



2004

Issue I

CENTRAL



REGION



CENTRAL REGIONAL ENVIRONMENTAL OFFICE

US ARMY ENVIRONMENTAL CENTER

Kansas National Guard Wins 2003 Secretary of the Army Award for Installation Environmental Quality

Army Unit on the Cutting Edge of Environmental Quality

Staff Notes

Central Regional Environmental Office

"Innovative" is the term that has been used in describing the Kansas Army National Guard's (KSARNG) approach to environmental quality. Over the past few years, the KSARNG has implemented new technologies and initiatives at its 90-plus armories and facilities across the state including:

- high volume-low pressure paint guns that reduce air emissions and user-



One of a series of experimental erosion control dikes installed by the KSARNG in keeping with its theme of "Guardians of the Prairie." *Photo Courtesy of the KS Army National Guard.*

fatigue caused by routine painting activities;

- a recycling program that collected more than 305,000 pounds of recyclable materials in two years and saved the Army almost \$70,000 in FY01;
- a series of small-scale erosion control experiments to determine the most effective and efficient way to minimize erosion of firebreaks and training areas;
- a comprehensive spill prevention and response program; and
- distance learning training packages on topics including Occupational Safety and Health Administration Hazard Communications and Cultural, Natural Resources and Pollution Prevention Awareness.

These efforts and many others helped the Kansas Guard win an FY 2003 Secretary of the Army Environmental Award for Environmental Quality. Cost savings from these initiatives have allowed commanders to allocate more funding for equipment and training, which increases readiness for crisis or emergency responses, thus better balancing environmental and military missions.

Most if not all of these initiatives can be attributed to KSARNG's proactive, risk-based approach to environmental quality, which is implemented through its Internal Environmental Compliance Assessment System (IECAS) program. This program

conducts annual visits to all facilities classified as Kansas hazardous waste generators. Procedures and supplies necessary to maintain compliance are identified and implemented and units are assisted in maintaining compliance through on-site personnel training and equipment setup.

In addition, the Kansas Guard is the only military unit to serve on the EPA's Region 7 Pollution Prevention Roundtable that works to improve the effectiveness of and cooperation among programs in Iowa, Kansas, Missouri and Nebraska. This illustrates EPA's recognition of KSARNG's commitment to the environment.

"As part of Region 7's Pollution

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Chief Commentary

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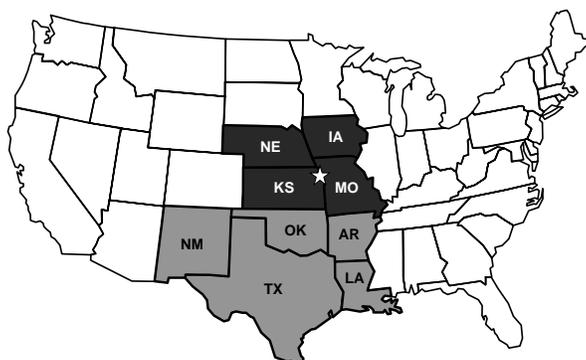


About a year ago, I wrote a commentary on my participation in a DoD Land Use Partnering Workshop I had attended. The purpose of this dialogue was to take the first steps towards discussing implementation of Sections 2811 and 2812 of last years Defense Appropriations Act (a.k.a. "buffer zone legislation"). Since that time things have progressed to the point of establishing an Army Compatible Use Buffer (ACUB) program to implement these provisions.

At that time I said that what this highlighted to me was the continuing need for Installation and Garrison Commanders to engage their surrounding communities and local and regional planning agencies. This is particularly true in light of all the current concerns regarding the sustainability of our installations and efforts to ward off those issues that result in what we in DoD would refer to as "encroachment."

The momentum in this area keeps building, especially in terms of the recognition at the highest levels within the DoD. For example, the Deputy Under Secretary of Defense (Installations and Environment) (DUSD (I&E)) is about to sign a memorandum for the service Assistant Secretaries urging them to use a tool available to work with state and local governments in order to combat issues that negatively affect our installations sustainability (a.k.a. "encroachment"). For the Army, that means moving out with tools like the ACUB, the Sustainable Range Program, and the implementation of forthcoming changes to the Master Planning process. Some of these changes include a requirement for a formal environmental assessment of the Master Plan, increased emphasis on sustainability, land use controls, Joint Land Use Studies, and intergovernmental coordination.

To borrow from the late "Tip" O'Neill who used to say, "All politics are local," we could say "All land use decisions are local." To maintain the sustainability of our installations in the face of growing competition for scarce resources, we're going to need to aggressively use every tool available to us. In this regard, the real test of our success will be the effectiveness of the interface between the installation and the surrounding communities.



CREO Nine-State Area of Responsibility

DoD REC Region 7	
Army REC Region 6	
Army REC Region 7	

CREO Participation Calendar DoD REC Region 7 Army RECs Regions 6 & 7

- 4/5-7 Region 7 P2 Roundtable, Kearny, NE
- 4/7 New Mexico Environmental Partnership, Albuquerque, NM
- 4/14-16 Southwest Strategies Border Task Team, Albuquerque, NM
- 4/22 Earth Day Activities, Lawrence, KS
- 4/20 Southwest Strategies TRST, Ak-Chin, AZ
- 4/20-23 Region 7 Environmental Conference, Kansas City, MO
- 5/6 Texas Environmental Partnership, Austin, TX
- 5/17-20 Global Demilitarization Symposium, Dallas, TX
- 8/16-19 9th Annual Joint Services Environmental Management Conference
- 8/16-20 ITAM Workshop, San Francisco, CA
- 8/22-27 DoD Conservation Conference, Savannah, GA

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Fort Sill Team Devises Innovative Long-Term Research Method That Minimizes Training Disruptions

ITAM & Oklahoma State Univ. Staff
Fort Sill, Oklahoma

In summer 2003, Fort Sill's Integrated Training Area Management (ITAM) team and Oklahoma State University initiated a research project aimed at studying the impacts of military training on mixed-grass prairie communities. The usual experimental design variables that researchers must account for include sampling location, scale of observation, number of sampling units, length of study, and season of observation in order to test hypotheses or monitor a landscape. The exact location of the study plot is a given under most circumstances. However, investigators on military reservations face a most unique challenge; that challenge is to effectively and efficiently mark the study areas so that they can be re-identified and revisited easily without impeding training



ITAM Coordinator with a Seibert Stake that was destroyed during training at Fort Sill. *Photo Courtesy of Fort Sill.*

missions or causing disturbance beyond normal training requirements.

As the experimental design for the project began, the ITAM team considered several options for sampling site plot markers that met the following criteria:

- ease of identifying the same locations on subsequent visits,
- lifespan, and
- cost.

Plot markers considered for this study

included standard ITAM Land Condition Trend Analysis (LCTA) protocol, such as polyvinyl flags, Seibert Stakes or other off-limits signs. LCTA protocols also recommend the use of buried steel pins and plates; however, use of the LCTA apparatus proved to be cumbersome and inefficient, even with the aid of GPS coordinates, photographs, and metal detectors because:

- GPS-located coordinates can carry an error of 1 to several meters.
- large amounts of metal debris (i.e., spent shell casings, etc.) from training missions scattered around plot locations can set off metal detectors that cause delays when searching for pins and plates.
- polyvinyl flags are inexpensive but can be displaced easily during training missions. Wind and sun also act to shorten the lifespan of a flag to perhaps one year or less.
- Seibert Stakes designed for areas deemed off limits are costly and subject to displacement during training.

None of the options discussed above would allow the ITAM team to easily re-identify plots without a high probability of marker displacement or damage, so they invoked some creativity to derive a solution with a little help from some friends.

In 1983, Fort Sill's Natural Resources unit began installing eastern bluebird boxes made from PVC throughout the post. The boxes are mounted on PVC covered t-posts for easy removal prior to prescribed burns and to prevent rodents from using them. A Fort Sill wildlife biologist explained that the eastern bluebird boxes have a surprisingly low destruction rate. "During the past 20 years, only 3 of the 133 bluebird boxes have been destroyed during military training missions. Units will park next to the boxes, set up, and live fire next



A Paladin prepares to live fire near an eastern bluebird house. *Photo Courtesy of Fort Sill.*

to the boxes, but for some reason they will not run them over", said the biologist.

The ITAM team installed 22 bluebird houses to mark permanently the ends of their research plots. The bird houses in the ITAM study were set 50 meters apart, in spite of the bluebird tendency not to nest within 100 yards from each other. It should be noted that Fort Sill's original set of bluebird houses are at least 100 yards apart. Within the first year, two of the houses became home to eastern bluebirds and many of the others were regularly visited perches for eastern meadowlarks.

Artillery and support vehicles seem to have no problem navigating around the houses at the 50 meter or 100 yard distance and are not deterred from using the areas. A buffer of five meters between houses and sampling areas was created to avoid any disturbance as a result of both installation and avian use of the boxes. Although, military training may prevent birds from actually occupying the houses in some cases, using them as a reference point is still an effective means of marking a study area. Birds' occupying the houses is a benefit that demonstrates that military training and wildlife can, in fact, coexist.

Community residents weren't surprised in 1995 after seven of the eight commissioners of the U.S. Base Realignment and Closure Commission decided that the Red River Army Depot was an essential part of military readiness. Red River was saved because it is a modern, well-maintained facility with dedicated and efficient employees. Red River has many advantages over other depots including newer infrastructure and facilities; a close proximity to Fort Hood, the largest military base in the country; and a central location, which provides timely and efficient logistics support to the U.S. Army throughout the Continental United States. The depot was and continues to be a keystone of national defense.

Today Red River provides depot maintenance for the Bradley Fighting Vehicle, Multiple Launch Rocket System (MLRS), and Combat Tactical Wheeled Vehicles. Its electronics repair facility supports the Bradley, MLRS, and a variety of missile support and aircraft armament subsy

Missile Site Near Kansas City Is Cleaned Up And Transferred To Local School

MO Department of Natural Resources
Public Affairs Office

An Army NIKE Battery missile site near Lone Jack (MO), just east of Kansas City, was transferred to the Lone Jack School District in a ceremony on at the local high school. The Deed of Transfer from the Department of the Army to the Lone Jack C-6 School District for the property was presented to the Lone Jack School Board during the ceremony. The ceremony highlighted the completion of the cleanup of the oldest Base Realignment and Closure (BRAC) site in the state of Missouri. This site can now be used by the Lone Jack School for a beneficial purpose, to better the school and the community.

The ceremony was hosted by Fort Leavenworth staff, who took the lead on the cleanup, and the Lone Jack School Superintendent and School Board. Also in attendance were Missouri Department of Natural Resources staff from the Hazardous Waste Program, the EPA project manager and community members. Congresswoman Karen McCarthy, representing Missouri's 5th Congressional District, congratulated the various groups on their participation in this noteworthy event.

The site, NIKE KC 30, was acquired in 1958 as one of four NIKE bases built to protect the Midwest and Kansas City area from air attack. The NIKE Batteries closed in 1968 with all but KC 30 being donated to local government agencies or sold. KC 30 was used as a Missouri National Guard training center until a new center was constructed. The site was then deactivated and placed on the BRAC list in 1989.

Fort Leavenworth is the Army installation that assumed responsibility for the site and has been working with the Kansas City District Corps of Engineers to clean up and ready the site for transfer. KC 30 consists of



School Board receives plaque and keys to the former Nike missile site from the U.S. Army Corps of Engineers. *Photo courtesy of Missouri Department of Natural Resources.*

19.5 acres with a four-acre easement.

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fer. KC 30 consists of 19.5 acres with a four-acre easement.

The Lone Jack School District applied, through the Department of Education, to acquire the property in 1994, but the transfer could not take place until all environmental remediation was complete. With the completion of the remediation of the contamination on the facility, which included asbestos removal, clean up of oil contamination sites, and the demolition of buildings that presented safety hazards, the Lone Jack C-6 School Board approved acceptance of the site, which was approved by the Department of Education. 



Abandoned buildings prior to demolition. Open field after building demolition and removal of debris.



Matters of Interest to All DoD Components



Legally Brief

Developing New Regulations...The Long and Winding Road

By Stanley Rasmussen
CREO Regional Counsel

In 1969 when the Beatles recorded "The Long and Winding Road," little did they know that they were describing the regulatory development process in most states in the United States. This article explores the regulatory development process by reviewing an example of such a process currently under way in the State of Kansas for new land use control regulations.

What are regulations? Regulations are issued by various government agencies of the executive branch to carry out the intent of laws passed by the legislative branch. The purpose of regulations is to guide the activity of the regulated community and of the agency's own employees. In theory, regulations are not "laws" because they are not the product of the legislative process, but in reality, they carry the same force and effect of laws.

In 2002, the U.S. Army Central Regional Environmental Office (CREO) participated on a committee to help draft proposed legislation for a land use control (LUC) statute in Kansas. LUCs enable entities with hazardous waste sites to remediate the site to a lesser standard than unrestricted residential use, thus enabling the entity to save a substantial amount of money in the remediation project. In 2003, the Kansas State Legislature eventually approved a LUC bill that was ultimately signed by the Governor.

Starting in the fall of 2003, the CREO participated on a committee to help draft the regulations to implement the new LUC statute in Kansas. The committee completed the draft regulations in late January 2004, but promulgation of

the final regulations are not expected to occur until sometime in 2005. Why will it take more than a year to get to the point where the regulations are actually in force and effect? Read on and see why.

In Kansas, like many other states, the regulatory process goes through several internal reviews before the process is completed. The following is a summary of the Kansas process:

- Draft the regulations—This process took approximately 4 months for the LUC.
- Agency Concurrence—This process is an internal review within the Kansas Department of Health and Environment (KDHE). It is anticipated to take 1 to 2 months to complete.
- Department of Administration Review—This agency review process will rewrite the regulations to ensure conformity with good regulatory format. It is anticipated to take 1 to 2 months to complete.
- Attorney General Review—The Kansas Attorney General Office will complete a double review by two staff attorneys. During this process the regulatory language may be revised in coordination with the KDHE. This process is anticipated to take 3 months to complete.
- Benefit Statement—Upon completing the reviews described above the KDHE will prepare an Environment Benefit Statement and Economic Benefit Statement to describe the environmental and economic impacts of the regulations upon the state and the regulated entities. At this step the proposed regulations and the benefit statements are published in the Kansas Register to provide the

public an opportunity to initiate its review of the proposed regulations. This process will take approximately 1 month to complete.

- Committee Review—KDHE will review the final proposed regulations in a joint committee process. During this process, public comments to the proposed regulations will be accepted and considered. This is anticipated to take 2 months to complete.
- Public Hearing—A public hearing is held to provide an opportunity for any final public comments. One month is assumed to be sufficient time to complete this step.
- Final Publication—Once the revisions are made from the committee review and public hearing process, the final regulations are published in the Kansas Register to notify the public of the final status of the regulations. This step will take one month to complete.

As you can see from the above process description, the entire regulation development, from initial drafting through promulgation, is anticipated to take 14 to 16 months. At first glance this length of time may seem unreasonable, however, proceeding with an abundance of caution to ensure that the proposed regulations do not contravene or conflict current regulations is a good justification for why the process is lengthy. Accordingly, during the next year, CREO will actively monitor the process to ensure that regulatory language, critical to the ability for military installations to avail themselves of the LUC program, is retained.

CREO will monitor this case with great

(Continued on page 8)

Scientists Debate Important Perchlorate Issues

Staff Notes

Central Regional Environmental Office

The focus on perchlorate in the United States emerged in the spring of 1997 when development of an analytical method with a quantitation limit at 4 ppb became available. In that same year, the US Environmental Protection Agency (EPA) was engaged in developing a strategy to evaluate the potential human health and ecotoxicologic effects of potential perchlorate exposures. The National Center for Environmental Assessment then released an external review draft in 1998 and recommendations for additional studies and analyses were made at a 1999 scientific peer review. The external review draft of the revised document, "Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization" responds to those recommendations and incorporates results from extensive laboratory and field studies performed since 1999.

A scientific exchange took place at the 2003 Perchlorate State-of-the-Science Symposium that was held in Omaha, NE (29 September through 1 October 2003) with investigators presenting findings of the most recent scientific studies on perchlorate and panels of scientists expressing views on those studies. The significance of these discussions is that they question some basic assumptions of a number of recent government efforts to assess the safe level of perchlorate exposure. Experts from leading institutions in the U.S. and Canada who have expertise in scientific areas that are critically related to the study of perchlorate took part in this symposium. These scientists included toxicologists, epidemiologists, risk assessment experts, clinicians, statisticians, neuro-developmental scientists, thyroid endocrinologists, and pharmacologists.

The Symposium was designed to allow researchers who have conducted recent scientific studies on perchlorate to present their work. Leading independent scientific experts then evaluated and

critiqued those studies in order to develop consensus reports on the state-of-the-science as of 2003. The Symposium was structured around the Office of Management and Budget's Draft Peer Review Standards for Regulatory Science issued in August 2003. Four scientific issues were addressed: (1) Analysis and Interpretation of Developmental Rat Brain Morphometry Studies, (2) Analysis and Interpretation of Developmental Animal Studies, (3) Adequacy and Relevance of Human Data, and (4) Alternative Definitions of "Adverse" Effects.

Generally, all parties agreed that perchlorate affected the thyroid gland but the panels of expert scientists concluded that the studies presented at the symposium were not definitive and could not be used for any decision-making purposes. The reasons given for this conclusion are presented below:

- Inadequate study design (e.g. length of exposure to perchlorate);
- Inadequate selection of measurement end points (e.g. brain measurements, behavioral testing);
- Inadequate statistical analytical methodologies;
- Lack of agreement between test results and scientific literature.

"It is the firm opinion of panel members that these studies allow us to draw no conclusions with respect to the effects of perchlorate on rats," said Dr. Harold L. Schwartz, Ph.D., professor of medicine at the University of California-Irvine and an expert in thyroid hormones who spoke for the scientific panel discussing Issue 1. "We recommend setting them aside and conducting new studies."

A separate panel of independent scientists who examined recent animal behavior studies on perchlorate recommended these studies not be used for estimating perchlorate's effects on the developmental central nervous system.

While noting the studies were carried out professionally and competently, the scientific experts offered seven specific criticisms of the studies' design. "These experiments are inadequate in demonstrating significant risks from exposure to perchlorate, and likewise they failed to demonstrate the absence of risks," said Sam Sanderson, Ph.D., a University of Nebraska Medical Center professor who facilitated the module and presented the expert panel's results. "The results are invalid and the conclusions of these studies should not be used in any way."

A panel of scientists and physicians discussing Issue 3 concluded that there are a number of human studies that provide important information about the effect of perchlorate on humans. The scientists opined that "human studies offer greater insight than animal studies into the affects of perchlorate at high doses (doses that are far higher than what is found in U.S. drinking water supplies)". Scientists also stated that more human research related to sensitive populations should be considered.

A fourth panel of scientists examined what constitutes an "adverse effect" to the thyroidal system (Issue 4), and concluded that the inhibition of iodide uptake "clearly is not an adverse effect but is instead a mundane biochemical event". Moreover, they also concluded that "changes in thyroid hormone levels by themselves are not harmful".

Dr. Michael Dourson of Toxicology Excellence for Risk Assessment (TERA), an invited speaker and acknowledged expert in risk assessment, stated that the database for development of a Reference Dose (RfD) for perchlorate is "replete". Moreover, Dr. Dourson stated that a Reference Dose (RfD) of 0.002 mg/Kg-day can be calculated using current information with a "high" level of confidence. This RfD equates to a drinking water concentration of 0.07 mg/L or

(Continued on page 11)

Former Richards-Gebaur Air Force Base Restoration Advisory Board Adjourns

By Public Affairs Office

MO Department Of Natural Resources

Established in February 1994, the Restoration Advisory Board (RAB) at the former Richards-Gebaur Air Force Base is a forum composed of five groups. The groups represent personnel from the Air Force Real Property Agency, U.S. Army Corps of Engineers, Missouri Department of Natural Resources, Environmental Protection Agency, and community members. The RAB is a Department of Defense tool, designed to give stakeholders an opportunity to participate in the cleanup process.

On 6 November 2003, the RAB was adjourned. The decision to adjourn the RAB was reached in consultation with the community. The topic was included as part of the RAB meeting agenda on 6 November and was discussed by the active membership. The community was given an opportunity to comment on the adjournment of the RAB during a 30-day public comment period, which concluded before the November board meeting.

The RAB's purpose was to give the community information and the opportunity to provide input on cleanup deci-

sions at the former air force base. It provided a mechanism for the Air Force and the Army Corps of Engineers to disseminate information regarding the investigation and cleanup of contaminated property to interested members of the community. It also gave the community the opportunity to voice their concerns and questions to the state and federal agencies.

The upcoming finalization and signature of the Record of Decision for Operable Units 1 and 2 will document the final decision regarding the cleanup of the former Richards-Gebaur AFB. Because of this major step toward program completion, the Air Force and Army Corps of Engineers proposed that the RAB members jointly consider adjournment of the RAB. The Air Force



Richards-Gebaur AFB Restoration Advisory Board Adjournment Meeting.
Photo courtesy of Missouri Department of Natural Resources.

and Army Corps of Engineers will continue to disseminate information to the public and provide opportunities for community involvement as it conducts long-term monitoring of the environmental conditions at the former base. Various outreach options that will be available to keep the community involved include public meetings, poster sessions, newsletters, and articles in local newspapers.



(Legally Brief, continued from page 6)

interest. Accordingly, I will report on the outcome of this case in a future edition of this newsletter.

If you want further information concerning the specific issues in this case or any other environmental legal issue, please contact the CREO Regional Counsel at 816-983-3448.

A Legally Brief Note

In the last Legally Brief, the Supreme Court Case of *Alaska Department of Environmental Conservation (ADEC) v. US Environmental Protection Agency (EPA)* was discussed. On 21 January 2004, the Supreme Court issued a 5 – 4 decision in favor of EPA. Writing for the majority, Justice Ginsburg noted that Congress first enacted the Clean Air Act (CAA) in response to dissatisfaction with state air programs. Although noting that ADEC was correct that states have initial responsibility for Best Available Control Technology (BACT) determinations, the Court pointed out that Congress gave EPA "explicit and sweeping authority to enforce CAA requirement". The Court continued: "[w]e fail to see why Congress, having expressly endorsed an expansive surveillance role for EPA ...would implicitly preclude the Agency from verifying substantive compliance with BACT provisions." Finally, the Court went on to note that ADEC can still go back and provide more justification to support their BACT analysis and that EPA is supportive of this option.

Fort Chaffee First Army Facility Declared "Ready for Reuse"

On 25 February 2004, the U.S. Environmental Protection Agency (EPA) and the Arkansas Department of Environmental Quality (ADEQ) issued the first "ready for reuse" determination to a U.S. Army installation to Fort Chaffee, Arkansas. Both ADEQ and EPA agreed that the Army has successfully completed its evaluation and, where necessary, cleanup of specific portions of the facility. The "ready for reuse" determination verifies that the environmental conditions on these sites are protective of human health and the environment based on their current and anticipated use as commercial/industrial and residential properties.

ADEQ Director Marcus Devine said, "I am pleased with the example of cooperation established in this cleanup project between the U.S. Army, Fort Chaffee Redevelopment Authority, EPA Region 6 and ADEQ. This type of partnership bodes well for all of us, and especially for the West Arkansas region. I believe we can replicate this precedent and make this level of cooperation common across the state".

Fort Chaffee is located approximately seven miles southeast of Fort Smith, Arkansas. In 1995, the base was ordered closed under the federal Base Realignment and Closure program, but with essential firing ranges, facilities and training areas maintained as an Army reserve training center. In 1997, some 64,000



Trac-hoe excavating contaminated soil.
Photo courtesy of EPA.

acres were turned over to the Arkansas Army National Guard, and approximately 7,000 acres were declared excess and transferred from the Department of the Army to the Fort Chaffee Redevelopment Authority Board.

Built in 1941, Fort Chaffee was the training site for thousands of troops headed overseas during World War II. In 1958, Elvis Presley began Army basic training there. In more recent years, Fort Chaffee served as a reserve training center and an indoctrination facility for Vietnamese and later Cuban refugees.

Over the past eight years more than 100 contaminated sites were investigated and cleaned up as necessary to make the property suitable for transfer to the public. The clean up included removing underground fuel storage tanks, covering landfills and remediating

contaminated ground water. In addition, clean up crews had to contend with storage areas for the toxic pesticide DDT, open ammunition detonation grounds, waste oil accumulation pits, contaminated oil trenches, and 770 buildings mostly World War II era barracks with potential for asbestos and lead-based paint. Ongoing monitoring of landfills and ground water will continue to ensure no recurring problems. Bennett says one specific area where ground water monitoring will continue is stable now and can be used for industrial purposes, though no drinking water wells can be drilled there.

As various clean ups were completed, land and facilities have been transferred to the Fort Chaffee Redevelopment Authority. Several commercial operations, a golf course, and recreational areas already are operating on the former military base. The Fort Chaffee Redevelopment Authority currently is reviewing proposals for a commercial, residential and industrial development called Chaffee Crossing.

Fort Chaffee Redevelopment Authority Board Chairman Jerry R. Stewart, M.D., said, "This site will serve as the engine for the economic development efforts at the Fort Chaffee Redevelopment Authority and for Sebastian County, the city of Fort Smith, and the city of Barling."



The DoD Office of the Deputy Under Secretary (Installations and Environment) Announces the First American Indian Cultural Communications Course for 2004

This course is designed to help staff at DoD facilities understand the DoD American Indian/ Alaska Native Policy and how to implement it at their sites. The instruction covers three days, and special events are scheduled outside of class time. The course is taught primarily by American Indian trainers, with some segments presented by DoD and regional American Indian participants. The following topics are covered in the course: the history of American Indian laws and the legal base for DoD policy; Federal laws and policies impacting DoD relationships with American Indians; an introduction to tribal concepts and culture; cross-cultural communication; and strategies for consulting with tribes. The course will be held on **27-29 April** at the **Washoe County National Guard Armory, Reno, Nevada**. For a video overview, see a 2-minute introduction on DENIX at: <https://www.denix.osd.mil/denix/Public/Native/trainingcourse.html>. There is no registration fee, but class size is limited to those who have the most critical need to use this information for military mission planning and consultation. For additional details, please contact Course Coordinator/Georgia State University, Atlanta, GA at (678) 357-6513 (day or evening) or e-mail donata@mindspring.com.



Partnerships with the Nature Conservancy – A Valuable Tool for Conservation and Range Sustainability

Bob Barnes

The Nature Conservancy

The Nature Conservancy (TNC) is the nation's largest conservation organization. Its mission is to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The TNC approach is to identify, using the best available science, the most valuable lands needing protection, and then to work in partnership with others to protect that land, either through acquisition from willing sellers or by conservation partnerships.

TNC has enjoyed a long-standing partnership with the Department of Defense (DoD) and installations across the country – a history of working together to achieve common goals that is reflected in the current Cooperative Agreement between TNC and the DoD (available on DENIX). Over 400 hundred sub-agreements have been entered into between TNC local chapters and installations from all the services across the country.

Collaborative work “inside the fenceline” performed under these conservation partnerships has covered the gamut of conservation planning and action – from helping prepare Integrated

Natural Resource Management Plans to invasive species control, vegetation and wildlife inventories, fire planning and prescribed burns, and a host of other conservation actions.

It was just such a partnership between TNC and Fort Bragg that led to the Army's innovative “Private Lands Initiative,” the precursor of the “section 2811” encroachment buffering program. Faced with extensive training restrictions resulting from the need to protect habitat for the Red Cockaded Woodpecker, Fort Bragg turned to The Nature Conservancy, which identified key habitat off post that, if protected, would both advance endangered species recovery and result in greatly relaxed training restrictions on the post. Together, and with a number of other partners, including the US Fish and Wildlife Service, TNC and the Army acquired protective easements on those critical habitat areas and got relief from the most onerous restrictions.

The TNC-Fort Bragg partnership, and an equally innovative partnership between TNC and Fort Huachuca, were the models for the authority provided by Congress in section 2811 of

the FY 2003 National Defense Authorization Act for the military to partner with “eligible entities” (to include conservation groups like TNC) to acquire “buffers” in the vicinity of bases to preclude incompatible development and protect valuable habitat.

Pursuant to that new authority, TNC is partnering with approximately 20 bases around the country to develop proposals to establish buffers that will protect key habitat and help ensure the long-term sustainability of operations at those bases.

A partnership with TNC can be one of the most valuable tools in the toolbox for both conservation and sustainable range management. These partnerships can, address “inside the fenceline” conservation work, integration of planning with other conservation plans in the ecoregion, and identifying and pursuing opportunities to acquire buffers to ensure that installations will be able to perform their mission now and indefinitely into the future.

For more information on TNC-DoD partnerships, contact Bob Barnes at (703) 841-7406, e-mail: bbarnes@tnc.org.



(KSARNG Award, continued from page 1)

Prevention Roundtable, the KSARNG has served in a unique capacity, offering a military perspective on critical environmental issues,” said Marguerite Duffy, the panel's EPA representative. “This, along with many other initiatives, has established its environmental quality program as a premier Army program.” The KSARNG Environmental Office also earned the Eagle Award for receiving the highest overall score of all seven winners, demonstrating their commitment to going above and beyond all regulatory requirements in the fulfillment of their mission. In addition, the KSARNG Environmental Office has developed computer-based environmental training packages and has also produced an environmental awareness videotape titled “Guardians of the Prairie,” which is currently being used as a part of the ecology curricula at the United States Military Academy at West Point.

The First Runner-up in the Installation Environmental Quality category was 25th Infantry Division (L) and US Army, Hawaii. Other First Runners-up in the Central Region included Fort Leavenworth (Cultural Resources Management, Installation category) and Mr. Dennis M. Herbert, Ft. Hood, TX (Natural Resources Conservation, Individual/Team category).

A panel of non-military and Army experts from the Office of the Director of Environmental Programs, the EPA and the U.S. Army Environmental Center judged competitors for the Environmental Quality award. Winners go on to compete for Secretary of Defense Environmental Awards and the KSARNG is one of the few chosen to move on to compete for one of those awards.



EPA Publishes Final Guidance on Environmentally Preferable Purchasing

The EPA's Final Guidance is designed to help Executive agencies meet their obligations under EO 13101 to identify and purchase environmentally preferable products and services. Section 503 (c) of EO 13101 directs Executive agencies to "use the principles and concepts in the EPA Guidance on Acquisition of Environmentally Preferable Products and Services, in addition to the lessons from the pilot and demonstration projects to the maximum extent practicable, in identifying and purchasing environmentally preferable products and services" and "modify their procurement programs as appropriate." "Environmentally preferable" is defined in Section 201 of EO 13101 to mean products or services that "have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service."

In addition to promoting environmentally preferable purchasing, EO 13101 encourages Executive agencies to purchase bio-based products. (Section 504 (b)). Under the EO, "biobased product"

means "a commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal and marine) or forestry materials."

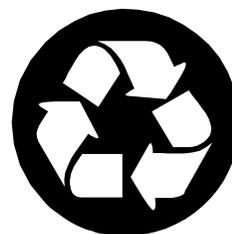
The guidance is not a step-by-step, "how to" guide. Instead, EPA has developed five guiding principles to provide broad guidance for applying environmentally preferable purchasing in the Federal government setting. Applicability of these principles in specific acquisitions will vary depending on a variety of factors, such as: the type and complexity of the product or service being purchased; whether or not the product or service is commercially-available; the type of procurement method used (e.g., negotiated contract, sealed bid, etc.); the time frame for the requirement; and the dollar amount of the requirement.

- **Guiding Principle 1: Environment + Price + Performance = Environmentally Preferable Purchasing.** Environmental considerations should become part of normal purchasing practice, consistent with such traditional factors as product safety, price, performance, and availability.
- **Guiding Principle 2: Pollution Prevention.** Consideration of environmental preferability should begin early in the acquisition process and

be rooted in the ethic of pollution prevention, which strives to eliminate or reduce, up-front, potential risks to human health and the environment.

- **Guiding Principle 3: Life Cycle Perspective/Multiple Attributes.** A product or service's environmental preferability is a function of multiple attributes from a life cycle perspective.
- **Guiding Principle 4: Comparison of Environmental Impacts.** Determining environmental preferability might involve comparing environmental impacts.
- **Guiding Principle 5: Environmental Performance Information.** Comprehensive, accurate, and meaningful information about the environmental performance of products or services is necessary in order to determine environmental preferability.

The full document can be found at <http://www.epa.gov/oppt/epp/guidance/finalguidancetoc.htm>.



(Perchlorate Debate continued from page 7)

70 ug/L. This drinking water concentration is approximately 5 to 15 times higher than the EPA Region 9 interim action level value of 4 to 18 ug/L. The development of the RiD included a "10-fold uncertainty factor to address toxicokinetic and toxicodynamic variability between healthy adults, pregnant women and children". More detailed scientific information regarding the perchlorate RiD and perchlorate in general can be found at <http://www.tera.org/Perchlorate/welcome.htm>.

To help resolve some of the issues surrounding perchlorate, the National Academy of Science established a committee to assess the adverse health effects resulting from ingestion of perchlorate from a clinical, toxicological, medical, and public health perspective. The committee has been charged with the responsibility to critically evaluate the scientific literature, including both human and animal data, and to assess the key studies underlying EPA's 2002 Draft Toxicological Review and Risk Characterization for Perchlorate in terms of quality, reliability, and relevance to draw conclusions about the health implications of exposure to low levels of perchlorate in drinking water. Based on the above review, the committee will determine whether EPA's findings in its 2002 Draft Toxicological Review and Risk Characterization for Perchlorate are consistent with the current scientific evidence. The committee is expected to issue a report of its findings in September 2004.

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Mission: The CREO supports the Army and DoD mission through coordination, communication and facilitation of environmental activities at state and regional levels. The Army REOs are part of a DoD Regional Environmental Coordination network in which the Army, Air Force and Navy each has lead responsibility for mission implementation in the 10 Standard Federal regions. For the U.S. Army, the Deputy Assistant Secretary for Environment, Safety, and Occupational Health has DoD executive agent responsibility for four of those regions (4, 5, 7, and 8). The other six are assigned to the Air Force and Navy. The CREO has DoD Regional Environmental Coordinator responsibility for Region 7 and Army Regional Environmental Coordinators for Regions 6 & 7. For more information on DoD Regional Environmental Coordinators and their activities please visit their website at <https://www.denix.osd.mil/denix/Public/Library/Partner/REC/rec.html>.

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