Audit Results	2
New Training Coordinator	3
Home Again	4
Reflections	5

Newsletter for the Employees of Ames Laboratory Volume 5, Number 11 December 1994



Environmental Audit Results

Report Reveals Lab's Strengths and Weaknesses

n response to Secretary of Energy Hazel O'Leary's policy for "a proactive program of continuous improvement to move the Department beyond minimal compliance with standards," the Office of Environ-

mental Audit conducts routine appraisals of DOE facilities. A 10-member team visited Ames Lab in September to review the Lab's environmental management systems and performance in waste management, toxic and chemical materials management, environmental quality assurance, and environmental monitoring and surveillance.

Strengths

The audit team identified three management practices that represent strengths or areas of excellence in Ames Lab's environmental program.

External Communications "Ames Lab has a very proactive external communications program associated with the chemical disposal site and former sewage treatment plant," says Bill Eckroade, audit team leader. "The community advisory group, public information sessions and Dear Neighbor letters have been very effective in keeping the public informed and getting support for this Laboratory activity. The external communications efforts by Laboratory senior management and the Office of Public Affairs have been very effective."



Ames Lab has established systems to ensure that environmental issues are addressed during the early stages of project development. The Ames Lab Proposal Submission Policy requires researchers initiating new Laboratory projects to complete the Preliminary Proposal Form prior to proposal

approval. The Readiness Review Procedure is another system established by the Laboratory to identify environmental issues in the early stages of new or changing project development. "These systems have been very well-thought-out, and I commend that," says Eckroade.

Hazardous Waste Management Training Program

"The noteworthy part is not that there is a hazardous waste training initiative but how the training is conducted," explains Eckroade. "Not only is the fundamental information provided, but the instructor has tailored the sessions to each group that generates waste. Each group is given practical laboratory-specific examples of things to do and things to avoid. That's noteworthy because that's not always done," he adds. "How many times have each of us come out of a training course and really not understood how to apply what we learned to our own jobs?"

Findings

"Ames Lab has made noticeable improvements," says
Eckroade. "Clearly you have been addressing specific issues that came out of the Tiger Team on improving your environmental management processes and capabilities, but overall, progress in your environmental program development remains slow.
There are several areas with deficiencies that need to be addressed."

Deficiencies are categorized as findings. Findings are conditions that, in the judgment of the audit team, may not satisfy one or more of the following: environmental regulations, DOE Orders, consent agreements with regulatory agencies, environmental permit conditions, DOE or contractor environmental policies and procedures, regulatory agency guidance, accepted industry practices or technical standards, DOE guidance or best management practices.

Following are the findings identified by the audit team in the report.

- 1. Roles and responsibilities for some environmental management activities at Ames Laboratory are not well defined, clearly communicated or consistently understood across the facility.
- **2.** Ames Laboratory does not conduct consistent, routine facility inspections as required.
- 3. Ames Laboratory has not fully developed or implemented a formal process for communicating routine environmental status information within line management.
- 4. The absence of close working relationships between Ames Laboratory's Environment, Safety and Health Group (ES&HG) and the ISU Environmental Health and Safety Group has resulted in lost opportunities to mutually improve environmental programs.
- **5.** Ames Laboratory ES&HG does not have adequate environmental staff resources and does not fully utilize the chemical safety technician.
- **6.** Ames Laboratory's corrective action system does not ensure that environmental action items are resolved in a timely manner.
- 7. Ames Laboratory does not conduct environmental appraisals of its operation in accordance with DOE Order 5482.1B, the August 1994 Ames Laboratory ES&H Program Manual and best management practices.
- **8.** Ames Laboratory has not implemented comprehensive systems to ensure that emer-

gency planning and reporting requirements under DOE Orders, CERCLA/SARA statutes and regulations, and state regulations are met.

- 9. The radioactive and mixed waste procedures provided in the Waste Management Program Manual are not fully developed regarding implementation, identification and management of potentially mixed wastes subject to the moratorium. In addition, a Waste Characterization Plan and a Transuranic Waste Certification plan have not been developed.
- 10. Ames Laboratory has not fully developed and implemented a program that ensures all hazardous waste management and waste minimization activities are performed in accordance with DOE, federal, state, and facility requirements and guidelines.
- 11. Ames Laboratory does not have an approved Environmental Monitoring Plan, and the current draft does not meet the requirements of DOE Order 5400.1 with respect to documentation of the effluent monitoring and environmental surveillance program.
- 12. Ames Laboratory has not prepared an Environmental Quality Assurance Program, and quality assurance has not been incorporated as a specific component of environmental monitoring programs.

Action plan coordinators have been assigned to respond to each of the 12 findings and to develop and write Ames Action Plans. Formal written responses correcting the deficiencies have been prepared and submitted to DOE for approval.

Enhancements in Store for Training Program

New Coordinator to Emphasize Hands-on Learning

mployees want to be active participants in the training process, and trainers need to be aware of that," says Barbara Egbert, with the confi-

dence of one who's been involved in training others for a good part of her professional career.

Egbert, new training coordinator for the Office of Assurance and Assessment (OAA), came to OAA well equipped to enhance and add depth to the Lab's training program. Her last position was with Rockwell International, where she first worked in the electronics training lab and later became manager of training development. She has a master's degree in technical communications and has focused her talents in the area of adult education. Egbert lives in Manson, Iowa, where her husband is a Lutheran minister. They have two daugh-

"Barbara's enthusiasm should energize the Lab's training program," says Tom Wessels, OAA manager. "Her education and experience will provide the knowledge and skills necessary to support the training efforts of the Lab's subject matter experts."

The Laboratory's training

program is still in the assessment stage of the development process, and staff members are working on a needs analysis, which will more fully define the program's mission statement. To help add direction to that effort, Egbert will conduct a number of table-top discussions, getting input on training ideas and issues from Lab employees representing a variety of areas and positions.

Although these tasks must be completed before OAA produces a formal mission statement for the training program, Egbert has developed a personal mission statement that expresses her philosophy about the value of effective training and guides her activities in that regard. "I view training as an ongoing process that provides individuals with a safe environment where they can gain a better understanding of their work," she says. "Training offers an avenue for both personal and professional development and allows individuals to participate in lifelong learning."

In her role as coordinator, Egbert looks forward to the challenge of boosting the degree of interactive learning in the Lab's training program. She will be working with a wide range of subject matter experts, helping them develop goals for the training activities they lead. "I might be considered a trainer for the trainers," says Egbert with a smile. "Part of my job is to facilitate communications, so I'll be working with the trainers on developing presentation skills and tools."

Egbert also hopes to make the training process more interactive and interesting for employees by implementing multimedia presentations. She would like to incorporate more computer-based applications in the training program and explains that there may even be the option of transporting training to one's own computer to work on as time allows.

Egbert draws from both inside and outside sources to give the training program a high degree of quality and diversity. She takes advantage of Lab experts, such as members of the Environment



Barbara Egbert

Safety and Health Group, and works closely with ISU's training and development staff to integrate training programs and avoid redundancy.

Although Egbert makes use of training resources both in and out of the Lab, OAA still holds and maintains documentation of all training modules and records. "All of our modules and records are centralized," she says. "But we're decentralized in terms of our instructors. It's a perfect mix because it allows us to stay current and respond to change."

New Employees

Shipping of Radioactive Wastes to Begin in December

hipping of radioactive chemical wastes buried at the Chemical Disposal Site (CDS) will begin soon. "Soil profiles of the waste have been sent to a designated disposal site in Utah for review and approval," says Rich Freeman, DOE project manager for the CDS. "We expect to get their approval to start shipping sometime during early December. Shipping should take about three weeks." Approximately 80 truckloads will be needed to ship the waste.

"We will be covering the site with some kind of mulch for the winter months, and the area will be revegetated next spring," says Freeman.
"Monitoring wells will also be installed in the spring." ■



These reinforced polyethylene super sacks, filled with contaminated soil, are ready to be shipped.

Diane Horsch, Systems Analyst II (Jim Corones)

Steven Kerschenbaum, Program Coordinator III (Jim Corones)

Robert Vincent, Visiting Scientist (Marek Pruski)

Home Again

Jenison Reflects on Time Abroad

magine living in a city of a million people, where all the stores close at 5:30, nothing is open on Sunday, gas is \$3.75 per gallon and dining out is almost twice as expensive as it is here.

Although Jerry Jenison, personnel officer, found these drawbacks somewhat bothersome and costly, he also discovered the many charms of Glasgow, Scotland. Nestled in a breathtaking land of rivers, hills and castles, Glasgow is a city that cherishes tradition. Morning and afternoon teas are customary, and the haunting tones of bagpipes still mingle with the sounds of the day.

Jenison and his family left for Glasgow on July 21 to take part in a three-month personnel exchange program with the University of Glasgow and the University of Strathclyde. "It was a chance for me to visit and work in a job setting in a different country and see how their personnel offices function," he says. "It was an excellent opportunity because I was able to work for six weeks at each university and experience the differences between them. The



Properly formal, Jerry Jenison leaves for his first day of work in Glasgow.

University of Glasgow was founded in 1451. It's steeped in tradition and is considered one of the four ancient universities in Scotland. The University of Strathclyde is modern in comparison, having only 30 years with university status."

Jenison exchanged jobs and homes with Liz and Norman Bell, personnel officers from the University of Glasgow and the University of Strathclyde who worked in the Lab's personnel office from July to October (see *Insider*, October 1994).

While at the University of Glasgow, Jenison worked on issues related to temporary employment contracts. During his time at the University of Strathclyde, he contributed to the development of a program designed to prepare prospective department heads for their new positions. "At Strathclyde they believe management training is essential to their operations, and contrary to most other management techniques, they are ahead of us in that area," says Jenison. "The fact that all employees at the universities are unionized helps the labor/management relationship. That relationship is good," he adds. "Both groups realize the need to work together toward common goals."

According to Jenison, many of the personnel issues he experienced in Glasgow are similar to those he handles here. Affirmative action is one of those issues. although he says it has only a four- or five-year history in Scotland. "The University of Strathclyde had just hired an equal employment opportunity officer when I arrived," he says. "I think the idea of affirmative action has developed more slowly there because Scotland has had less diversity in its workforce population over the years than

we've had in this country."

Although many of the issues are the same, Jenison did notice some obvious differences in the way Scottish personnel offices function. "Meetings are very structured and formal," he says,

"and the dress is always suits and ties for men and suits or dresses for women. Also, they do teas and coffees between

9:30 and 11:30 in the morning and 1:30 and 4 in the afternoon. If guests are visiting, it's expected that you offer them a cup of coffee or tea and a biscuit."

As visitors themselves, Jenison and his family were grateful for the Scottish hospitality. "People were very friendly and had a good sense of humor," he says. "They would talk about anything. We talked about the size of the country in relation to the United States. Here we think very little about driving 150 miles to attend an event or visit relatives or friends, but to them that's a great

distance. Everything is smaller there, even the vehicles. In the three months we were in Scotland, we saw only two pickups," Jenison says with amazement.

Trucks may have been few and far between, but that wasn't the case for castles. "We visited a lot of castles, and there were certainly a ton of them," says Jenison. Even though the castles were fascinating, Jenison was most enchanted by the countryside. "I loved the highlands of Scotland, the rivers and hills," he says with a wistful smile of recollection.

In his three-month stay in Scotland, Jenison says the thing that stands out most in his professional experience is that a vast majority of their human resource issues are the same as those he addresses here. Perhaps it is true that the more things change, the more they stay the same. In October, as Jenison was preparing for his trip home, Glasgow's big department stores were putting up their Christmas decorations.

Raking in the Big Ones

Unusual Contest Leaves Everyone a Winner

t came about unexpectedly, without planning or preparation, during a coffee break in the Metals Development lunchroom—the birth of the Big Leaf Contest. Since that time three years ago, some Lab employees have marked the passing of summer and the coming of a new season by sifting through neat piles of carefully raked leaves, rescuing potential Big Leaf winners from their bonfire fates.

"It started with a simple discussion about raking leaves," says Anne Coffman, clerk typist in Metallurgy and Ceramics. "I was explaining that the piles of



Dave Peterson displays his winning entry, the smallest leaf in the Big Leaf Contest.

raked leaves in my yard get huge because our sycamore tree has such big leaves." Unable to convince her co-workers of just how big those leaves are, Coffman said she would bring one in. That

was all it took. Before long the competition was underway to determine who could come up with

Reflections

50 Years After Hiroshima

SU's Institute on World Affairs sponsored a series of lectures and discussions on "Hiroshima: Fifty Years After" during the week of November 6. Participants on one of the panels were retirees David Peterson, Adolf Voigt and Harley Wilhelm. They discussed and reflected on their roles in the Manhattan Project.

"Ames was a rather dull place at that time, but working on the Manhattan Project was very exciting. The U.S. was heavily involved in World War II, and the outcome was very much in doubt," Peterson recalled, "Our work in developing a totally new explosive that was potentially enormous and terribly powerful was a crucial defense effort. We really had no alternative if we wanted to win the war. There was, however, no certainty that what we were doing was going to work," he continued. "There were only wild estimates of the amount of power that would be released and the destructive effect of that much power. We knew that if the predictions were

even half true, it was clear that the atomic bomb would be a decisive weapon in the war."

Because nuclear fission was discovered in Germany in 1939, it seemed logical that the Germans would be ahead of the U.S. "The fact that a nuclear weapon hadn't been discovered in Germany was surprising to us," said Voigt. "It wasn't because they weren't trying, but because they hadn't hit on the right combination to produce a nuclear weapon."

Peterson added that the development of the bomb and the prospect of atomic fission power were very exciting. "From the very first glimmer of information about atomic power, there was speculation about what it could be used for," he said. The potential of using atomic power for energy generation was a concept that started very early and continued during the war. "We were an idealistic generation hoping for a world that was safe from the threat of war and a country that could provide a better standard of living than we had at that time,"



Panel members participating in the discussion are left to right: David Peterson, Adolf Voigt, Wayne Osborn (moderator) and Harley Wilhelm.

Peterson concluded.

Iowa State College became involved in the Manhattan Project when Frank Spedding, an expert in rare-earths, agreed to set up and direct a chemical research and development program. In 1942, Harley Wilhelm and his team developed the most efficient process to produce pure uranium metal. Ames provided one-third of the uranium used by Enrico Fermi to secretly demonstrate the first self-sustained chain reaction. As a result of the successful

demonstration, the need for uranium greatly increased. Ames workers produced over 1,000 tons of uranium metal, advancing wartime efforts to uncover the secrets of atomic power and protect national security.

Most of the employees knew they were working on a secret project, but they didn't know what it was. "We always called the uranium "tuballoy" to maintain the secrecy of the work," Wilhelm said. ■



John Wheelock enjoys almond bark (tree)ts.

the biggest leaf. And over the years, efforts to do so have sometimes proved a little shady.

There was a cardboard banana leaf, a rhubarb leaf and a giant Chinese fan leaf. Things were running amuck, so Coffman leafed through her Webster's and came up with a definition that limits the competition to tree leaves only. To help contest participants turn over a new leaf and stay within the guidelines, Coffman has a surefire strategy: create categories for all entries, make everyone a winner and bring (tree) ts. This year she appropriately rewarded the Big Leaf contestants with almond bark.



Anne Coffman, originator and coordinator of the Big Leaf Contest, named Jim Pollard a winner for the biggest leaf (upper left).



ACCESS TO TASF FROM GILMAN

The doors between TASF and Gilman Hall are now on the MARLOK key system. Anyone with an Ames Lab MARLOK key can enter TASF on any floor from Gilman Hall at any time. Contact Facilities Services at 4-3756 if you have any questions.



AUDITORIUM/CONFERENCE ROOM KEY

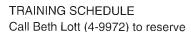
The key to the Spedding Hall Auditorium and Conference Rooms is now available in the Director's Office, 311 TASF.



PHOTOCOPIER AVAILABILITY

The KODAK walk-up photocopier located in 205 TASF is available for use from 8 a.m. to 5 p.m. daily. After hours, the copier is available only via Ames Lab MARLOK keys.

REMINDER: Walk-up photocopier service expires September 30, 1995, when the current maintenance agreement ends.



NEW EMPLOYEE TRAINING

December 15, 22 and 29

8:15-11:45 a.m.

Held in 305 TASF

December 19

1:15-4:45 p.m.

Held in 305 TASF

BASIC ELECTRICAL SAFETY (<600 Volts) PART II

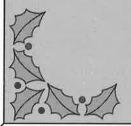
December 15
1-4 p.m.
Instructor: John Hjortshoj
Held in 305 Spedding Hall

EXCESS FURNITURE

A large volume of used furniture has been turned in and is available at the Warehouse. Ames Lab personnel interested in newer or different tables, chairs, etc. can stop and see what's available and make delivery arrangements. Furniture remaining after January 31, 1995 will likely be scrapped.

WORDPERFECT USERS GROUP

The WordPerfect Users Group will meet at noon on Tuesday, December 13 in 301B Spedding. The topic for the meeting will be the organization of the users group. There will also be a presentation on customizing the power/button bar. For more information, contact Marlene Frisk at 4-4124 or Allis Dethrow at 4-6551.



A Dedicated Mom

Dreams of Sharing

Y ou may not think spending hours in an unheated building in the dead of winter is fun, but it's been part of Lucille Kilmer's life for the past 11 years. Lucy, administrative specialist for Environmental Technology Development, is an active member of the Ames Minor Hockey Association (AMHA).

A dedicated volunteer, she has spent many long, cold hours at the Ames/ISU Ice Arena coaching and watching her son play. "We spend a lot of time at the hockey rink as well as spending many winter weekends out of town with the team," she says.

Lucy isn't the only one in her family who is involved in the AMHA. Her children, Carol, 19, Amy, 18, and Jason, 13, have grown up at the arena. Her husband, Lee, coaches, referees and serves on the AMHA board.

"Hockey is a family sport, especially in Ames where it's a volunteer effort," says Lucy. "There's always something for every member of the family to do."

Lucy believes sports are important, and she has always encouraged and participated in any sport her children have pursued. Both of her daughters played softball, and her son started skating when he was only 3 years old.

"Most sports are good at aiding development for kids," says Lucy. "It keeps them busy and teaches them to work together."

In addition to the many winter weekend trips with the team, hockey has also allowed Lucy and Lee to travel overseas. "Travel has become an important part of our family's lives," she says. Lucy and Lee have traveled through northern Europe with the ISU hockey team, Carol has studied in Germany, and Amy went to England last summer. Currently, Jason is in Russia studying and playing hockey with



Lucille Kilmer

a team from the Olympic Reserve School.

"They develop a real sense of independence when they travel alone and live in another country," explains Lucy. "I think it's great that they're able to travel if they want to. Neither Carol nor Jason expressed any serious homesickness while living abroad."

With Jason in Russia and Carol attending school at the University of Iowa, Lucy enjoys having more time to spend with Amy, but she still often encounters an empty house.

"Amy works 20 hours a week, so quite often I find myself spending time with Lee or by myself. It's very quiet," says Lucy with amazement. "I didn't realize how much time I spent driving the kids around." Finding hobbies to occupy her time has been her newest challenge.

In addition to their other travels, Lucy and her family always find time to go home to northeast Pennsylvania where both she and Lee grew up. "We enjoy visiting our families, but we also like Ames very much," she says. "Since we moved here 14 years ago, Ames has provided our family many opportunities."

ike Vaclav is ready to share his hobbies and interests with the next generation, but he has one problem — his son Michael is only 3 months old. It may be too soon for his son to be singing, square dancing, or gazing at the stars, but that doesn't stop Mike from dreaming of the day when they will do those things together.

Mike believes that it's helpful when a parent and child are excited about the same things. "Without that mutual interest, a child isn't as likely to pursue something. I hope to get Michael involved in all my interests," says Mike. "I'd really like to see him pick up singing, whether it be barbershop or whatever. I like the idea of singing because it's something he can do for the rest of his life without having to worry about pulling out an instrument."

Mike, an engineer in Facilities Services, is a member of the Ametones Barbershop Chorus. "I sing a very bad bass. I'm what they call a leaner. I lean on the guy next to me; otherwise I can't hit a note to save my life," explains Mike.

This past March he was able to escape singing by being the stage manager for their annual performance. "I learned a long time ago that you can't take care of the stage and sing at the same time," he says with a smile. "Getting the stage ready included many six-to-midnight evenings, but it was worth it."

In addition to singing, Mike would also like to get his son interested in square dancing. "I've seen people as young as 7 or 8 square dancing," he says.

He and his wife, Connie, a systems analyst in Information Systems, are avid square dancers and members of clubs in both Gilbert and Ames. "Before Michael was born, we attended four dances a month, but we don't anticipate doing much square



Mike Vaclav and son Michael

dancing this year," says Mike. "Maybe next year when junior gets a little bigger—he's our outside activity right now."

One of the most important things that Mike wants to share with his son is his interest in astronomy. "I'd like to start him early on learning the stars and planets and getting him interested in science through astronomy. It's always been a love of mine," Mike says. "I got interested in astronomy when I was twelve years old because I wanted to know what that bright star was up in the western sky. It turned out to be Jupiter. That's how my primary interest in science began. I hope I can pass that on."

One interest that little Michael will undoubtedly share with his parents is their love of Disney. Mike and Connie went to Disney World for the first time on their honeymoon. They have been there several times since; the last time was three months before Michael was born. "Our next trip to Disney World, probably in two years, will be very special because Michael will be seeing it for the first time," says Mike. Michael will almost certainly be raised to be a Disney fan.

Moving Days



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