

MONDAY MORNING

OPERATOR CERTIFICATION FUNDAMENTALS: LEVELS 1 & 2

8:00-5:00 Franciscan Room

6.5 credits – Water

Michael Alvidrez, Pueblo of Santa Ana

This session is geared toward water operators who are preparing to take their certification exam. The morning session will cover the basic of groundwater, wells, and the distribution system including cross connection control. The afternoon session will cover surface water treatment, disinfection and safety. This course is intended to be a refresher for operators who already have been studying and preparing for the certification exam. The presenter will not discuss actual exam questions. Come prepared to review and clarify water operation information as an added opportunity to further prepare for the certification exam.

CHLORINATION DISINFECTION SCIENCE

8:00-10:00 Alvarado F

2 credits – Water/Wastewater

Mike Harrington, USA BlueBook

This session will review the dosing technology for the three basic forms of chlorine disinfection, and look at the pros and cons of each type of chlorination system. Participants will learn why switching from a gas-based chlorination process may not be advantageous or cost effective, when one looks at the total costs. Hypochlorite strength and residual testing methods will be discussed, as well as on-site generation systems and simple ways to minimize disinfection by-products. Through the use of computer visuals, expert commentary, demonstrations and case histories, operators will leave this session with increased knowledge about chlorination disinfection science.

WATER SAMPLER CERTIFICATION (LEVEL ONE & LEVEL TWO)

8:00-3:00 Alvarado G

5 credits – Water/Water Sampler

Violette Valerio-Hirschfeld, NMED Drinking Water Bureau

This class will cover water sampling requirements for compliance with the Safe Drinking Water Act (SDWA), sample site plans, sample containers, sample collection, preservation, holding times and sample form completion. The New Mexico Water Sampling Certification Study Guide will be used as the text for the class. The class will also include a field trip to the New Mexico State Scientific Laboratory, where lab personnel will cover what happens to the sample once it is delivered to the lab. The class is designed to help students prepare for the Water Sample Technician Level 1 and Level 2 exams. Five classroom hours are required for both Level 1 and Level 2 certification. The field trip is recommended for Level 2 certification.

SURFACE WATER TREATMENT BASICS

8:00-10:00 Alvarado H

2 credits – Water

John Eckley, City of Bloomfield

This class will introduce the concepts of effective removal of disease-causing microorganisms, removal of nuisance particles, provision of potable and palatable water, compliance with State and SDWA regulations, reservoir management, coagulation and flocculation, jar-testing, and filter backwashing.

RATE ANALYSIS WORKSHOP FOR WATER & WASTEWATER SYSTEMS

8:00-5:00 Potter's Room

6.5 credits – Board Training

Carl Brown, Carl Brown Consulting, LLC

The workshop will cover issues, strategies and some methodologies that system managers and decision-makers should employ to make and keep their rates and fees set at appropriate levels and in appropriate structures. Handouts, PowerPoint slides and several Excel-based rate analysis software programs and related tools to demonstrate principles and concepts will be utilized. Other publicly available guides and tools will be referenced. Elected or appointed decision-makers, managers, finance directors and clerks of the systems should attend this session for the latest information from nationally-acclaimed utility consultant Carl Brown.

EMERGENCY RESPONSE PLANS

8:00-10:00 Weaver's Room

2 credits – Water

Ron Schwarzwald, New Mexico Rural Water Association

Water systems have utilized many resources to complete vulnerability assessments and emergency response plans. Are these requirements adaptable to assisting the utility to meet sections of the Safe Drinking Water Act? How can they leverage efforts to make best utilization of these required tasks to better know and operate their systems? And how do we assure that we can operate following disasters regardless of the cause? Attend this session to find out the answers.

OSE POLICY CHANGES IN ADJUDICATION AND WATER RIGHTS

8:00-10:00 Turquoise Room

1 credit – Water/Board Training

Jeffrey Albright, Lewis and Roca Jontz Dawe LLP

Mr. Albright will discuss the impact on rural water users of adjudication procedures, permits, licenses, and return flow credits. He will outline the proposed budgetary initiatives by the OSE in the governor's office to speed up the adjudication process, and the impact of new regulations on water used by rural water users. Discussions will include what is meant by a "closed" basin, what constitutes "return flow" and the change in interpretation of the OSE that could jeopardize return flow credits in the adjudicatory process. A summary of the status of adjudications throughout New Mexico will be provided.

LATEST TRENDS WITH WASTEWATER PLANTS

10:30-12:00 Alvarado F

1.5 credits – Wastewater

Dan Boivin, Smith Engineering Company

This seminar is an introductory-level approach to rural wastewater treatment. It is ideal for board members without significant technical background or operators who wish to refresh their overall wastewater treatment theory. The discussion will provide an overview of common unit processes in wastewater treatment. An emphasis will be placed on how those processes are being combined today to treat wastewater for rural community systems. The strengths and weaknesses of a variety of common and emerging alternatives will be discussed. The introduction of membrane technology and effluent reuse options will be explored. New permitting issues such as reduced nutrient loadings in surface waters, soil management plans for land application, and dam safety issues with existing treatment ponds will also be discussed.

INTRODUCTION TO MEMBRANE ELEMENTS

10:30-12:00 Alvarado H

1.5 credits – Water

Eddie Livingston, Livingston Associates

This introductory course will focus on the use of membranes in water treatment. The different categories of membranes will be discussed, including microfiltration, ultrafiltration, nanofiltration and hyperfiltration (reverse osmosis). The various uses for each of these membrane types in water treatment will be covered, along with some project examples. Specific water treatment objectives will also be discussed, including arsenic removal, surface water treatment, groundwater under the influence (GUI), brackish water treatment, total-dissolved-solids (TDS) and mineral reduction (water softening) and others. Some discussion on the planning, design, construction and operation, along with the economics of using membrane treatment will be covered.

USDA PROJECT ENGINEERING AND ENVIRONMENTAL REQUIREMENTS

10:30-12:00 Weaver's Room

1.5 credits – Water/Wastewater

John Thomas, USDA Rural Development

George Scott, USDA Rural Development

USDA Rural Development has developed common formats for preparing the Preliminary Engineering Report (PER) for water and wastewater projects. These formats have been adopted by the New Mexico Environment Department. When a PER is prepared, it is not always known what the source of funding will be. Use of these formats provides the information needed by both agencies to review the proposed projects. Engineers, project managers and community decision makers should attend this workshop to learn about design guidelines, review processes and funding opportunities.

CREATING A FORTY YEAR WATER PLAN

10:30-12:00 Turquoise Room

.5 credits – Water

Jeffrey Albright, Lewis and Roca Jontz Dawe LLP

New Mexico statutes provide that 40-year plans may be used by certain governmental entities to match long-range planning with actual water use. Recent initiatives at the legislature have attempted to expand this planning mechanism to include non-municipal government entities. This presentation will discuss the makeup and development of 40-year plans, the integration of conservation initiatives within the 40-year plan, and how the OSE is presently examining one 40-year plan with available water supplies to ensure that long-term community needs are met. The course will provide some proposed legislation that would allow small water users associations, cooperatives, and water and sanitation districts to be integrated into the process.

MONDAY AFTERNOON**MORTALITY COMPOSTING**

1:30-3:00 Alvarado F

1.5 credits – Wastewater

Auralie Ashley-Marx, Solid Waste Bureau Chief, New Mexico Environment Dept.

Animal carcasses left to decay naturally above ground or buried in shallow pits pose risks to surface and groundwater and endanger the health of human livestock, wildlife, and pets. Static pile composting of whole, large and small animal carcasses is easy, economical, environmentally sound, and legally acceptable for managing mortalities and butcher waste in New Mexico. Mortality composting is the preferred method to use to prevent the spread of disease from poultry flocks infected with avian flu, as pathogens are killed during the composting process. Learn about fundamentals and benefits of mortality composting using examples from operations in New Mexico.

ADVANCED WATER MATHEMATICS

1:30-3:00 Alvarado H

3 credits – Water

Peter Nathanson, New Mexico Rural Water Association

Math is an integral (no pun intended!) part of an operator's day, whether it is used to analyze laboratory or process control data, calculate efficiencies, determine chemical feed rates, check CT, or simply determine if your paycheck is correct. This advanced operator math training session will incorporate a review of math fundamentals while working through typical problems dealing with data management, percent and efficiency, dimensional analysis, geometry, flow and detention time, hydraulics and pressure, mass and concentration, chlorine demand and CT, and surface and weir loading rates. The fundamentals review will include hierarchy of operations, manipulating equations, calculator abuse and certification exam strategies. Please bring your calculator for maximum enjoyment!

USDA FUNDING OPPORTUNITIES FOR WATER, WASTEWATER AND SOLID WASTE

1:30-3:00 Weaver's Room

1.5 credits – Water/Wastewater

Ryan Gleason, State Director USDA Rural Development

Many communities need to invest a large amount of financial resources to improve their water, wastewater and solid waste facilities, but often do not have the means for such as investment. In this session, USDA Rural Development will provide information on available financing methods that can help communities develop the most effective and efficient infrastructure.

PROTECTING THE SERVICE AREA OF FEDERALLY-INDEBTED RURAL WATER ASSOCIATIONS USING 1926 (B)

1:30-3:00 Turquoise Room

.5 credits – Water

Steven M. Harris, Doyle Harris Davis & Haughey

7 U.S.C. § 1926(b) is a federal statute designed to protect federally-indebted rural water associations from municipal encroachment and competition. This course will provide current information about recent court decisions and a practical “how-to guide” to enable you to protect your service area, including existing and future customers. “Federally-indebted” includes districts/associations making loan payments to USDA, to Capmark, to GMAC/GECC and for loans guaranteed by the federal government.

TREATING PHOSPHORUS IN REACTIVE FILTERS USING FERRIC CHLORIDE

3:30-5:00 Alvarado F

1.5 credits – Wastewater

Matt Schowengerdt, Blue Water Technologies

The reduction of nutrients present in the effluent of wastewater treatment plants is an important strategy to impede further eutrophication of impacted waterways and to protect those that are in danger. Phosphorus is one of the key nutrients linked to contributing eutrophication, in both its soluble and insoluble fraction. Chemical precipitation has long been used to reduce phosphorus loads from wastewater treatment plants. However, the effectiveness of this treatment method is determined by how much insoluble phosphorus is present which can be precipitated, compared to the soluble fraction that cannot. Waste streams characterized by high soluble phosphorus fractions may not be economical at very low phosphorus limits. A reactive filter, such as the Blue PRO[®] system, uses co-precipitation and adsorption to maximize total phosphorus removal by treating both the insoluble and soluble fractions of the phosphorus load. Results and cost information will be discussed in detail.

SOURCE WATER PROTECTION

3:30-5:00 Alvarado G

1.5 credits – Water

Darren Padilla, NMED Drinking Water Bureau

This workshop will look at the need for source water protection, some of the different approaches to source water protection and how to create a source water protection plan. Examples of source water protection efforts will be presented.

HIRING AN ENGINEER - THE QBS PROCESS

3:30-5:00 Weaver's Room

1.5 credits – Water/Wastewater

Stephen Grollman, Larkin Group, New Mexico

The class will review the Qualifications-Based Selection (QBS) process which is available to assist communities in the selection and hiring of design professionals in compliance with the State Procurement Code. There will be a complete explanation of the QBS process and guidelines for proceeding from project inception, to concluding a contract for professional services. Also to be discussed is a sample Request for Proposals (RFP) to be used with modification by the owner to suite the individual circumstances.

AQUIFER STORAGE AND RECOVERY

3:30-5:00 Turquoise Room

1.5 credits – Water

Stephanie J. Moore, Daniel B. Stephens & Associates

John T. Kay, Daniel B. Stephens & Associates

Aquifer storage and recovery (ASR) allows for the efficient and conjunctive management of surface-water, groundwater, and reclaimed water resources. Numerous ASR systems have been successfully implemented throughout the Western United States, and New Mexico has two ASR projects in the permitting stage. The presenters will provide an overview of ASR methods used throughout the Southwest; discuss the current status of ASR in New Mexico, including the rules and regulations that govern it; and describe the hydrologic conditions necessary to implement a successful ASR project.

TUESDAY MORNING

BASIC WATER MATHEMATICS

8:00-10:00 Franciscan Room

2 credits – Water

Michael Alvidrez, Pueblo of Santa Ana

This class is designed to help students overcome their fears of doing basic math, refresh memories and provide valuable information on solving practical problems as well as those on the certification exam. The curriculum is designed to be useful to both beginning and more advanced students. Topics to be covered include conversions, well data, basic geometry, flows, pump calculations and disinfection dosages.

PH, TRC & DO: THE THREE STOOGES OF WASTEWATER TESTING

8:00-12:00 Alvarado F
3.5 credits – Water/Wastewater
Mike Harrington, USA BlueBook

Don't be fooled by the simplicity of the three most common tests run in water and wastewater systems today; pH, total residual chlorine and dissolved oxygen. This workshop gives the operator an opportunity to get the most out their testing skills via superb computer visuals, verbal text and live demonstrations. Employing a pH, Chlorine, and DO testing apparatus is a five-step process of selection, use, care, verification, and maintenance. Learn numerous helpful hints to achieve solid verifiable, accurate, viable test results for operations and reporting purposes.

DRINKING WATER BUREAU PROGRAM OVERVIEW

8:00-10:00 Alvarado G
2 credits – Water
Rob Pine, Joseph Chavez, Danny Valenzuela, and Ron Romero, NMED Drinking Water Bureau

This presentation will give an overview of the structure of the Drinking Water Bureau and its different programs. The programs covered will be: Sampling, System Oversight, Capacity Development, Enforcement, Security and Source Water Protection. Also discussed will be the overall regulatory framework that water systems must work within and tools available to assist water systems.

ARSENIC TREATMENT BY AQUACELL RESIN

8:00-10:00 Alvarado H
2 credits – Water
George Armstrong, Aquacell Water Treatment, Inc.
Sheri Stockhaus, Aquacell Water Treatment, Inc

Nano-crystalline titanium dioxide is becoming a leading adsorption technology for municipal, commercial and industrial water systems to meet the reduced MCL for arsenic and heavy metal contaminants. The advantages of this media include reduced footprint, reduced capital costs, up to 99% contaminate removal efficiency without chemical addition, no wastewater discharge and easy operator interface. The utilization of the titanium adsorbent media allows it upon exhaustion, to be managed simply as non-hazardous waste and disposed at a landfill. Taking into consideration the complete water chemistry, flow rates, space limitations and other determining factors, Aquacell can assist systems by designing and manufacturing the right and affordable system for the situation.

SANITARY PROJECTS ACT, FACT OR FICTION?

8:00-10:00 Potter's Room
2 credits – Board Training
Richard Rose, Chief, Construction Programs Bureau

If you represent a Mutual Domestic Water Association or thinking of becoming one, this training session will answer all your questions regarding organization, recent changes to the law, and will separate facts from fiction. You will learn whether your organization is a public or private entity

and what the implications are, what reports you must file, whether your board members must complete training, and how the recent changes to law provide more latitude in organizing and running your association. So gather up your questions and come join in the discussion.

ASSET MANAGEMENT: ALL SYSTEMS CAN BENEFIT

8:00-10:00 Weaver's Room

2 credits – Water/Wastewater

Heather Himmelberger, NM Environmental Finance Center

Asset Management is an approach that will help all systems improve their management of water or wastewater systems and lead them towards long-term sustainability. Approaches that are available to assist systems with asset management, including EPA's latest software - CUPSS - will be presented.

CONSUMER CONFIDENCE REPORT WORKSHOP

8:00-10:00 Turquoise Room

2 credits – Water

Andrew Sweetman, New Mexico Rural Water Association

What is the significance of July 1, 2008? July 1, 2008 is the deadline for your community water system to complete a consumer confidence report for your 2007 water quality monitoring data. Attend this session for an informative look at background of the consumer confidence reporting rule and the ways and means of completing a well-designed consumer confidence report.

CONSERVATION & DROUGHT PLANNING FOR WATER SYSTEMS

10:30-12:00 Alvarado G

1.5 credits – Water

Rob Pine, NMED Drinking Water Bureau

With the ever-present threat of drought, global warming, increasing water demand and the expense of new water rights, New Mexico's water systems have good reason to be interested in water conservation. This workshop will discuss the need for water conservation, how water is used, water rights, and several successful approaches to water conservation that can be implemented by water systems.

RADIONUCLIDE REMOVAL FROM DRINKING WATER

10:30-12:00 Alvarado H

1.5 credits – Water

Ryan Peterson, WRT - Water Remediation Technology

Water providers are required to be compliant with the EPA Radionuclide Rule, which limits the radium and uranium concentrations in drinking water. A review of the radionuclide rule and an overview of the WRT Z-88™ radium, and Z-92™ uranium removal processes will be presented along with pilot study results. WRT utilizes an adsorptive media, zero liquid discharge process. This presentation will also cover regulatory licensing and permitting requirements along with the potential impacts of treatment residual disposal. WRT provides for the safe exchange and proper disposal/recovery of the used media in licensed and permitted facilities on a long term basis.

COMPLIANCE WITH THE STATE AUDIT ACT & AUDIT RULE

10:30-12:00 Potter's Room

1.5 credits – Board Training

Hector Balderas, New Mexico State Auditor

Join the New Mexico State Auditor, Hector Balderas to learn your system's responsibilities under the State Audit Act and Audit Rule. Auditor Balderas will provide an overview of the intent and applicability of the Act, as well as general advice for selecting a private auditing firm. This is a fantastic opportunity to get all of your questions answered by this knowledgeable and dedicated public official.

NMED FUNDING PROGRAMS FOR WATER & WASTEWATER PROJECTS

10:30-12:00 Weaver's Room

1.5 credits – Water/Wastewater

Jeff Canney, NMED Construction Programs Bureau

This session will focus on lending programs available through the New Mexico Environment Department: the Clean Water State Revolving Fund Program (CWSRF) and the Rural Infrastructure Revolving Loan Program (RIP). Learn what the key requirements are for each and how you can use these funds to improve your water or wastewater systems.

EPA HIGHLIGHTS: TCR, SUSTAINABLE INFRASTRUCTURE, AND WATERSENSE

10:30-12:00 Turquoise Room

1.5 credits – Water

Dzung Kim Ngo Kidd, US EPA Region 6, Drinking Water Section

EPA is required to review and revise national primary drinking water regulations every six years for the Total Coliform Rule. This presentation will include a short highlight and update of this process. EPA is preparing for the wave of infrastructure rehab and replacement that we will all face in the next several decades. EPA will give a short highlight of our commitment to promoting sustainable practices and working with the water industry to address a variety of challenges that will address the needs of water utilities. For WaterSense, EPA will highlight this new program that makes it easy for all Americans to save water. The label on products will help businesses and organizations who are partnering with this water-saving program.

TUESDAY AFTERNOON**EXHIBITOR DEMONSTRATION CLASSES****1:30-5:00 in the Exhibition Hall, 2.5 Credits Maximum – Water/Wastewater**

Please see the Exhibitor Demonstration Classes Instruction Sheet included in your conference materials for further information. Each 30-minute session is valued at .5 credits.

TOUR #1: ARS USA - UNIQUE ARSENIC REMOVAL PLANT

1:30-5:00 Meet in Alvarado F

1.5 credits – Water

Dr. Frank Huang, ARS USA. LLC

This tour will provide an opportunity for the attendees to examine the unique design and operation of the ARS process. The Arsenic Treatment Facility is the first of its kind in the US. It has a design capacity of 700 gpm and utilizes a simple, yet effective, electro-coagulation technology developed by ARS. The ARS technology is NSF-61 certified and is verified via the US EPA-ETV program. This technology is unique in its simplicity of design, little susceptibility to silicates/high pH, the ability to remove multiple contaminants simultaneously (e.g., As, F), and having no chemical addition. Several other similar facilities are either under construction or in the planning phase.

TOUR #2: WATER SAMPLER CERTIFICATION – STATE LABORATORY DIVISION

1:30-5:00 Meet at Hotel Entrance

1.5 credits – Water/Water Sampler

Violette Valerio-Hirschfeld, NMED Drinking Water Bureau

This field trip will be to the New Mexico State Scientific Laboratory, where lab personnel will cover what happens to the sample once it is delivered to the lab. The field trip is recommended for Water Sample Technician Level 2 certification.

WEDNESDAY MORNING**NEW MEXICO EXCAVATION LAW CERTIFICATION**

8:00-12:00 Franciscan Room

3.5 credits – Water/Wastewater

Vic Newton, New Mexico One-Call, Inc.

This class provides an in-depth look at the state statutes, rules and regulations regarding excavation, and how it imposes and shifts burdens of responsibility from one party to another. Emphasis is placed on when you may dig and how to handle “clears” correctly. The NM Excavation Law contains provisions for fines of \$5,000 to \$25,000 for facility owners of underground plants, as well as excavators who violate the law. The presentation will also cover new rules adopted by the PRC regarding administration of the excavation law. The presentation includes handouts of the excavation law and appropriate NMPRC rules condensed into student manual and a pocket size excavator’s manual. Participants will receive a certification from NMOC upon completion of this session.

WASTEWATER LAB QA/QC ESSENTIALS

8:00-10:00 Alvarado F

2 credits – Wastewater

Gail Huggins, ABCWUA

Ms. Huggins will present the essentials of a quality system within a laboratory environment. The quality system serves as a basis for evaluating the integrity of analytical results. Ms. Huggins

will highlight the necessity of having a program by addressing the elements of a QA program and the difference between quality assurance and quality control; as well as the implementation of actions to correct deficiencies and to prevent potential problems affecting quality of data. Ms. Huggins will also address the process of quality assurance achievement, such as, planning, documenting and implementing management procedures to ensure that the customer's requirements are consistently met. The presentation will also outline regular reviews and audits of all processes to insure that staff are trained and provided with the resources to do the job right the first time with the emphasis in total commitment from management. The presentation will also include documentation requirements for those doing field-testing.

DRINKING WATER REGULATION OVERVIEW

8:00-10:00 Alvarado G

2 credits – Water

Violette Valerio-Hirschfeld, NMED Drinking Water Bureau

An overview of all Safe Drinking Water Act Rules will be presented. Find out what each Rule requires and which Rules apply to your water system. This session provides a brief overview of each Rule currently in effect and focuses on what water systems need to do to achieve and maintain compliance.

SCADA SYSTEMS WORKSHOP

8:00-12:00 Alvarado H

3.5 credits – Water/Wastewater

Andy Hutson, Control West Inc.

This workshop is an entry level overview of the concepts and technologies of modern industrial process control, from the field to the office. This interactive presentation assumes attendees' understanding of only the most basic process control concepts. For example; knowledge of what flow meter is, and perhaps the distinction between AC and DC voltage. Among the topics discussed are the features and benefits of SCADA systems, the system architecture and scope, field devices, wiring and communication methods, basic process control concepts, and more.

COMPLIANCE WITH OPEN MEETINGS ACT & INSPECTION OF PUBLIC RECORDS ACT

8:00-10:00 Potter's Room

2 credits – Board Training

Jeffrey Albright, Lewis and Roca Jontz Dawe LLP

New Mexico Statutes and New Mexico case law impose strict requirements under the Public Records Act and the Open Meetings Act for strict accountability by boards of water and sanitation districts. Mr. Albright will explain the requirements for responding to public records requests, the need for "closure" when responding to the requests, and compliance requirements in both litigation and non-litigious situations. The impact of compliance (and non-compliance) will be discussed, using specific examples from New Mexico cases. Mr. Albright will also discuss district elections, the true "exceptions" under New Mexico Elections law for Water and Sanitation Districts, and how best to ensure that elections will not be left open for challenge.

HOW TO COMPLY WITH THE NM PROCUREMENT CODE

8:00-12:00 Weaver's Room

3.5 credits – Board Training

Michael Vineyard, New Mexico General Services Department

This presentation will provide an overview of New Mexico State Statute 13-1-28 thru 13-1-199, better known as the "Procurement Code." Michael will briefly address the intent of the Procurement Code ("Code"), who it applies to and when. Satisfying agency needs while properly applying the Code is then addressed with special emphasis on less restrictive portions of the Code that address small purchases and the use of Price Agreements. The use of, and differences between, Invitations to Bid (ITBs) and Requests for Proposals (RFPs) are covered as well as special situations such as Sole Source and Emergency Procurements. Finally, the handling of protests is briefly addressed.

NEW MEXICO WATER LAW: OVERVIEW & CURRENT ISSUES

8:00-10:00 Turquoise Room

2 credits – Water

Kyle S. Hardwood, Hardwood Consulting, Inc.

This two hour session will be divided into three sections; a discussion of how rural water entities can be informed consumers of legal services, a basic review of water law concepts and issues, and a summary of current issues from the 2008 Legislative Session. In the first section we will discuss the types of legal issues facing rural water entities and users from transactions, bylaws and governance issues to regulation, litigation and adjudication. The second section will be an overview of the water right permitting process and the evolution of water right markets in New Mexico. The final session will look back to the 2007 Year of Water and the recently completed 2008 Legislature.

SAMPLING, RECORDING & REPORTING FOR GW DISCHARGE PERMITS

10:30-12:00 Alvarado F

1.5 credits – Wastewater

Melanie Sanchez, NMED

The Ground Water Pollution Prevention Section of the New Mexico Environment Department approves discharge permits for discharges that have the potential to impact ground water quality pursuant to the Water Quality Control Commission Regulations (20.6.2 NMAC). Discharge permits address a wide variety of discharges including domestic wastewater treatment plants, lagoons, commercial septic tank leachfields, power generating plants, dairies, land farms and remediation systems. This presentation will provide certified operators with the understanding of sampling, recording and reporting for discharge permits. This presentation also covers the operational, monitoring, and contingency and closure plans along with the general requirements of a discharge permit.

SANITARY SURVEYS

10:30-12:00 Alvarado G

1.5 credits – Water

Joseph Savage, NMED Drinking Water Bureau

This presentation will discuss the regulatory basis for sanitary surveys and the inspection process. It will give the water system a clear understanding of what constitutes a regulatory and sanitary deficiency. Also discussed will be how a water system can prepare for a sanitary survey and the follow-up process.

HIRING AN OUTSIDE ADMINISTRATOR

10:30-12:00 Potter's Room

1.5 credits – Board Training

Diane Nuñez, The Nuñez Group

Is your water board too busy to handle the day to day operations of your water system? Is your water board considering outsourcing the accounting/bookkeeping, billing, and general management functions of your water system but they don't know where to start? This course will provide an overview of things to consider when hiring an outside administrator. Items to be covered include: what to look for in an administrator, developing a contract with a job description outlining the roles and responsibilities of an administrator, cost of an administrator, how to pay for an administrator, and the advantages and disadvantages of hiring an administrator.

REGION 6 EXPERIENCES WITH DRINKING WATER OPTIMIZATION

10:30-12:00 Turquoise Room

1.5 credits – Water

Bill Davis, US EPA Region 6

Process control principles can be used to optimize water quality at drinking water utilities. The US EPA Region 6 office in Dallas has done pilot work at a number of utilities in New Mexico and other states, testing these principles. Through those experiences, critical information and skills such as developing monitoring plans and interpreting monitoring data, have been identified that can facilitate optimization. This presentation will document some of the experiences of the US EPA Region 6 drinking water optimization program and will provide some examples from real world situations in the form of brief workshops.

WEDNESDAY AFTERNOON**CENTRIFUGAL PUMPS: APPLICATION, OPERATIONS, MAINTENANCE AND TROUBLESHOOTING**

1:30-5:00 Franciscan Room

3 credits – Water/Wastewater

Mark Dilley, The Gorman-Rupp Company

This lecture and discussion style course will broaden the participant's knowledge and experience regarding centrifugal pumps. Basic topics include the following: hydraulic terminology, the

mechanics of centrifugal pumps, types of centrifugal pumps, and cavitations. The class will proceed to sections that detail centrifugal pump basics for operators, such as: total dynamic head, pump performance curves, friction head, system head, and NPSHR vs. NPSHA.

E.COLI: APPROVED METHODS REVIEW

1:30-3:00 Alvarado F

1.5 credits – Wastewater

Paul W. Gray, NM DOH-Scientific Lab Division

Discussion and demonstration of the three (or five) methods approved by EPA for the enumeration of *E. coli* from wastewater: Colilert or Colilert 18 using Quanti Tray and Colilert as a 5 Tube 3 Dilution MPN [SM 9223. B and AOAC Method 991.15] Membrane Filtration using Modified membrane-Thermo tolerant *Escherichia coli* Agar (Modified mTEC) [EPA Method 1603] and mColiBlue24 made by HACH [EPA Method 10029].

RADIONUCLIDE & GROUNDWATER RULE OVERVIEW

1:30-3:00 Alvarado G

1.5 credits – Water

Angela Cross and Damian Luna, NMED Drinking Water Bureau

EPA published the Ground Water Rule (GWR) in the Federal Register on November 8, 2006. The GWR will apply to all public water systems that serve ground water and will go into effect in December 2009. The purpose of the rule is to provide for increased protection against microbial pathogens in public water systems that use ground water sources. The rule includes provisions for monitoring for systems with sources at risk, and actions to remove or inactivate contaminants, if found, to prevent them from reaching drinking water consumers. The Drinking Water Bureau will be presenting their proposal for implementation of this regulation in New Mexico.

PILOT BENCH SCALE ARSENIC REMOVAL STUDIES

1:30-3:00 Alvarado H

1.5 credits – Water

Malcolm Siegel, PhD, MPH, Sandia National Laboratories

The new Drinking Water Standard for arsenic has significant implications for small water utilities in New Mexico. Over the last four years, Sandia National Laboratories has carried out pilot-scale demonstrations in several communities in New Mexico to compare the arsenic removal performance of innovative adsorptive media. The subsequent pilot tests examined several innovations that potentially could lead to lower treatment costs for adsorptive media systems. A total of over 20 media have been tested at 4 different sites in New Mexico. Laboratory studies were conducted using batch methods and rapid small-scale column tests (RSSCTs) to understand the performance of pilot-scale adsorption columns. The results of the laboratory tests are compared to the pilot scale performance at one of the sites in order to demonstrate how well short-term, low-cost tests predict the results of long-term and more expensive field demonstrations tests.

BASIC PARLIAMENTARY PROCEDURE FOR UTILITY BOARD MEETINGS

1:30-3:00 Potter's Room
1.5 credits – Board Training
Rick Bela, ConZeho, Inc.

This is a course on the basic rules for chairing a board meeting. It is designed to provide the Chair of a board meeting with the tools to ensure that all members have a fair and democratic opportunity to be heard and to participate in the decision-making process of the organization in a timely and orderly manner.

NMED DISBURSEMENT REQUIREMENTS FOR LEGISLATIVE SPECIAL APPROPRIATIONS

1:30-3:00 Weaver's Room
1.5 credits – Water/Wastewater
Jim Chiasson, NMED Construction Programs Bureau

Having trouble implementing your water or wastewater special appropriations project or obtaining reimbursement? This session provides implementation tips from executing the grant agreement, hiring an engineer and negotiating the contract, to submitting the required documentation for reimbursement and closeout.

WATER DISTRIBUTION VULNERABILITY OF FIRE HYDRANTS

1:30-3:00 Turquoise Room
1.5 credits – Water
Michael A. Kozeliski, H2OATV, LLC

The class will review the basics structure of water distribution system vulnerabilities and current security measures on those systems. The class will advise on congressional requirements and timelines to identify and mitigate those vulnerabilities. Additionally, proven information on contaminants and concentrations rates for accidental and intentional contamination of water system will be detailed to dispel myths. Discussion of what other communities outside the State of New Mexico are doing will be discussed. Finally, the different options available to the water utilities to mitigate of those vulnerabilities specifically at fire hydrants will be reviewed.

BIOMONITORING IN THE 21ST CENTURY

3:30-5:00 Alvarado F
1.5 credits – Wastewater
D'Ann Wilkins, Wilkins Environmental Laboratories

Biomonitoring is a biological endpoint used to determine the cumulative and additive effects that wastewater discharges have on aquatic species. These tests are used to detect different families of toxicants that are found in wastewaters. Facilities that are required to perform these tests must meet the regulatory requirement for survival, growth and reproduction. These tests utilize a variety of freshwater and saltwater species. Representative vertebrate and invertebrate species that best represent the Regional geographic areas of the United States are used in these tests. This course will address the types of tests required in the USEPA Region 6 and New Mexico.

We will discuss test methodology and regulatory compliance related to Biomonitoring, TRE's and TIE's.

DISINFECTION & CONTACT TIME

3:30-5:00 Alvarado G

1.5 credits – Water

Rob Pine and Joseph Savage, NMED

The Surface Water Treatment Rules and the Groundwater Rule have disinfection requirements that impact or soon will impact a large number of drinking water systems. Under these rules, systems that chlorinate must meet requirements for CT (chlorine dose x contact time). This workshop will look at the regulatory requirements, disinfection alternatives and will explain how to calculate CT.

EFFECTS OF SALT IN GROUNDWATER

3:30-5:00 Alvarado H

1.5 credits – Water

Tim Cavellier, Zeta Core USA

Anne La Lopa, The Water Lady Inc.

Most of the potable water in the Southwestern US is extracted from wells and because of this the water is hard. The measure of hard water is high levels of calcium and magnesium. These minerals form salts with bicarbonates and sulfates in water. Potassium and sodium chloride are used to extract and flush the hard water minerals from the water to make the water more desirable for potable use. Depending on the total hardness of the water this can significantly increase the TDS of the waste water from residential and commercial buildings. The high TDS levels can make the wastewater not desirable for agricultural or turf applications and also causes problems with waste water treatment. The presentation will discuss what can be done to keep the TDS at manageable levels.

OFFICE OF THE STATE ENGINEER REPORTS & REQUIREMENTS

3:30-5:00 Potter's Room

1.5 credits – Board Training

Paul Wells, NM Office of the State Engineer

The mission of the Office of the State Engineer is to protect and manage the water resources of New Mexico for beneficial uses by its people, in accordance with law. The session will begin with a brief introduction of the administrative responsibilities of the Office of the State Engineer. A basic discussion of water rights will then be made, followed by a review of the application process for developing a new water right or for making changes to an existing water right. Issues specific to rural water suppliers will then be discussed, including the transferability of water use from a domestic well. After some concluding remarks, there will be 20-30 minute period for open discussion.

SYSTEM RESPONSABILITIES DURING CONSTRUCTION

3:30-5:00 Weaver's Room

1.5 credits – Water/Wastewater

Andy Edmondson, NMED Construction Programs Bureau

Not sure of the requirements as an owner during the construction process? This session reveals the specifics on how to get involved during construction to ensure a successful completion of your water or wastewater project. Topics include reimbursement requests, how to make certain the project stays on schedule, and dealing with change orders.

MAPPING YOUR SYSTEM USING GPS/GIS TECHNOLOGY

3:30-5:00 Turquoise Room

1.5 credits – Water/Wastewater

Carlos Bustos, NMRWA Source Water Protection Specialist

This class will cover the basics of Global Position Systems (GPS) and Geographical Information Systems (GIS) particularly the use of this technology to improve the management and operations of your water system. Participants will learn the basics of GPS and GIS technology. Additionally, participants will learn how mapping your distribution lines, water meters, special projects and incidents can help provide better customer service to your members. Finally, case studies of how GPS and GIS have benefited water systems will be reviewed.