because disinfection byproducts can continue to form throughout the distribution lines, consecutive systems may have higher levels of disinfection byproducts than the wholesaler. To improve public health protection, Stage 2 explicitly requires all consecutive water systems to comply with both disinfectant residual and disinfection byproducts monitoring and MRDLs and MCLs. This becomes increasingly important as more small water systems in Nevada connect to adjacent larger municipal water

systems. For Nevada, at least five new water systems are regulated due to the need for all consecutive systems to comply.

Monitoring Frequency—Stage 1 based the quantity of monitoring on population, source water type and the number of treatment plants or wells drawing from the same aquifer. This sometimes meant that smaller distribution systems like Carson City, with a population of approximately 57,000, performs the same monitoring as larger distribution systems like the City of Henderson, with a population of approximately 250,000. Stage 2 is based on source water type and population. New data indicates that population is a better measure for quantifying monitoring locations. For some systems in Nevada, the quantity of samples may increase while others may decrease. The costs associated with the analysis of each paired sample of Total Trihalomethanes and Haloacetic Acids is \$350.

Site Selection—Under Stage 1, systems collecting more than one sample may have collected up to 75 percent at locations representing average residence time. Average residence time locations do not normally tend to be the locations with a high risk to disinfection byproduct formation. To improve public health protection, Stage 2 requires disinfection byproduct samples to be taken at locations with the highest risk to public health.

Compliance Calculation—Under Stage 1, systems with multiple monitoring locations would average the concentrations from all locations in the distribution system to determine compliance. This means that in some distribution system locations the concentration may be exceeding the MCL, but the water system remains in compliance through data averaging—high sites are

averaged with low sites. To improve public health, Stage 2 requires that compliance be met based on the average concentration at EACH distribution sampling location. In addition, after each monitoring cycle, water systems will have to anticipate if they are at risk of exceeding the MCL in the subsequent monitoring cycle, based on existing data. For Nevada, the water systems that may need to make capital improvements to comply with Stage 2 happen to be larger water systems. They currently monitor at more than one location and may have individual sites that will not comply with the new compliance calculation method.

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Compliance dates with Stage 2 are based on population and have 4 schedules for compliance, with the largest systems having to comply first. Compliance dates range from 2012 to 2014 for the new disinfection byproducts sampling and compliance calculations. The State has the ability to give a possible 24-month extension to comply if a water system must make capital improvements and cannot meet the compliance deadline.

Since the promulgation of Stage 2 in 2006, existing NDEP staff and technical assistance providers, along with the support of USEPA Region IX, have been working with the water systems to implement this new regulation to help ensure compliance by the specified dates. Thus far, of the 220 water systems regulated, only one has had a violation, for which the USEPA has commended our program. This concludes my remarks on the proposed adoption of the Stage 2 Rule.

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Long Term 2 Enhanced Surface Water Treatment Rule

During this next part of my discussion, I will refer to the Long Term 2 Enhanced Surface Water Treatment Rule as “the LT2 Rule” or “LT2”.

The LT2 Rule impacts water systems that utilize surface water or groundwater under the direct influence of surface water. For Nevada, there are 22 water systems that are impacted by this regulation, all of which have to perform additional monitoring, and at least five of which will need to make capital improvements to comply.

The LT2 Rule builds upon the existing surface water treatment rules and establishes a method to ensure more equitable protection from the acute gastrointestinal health risks associated with *Cryptosporidium*. Water systems that utilize surface water, such as lakes or rivers, or groundwater under the direct influence of surface water, such as shallow wells near surface water or springs with microbial indicators, have been required to treat for microbial pathogens beginning with the promulgation of the Surface Water Treatment Rule in 1989. This regulation required treatment for Giardia, viruses, and bacteria.

Subsequent to the 1989 Surface Water Treatment Rule, outbreaks indicated the need to regulate *Cryptosporidium* which is very resistant to the common disinfection practice of chlorination. A significant Cryptosporidiosis outbreak in Milwaukee in 1993 caused intestinal illness in 400,000 people; over 4,000 were hospitalized, and at least 50 deaths have been attributed to the outbreak. Other cryptosporidiosis outbreaks have occurred in Nevada, Oregon, and Georgia. Based upon lessons learned from these outbreaks, further regulations for surface water sources have been promulgated.

In 1998 and 2002, the subsequent promulgation of the Interim Enhanced and Long Term 1 Enhanced Surface Water Treatment Rules added treatment protection from *Cryptosporidium*. Surface water sources that provide filtration were required to meet a 2-log removal of *Cryptosporidium* through their treatment processes.

In Nevada, there are five surface water systems which are not required to filter and have been granted filtration avoidance status, all of these being at Lake Tahoe. Nationally, some of the largest cities in the U.S. also drink water with filtration avoidance status—being San Francisco, Portland, Seattle, New York City, and Boston. Due to their unique watersheds and low susceptibility to microbial pathogen contamination, these filtration avoidance systems are not required to filter; however, they must disinfect their water and provide extensive watershed control measures. Under current regulations, filtration avoidance systems are only required to disinfect for *Giardia* and viruses. *Cryptosporidium* must only be addressed in the Watershed Control Program.

The LT2 Rule was promulgated in January 2006 and is the subject of this proposed regulation revision. LT2 provides additional protection against *Cryptosporidium* and is designed to protect public health by lowering the level of *Cryptosporidium* in finished drinking water to less than 1 oocyst/10,000 L, while maintaining public health protection against disinfection byproduct-related risks (parallel protection is ensured through the simultaneous promulgation of the aforementioned Stage 2 Rule).

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In looking at the micrograph on slide 13, you will notice that *Cryptosporidium* is smaller than *Giardia*; therefore making it more difficult to control. Due to its smaller size and physical properties, additional treatment techniques to control its propensity to survive in the finished water have been established in the Interim Enhanced, LT1, and LT2 Rules.

The requirement for additional protection required by LT2 is predicated on the fact that not all source water is equal. Some source waters will have numerous discharges upstream from drinking water intakes. These discharges from ranches, animal farms, or wastewater treatment plants can contribute to microbial contamination. Therefore, sources with a higher risk to *Cryptosporidium* contamination will be required to provide additional barriers of protection against the pathogen.

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The stricter standards of LT2 are accomplished through a two-stepped approach—First source water monitoring is performed, and secondly additional treatment techniques are installed if necessary.

LT2 requires at least two rounds of source water monitoring in order to determine surface water susceptibility to *Cryptosporidium*. All surface water systems must monitor for *Cryptosporidium* prior to any treatment, except small water systems that can show low levels of *E.Coli* contamination in their source water. If source water monitoring indicates high levels of *Cryptosporidium*, the regulation provides treatment techniques to reduce the concentration of *Cryptosporidium* in the drinking water.

The average *Cryptosporidium* concentration in the source water will determine the level of treatment required. One requirement to attain Primacy, for the LT2 Rule, is that Nevada establishes the authority to require additional rounds of source water monitoring if future changes in the watershed indicate a possible increased risk to *Cryptosporidium*; therefore, the proposed regulations address this Primacy requirement by linking any watershed changes to watershed updates required by current State regulations.

Based on the average of the source water monitoring results for filtered systems, each source will be placed into a bin, ranging from 1 to 4. Bin 1 will not require additional treatment for *Cryptosporidium*, and bin 4 will require a total of 5.5-log treatment for *Cryptosporidium*. The first round of source water monitoring was an early implementation activity. A majority of the monitoring has been completed in Nevada, and thus far, none of the filtered systems have indicated a need to make capital improvements to comply with this regulation. The data indicates that they are at low risk for *Cryptosporidium* contamination and will not be required to provide additional treatment for *Cryptosporidium* at this time.

Under LT2, it is the first time that filtration avoidance systems will be required to treat for *Cryptosporidium* and to install a second disinfectant barrier against microbial pathogens. Filtration avoidance systems will be required to provide 2- or 3-log inactivation for *Cryptosporidium* depending on their source water monitoring averages. This means that the 5 Nevada Filtration Avoidance Systems at Lake Tahoe have no choice but to make capital improvements. Preliminary costs indicate that these systems may individually need to spend 2-4

million dollars to comply with LT2. Because this regulation poses an impact to small businesses, a Small Business Impact Statement was written and was made available at the workshops. It is important to note that the LT2 Rule is currently enforceable by the USEPA.

In the proposed regulation, there is new language that discusses the USEPA's new microbial toolbox. Sources required to treat for *Cryptosporidium* as a part of LT2 must utilize the treatment techniques established in the Microbial Toolbox made a part of LT2. There are five Microbial Toolbox categories, being source water protection, Prefiltration, treatment performance, additional filtration, and inactivation. Within each category, there are different techniques for which a water system can receive regulatory treatment credit. Depending on the treatment(s) or control process option(s) that a system implements, it will receive a certain amount of credit for *Cryptosporidium* treatment.

Filtration Avoidance systems can only use inactivation tools, which are comprised of disinfectants that reduce the ability of *Cryptosporidium* to reproduce and infect humans. The disinfectants available for *Cryptosporidium* inactivation credit are chlorine dioxide, ozone, or ultraviolet light. Ultraviolet light is a new allowable disinfectant and other amendments have been proposed that relate to the use of this technology in the water treatment process.

Additional requirements have been placed on surface water systems to perform a disinfection profile and benchmark if they are making significant changes to their disinfection practices. This requires an evaluation to determine that treatment for pathogens is still maintained while trying to balance the formation of disinfection byproducts.

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Similar to Stage 2, LT2 compliance is based on population and has 4 schedules for compliance. Compliance dates range from 2012 to 2014 for installing any additional treatment, with the largest systems having to comply first. The State has the ability to give a possible 24-month extension to comply if a water system must make capital improvements and cannot meet the compliance deadline. There are funding sources available for water systems needing to make capital improvements. This funding is in the form of grants and low interest loans through the NDEP State Revolving Fund, Nevada's AB 198 grant program, and Community Development Block grants and loans with the US Department of Agriculture.

Existing NDEP staff, along with the support of USEPA Region IX, has been working with the water systems to implement this new regulation since its promulgation in 2006 to help ensure compliance by the specified dates. Thus far, all of the 22 regulated water systems have complied with source water monitoring requirements. This concludes my remarks on the proposed adoption of the LT2 Rule.

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Design Construction Operation & Maintenance for LT2

As discussed in the opening Overview of our petition, the second purpose, of the proposed amendments, is to revise portions of the Design, Construction, Operation and Maintenance regulations necessary for overall implementation of the LT2 Rule. The first (LCB section 74, NAC 445A.6669), proposes the requirement that prior to design of a water project, the water supplier must submit source water monitoring results and a disinfection profile and benchmark as required by LT2 in order to ensure that treatment is designed adequately. The second

proposed amendment (LCB section 91, NAC 445A.66825), requires that water projects that include chlorine dioxide, ultraviolet light, or ozone for microbial inactivation, comply with the disinfection standards established in the surface water treatment regulations (NAC 445A.526).

{Slide 17}

Primacy Packages

The third overall purpose of the proposed amendments, and as discussed by Jennifer at the beginning of our testimony, is to revise certain Nevada regulations to ensure they are no less stringent than USEPA regulations, and to attain primacy approval for previously adopted NACs. The USEPA Office of Regional Council has reviewed certain Primacy revision packages submitted previously, and has requested modification of a few NACs prior to approval.

The revisions to previously adopted rules made necessary to complete Nevada's primacy revisions pertain to the following existing primacy packages:

- 1) Public Notice Rule
- 2) Interim Enhanced Surface Water Treatment Rule (Interim Enhanced)
- 3) Long Term 1 Enhanced Surface Water Treatment Rule (Long Term 1)
- 4) Variances and Exemptions
- 5) Lead and Copper Rule Minor Revisions

We will review these in brief.

{Slide 18}

Public Notice Rule

EPA comments regarding the Public Notice Rule primacy package were related to language within the surface water treatment portion of the NAC. This language specifies requirements for

notification when certain treatment performance standards are not met. With the new Public Notice Rule, conflicts between the surface water treatment NACs and the new Public Notice Rule exist. The proposed modifications clarify the responsibilities for notification to the public and NDEP when certain treatment requirements are not met which reflect the language promulgated in the 2000 Public Notice Rule and the surface water treatment rules. We anticipate that these amendments will permit the USEPA Region 9 to approve our Primacy application for the Public Notice Rule.

{Slide 19}

Interim Enhanced Surface Water Treatment Rule (Interim Enhanced) and Long Term 1

Enhanced Surface Water Treatment Rule (Long Term 1)

- 1) EPA comments, relating to the primacy package for the Interim Enhanced Surface Water Treatment Rule, relate to Nevada regulations not explicitly having the authority to require implementation of proposed modifications for addressing significant deficiencies identified during a sanitary survey (or an inspection) of a water system. The proposed amendments require modifications to be implemented on a schedule approved by NDEP.

{Slide 20}

- 2) EPA comments, relating to the primacy package for the Interim Enhanced and Long Term 1 Rules, relate to Nevada not having the authority to require a Composite Correction Program (CCP), which is a combination of a Comprehensive Performance Evaluation and Comprehensive Technical Assistance, when the individual filter turbidity limits established under the two regulations are not met by a surface water system. This was accomplished by proposing new definitions and a new section that link the need to perform a CCP to an existing regulation related to treatment plant performance standards.

- 3) To clarify the requirements for turbidimeter locations, language was added to ensure that each surface water treatment plant installs a combined filter effluent turbidimeter.

We anticipate that these revisions will permit the USEPA Region 9 to approve our Primacy applications for the Interim Enhanced Surface Water Treatment Rule and the Long Term 1 Enhanced Surface Water Treatment Rule.

This concludes my remarks related to the Surface Water Treatment and Disinfectant and Disinfection Byproducts amendments proposed in today's regulation. Jennifer will now bring us to the finish line with the last of the proposed amendments.

{Slide 21}

Thank you, Andrea.

Variations and Exemptions

A primacy application package was submitted to the USEPA to attain Primacy for issuing variances and exemptions from drinking water standards, such as the exemptions issued by the SEC for the Arsenic Rule, or variances from compliance with other drinking water standards.

While the USEPA did not take issue with any of our Exemption provisions, they had three concerns with our NACs that outline general conditions and procedures for granting Variations.

One of the USEPA's concerns was with language related to Best Available Technology, or BAT. The Nevada regulation does not currently require that the Administrator of the USEPA find the variance technology be "reasonably available". The basis for the concern is that the Safe Drinking Water Act and the 1996 amendments allow States with Primacy to issue variances to

Public Water Systems which cannot meet a requirement with respect to a Maximum Contaminant Level. A variance may be granted by the State Environmental Commission on the condition that the public water system install the Best Available Technology, treatment techniques or other means which the Commission and the Administrator of USEPA find are reasonably available. Therefore, NAC 445A.487 is proposed to be amended to recognize the role of the USEPA in defining available BAT.

The USEPA's second concern with the existing NACs for Variances, was that the regulations did not adequately specify reasonably available BAT since the NACs do not adopt specific Federal BATs by reference. The amendment to NAC 445A.4525 adopts the BATs, treatment techniques or other means which the USEPA Administrator finds "reasonably available" as listed in Title 40 of the Code of Federal Regulations, Part 142.61 to 142.65. A new section was also added in NAC 445A.487 to cross reference the Federal BATs for variances that are proposed to be adopted by reference.

Finally, the USEPA also had a concern with section of our Variance Regulations in NAC 445A.4874 which pertains to Variances in Unique Circumstances. NAC 445A.4874 does not explicitly cross-reference NAC 445A.487 to make clear that all the conditions of those provisions, must be met in order for a variance to be granted. EPA's comment was that: it is not clear whether NAC 445A.4874 allows variances to be granted under circumstances that may be "less stringent" than those permitted by the SDWA. Likewise, the USEPA Region 9 attorney noted that this provision is in conflict with the procedures and conditions for granting Variances contained in NAC 445A.487. The Nevada Attorney General's Office informally agreed with the

USEPA Region 9 Office of Regional Council and therefore, the NDEP is requesting a repeal of this regulation. Additional amendments to strike associated references to NAC 445A.4874 are proposed.

We anticipate that these revisions will permit the USEPA Region 9 to approve our Primacy application for Variances and Exemptions; which, incidentally, will also allow them to process approval of our Primacy package application for the Arsenic Rule that is currently being held up by these identified concerns.

{Slide 22}

Lead and Copper Rule Minor Revisions

EPAs comment on the Primacy Package submitted for the Lead and Copper Rule Minor Revisions involved an existing NDEP regulation that generally requires waterlines to be flushed prior to sampling. This amendment provides an exception for collecting water quality samples in accordance with the requirements of the Lead and Copper Rule. The Lead and Copper Rule requires a “first draw” sample from the tap that is more representative of lead and copper concentrations in the home. We anticipate that this revision will permit the USEPA Region 9 to approve our Primacy application for the Lead and Copper Rule Minor Revisions.

That finishes our testimony on items pertaining to Federal regulations and Primacy. We are really close to the end.

{Slide 23}

Transfer of Authority

As most of you are aware, the 2005 Legislature transferred the Safe Drinking Water program from the Health Division to the NDEP through approval of Senate Bill 395. The Design, Construction, Operation and Maintenance section of our regulations had not been opened until this time, as discussed for the LT2 Rule. Therefore, we took this opportunity to continue to clean up old agency references. This proposal includes a significant number of administrative name changes such as “Health Division” to “Division of Environmental Protection”; or “Health Authority” to “the Division or the appropriate district board of health”. This latter reference was used where appropriate in addressing roles and responsibilities shared by the NDEP staff and those of the Washoe County Health District and the Southern Nevada Health District.

An outdated reference on an appeal process for persons aggrieved by a permitting-related decision was also updated from the State Board of Health process to the Statutes of the State Environmental Commission.

{Slide 24}

Miscellaneous Amendments

In reviewing and proposing amendments to the NACs, various additional clean-up items were found such as missing cross-references to engineering standards adopted by reference, or additional cross-references in other sections of the regulations that were affected by the proposed program adoptions.

Where appropriate, additional references to program responsibilities for our County Health Department partners were also added. By Statute, the two large County Health Districts are required to enforce the provisions of the Public Water System law, and they work under contract with the Bureau of Safe Drinking Water to implement various parts of the program.

One such additional reference to the County Health Departments included the authority for County staff to determine when a groundwater source is under the direct influence of surface water. The premise behind this addition is that the Counties are most familiar with the water systems they oversee and are better able to make such a determination.

An amendment is proposed that will modify procedures for persons aggrieved by Agency actions taken under the regulations pertaining to Design, Construction, Operation and Maintenance of public water systems. The proposed amendment adds the ability for persons aggrieved by decisions made by the County Health Departments to be vetted by the NDEP. This amendment is designed to promote consistency between the NDEP and the County Health Districts when applying decision-making under these regulations.

The last miscellaneous amendment pertains to granting Special Exceptions from the Design, Construction, Operation and Maintenance regulations. The amendment proposes to now permit the County Health Districts to also grant special exceptions with the concurrence of the Division. The intent of this amendment is to streamline the Special Exception process for the regulated community while promoting consistency on engineering decisions made by the NDEP and the County Health Districts.

Finally, I will simply note that there were 6 “green-line” amendments to the wording of the proposed regulation amendments that were completed after the NDEP’s final review of the LCB’s September 3, 2009 version of this petition. I did not plan to review each one unless you have questions. No additional amendments have been made since your binders were produced.

That concludes our testimony today. We would, of course, be happy to answer any questions you may have. Thank you.

ATTACHMENT 2

Handout related to R194-08 (12 pages)

State Environmental Commission Proposed Regulation Amendments R194-08

Public Water Systems

NAC 445A.450-.540; 445A.607 & .610; 445A.65505-.6731; 445A.67561

**Nevada Division of
Environmental
Protection**

October 6, 2009

Overview of Proposed Amendments

- Adopt Two New Federal Rules
- Revise Existing Regulations to obtain Primacy Approval
- Perform Administrative Name Changes & Some General “Clean-up”

Primacy...what's that?



Overview of Proposed Amendments

- Adoption of Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2)
- Adoption of the Long Term 2 Enhanced Surface Water Treatment Rule (Long Term 2)
- Associated New Rule Amendments to NACs for Design, Construction, Operation and Maintenance
- Revisions to Existing NACs to attain Primacy Approval
- Amendments to Design, Construction, Operation & Maintenance Regulations & General Clean-up

3

Public Participation

- Regulation Development
 - Meetings with major stakeholders
 - Presentations through Conferences & UNR Distance Learning Broadcast Opportunities
- Public Workshops
 - Las Vegas, NV - June 23, 2009
 - Carson City, NV - June 24, 2009
 - Elko, NV - June 25, 2009
- Written Comments
- E-mail Comments

4

Fluoridation Section (Removed)

- Primary Authority for oral health fluoridation of Public Water Systems resides with the State Board of Health
- Amendments were drafted in concert with staff of the State Health Division to clarify respective Roles and Responsibilities
- LCB removed the proposed Section in deference to the Board of Health

5

Adoption of New Federal Regulations

- Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2)
 - Promulgated Federally: January 4, 2006
- Long Term 2 Enhanced Surface Water Treatment Rule (Long Term 2)
 - Promulgated Federally: January 5, 2006

6

Stage 2 Disinfectant & Disinfection Byproducts Rule (Stage 2 DBPR)

- Impacted Water Systems in Nevada
- Disinfection
 - Chlorine, chloramines, ozone, chlorine dioxide
- Disinfection Byproducts (DBP)
Disinfection + organics/inorganics → DBP

Excess Disinfectants and DBPs cause increased adverse risk to public health

7

Stage 2 DBPR—Health Affects

- Disinfection
- Maximum Disinfectant Residual Level (MRDL)
 - Chlorine & Chloramines
 - Chronic health risk
 - Chlorine Dioxide
 - Acute health risk
- Disinfection Byproduct
- Maximum Contaminant Level (MCL)
 - Total Trihalomethane & Haloacetic Acids
 - Chronic health risk & Increased cancer risk
 - Bromate
 - Chronic health risk & Increased cancer risk
 - Chlorite
 - Acute health risk

8

Stage 2 DBPR—History

- Total Trihalomethane Rule—1979
- Stage 1 Disinfectant & Disinfection Byproducts Rule (Stage 1 DBPR)—1998
- Stage 2 DBPR—2006
 - Consecutive systems
 - Highest risk locations monitored
 - Each location must comply
 - Ancillary modifications

9

Stage 2 DBPR—Two Steps

- Initial Distribution System Evaluation
 - New data
 - Determine highest risk locations
- Compliance Monitoring
 - Consecutive Systems
 - Population based monitoring
 - Site Selection
 - Compliance Calculation

10

Stage 2 DBPR Compliance Schedule

Sch.	Systems Serving	IDSE Plan Submittal	Complete IDSE Monitoring	Submit IDSE Report and/or Compliance Sites	Compliance Monitoring Begins
1	≥ 100,000	10/1/2006	9/30/2008	1/1/2009	4/1/2012
2	50,000 – 99,999	4/1/2007	3/31/2009	7/1/2009	10/1/2012
3	10,000 – 49,999	10/1/2007	9/30/2009	1/1/2010	10/1/2013
4	< 10,000	4/1/2008	3/31/2010	7/1/2010	10/1/2013 or 10/1/2014
11	<p>Schedule for systems in a combined distribution system is based on that of largest system in the combined distribution system</p> <p>Possible 24 month Extension</p>				

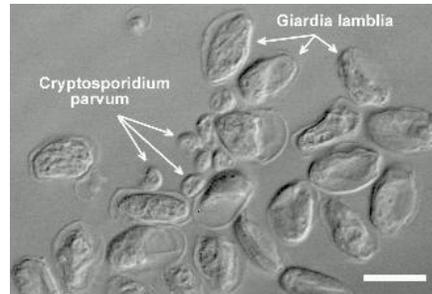
Long Term 2 Enhanced Surface Water Treatment Rule (LT2)

- Impacted Water Systems in Nevada
- History
 - Surface Water Treatment Rule (SWTR)—1989
 - Giardia, viruses, bacteria
 - Interim Enhanced SWTR—1998
 - Cryptosporidium- Large Systems
 - Long Term 1 Enhanced SWTR—2002
 - Cryptosporidium- Small Systems
 - Long Term 2 Enhanced SWTR—2006
 - Extra Cryptosporidium treatment

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LT2—Cryptosporidium

- Cryptosporidium
 - Protozoan parasite
 - Common in surface water
 - Resistant to traditional disinfectants
 - Can pass through filters
 - Causes cryptosporidiosis
 - Filtration and alternative disinfectants can remove and/or inactivate



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LT2—Two Steps

- Source Water Monitoring
 - Minimum of two rounds
 - Additional rounds based on watershed updates
- Additional Treatment
 - Based on Source Water Monitoring results
 - Bin Classification—Filtered
 - Average of results—Filtration Avoidance
 - Must install additional disinfection
 - Microbial Toolbox
 - Disinfection Profile and Benchmark

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LT2—Compliance Schedule

- Install chosen treatment to meet Treatment requirements:
 - Schedule 1 – April 1, 2012
 - Schedule 2 – October 1, 2012
 - Schedule 3 – October 1, 2013
 - Schedule 4 – October 1, 2014
- Possible 24 month extension
- Various capital construction loan and grant programs are available to assist with funding

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Other NAC Amendments for LT2

Affects on Design, Construction, Operation & Maintenance Regulations (DCO&M)

- Design of Water project
 - Source Water Monitoring
 - Disinfection Profile & Benchmark
- Design of Water Project that includes Disinfection for microbial inactivation
 - Ultraviolet light, ozone, chlorine dioxide
 - Meet requirements of surface water regulations

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Primacy Revisions

- Revisions to Nevada Administrative Code (NAC) to attain Primacy for Previously Adopted Rules
 - Public Notice Rule
 - Interim Enhanced Surface Water Treatment Rule (Interim Enhanced)
 - Long Term 1 Enhanced Surface Water Treatment Rule (Long Term 1)
 - Variances and Exemptions Process
 - Lead and Copper Rule Minor Revisions

17

Primacy Revision ~ Public Notice Rule

- Conflict between certain Notification requirements in the Public Notice Rule and the Surface Water Treatment Regulations
 - Notification of Certain Events
 - NAC 445A.538: Amended to reconcile requirements also in NAC 445A.485
 - Requirements for notification of persons served by system
 - NAC 445A.540: Amended to strike in part; Included outdated Notice language for Treatment Technique Violations; NAC 445A.485 now includes the required language

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Primacy Revision ~ Interim Enhanced SWTR

(Interim Enhanced Surface Water Treatment Rule)

- Significant Deficiencies
 - NAC 445A.4665: Amended to require Significant Deficiencies that are identified in a Sanitary Survey be corrected on a Schedule approved by the Division.
 - Applies to all Public Water Systems (PWS)

19

Primacy Revision ~ Interim Enhanced SWTR & Long Term 1

- Composite Correction Program (CCP)
 - Definitions
 - Composite Correction Program
 - Comprehensive Performance Evaluation
 - Comprehensive Technical Assistance
 - CCP Requirements
 - Performed by approved party
 - Additional information document
 - Triggers to Conduct CCP based on Turbidity
- Turbidimeters
 - Clarification of Location and Quantity Requirements

20

Primacy Revision ~ Variances & Exemptions

- 445A.487: Variances – Conditions & Procedures for Granting
 - Amendment to tie Best Available Technology (BAT) for Variances to the EPA BAT approval process via recognition of the role of the US EPA Administrator in defining BAT.
 - Amendment to adopt by reference: BAT for Variances as listed in 40 CFR Part 141 and Part 142
- Repeal of NAC 445A.4874 Variances: Unique circumstances – In Conflict with NAC 445A.487

21

Primacy Revision ~ Lead and Copper Rule Minor Revisions

- Methods of obtaining samples of water
 - Lead and Copper monitoring with first draw sample
 - More representative of lead and copper concentrations in the home

22

Administrative Name Changes

- 2005 Legislative Action – SB395
- Administrative Name Changes:
 - “Health Division” to “Division” or “Division of Environmental Protection”; or
 - “Health Authority” to “the Division or the appropriate district board of health”
 - Currently: the Washoe County Health District and the Southern Nevada Health District
- NAC 445A.66645: Updates formal appeal processes for permitting issues to the State Environmental Commission from the State Board of Health

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Miscellaneous Amendments

- Addition of missing cross-references to engineering design standards adopted by reference.
- NAC 445A.6603: Amends authority to determine “Groundwater under the direct influence of surface water” to include County Health Departments
- NAC 445A.66645: Amends procedures for persons aggrieved by decisions made under Design, Construction, Operation & Maintenance Regulations
- NAC 445A.6665: Amendment adds the ability for a County Health District to grant special engineering exceptions “with the concurrence of the Division”

24

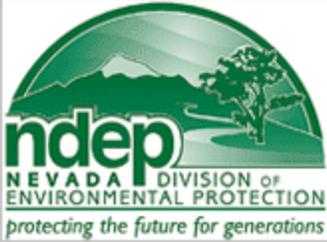
Questions?



25

ATTACHMENT 3

Slides Related to Presentation by Leo Drozdoff regarding American Recovery and Reinvestment Act (ARRA) stimulus funds (8 pages)



Administrator
Leo Drozdoff

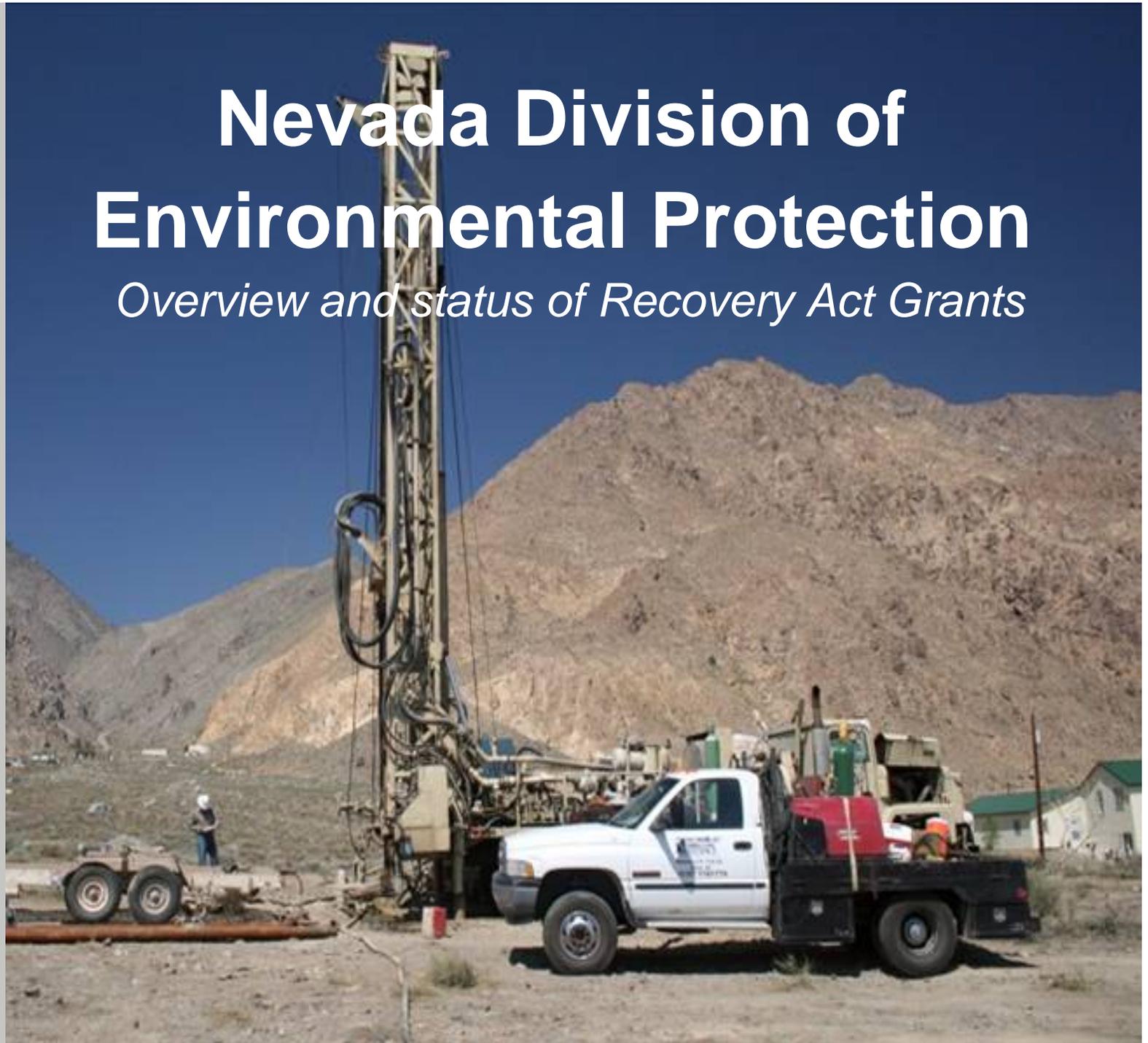
Deputies
Tom Porta
Colleen Cripps

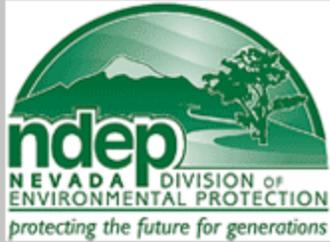


DEPARTMENT OF
**CONSERVATION &
NATURAL RESOURCES**

Nevada Division of Environmental Protection

Overview and status of Recovery Act Grants





Administrator
Leo Drozdoff

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Colleen Cripps

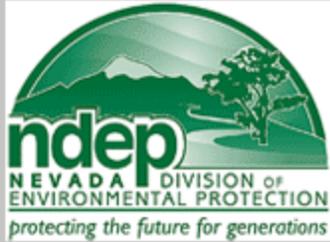


DEPARTMENT OF
**CONSERVATION &
NATURAL RESOURCES**

NDEP Recovery Act Grants

Recovery Act Grants awarded by US EPA:

- ▶ \$19.2 million Clean Water State Revolving Loan Fund
- ▶ \$19.5 million Drinking Water State Revolving Loan Fund
- ▶ \$194,300 Clean Water Act 604(b) Planning
- ▶ \$1.73 million Diesel Emissions Reduction Program, State Clean Diesel Grants
- ▶ \$1.266 million Leaking Underground Storage Tank Trust Fund



Administrator
Leo Drozdoff

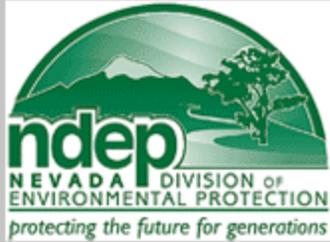
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Clean Water and Drinking Water SRF Programs

- ▶ CWSRF began in 1989 and the DWSRF in 1998. They provide low cost financing of municipal wastewater treatment and drinking water infrastructure projects.
- ▶ Existing laws and regulations apply
- ▶ Recovery Act added new requirements:
 - 50% of grant funds must provide some form of loan subsidy (e.g. principal forgiveness for disadvantaged communities)
 - 20% of grant funds set aside for “green” infrastructure projects
 - Davis Bacon prevailing wage rules
 - Buy American steel
 - Construction must begin or contracts be in place by February 17, 2010



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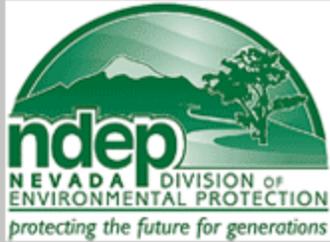


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NATURAL RESOURCES**

Clean Water and Drinking Water SRF Programs

Timeline for Allocation of Funds:

- ▶ December 2008. Solicited projects for the Priority List.
- ▶ April 2009. Priority Lists adopted after public comment period. Includes 50 CWSRF projects requesting \$986 million and 85 DWSRF projects totaling \$574 million.
- ▶ April 23, 2009. Grants awarded by US EPA.
- ▶ May 2009. Loan applications submitted by highest ranking projects that are ready to proceed.
- ▶ June-Dec 2009. Executing loan contracts with recipients, 22 contracts have been executed, 7 are pending.
- ▶ Feb 17, 2010. Projects must be under construction or have a construction contract in place.



Clean Water and Drinking Water SRF Programs

Allocation of funds by County

(actual amounts may vary due to final bids and reallocation of remaining funds)

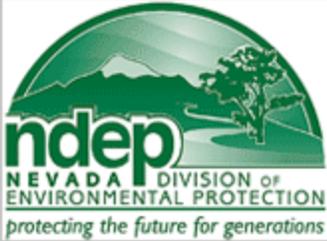
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County	CWSRF Loan Amount	DWSRF Loan Amount	TOTAL	Percent of Total
Carson City	\$ -	\$ 3,400,000	\$ 3,400,000	9%
Churchill	\$ 2,490,000	\$ 818,000	\$ 3,308,000	9%
Clark	\$ 8,344,780	\$ 2,000,000	\$ 10,344,780	27%
Douglas	\$ 1,250,000	\$ 780,000	\$ 2,030,000	5%
Elko	\$ 1,820,000	\$ 737,000	\$ 2,557,000	7%
Esmeralda	\$ 427,220	\$ -	\$ 427,220	1%
Eureka	\$ -	\$ 565,000	\$ 565,000	1%
Humboldt	\$ 284,647	\$ 492,000	\$ 776,647	2%
Lincoln	\$ 1,034,600	\$ 302,000	\$ 1,336,600	3%
Lyon	\$ -	\$ 3,662,350	\$ 3,662,350	9%
Mineral	\$ 1,531,500	\$ 1,239,650	\$ 2,771,150	7%
Nye	\$ 710,000	\$ 3,060,000	\$ 3,770,000	10%
Storey	\$ 1,361,000	\$ -	\$ 1,361,000	4%
Washoe	\$ -	\$ 2,000,000	\$ 2,000,000	5%
White Pine	\$ 300,000	\$ -	\$ 300,000	1%
Grand Total	\$ 19,553,747	\$ 19,056,000	\$ 38,609,747	



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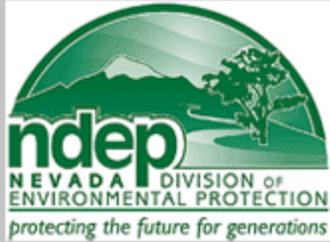


DEPARTMENT OF
CONSERVATION &
NATURAL RESOURCES

Clean Water Act 604(b) Planning Grant

- ▶ Section 604(b) of the Clean Water Act provides that 1% of State Clean Water Revolving Loan Fund grants be allocated each FY to water quality planning activities. 40% of these funds are allocated to regional comprehensive planning agencies, these funds are passed through based on a rotation schedule.

- ▶ Allocation of Recovery Act Grant funds (\$194,300):
 - \$114,300. Staff support for the development of temperature TMDLs in the Upper Humboldt River Basin and review of the existing Truckee River TMDL.
 - \$40,000. TRPA for water quality planning in the Tahoe Basin.
 - \$40,000. Western Regional Water Commission for analysis of regional wastewater facility capacities.



Administrator
Leo Drozdoff

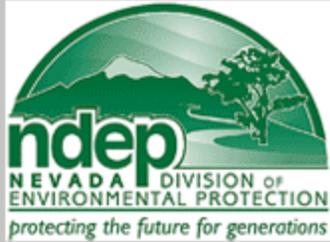
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DEPARTMENT OF
**CONSERVATION &
NATURAL RESOURCES**

Diesel Emissions Reduction Program

- ▶ \$1.73 million allocated by US EPA to support efforts to reduce diesel emissions under the State Clean Diesel grants program.
- ▶ Funds will be used to replace 17 older school buses (1991 or older) with new buses equipped with modern emission control equipment.
 - School district fleet managers were consulted.
 - Two existing School District contracts were considered. A Douglas County School District contract with Bryson Sales and Service in Centerville, Utah was used based on lower price, enabling 1 or 2 more buses to be purchased.
 - The buses are manufactured in Georgia. There are no bus manufacturers located in Nevada.
 - 15 County School Districts applied for buses. Clark and Carson City did not have buses eligible for replacement. Lyon and Nye will receive 2 buses, all other Counties will receive 1 new bus.
- ▶ Delivery is expected in February 2010.



Administrator

Leo Drozdoff

Deputies

Tom Porta
Colleen Cripps



DEPARTMENT OF
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NATURAL RESOURCES

Leaking Underground Storage Tank Program

- ▶ The Leaking Underground Storage Tank program uses federal LUST Trust Funds to assess and clean-up petroleum releases from underground storage tanks where no responsible party is able or willing to respond. Cost recovery is sought from viable responsible parties.
- ▶ \$1,266,000 was allocated by US EPA to Nevada.
- ▶ These funds will be used to identify abandoned or orphaned underground storage tanks, conduct assessments and as needed site remediation.
- ▶ An existing LUST program contract with Broadbent and Associates, a Nevada-based environmental engineering firm, has been amended to include this work.