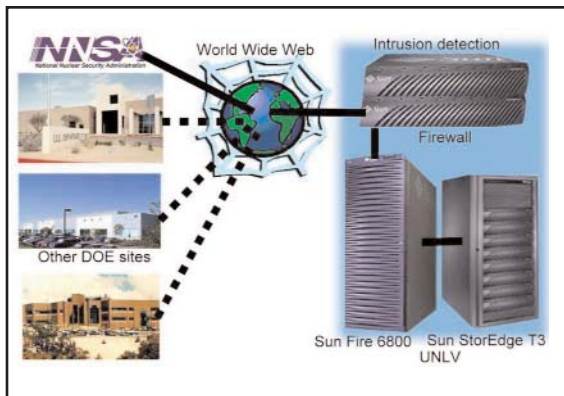


# NNSA/NV and UNLV team on new health records project

by Nancy Tufano

The Medical Record Knowledge Discovery and Information Management Project is a cooperative agreement between the National Nuclear Security Administration Nevada Operations Office (NNSA/NV) and the University of Nevada Las Vegas (UNLV) in conjunction with

corporate members to create a record management system that will preserve the growing amount of health records generated across the U.S. Department of Energy (DOE) complex. The project, started in 2001, focuses on providing economic, long-term retention of digital information in a usable format.



*A graphic representation of the interface between DOE and NNSA and the proposed records management system.*

solution based on open standards. Costs and dependence on vendors and technology are reduced by using non-proprietary storage and software formats.

Currently, the developing project operates at the UNLV National Supercomputing Center for Energy and the Environment using open

source systems and tools with a cyber security system in place; and a pilot that developed, tested and implemented a core set of functions to support e-records management was recently completed.

**Bill Bunn,** NNSA/NV health systems specialist and part of the e-records management

team, took time to answer some questions about the project.

*How did this project come about - what was the reason for its establishment?*

Initial funding for the project came from Senator Harry Reid. He was convinced of the need to move forward on research to place DOE workers' health records into an electronic format, for preservation and for easy access. Reid funded this research project with an important public purpose: to preserve health records of current and former

*continued on page 5*

The e-medical records project was necessitated by an increase in the flow of paper-to-digital and digital-to-digital record intake, resulting in fragile, low utility electronic archives. The need for digital preservation increases with each new record. Unfortunately, reliance on proprietary software and storage formats was a roadblock to digital preservation. The e-medical records team of NNSA/NV and UNLV worked in partnership with information technology companies to develop a scalable, workflow neutral, non-proprietary records management

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## Safety Focus

*This article is one in a series that highlights the various components of Bechtel Nevada's Construction Safety Program. Over the next several months, a new monthly article will feature a different component of Bechtel Nevada's unique Construction Safety Program.*

### Safety meetings help BN construction department work toward zero accidents

by Jennifer Morton

The Bechtel Nevada construction department utilizes monthly safety meetings as one tool to help attain zero accidents.

Once a month, managers and supervisors meet at the Nevada Test Site (NTS) to discuss safety performance, new company directives, planned activities, and recent safety incidents. Since it is logistically difficult to include all construction employees at the safety meetings, construction managers and supervisors are tasked to ensure that information is distributed and communicated back to the workforce.

The meeting begins with a review of both the previous month's safety performance and the year-to-date safety performance. Discussions focus on such issues as the number of accidents occurred, the severity of the accidents, the injury type, and the location of the accidents. Each meeting includes at least one presentation developed by a general foreman. Topics include lessons learned, briefings in a change in company level safety procedures, and identification of best practices.

Reports from a cost committee representative (a construction department employee) and a safety seven committee representative are standard at all monthly safety meetings. During the meeting, the cost committee chairman, provides

a status report of performance based safety program (PBSP) activities conducted by the committee. These program activities include the number of PBSP observations conducted at NTS and the number of at-risk observations found from the previous month.

The safety seven committee, comprising seven employees from various levels, monitors job sites and checks for safety hazards. During the meeting the safety seven committee representatives make a presentation and ask for status updates from the various crafts on the repairs/fixes of the safety findings.

The cost committee representative and the safety seven committee representative update the other meeting attendants with concerns or issues submitted by workers in the field. The concerns or issues are addressed during the daily safety meeting, which is held at various site locations at NTS.

"These monthly safety meetings are important because safety is the number one issue. We use whatever means we can to relay safety information to the workers," said **Pamela Haynes**, who helps with the presentation development.

According to safety professional **Tim Grover**, "The monthly safety meetings are an opportunity for the leaders of the organization to review performance, identify opportunities for improvement, develop strategies to improve performance, and just as important, to communicate this information to all levels of construction personnel."

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*This Six Sigma feature focuses on the Process Improvement Projects (PIPs) at the National Nuclear Security Administration Nevada Operations complex. A different article will detail each PIP; the team associated with the PIP; and the anticipated benefits and cost savings involved with implementing the recommendations of the PIP team.*

### Bechtel Nevada PIP finished in record time

by Jennifer Morton

A Bechtel Nevada Six Sigma process improvement team recently finished the Joint Actinide Shock Physics Experimental Research (JASPER) Maintenance Process Improvement Project (PIP) Program in 16 days, the shortest amount of time to finish a PIP at Bechtel Nevada since the program began in November 2000.

A Lawrence Livermore National Laboratory (LLNL) Management Self Assessment (MSA) identified the need to

upgrade the maintenance program at JASPER. It was apparent that the current maintenance management process at JASPER was insufficient to assure that the maintenance program would support facility readiness. A more systematic and efficient approach was required to support the upcoming readiness assessment which would allow the facility to begin SNM operations. A Maintenance PIP team was implemented to correct these issues.

JASPER Maintenance Management PIP members included **Robert Braddy** (JASPER Project Manager and Six Sigma Champion), **Scott Doney** (Black Belt), **Alex Jackovich**,

*continued on page 3*

## Bechtel Nevada PIP finished in record time

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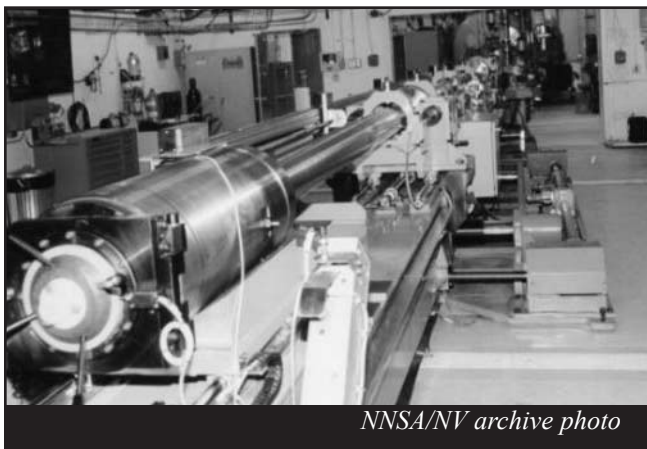
**Carl Konrad, Chuck Lowery, and Richard Schmidt** from Bechtel Nevada along with team member **Gene Christensen** from LLNL. The team used the Six Sigma methodology to measure, analyze, improve, and control factors to make the necessary efficiency changes.

On July 31, 16 days from the starting day, the team finalized the PIP and came up with a cost avoidance of \$360,000.

“I feel the Maintenance PIP went very well, it was done rapidly at my request, and found areas which require improvement in the maintenance process,” said **Gene Christensen**, JASPER facility manager. “I would like the

other PIPs to accomplish similar results,” Christensen added.

Two additional PIPs are planned for JASPER, which will involve LLNL. The JASPER Primary Target Chamber (PTC), currently in progress, was initiated to reduce the number of hours required to fabricate a PTC. This will allow Bechtel Nevada to produce additional PTCs each year and enable more experiments at the JASPER facility. The second PIP is to reduce the JASPER experiment execution cycle time once sufficient data is available.



*NNSA/NV archive photo*

*The Joint Actinide Shock Physics Experimental Research (JASPER), a two-stage light-gas gun facility, is a new Stockpile Stewardship state-of-the-art facility at the Nevada Test Site. A Bechtel Nevada Six Sigma process improvement team recently finished the JASPER Maintenance Process Improvement Project Program (PIP) in 16 days with a cost avoidance of \$360,000.*

### About JASPER

JASPER, a two-stage light-gas gun facility, is a new Stockpile Stewardship state-of-the-art facility at the Nevada Test Site managed by Lawrence Livermore National Laboratory (LLNL). Once operational, this facility will conduct equation-of-state experiments with special nuclear materials (SNM) and other actinides. JASPER is the only gas gun facility in the U.S.

Department of Energy complex able to conduct experiments with SNM in the two to eight-kilometer per second regime.

While LLNL manages the JASPER facility, 80 percent of the support is provided by Bechtel Nevada employees. The two groups are working together as a team to get JASPER ready for SNM operations.

## In the next issue of *SiteLines*...

- Subcritical experiment MARIO conducted at NTS
- Wildfire burns part of NTS

## Health fair, a winner

by Jennifer Morgan

Bechtel Nevada's workforce enhancement department recently sponsored a health fair at the Mercury cafeteria. Over 300 federal, contractor, and laboratory employees visited 14 vendors that had health-related booths.

Employees had the opportunity to have blood drawn for glucose, cholesterol, and Prostate- Specific Antigen (PSA) testing; have their necks, backs, shoulders or feet pampered by a masseuse or reflexologist; have their bone density, body fat, or neck alignments read; have their hearing or eyes checked; or received a variety of other health-related testing or information.

Health fairs are held every year; once at the test site and once in North Las Vegas. The next health fair is scheduled for North Las Vegas in the fall.



Photo by Connie Sheldon

Nevada Test Site workers receive massages at a health fair sponsored by Bechtel Nevada's workforce enhancement department..

## Back to school safety reminders

by Kurt Arnold

As schools resume classes this fall, our streets and crosswalks will once again contain students heading back to school. As commuters it is our responsibility to obey the rules of the road and we need to remain aware of signs and speed limits in and around our schools. Remain aware of students walking, riding bicycles, skateboarding, and roller blading to and from school.



Listed below are a few safety reminders for motorists:

- Watch for flashing yellow lights in school zones and pedestrian crosswalks.
- Observe the posted school zone speed limits. Stiffer penalties are given if you are caught speeding in a school zone.
- Flashing red lights on a school bus mean that approach-

ing traffic must stop in **both** directions. Students are either boarding or exiting the bus and may cross in front of the school bus.

- Slow down when approaching pedestrian crosswalks.
- Stop for pedestrians waiting to cross in crosswalks. Do not motion for students to cross until all traffic has stopped.
- During school hours, look **very** carefully for pedestrians before turning into a pedestrian crosswalk
- Watch for crossing guards donned in orange vests near intersections or school zones.

Become familiar with the school zones and the speed limits on your commute to and from work. Slow down and watch for students and crossing guards in and near pedestrian crosswalks. Drive safely.

# NEWS BRIEFS



## DOE awards \$300,000 to NTSDC

The Department of Energy has awarded \$300,000 to the Nevada Test Site Development Corporation (NTSDC). The block grant will enable the NTSDC to continue to provide administrative support for rural economic development, renewable energy, aerospace activities, asset management, and business incubation.

“The Energy Department is a good neighbor to the communities surrounding our sites,” stated Secretary of Energy **Spencer Abraham**. “Working with the NTSDC and other community reuse organizations around the country, the Department has retained, expanded or created over 25,000 jobs for workers affected by restructuring efforts at DOE sites.”

The goal of the NTSDC is to diversify the local economy and build new jobs in science and technology-based industries through the development of sustainable private commercial activities. This maximizes the use of DOE resources, expands non-government opportunities, and adds long-term value to the regional economy.

The Department of Energy’s Office of Worker and Community Transition and the Nevada Test Site Development Corporation have created or retained 1,876 new economy jobs and estimates the creation or retention of 3,273 jobs by 2005.



## Health Records project

*continued from page 1*

employees. Not only does this project benefit the DOE, but it allows advanced technology to be developed at UNLV, benefitting the state, as this technology is expanded.

*Can current and former employees be able to access their own records?*

Only those authorized by the Department, NNSA/NV will have access to the UNLV computerized records system. They will sign a nondisclosure and privacy act statement, and have a legitimate need for having access. While the access can be via the internet, individual employees will not be able to access their records directly, but will be able to access them through an authorized portal, such as the medical department. This will be useful to employees who’s paper records have been sent to a federal records center or other storage area, because they will be able to access authentic copies quickly through this authorized portal to the health records system.

*What happens to hard copy/paper records?*

The original records, will always be preserved by DOE. These records will be preserved as well as technology can preserve paper records without excessive expense - approximately 50-100 years for paper under normal record storage conditions i.e. federal records storage areas, or local ware-

houses. As time goes by, it becomes less and less cost effective to retrieve employee health records (medical records, industrial hygiene records, radiation records and employment records). In addition, each time the records are handled they deteriorate faster, and there is always a concern for loss of documents. To ensure access, authentic electronic copies of these records need to be available. The UNLV Records Project is designed to store authentic copies of health records in a single indexed file, that can be accessed simultaneously by multiple file users and placed in multiple file folders for use, without making multiple copies for each folder, thereby saving storage space on the electronic storage media. The system monitors the electronic records to ensure that they are not changed, and remain authentic. The system has been designed to be non-proprietary, which means the system is owned by the DOE. It is not a private software vender system that requires yearly licensing fees in order to access the data. As technology advances, the records will graduate to more advanced systems, preventing future inaccessibility.

*Where are the records be stored?*

Currently the records are stored on a Sunfire 6800 computer located at the UNLV Super Computer Center for Energy and the Environment. The computer was acquired by the University of Nevada Las Vegas, specifically for this project, and is currently operating on the UNLV campus. It is important to note that the computer system is totally separate from the UNLV system, and protected with both physi-

*continued on page 8*

## BEYOND THE CALL

### NTS supports Desert Bighorn water project

by Darwin Morgan

Constant 100-degree-plus days, a barren landscape, and no clouds to shade an individual from the persistent rays of a sweltering sun would tap the resources of even the heartiest desert dweller. It is no easier for the wildlife roaming across the Mojave and Great Basin ranges making up the 1,375 square miles of the Nevada Test Site.

For the desert bighorn sheep - the state of Nevada animal - it finds this setting and situation to its liking. Like any other species of animal roving the desert, the one constant in the daily grind of survival is water.

Enter an unlikely group of partners. The Fraternity of Desert Bighorn, a wildlife conservation organization based in southern Nevada, works at providing water sources for the sheep. The Nevada Division of Wildlife provided pilots for the Nevada Division of Forestry helicopters to move "buckets" of water to remote southern Nevada locations and an eclectic group of people from the Nevada Test Site.

The Fraternity of Desert Bighorn constructs and maintains watering devices or guzzlers in some of the most remote hard-to-get-to locations in the desert. With the prolonged lack of rain this region has seen over the last few years, there was a need to fill the watering holes since nature is not assisting. That is where the test site came in to play for one of the more remote water troughs.

**Bill Vasconi**, a former site worker and current vice-president of the Fraternity, called the Nevada Operations Office and asked for water for several of the guzzlers in the Specter Range — a rugged desert mountain range lying due south of the border between Areas 25 and 27 on Bureau of Land Management land.

The plan was simple. Put water from a fire hydrant located next to the Desert Rock Control Tower in a big orange tub and let a Nevada Division of Forestry helicopter take dips and fly it out to the sheep projects some 25 miles away.

Bechtel Nevada's site services checked and cleared the fire hydrant line, NNSA site operations checked and cleared the air space out at Desert Rock while Wackenhut and Nye County Sheriff's deputies checked and cleared the Fraternity volunteers.

According to Vasconi, "We just did not know what we were going to do for water to these particular guzzlers. Our only hope to get them replenished in a manner that made sense was the test site."

Vasconi's past knowledge of site resources and knowing who to call enabled everything and everyone to come together.



*Bill Vasconi, a former site worker and current vice-president of the Fraternity of Desert Bighorn, fills a water tank to aid in the filling of watering holes used by Desert Bighorn sheep.*



*A Nevada Division of Forestry helicopter lifts away from the water tank with a load of water for the sheep projects some 25 miles away.*



*photos courtesy of the Fraternity of Desert Bighorns*

*Desert Bighorn sheep drink from the replenished guzzler.*

## BEYOND THE CALL

### Bechtel Nevada employee helps build churches in Russia

by Jennifer Morton

**Sarah Yenglin**, a Bechtel Nevada employee, recently returned from Russia where she and a mission group helped build churches. She is very thankful to share her experience.

#### Why did you recently go to Russia?

In November of 2001, the college group at my church was informed that the next mission's group was going to Moscow. These mission trips average 10 days in length. We are involved in a street ministry, construction of churches, and children ministries. I have always wanted to go on a mission's trip to a foreign country and saw this as my opportunity.

#### Describe your experience in Moscow?

My experience in Russia was definitely a learning experience. I was selected, along with nine other team members, to travel to a town outside of Moscow to help in the construction of a community church and a Teen Challenge Center facility (a rehabilitation center for teens with alcohol or drug addictions). It took four hours to travel to get to Korobonova. We traveled by subway, two hours by train, and then 45 minutes by bus. The "hotel" we stayed at was built in the 1950s, but it looked like it had been through two world wars.

The pastor we were assisting had an extremely small apartment. At one time his apartment housed eight families; today many apartments still house that many families. We spent four days there and in those four days I realized how blessed we are to live here in the United States.

The construction work was very difficult and time consuming. We leveled a brick foundation, laid top block for the cedar roof, made cement for the block work, removed old timber, and weeded the garden.

Back in Moscow, we joined the other 31 team members. Transportation was either by subway or by foot. On average we walked 10 miles a day. We were given the opportunity to help in construction of another church and ministered to the community children. We sang songs, made balloon animals, face painted, and made them feel special.

We visited a government-run facility for outcasts ranging from ages 4 to 16. These abandoned youth were prostitutes, thieves, orphans, etc. We were given a 1-hour window to play and minister to these kids. We gave them gifts from home and showed them that they were special. We also visited a Christian library, where children come to worship and learn English; some children even lived there. We spent an hour with these children. It was incredible to see how much a little girl's face lit up when I made her a balloon hat. The look was one of surprise, as though she was saying, "What, is this for me?" It was just amazing to watch every face light up as though they were experiencing Christmas for the very first time.

#### Did you find it difficult communicating with these children due to the language barrier?

With children we made noises, faces, and other gestures in order to get them to understand. It was more difficult trying to communicate with the adults. We studied the Russian language for seven months prior to the trip, which enabled us to communicate some.

#### What was the security like?

The security was pretty tight all the way through. We had to go through five different airports. There were passport and custom checks in Finland, Russia, and New York. We did not experience any major issues except the process was extremely long and our passports and visas were carefully examined.

#### Did you have any time for sightseeing?

On our last day in Moscow we toured Red Square, Lenin's Tomb, the Kremlin, and many cathedrals.

#### What did you learn from this experience?

We are spoiled here in the United States. In Russia, if you make little less than 300 Rubles (\$10 a month) that is considered quite good. In the United States, the majority of folks have the choice of owning a vehicle, using public transportation, or walking. In Russia there is no middle class - you are either rich or poor. I realized that I take a lot of the things for granted.

## BEYOND THE CALL

### ABCD Award winners

by Sheril Hamlin

Wackenhut Services, Inc. (WSI) recognizes employees who go beyond the call of duty with a special award. The award known as Above and Beyond the Call of Duty (ABCD) has been awarded to the following WSI employees:

**Teri Rogers** was awarded an ABCD award for her efforts as the WSI Corporate Challenge coordinator. Teri devoted countless hours organizing and executing WSI's involvement with this year's games. She not only served as coordinator, but actively participant in many of the events.

Due to his keen sense of observation, which precluded access to the National Nuclear Security Administration Nevada Operations Office (NNSA/NV) facilities by unauthorized personnel, **Mark D. Hojnacke** received an ABCD Award. Hojnacke had read an article in the *Las Vegas*

*Review Journal* that discussed two Secret Service personnel being relieved of their duties due to alleged criminal activities. The names were provided to security access control section personnel where it was discovered that the two individuals in question had active access authorizations.

An ABCD Award was given to **Gloria Sandoval** for her ability to take on additional tasks when the need arises. Gloria continued to maintain her own workload while assuming the responsibilities of a co-worker within another section during that person's absence.

**Adrienne Anderton, Brad Anderton, Peggy Ebbenga, Gary Glazier, Earl Hall, Don Horn, Bill Shimek, Ron Stone, Page Tyler, and Albert Valle** received ABCD Awards for outstanding service and commitment to support Project 400. These employees worked as a team with a short turnaround time to install a security system in Area 12 at the Nevada Test Site. These individuals worked long hours, nights, and weekends during this project.

### Health Records project

*continued from page 5*

cal and electronic security that conforms to NNSA/NV standards and DOE cyber security standards. It has been certified by DOE cyber security personnel to be in compliance with all standards for this type of electronic system. In addition, the computer system is in compliance with several other national standards in regards to safeguarding medical data, including the federal Health Insurance Portability and Accountability Act of 1996 (HIPPA).

*How will this new records management system effect members of the DOE/NNSA complex?*

Initially the project will have little effect, but as the system matures and more data is stored, it will become of primary interest to current and former employees. It will be a preferred method for quick access to authentic electronic copies of occupational health data (medical, industrial hygiene, radiation and employment records) for both current and former workers. This is of particular interest in workers compensation claims, and also for individuals seeking prior health data to compare with workers current health data. An example would be an employee who has a heart attack can have a copy of his previous electrocardiograms available through the electronic health records system available for comparison with his current electrocardiogram, to determine what changes have occurred. This would be accomplished quickly electronically, rather than sending to the archive for

the records, which could take days to months to retrieve old records.

*What is NNSA/NV's role?*

As a member of the cooperative agreement, NNSA/NV has substantial input into the direction of the project.

*What is UNLV's role?*

UNLV has provides academia research component, with subcontracts to world class research centers such as Northern Arizona University Center for Data Insight (CDI), a world renowned center for data analysis. CDI analyzes large data sets to discover previously unknown knowledge or trends in the data sets. It has performed a number of high profile data analyses for large corporations and insurance companies to improve efficiency.

UNLV also provides research into a number of technology areas that will improve data storage capabilities, and efficiencies. The cooperative partnership between NNSA/NV, UNLV and a private corporation have resulted in a synergy that allows the best of each to move the project along. Corporate members of the team provide cost containment and schedule, UNLV provides new research and analysis, and NNSA/NV provides direction into developing solutions for records management for a vital public purpose.

*Since this is a pilot program, how long will the pilot phase last before it becomes the operating procedure?*

*continued on page 11*



# LESSONS LEARNED

## Injuries driven to zero when lessons learned roundtable involves workers

by Dawn Starrett

Instituting a roundtable discussion of lessons learned during periodic safety meetings can increase awareness and potentially reduce injuries.

A manager, who had experienced a number of injuries within his team within a short time period, tried to discuss lessons learned with his team, but found that the “manager to worker” communication was not very effective. When the information was presented from the manager to the team, the team did not feel part of the process. The manager instituted a corrective action that included a roundtable discussion of lessons learned at each weekly safety meeting.

Each team member at the table discusses one lesson they learned, either at home or at work, during the last week. The manager found that once the workers were directly involved, the injury rate dropped to zero for eight consecutive months.

While the roundtable discussions take time, they are effective in increasing awareness and reducing the injury rate. Include workers input and two-way communication during in periodic meetings to increase safety awareness. You never know where the next great idea for ensuring safety will originate.

If you have a lessons learned that you would like to share with others, contact your organization’s Lessons Learned point of contact or **Dawn Starrett (702-295-4297)**.

## Multimedia inspections; EPA’s new wave of environmental assessment

by Carl Soong

To address the increased public awareness of environmental issues the U. S. Environmental Protection Agency (EPA) has stepped up enforcement by teaming with state regulators to initiate Multi-Media Inspections (MMI) at several federal and privately owned facilities throughout the country.

These inspections are comprehensive and are cost effective for the EPA and the involved states. The MMI teams make the most of available resources and time by assessing all major areas of environmental compliance at individual sites during an intensive but short time period.

In the past three years, four U.S. Department of Energy (DOE) sites have had environmental MMIs. Typically, the MMI teams arrive unannounced at the site. Only one of the four sites had any advance notice prior to the arrival of the inspection team. With the exception of the Bechtel Bettis facility in Idaho, these inspections have resulted in notices of violations, including fines and penalties. The success of this Bechtel group is attributed to two factors: (1) Bechtel Bettis has established an effective and open relationship with the state, and (2) they conducted an internal MMI several months prior to the actual MMI.

Remember that inspections and assessments are tools used by compliance organizations to increase awareness on

those involved. It is also your chance to learn more of the environmental responsibilities associated with your job duties, organization, and company.

If you or your organization is involved in an inspection, listed below are some general rules that apply to regulatory inspections:

- Remain courteous and helpful to inspectors.
- Provide only requested information. If information is not immediately available, let the inspection team know when or where the information is available.
- If you are unsure about releasing information due to security issues, let the inspector know that you will need to check with your supervisor or security personnel before handing over drawings, plans, or procedures.
- Maintain a professional demeanor. Discussions of personal issues concerning the company or co-workers are not appropriate to the situation.
- Correct any minor compliance items immediately or within a time period of 24 hours and note as such to the inspection team.

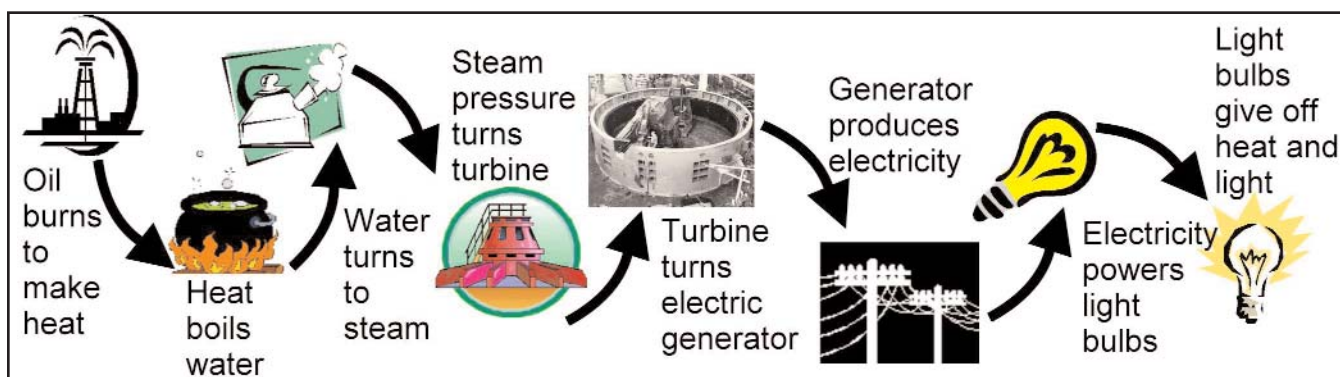
## Energy conservation

The following information is from the United States Environmental Protection Agency EPA-905- F-97-011, dated August 1997.

### What are the uses of energy?

Energy is defined as “the ability to do work.” In this sense, examples of work include moving something, lifting something, warming something, or lighting something.

The following is an example of the transformation of different types of energy into heat and power.



It is difficult to imagine spending an entire day without using energy. We use energy to light our cities and homes, to power machinery in factories, cook our food, play music, and operate televisions. In a home where electricity supplies all of the energy requirements, the average energy consumption is shown below:

- Air conditioner and heater = 50%
- Water heater = 20%
- Lighting and small appliances = 10%
- Refrigerator = 8%
- Other = 5%
- Ovens and stoves = 4%
- Clothes dryer = 3%

Electricity is generated from both renewable and nonrenewable energy sources.

### Renewable energy sources

These sources are constantly renewed or restored and include wind (wind power), water (hydro power), sun (solar), vegetation (biomass), and internal heat of the earth (geothermal). About 9 percent of electricity in the U.S. is generated from renewable sources.

### Nonrenewable energy sources

These are natural resources are not replenished (fossil fuels such as oil, gas, and coal). About 71.5 percent of electricity in the U.S. is generated from nonrenewable sources. Most electricity in the United States is generated by burning non-

renewable fossil fuels and there is a limited amount of these energy sources.

In addition to renewable and nonrenewable energy sources, about 19.5 percent of electric power in the United States is generated by nuclear power plants. However, operating such plants poses significant nuclear waste disposal problems; consequently, there are no current plans to build more.

### Why is energy conservation important?

Because of the limited amount of nonrenewable energy sources on Earth, it is important to conserve our current supply or to use renewable sources so that our natural resources

are available for future generations. Energy conservation is also important because consumption of nonrenewable sources impacts the environment.

Specifically, our use of fossil fuels contributes to air and water pollution. For example, carbon dioxide is produced when oil, coal, and gases combust in power stations, heating systems, and car engines. Carbon dioxide in the atmosphere acts as a transparent blanket, which contributes to the global warming of the earth, or “greenhouse effect.” It is possible that this warming trend could significantly alter our weather.

Possible impacts include a threat to human health, environmental impacts such as rising sea levels that can damage coastal areas, and major changes in vegetation growth patterns that could cause some plant and animal species to become extinct. Sulfur dioxide is also emitted into the air when coal is burned. The sulfur dioxide reacts with water and oxygen in the clouds to form precipitation known as “acid rain.” Acid rain can kill fish and trees and damage limestone buildings and statues. You can help solve these global problems.

In the United States, the average family’s energy use generates more than 11,200 pounds of air pollutants each year. Therefore, every unit (or kilowatt) of electricity conserved reduces the environmental impact of energy use.

*continued on page 14*

## Health Records project

*continued from page 8*

While electronic records storage has been around a long time, there is still much research to be done in this area. Continuing research into methods of data compression, that compresses data for storage but is able to monitor what is retrieved to ensure that there is no loss of data, is ongoing by UNLV. Research is needed on forms recognition programs for scanning data, automatic indexing of scanned

files, and continued research on optical character recognition technology, and the ability to scan large amounts of paper data and batch up load it to the computer system and index the data for retrieval. The time frame depends on how rapidly the DOE will move into the e-records data storage system that is accessible via the internet to authorized users. If you would like more information about the Medical Record Knowledge Discovery and Information Management Project, please contact **Bill Bunn**, NNSA/NV (702-295-7207).



### Bechtel Nevada

- 35 years *Las Vegas* - **Michael Lukens, Raymond O'Connor, Jr**
- 30 years *Las Vegas* - **Emeldia Washington**
- 25 years *Nevada Test Site* - **Martin Gonska, Henry Jackson, Jr.; Special Technologies Laboratory - Rosalie Robledo; RSL - Andrews Operations - Crestle Watson, Jr.**
- 20 years *Las Vegas* - **Jane Pete, Karen Theuer, Maceo Woolard, Jr.; Nevada Test Site - Gary Hanson, Patricia Williams**
- 10 years *Las Vegas* - **Brian Allen; Nevada Test Site - Louis Tharin**
- 5 years *Las Vegas* - **Karen Caneva; Nevada Test Site - James Collet, Jerry Daniels, Charles Finch, Anthony Garcia, Jason Jenkins, James Lawler, Kenneth Machylnia, Richard Schmidt; Los Alamos Operations - Gregory Lare**

- New Hires *Las Vegas* - **Daniel Allred, Loretta Baraga, Courtney Brown, Michael Bryant, Adam Clark, Itaska Cole, Shane Gillett, Wallace Griggs, Gloria Gunn, Kim Holton, Scott Jenkins, David Mitchell, Jeffrey Mortensen, John Painter, Michael Sanders; Nevada Test Site - Michael Belangia, Dianne Bell, Wallace Bowman III, Kevin Breen, Timothy Buer, Martin Cavanaugh, Natasha Checkovich, Augusto Dionizio, Karen Griffin, Daniel Jensen, Brian Memmott, Howard Ostfeld, Daniel Phelan, Russell Shelton; RSL-Andrews Operations - Henry**

- Adams, Jr., Roger Gima; Los Alamos Operations - Angela Cata, Bradley Delamarter, Guadalupe Diaz, Michael Rutkowski, Jr.; Livermore Operations - James Tellinghuisen, Ann Thurman**

### National Nuclear Security Administration Nevada Operation Office

- 25 years **Carl Gertz, Michael Remington**
- 15 years **Elaine Jimenez, Wilhelm "Bill" Wilborn**
- 10 years **John Jones**

### Desert Research Institute

- 25 years **Richard Stone**
- 20 years **David Mitchell**
- 15 years **Charles Russell**
- 5 years **Catherine Cahill**

### IT Corp.

- 10 years **Deborah Eckardt**
- 5 years **Beatriz Bordelois**

### Wackenhut Services Inc.

- 10 years *Las Vegas* - **Trudy Rocha, Rae Yuhas**

— *Compiled by Tamiko Brown*

# Partnering for Education



*This new feature will highlight the programs and activities of the U.S. Department of Energy Nevada Operations Office and Bechtel Nevada's partnership with the Clark County School District's Focus School Program.*

## Focus schools book drive

by Judith Lacuadra

Books, books, everywhere books! Books donated for the Focus School Book Drive have been collected for students at Jim Bridger Junior High School, Kit Carson Elementary School, and Quannah McCall Elementary School. Students at these schools will receive a great variety and selection to read throughout the years.

To the employees, who contributed books, thank you. If you did not have a chance to donate your books and are still interested in donating, the drive will continue throughout the upcoming school year. So, you can contribute books any time.

Jim Bridger Junior High, Kit Carson Elementary and Quannah McCall Schools will receive the books shortly after school begins.

If you have any questions or would like to donate books, contact **Judith Lacuadra, BN (295- 1688)**.

## WSI-NV donates clothing to Quannah McCall

by Sheril Hamlin

The employees of Wackenhut Services, Incorporated – Nevada Operations (WSI-NV) came through again for the students at Quannah McCall Elementary School.

**Mary Manchego**, principal at Quannah McCall Elementary School, recently shared a heart-wrenching story with members of the Community Outreach Committee (COC). A student did not attend school because his/her family could not afford to purchase shoes for the child. The COC immediately saw a need and jumped into action. Every section within WSI-NV was challenged to bring in as many clothing items as they possibly could. Their response was absolutely overwhelming.

Each section attempted to “out do” the other sections. When the drive ended, members of the support section won the “friendly competition.” However, the real winners were the Quannah McCall students. Approximately 450 clothing items, with an estimated value of more than \$1,500, were donated to the school to help ensure that the children, our future leaders, can attend school and receive the education they need to succeed.

“WSI-NV employees are the best and I am extremely proud to be associated with a group of people who care enough to give back to our community and look toward the future,” **Sheril Hamlin** proudly stated.



Photo by Brad Hamlin

*Employee representatives from Wackenhut Services, Inc. - Nevada Operations present clothing and shoes donated by fellow employees to **Mary Manchego**, Quannah McCall's principal. Representing WSI-NV are (from left) **Mary Maier**, deputy general manager; **Sheril Hamlin**, executive assistant/outreach coordinator; **Lisa Eggert**, Quannah McCall's counselor; **Mary Manchego**, Quannah McCall's principal; and **Ann Gustavson**, human resources manager.*

# CALENDAR OF EVENTS

## September 24

NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, HAZMAT Spill Center, Bilby Crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702-295-0944)**.

## September 24 (11:30 a.m. to 12:30 p.m.)

Energizers Toastmasters club meeting. Pioche Conference Room (C205), Nevada Support Facility. Contact **Kirsten Kellogg, NNSA/NV (702-295-1821)**.

## October 8

Energizers Toastmasters club meeting. Pioche Conference Room (C205), Nevada Support Facility. Contact **Kirsten Kellogg, NNSA/NV (702-295-1821)**.

## October 9

Community Advisory Board meeting. Grant Sawyer Building, 555 E. Washington, Avenue, Room 4401, Las Vegas, Nevada. Contact **Kelly Kozeliski, NNSA/NV (702-295-2836)**.

## October 14

NNSA/NV offices closed in observance of Columbus Day.

## October 22

Energizers Toastmasters club meeting. Pioche Conference Room (C205), Nevada Support Facility. Contact **Kirsten Kellogg, NNSA/NV (702-295-1821)**.

## October 24

NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, HAZMAT Spill Center, Bilby Crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702-**

**295-0944)**.

## November 11

NNSA/NV and contractor offices closed in observance of Veteran's Day.

## November 12

Energizers Toastmasters club meeting. Pioche Conference Room (C205), Nevada Support Facility. Contact **Kirsten Kellogg, NNSA/NV (702-295-1821)**.

## November 19

NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, HAZMAT Spill Center, Bilby Crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702-295-0944)**.

## November 28 and 29

NNSA/NV and contractor offices closed in observance of Thanksgiving holiday.

## December 12

NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, HAZMAT Spill Center, Bilby Crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702-295-0944)**.

## December 25

NNSA/NV and contractor offices closed in observance of Christmas holiday.

## January 8, 2003

Community Advisory Board meeting. Grant Sawyer Building, 555 E. Washington, Avenue, Room 4401, Las Vegas, Nevada. Contact **Kelly Kozeliski, NNSA/NV (702-295-2836)**.

## January 15

NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, HAZMAT Spill Center, Bilby Crater, Area 5 Low-

level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702-295-0944)**.

## Declassified Film Showings

For information on declassified film showings at NTS CP-1, contact **Denise Langendorf (702- 295-4015)**. For information on declassified film showings at NTS Yucca Mountain, contact **Rod Rodriguez (702-295-5825)**.

## Upcoming conferences and trade shows

### October 3-10

Project Management Institute (PMI) 2002. Henry B. Gonzales Convention Center, San Antonio, Texas. For additional information, visit [www.pmi2002.fusionproductions.com](http://www.pmi2002.fusionproductions.com).

### October 9-12

2002 Society of Women Engineers National Conference. The Cobo Conference/Exhibition Center, Detroit, Michigan. For additional information, visit [www.swe.org/SWE/Convention/detroit/](http://www.swe.org/SWE/Convention/detroit/).

### October 12-16

IAEM 2002 Annual Conference and Exhibit. Greater Columbus Convention Center, Columbus, Ohio. For additional information, visit [www.iaem.com](http://www.iaem.com).

### November 3-7

Civil Engineering Conference and Exposition. Washington Convention Center, Washington, D.C. For additional information, visit [www.asce.org/conferences/annual02/conference\\_facts.html](http://www.asce.org/conferences/annual02/conference_facts.html).

## Energy conservation

*continued from page 10*

### How can pollution prevention (P2) help you?

The following four P2 concepts can help you evaluate your household energy use and identify ways to conserve energy. These concepts will significantly reduce a family utility bill and other energy costs over a year.

#### Changing What You Use

- Walk, ride a bicycle, or use mass transit instead of driving; automobile emissions account for about 60 percent of air pollution in our cities.
- Install compact fluorescent light bulbs that use less energy and last 10 times longer than incandescent light bulbs.
- Air-dry your clothes on a laundry line instead of using a clothes dryer.
- Install a programmable thermostat that automatically adjusts the temperature when you are in bed or away.
- Buy energy-efficient appliances. There are standard energy use tags attached to most new appliances that can help you determine which appliances are the most efficient. These appliances are usually more costly, but your utility bill savings will quickly make up for the extra cost.

#### Changing What You Do

- Set the thermostat to 68 F in winter when you're home and down to 55 F when you go to bed or are away (pro-

- grammable thermostats can do this automatically).
- Insulate the ceiling, walls, and floor of your home.
- Plant a tree next to a window for shade to reduce the need for air conditioning.
- Recycle items such as newspaper, aluminum cans, and plastic bottles; recycling these items requires less energy than producing them from brand new, raw materials.
- Wash clothes in cold water and only in full loads.
- Use energy-saving settings on washing machines, dish washers, and clothes dryers.

#### Improving Your Housekeeping

- Turn down the water heater thermostat to 120 F.
- Turn off lights when leaving a room.
- Close heating vents and close doors to unused rooms.
- Close drapes and windows during sunny summer days and after sunset in cooler weather.
- Caulk or add weather stripping around windows and doors to stop air leaks. Air leaks can rob your house of heat in the winter or make it too humid in the summer. Air leaks may impact your heating and cooling costs by as much as 40 percent.
- Clean or change air filters on your air heating system in the winter and on air conditioning units in the summer so that they work more efficiently.

For other energy savings ideas, check with your local power company. To calculate your home's potential energy savings, use the Home Energy Saver found on the U.S. Department of Energy's Home Page ([www.homeenergysaver.lbl.gov](http://www.homeenergysaver.lbl.gov)).

Watch for a new feature, *Face-to-Face*, in next month's issue! *Face-to-Face* will introduce co-workers from around the NNSA/NV complex to *SiteLines* readers. Now you can put a face with a name and learn more about your co-workers! Look for this new feature in the October and future issues.



*Published monthly for all members of the NNSA/NV family.  
 Kathleen A. Carlson, Manager, NNSA, Nevada Operations Office.  
 Darwin J. Morgan, Director, Office of Public Affairs and Information.  
 Submit articles or ideas to the editor at 702-295-5792 or M/S NLV 106.*

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