

WUTAP INSTRUCTORS RECEIVE AWARDS

For three years running now the N.M. Water and Wastewater Association has jointly awarded “Instructor of the Year” plaques to two outstanding individuals. At this year’s Annual School Robert George and Bernie Garcia, both Field Training Specialists for the NMSU Water Utilities Technical Assistance Program, were the recipients.

This makes a clean sweep for the WUTAP instructors. Last year Robert Gott, WUTAP’s Program Coordinator, and David Ceballes, retired, were joint recipients of the award. You can regularly find Robert, Bernie, and Bob in front of a classroom of operators or training operators on-site at water and wastewater facilities around the state.

The honorees in 1999, the first year these instructor plaques were presented, were Fred Ragsdale, City of Albuquerque, and Robert Padilla, retired. All of the

members of this distinguished list continue to provide their teaching expertise to the Association. Most of you have been in their classes and know first hand about their dedication to the professional development of New Mexico water and wastewater operators. They all regularly provide instruction at the Association’s short schools and beyond..... Sometimes

they barely get a chance for a toilet break at the schools because they are helping operators solve problems specific to their town’s plant.

Bob continues to serve the Association as Short School Chairman, lining up instructors for the schools. Currently, Fred is assisting the Association with Technical O&M seminars (TOMS) at various locations throughout the state.

(There is a registration form in this newsletter.) David and Robert take time off from the retiree “Honey Do” list to provide teaching assistance whenever asked. And last, but certainly not least, Robert and Bernie, who spend many days on the road providing on-site technical assistance to municipalities and tribes, have never refused the challenge of developing a new class, even when they are called upon to pinch hit at the last minute.

Thank you Gentlemen!!!



Robert George (left) and Bernie Garcia (right) receive “Instructor of the Year” plaques from Art Torrez.

CERTIFICATION NEWS

REGULATIONS UPDATE:

The Federal Register dated January 16, 2001, updated the 40 CFR 136 regulations for acceptable methods for monitoring wastewater. Among the changes implemented by this rule change is the acceptance of *Standard Methods 19th and 20th Editions*. *Standard Methods 18th Edition* continues to be acceptable. This rule change will go into effect on May 16, 2001. Inspectors will now be checking if you have any of the 3 accepted editions on site when an NPDES permit inspection takes place.

CERTIFICATION REGS CLARIFIED:

- Basic requirements for the classes include high school diploma or a GED certificate, but 1 additional year of experience can be substituted for any level of certification EXCEPT for class 4. (20.7.4.22)
- Renewal of Certificates: 10 training credits, of the required 30 every 3 years, will now need to be in water and/

or wastewater as per your certification. The regulations state "at least ten training credits for approved training in the operation and maintenance of the same **class** of..." (20.7.4.25). This should read **type**, i.e., water and/or wastewater. This does not mean "class 1,2,3, or 4". This change in language will be proposed to the WQCC in July 2001.

Please contact us if more clarification is needed.

PAYMENT REMINDER:

The NMED Certification Office is still receiving test applications without payment. A \$15.00 exam fee must accompany the application, or the application will not be accepted.

Mike Coffman



for on-site generation at a cost of 2¢ - 6¢ per 1000 gallons. Chlorine dioxide is more expensive than chlorine and requires regular monitoring in the distribution system. It is easily scrubbed from water and may deteriorate with exposure to light.

•**Chloramines** - The primary reason utilities use chloramines is to control disinfection by-products. Another advantage chloramine has in its residual form is the control of biofilms in the distribution system. However, chloramine is less effective than free chlorine and is not useful for primary disinfection and meeting chlorine contact time (CT) requirements. Chloramines also present some operational challenges, particularly nitrification, that can be met with a comprehensive monitoring program. One of the secrets of success is to minimize free ammonia.

•**Ozone** - Ozone is a powerful oxidant that has been used in Europe for a long time. Ozone is effective against *Giardia*, but less so with *Cryptosporidium*. It can be used for residual credit and improves the aesthetic qualities of problem water, i.e. taste, odor, and color. Capitol costs for ozone have decreased as the equipment has simplified. Because of its instability, ozone, like chlorine dioxide, must be generated on-site. Ozone use also reduces disinfection by-products including bromate and aldehydes.

•**Potassium Permanganate** - Potassium permanganate is used in place of chlorine for pre-oxidation. It reduces iron, manganese, color, turbidity, and it improves certain tastes and odors. Enhancing the coagulation process can aid in the prevention of disinfection by-product precursors. It is effective in cold weather as an aid to control haloacetic acids.

•**Ultraviolet Radiation (UV)** - UV is the newest kid on the block for disinfection and is prompting interest

DISINFECTION BY-PRODUCTS AWWA CONFERENCE HIGHLIGHTS

Robert Gott

The American Water Works Association (AWWA) recent tele-conference on "Alternatives for Disinfecting Drinking Water" gave the viewer a primer on the advantages and disadvantages of chlorine, chlorine dioxide, chloramines, potassium permanganate, ozone, and ultra violet radiation. The tele-conference was driven by the regulation of by-products from the chlorine disinfection process. Water utilities are considering changes they can make in their treatment processes to prevent or lower the formation of trihalomethanes (THMs), haloacetic acids (HAAs), or other disinfection by-products (DBPs).

•**Chlorine** - Chlorine, as we well know, kills bacteria, oxidizes iron and manganese, and provides a persistent residual

in the water distribution system. Its main disadvantage is the formation of disinfection by-products with known adverse health effects. Chlorine also requires careful handling because of safety issues.

•**Chlorine Dioxide** - Chlorine dioxide's major advantage is that it does not react with organic matter forming unwanted by-products. It is a good oxidant for iron and manganese and at the same time reduces biological growths. Utilities can earn disinfection credits using this compound. Although it will destroy certain odors in the water, it can also lead to customer complaints because of reactions with airborne compounds which create objectionable kerosene or cat odor smells. Another disadvantage of using chlorine dioxide include the need

because it is the most effective weapon against *Cryptosporidium* and *Giardia* as well. A physical form of disinfection, UV does not kill protozoa, it inactivates its reproductive cycle. Although UV does not form disinfection by-products, it is difficult to use by itself because it does not count toward a CT credit. UV does not inhibit biofilm regrowth or taste and odor problems. Currently UV is not considered "Best Available Technology" (BAT) for surface water treatment, but has the potential to be in the next stage of surface water treatment regulations.

We'll keep you posted as new regulations come on-line.



PRESIDENT'S CORNER

Ray Espinoza

It's a real honor for me to be your NMWWA President for the year 2001. The Association is still continuing to lead the State in offering the best training for the utility field in New Mexico, not only in the State Schools but, also in the Section Workshops. Now, we have added the Technical Operations & Maintenance Seminars (TOMS). These 1-day seminars focus on water & wastewater topics. By June 8th, we will have completed 8 of these seminars. There will be 13 more of these seminars being offered throughout the State and will be open to everybody.

In order to continue to bring quality training to all water and wastewater related personnel, the Association needs to recruit more qualified trainers. If you, or anyone you know, would like to volunteer to teach at any of the Association's schools, please contact Caroline Martinez. We need you!!!

46TH ANNUAL NMWWA SHORT SCHOOL AWARDS

- Good Housekeeping Awards
City of Las Vegas, Town of Taos, City of Roswell(2), City of Grants, City of Gallup
- Charles Caldwell Award
Northwest Section
- Outstanding Operator of the Year
Andrew Barnes, Matthew Padilla, Eddie Lujan, Ivan Valerio
- Max Summerlot Award
City of Las Cruces Jake Hands Wastewater Plant
- Section Presidents' Award
Village of Chama, City of Clovis, City of Farmington, NTUA- Blackrock Water Plant, City of Las Cruces- Water Plant, Coronado Water Reservoir Facility
- Outstanding Instructor of the Year
Bernie Garcia, Robert George
- Achievement Award
Ted Martinez
- Lifetime Membership Award
Gary Spickelmier, Michael Martinez, Leo Valdez, Debbie Hartell, Richard Griego, Stephen Bornman, Leonard Mahan, Harrison Dick, Rubin Armenta, Tim McDonough, Epimenio Joseph, Michael Gonzales
- John Clark Award
Gene Salazar
- President's Award
Gene Salazar

NMWWA

DISINFECTION - TECHNICAL O&M SEMINARS

Pre-payment & Pre-registration Required

Fee:	\$25	Topics:	Waterborne diseases, Disinfectants, Forms of chlorine, Hypochlorites, Chloramines, Residuals & Detention
Credits:	7 Hours		Time, Storage, Handling, Emergency Response, Changing cylinders, Batching
Times:	8:00-4:30		Hypochlorite Solutions, Gas Chlorinators, SCBA Units
Instructor:	Fred Ragsdale		

✓ **Please mark which session you plan to attend:**

<input type="checkbox"/> Mission Convento Corner of Bond & Onate St. Espanola, NM Friday, July 27, 2001	<input type="checkbox"/> Rita Sanchez Municipal Bldg. 141 S. 5th Street Santa Rosa, NM Friday, August 24, 2001
--	---

<input type="checkbox"/> Civic Center 400 W. 4th St. T. or C., NM Friday, August 10, 2001	<input type="checkbox"/> UNM Continuing Ed. Bldg. 1634 University Blvd. NE (Room D) Albuquerque, NM Friday, September 7, 2001
--	--

NAME _____ SSN# _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

EMPLOYED BY _____ EMP. PHONE# _____

IMPORTANT: Classes are limited and pre-registration is required. No registration at the door. Please call Caroline Martinez at 505-753-8840 to confirm registration. Refunds apply only if cancellation is received 1 week before seminar. (Fax: 505-753-9810) Please mail registration form & check or purchase order to :
Caroline Martinez, Executive Manager
NM Water & Wastewater Association
P.O. Box 819
Espanola, NM 87532

2001 NEW MEXICO TRAINING CALENDAR 2001

JUNE

NMWWA SEMINAR — WELLS O&M

TOPICS: well construction & components, well operations, operational troubleshooting, well/pump hydraulics, casing & screen, line shaft applications, well logs, data interpretation, mechanical troubleshooting.

DATE: June 8, Friday

TIMES: 8 to 4:30

LOCATION: Ruidoso, Council Chambers

REGISTRATION: \$25, *pre-registration is required.*

CREDITS: 7 hours

CONTACT: NMWWA, Caroline Martinez, 505-753-8840, FAX 505-753-9810

NMRWA TRAINING SESSION — WATER O&M

DATE: June 27-28, Wednesday & Thursday

LOCATION: Hatch Community Center

CONTACT: N.M. Rural Water Association, 505-884-1031, 1-800-819-9893, FAX 505-884-1031, www.nmrwa.org

NMSU WUTAP TRIBAL OPERATOR CERTIFICATION TRAINING — LAGOONS

★ DATE: June 19, Tuesday

LOCATION: Sandia Pueblo, Sandia Lakes Conf. Rm.

★ DATE: June 20, Wednesday

LOCATION: Gallup, UNM Auditorium

TIMES: 8:30 AM to Noon

REGISTRATION: *Free to tribal members only*

CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137

e-mail wutap@swcp.com

JULY

NMWWA WEST CENTRAL SECTION WORKSHOP

TOPICS: Levels 1 & 2, Basic Water & Wastewater

DATE: July 11-12, Wednesday & Thursday

TIMES: 8 to 4:30, each day

LOCATION: Gallup, UNM Gallup

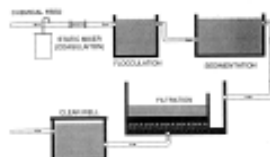
REGISTRATION: \$60, members; \$80, non-members. *Advance registration is requested.*

CONTACT: Pat Sanchez, 505-863-1211

NMED EXAM: July 13, 8 to 2:30 *Submit your test application by June 13th at the latest.*

NMSU WUTAP WORKSHOP — SURFACE & GROUND WATER

TOPICS: water characteristics; wells; theory of coagulation, flocculation & filtration; jar testing, alkalinity & pH testing



DATE: July 18, Wednesday

TIMES: 8-5

LOCATION: Conchas Lake, Corps of Engineers Conference Rm.

REGISTRATION: \$40 *Preregistration requested.*

CREDITS: 7 hours per day

CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137; e-mail wutap@swcp.com

NMRWA TRAINING SESSION — WATER O&M

DATE: July 25-26, Wednesday & Thursday

LOCATION: Raton Convention Center

CONTACT: N.M. Rural Water Association, 505-884-1031, 1-800-819-9893, FAX 505-884-1031, www.nmrwa.org

NMWWA SEMINAR — DISINFECTION O&M

TOPICS: waterborne diseases, disinfectants, forms of chlorine, hypochlorites, chloramines, residuals & detention time, storage, handling, emergency response, changing cylinders, batching hypochlorite solutions, gas chlorinators, SCBA units

DATE: July 27, Friday

TIMES: 8 to 4:30

LOCATION: Espanola, Mission Convento, corner of Bond & Onate

REGISTRATION: \$25, *pre-registration is required.*

CREDITS: 7 hours

CONTACT: NMWWA, Caroline Martinez, 505-753-8840, FAX 505-753-9810

NMSU WUTAP TRIBAL OPERATOR CERTIFICATION TRAINING — SECONDARY TREATMENT

DATE: July 31, Tuesday

LOCATION: Sandia Pueblo, Sandia Lakes Conf. Room

TIME: 8:30 AM to Noon

REGISTRATION: *Free to tribal members only*

CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137

e-mail wutap@swcp.com

AUGUST

NMSU WUTAP OPERATOR CERTIFICATION TRAINING — SECONDARY TREATMENT & ACTIVATED SLUDGE

DATE: August 1, Wednesday

LOCATION: Gallup, Best Western Hotel, 3009 W Hwy 66

TIMES: 8:00 AM to 5 PM

REGISTRATION: \$40

CREDITS: 7 hours

CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137

e-mail wutap@swcp.com

2001 NEW MEXICO TRAINING CALENDAR 2001

NMWWA SOUTHEAST SECTION WORKSHOP

TOPICS: Levels 1 & 2, Basic Water & Wastewater
 DATE: August 8-9, Wednesday & Thursday
 TIMES: 8 to 5, both days
 LOCATION: Carlsbad, NMSU-Carlsbad, 1500 Univ.
 at the Industrial Air Center, 20 West Mathis
 REGISTRATION: \$60, members; \$80, non-members. *Advance registration is requested.*
 CONTACT: Debra Edwards, 887-5412
 NMED EXAM: August 10, 8 to 2:30 *Submit your test application by July 11th at the latest.*

NMWWA SEMINAR —DISINFECTION O&M

TOPICS: waterborne diseases, disinfectants, forms of chlorine, hypochlorites, chloramines, residuals & detention time, storage, handling, emergency response, changing cylinders, batching hypochlorite solutions, gas chlorinators, SCBA units

✦ DATE: August 10, Friday
 LOCATION: Truth or Consequences, Civic Center, 400 W. 4th St.

✦ DATE: August 24, Friday
 LOCATION: Santa Rosa, Rita Sanchez Municipal Bldg., 141 S. 5th St.

TIMES: 8 to 4:30
 REGISTRATION: \$25, *pre-registration is required.*
 CREDITS: 7 hours
 CONTACT: NMWWA, Caroline Martinez, 505-753-8840,
 FAX 505-753-9810

NMRWA TRAINING SESSION — WATER O&M

DATE: August 29-30, Wednesday & Thursday
 LOCATION: Bloomfield Cultural Center
 CONTACT: N.M. Rural Water Association, 505-884-1031,
 1-800-819-9893, FAX 505-884-1031, www.nmrwa.org

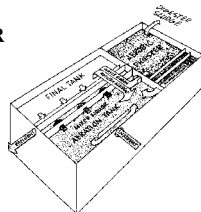
NMSU WUTAP TRIBAL OPERATOR CERTIFICATION TRAINING — FIELD TRIP

DATE: August 28, Tuesday
 LOCATION: Sandia Pueblo Wastewater Treatment Plant
 TIMES: 8:30 AM to Noon
 REGISTRATION: *Free to tribal members only*
 CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137
 e-mail wutap@swcp.com

NMSU WUTAP WORKSHOPS —

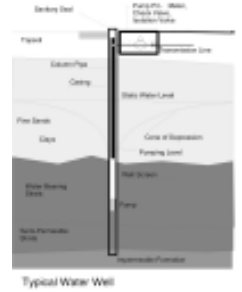
■ BASIC & ADVANCED WASTEWATER SYSTEMS O&M

TOPICS: wastewater characteristics, trickling filters, activated sludge theory & math, lagoons
 DATE: August 28, Tuesday



■ BASIC & ADVANCED WATER SYSTEMS O&M

TOPICS: water characteristics, water wells, disinfection, surface water treatment, regulations
 DATE: August 29, Wednesday
 TIMES: 8-5, both days
 LOCATION: Albuquerque, Howard Johnson Conference Center, 15 Hotel Circle, Emerald Rm
 REGISTRATION: \$75 for both workshops or \$40 for one workshop. *Preregistration requested.* Send to: P.O. Box 4192, Santa Fe, NM 87502



CREDITS: 7 hours per day
 CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137;
 e-mail wutap@swcp.com

SEPTEMBER

NMWWA SEMINAR —DISINFECTION O&M

TOPICS: waterborne diseases, disinfectants, forms of chlorine, hypochlorites, chloramines, residuals & detention time, storage, handling, emergency response, changing cylinders, batching hypochlorite solutions, gas chlorinators, SCBA units

DATE: September 7, Friday
 TIMES: 8 to 4:30
 LOCATION: Albuquerque, UNM Continuing Ed. Bldg., 1634 University Blvd. NE, Rm. D
 REGISTRATION: \$25, *pre-registration is required.*
 CREDITS: 7 hours
 CONTACT: NMWWA, Caroline Martinez, 505-753-8840,
 FAX 505-753-9810

NMWWA SOUTHWEST SECTION — JAKE HANDS MEMORIAL WORKSHOP

TOPICS: Levels 1 & 2, Basic water & wastewater
 DATE: September 12-13, Wednesday & Thursday
 TIMES: 8 to 5 each day
 LOCATION: Mesilla, Com. Center, 2251 Calle de Santiago
 REGISTRATION: \$60, members; \$80, non-members
 CONTACT: Tony Parra, 505-528-3554
 NMED EXAM: September 14, 8 to 2:30. *Submit your test application by August 15th at the latest.*

NMSU WUTAP WORKSHOPS —

■ BASIC & ADVANCED WATER SYSTEMS O&M

TOPICS: water characteristics, water wells, disinfection, surface water treatment, regulations
 DATE: September 12, Wednesday

2001 NEW MEXICO TRAINING CALENDAR 2001

■ BASIC & ADVANCED WASTEWATER SYSTEMS O&M

TOPICS: wastewater characteristics, trickling filters, activated sludge theory & math, lagoons
DATE: September 13, Tuesday
TIMES: 8-5, both days
LOCATION: Philmont Scout Ranch
REGISTRATION: \$75 for both workshops or \$40 for one workshop.
Preregistration requested. Send to: P.O. Box 4192, Santa Fe, NM 87502
CREDITS: 7 hours per day
CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137;
e-mail wutap@swcp.com

NMRWA TRAINING SESSION — WATER O&M

DATE: September 26-27, Wednesday & Thursday
LOCATION: Taos Convention Center
CONTACT: N.M. Rural Water Association, 505-884-1031,
1-800-819-9893, FAX 505-884-1031, www.nmrwa.org

NMSU WUTAP TRIBAL OPERATOR CERT. TRAINING — COLLECTION SYSTEM & LIFT STATION PUMPS & MOTORS

DATE: September 28, Friday
LOCATION: Sandia Pueblo, Sandia Lakes conference room
TIMES: 8:30 AM to Noon
REGISTRATION: *Free to tribal members only*
CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137
e-mail wutap@swcp.com

OCTOBER

NMWWA NORTHEAST SECTION WORKSHOP

TOPICS: Levels 1 – 2, Basic water & wastewater
DATE: October 3-4, Wednesday through Thursday
TIMES: 8 to 5 each day
LOCATION: Espanola, National Guard Armory
REGISTRATION: \$60, members; \$80, non-members
CONTACT: Pete Padilla, 505-662-8472
NMED EXAM: October 5, 8 to 2:30.
Submit your test application by Sept 5th at the latest.

NMRWA TRAINING SESSION — WATER O&M

DATE: October 24-25, Wednesday & Thursday
LOCATION: Clovis
CONTACT: N.M. Rural Water Association, 505-884-1031,
1-800-819-9893, FAX 505-884-1031, www.nmrwa.org

NMSU WUTAP TRIBAL OPERATOR CERTIFICATION TRAINING — DISINFECTION

DATE: October 30, Tuesday
LOCATION: Sandia Pueblo, Sandia Lakes conference room
TIME: 8:30 AM to Noon
REGISTRATION: *Free to tribal members only*
CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137
e-mail wutap@swcp.com

NMSU WUTAP OPERATOR CERTIFICATION TRAINING — DISINFECTION & NPDES LABORATORY OVERVIEW

DATE: October 31, Wednesday
LOCATION: Gallup, Best Western Hotel, 3009 W Hwy 66
TIME: 8:00 AM to 5 PM
REGISTRATION: \$40
CREDITS: 7 hours
CONTACT: NMSU WUTAP, 505-984-0676, FAX 982-3137
e-mail wutap@swcp.com

NOVEMBER

NMWWA CENTRAL SCHOOL

TOPICS: This general water & wastewater operations school is for both basic and advanced, Levels 1-4.
DATES: November 6-9, Monday through Thursday
TIMES: 8 to 5 each day [26 hours credit]
LOCATION: Albuquerque, UNM Continuing Education Bldg.
1634 University Blvd., NE
REGISTRATION: \$150 for members, \$180 for non-members.
Advanced registration is required
CONTACT: Caroline Martinez, 505-753-8840,
FAX 505-753-9810.
NMED EXAM: November 10, 8 to 2:30.
Application due by Oct. 10th

NMRWA TRAINING SESSION — WATER O&M

DATE: November 28-29, Wednesday & Thursday
LOCATION: Silver City
CONTACT: N.M. Rural Water Association, 505-884-1031,
1-800-819-9893, FAX 505-884-1031, www.nmrwa.org

FIELD TRAINING

The New Mexico State University, Water Utilities Technical Assistance (WUTAP) - Robert Gott, Robert George, & Bernie Garcia - can provide on-site, no cost training in operations & maintenance, process control, laboratory, & financial management of water supply or wastewater treatment operations to municipal facilities and Indian Pueblos.
505-984-0676; FAX 505-982-3137; e-mail wutap@swcp.com

OPERATOR SPOTLIGHT

PAUL LOVATO

RAY ESPINOSA, NORTHWEST SECTION

Paul has been with the City of Gallup Water Department for 19 years and is Level 4 Water Operator. Paul supervises the treatment of Gallup's groundwater. He and his crew are also responsible for the water storage tanks, pumps, and control valves. Paul also monitors the water system using a SCADA system.

He has been a member of the NMWater and Wastewater Association for 19 years. Paul has lived in Gallup for over 21 years, is married, and has 2 sons.



Paul Lovato, City of Gallup

NMWWA MONTHLY SECTION MEETINGS

- Southeast Section
 - ⊕ 1st Wednesday, rotating
 - ☎ Art Sena, 505-745-3511
- Southwest Section
 - ⊕ 3rd Wednesday, Las Cruces
 - ☎ Tony Parra, 505-528-3554
- West Central Section
 - ⊕ 4th Wednesday, Gallup
 - ☎ Ray Espinoza, 505-863-1210
- Central Section
 - ⊕ 1st Monday, Albuquerque
 - ☎ John Kelley, 505-857-8286
- Northeast Section
 - ⊕ 2nd Monday, rotating
 - ☎ Andrew Medina, 505-662-8141
- Northwest Section
 - ⊕ 1st Tuesday, rotating
 - ☎ Cindy Huntsman, 505-334-8684