

Air Force Research Laboratory
Wright-Patterson AFB Ohio
Environmental, Safety, and
Occupational Health Newsletter



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In This Issue:

Recycling—are you?

Eyewash Stations

Summer Camp – better
check it out first

Free Gas Cap Leak Test

Upcoming ESOH Training
and opportunities

RECYCLING...ARE YOU?



Take a moment now and look in your trashcan...go on, dig through there...I'll wait. What do you see...paper? Oh, lots of paper, huh? What else, Skywrighters, Post-It notes, envelopes, magazines, file folders, aluminum cans and plastic or glass beverage containers, cardboard...? You do?!? Shame on you!! Get it out of there! That's right, reach in there and pull those items out...Okay, good job! You've just taken the first step toward recycling. Now where is all that stuff supposed to go, you ask? Read on and let's find out.

If I told you there was a handful of change at the bottom of your trashcan, I bet you'd be digging through it right now looking for the money. Well think about these numbers. When we at Wright-Patterson recycle our materials

instead of throwing them in the trash, the Base Recycling Center sells that material for cash. Here's generally how much money we get, depending on the current market:

Aluminum cans	\$1200/ton
Non-ferrous metal (wire, copper, etc.)	\$ 800/ton
Plastic (#1 and 2 only)	\$ 400/ton
Desk (high-grade) paper	\$150/ton
Cardboard	\$115/ton
Newspaper (Skywrighters etc.)	\$ 90/ton
Low-Grade paper (magazines, books, etc.)	\$ 35/ton
Glass	\$ 12/ton

SOME STATISTICS TO PONDER: We at Wright-Patterson generate 16,000 tons of Waste in an average year, and although just about everything can be recycled, we only recycle a small percentage of that. For example, in 1999 we only recycled 3500 tons, or 22% of the total recyclable waste generated. That means we threw away about 78% of recyclable material. So, instead of making money on what could have been recycled, we pay a waste hauler to truck the now "solid waste" off Base and dispose of it in a landfill. And you've heard of cradle to grave liability, right? Well now our name is on that landfilled trash from now on - NOT A SMART WAY TO RUN A BUSINESS!

In an effort to increase recycling across the Air Force, Air Staff has

Some products made from recycled materials...

Steel food cans:

appliances, auto parts, construction beams...

Plastic bottles and milk

jugs: plant pots, plastic lumber, can liners, lawn furniture, carpeting...

Glass:

New glass packaging, decorative tiles, paving materials...

And all these new items are also recyclable!

(Continued on page 3)

In an effort to increase recycling across the Air Force, Air Staff has initiated the goal of recycling 40% of waste generated across the Air Force by the year 2004.

Here at Wright-Patterson, we average only 27-30%. Unfortunately we also continue to see an increase in the amount of waste we generate relative to the number of people on Base. This same trend can be seen nationwide as a result of our robust economy, product marketing, and desire for conveniences. The other day I ran out to a fast food restaurant and brought back a salad in a plastic container, ate it with plastic silverware, and drank my coffee from a Styrofoam cup. When I was done with my lunch, my trashcan was full! Then I unpacked my new computer. It was wrapped in plastic, surrounded by Styrofoam, and packed in a box. Of course the keyboard and mouse were each wrapped in plastic and in their own boxes too. I'm not saying I would rather receive my computer all thrown together in one big box, but it's just a good example of how much waste is generated by a thriving consumer market.



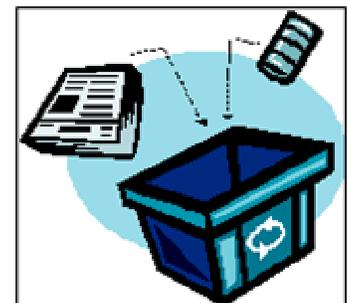
We average four pounds of waste per person per day

On Wright-Patterson, as is with the rest of the U.S., we average four pounds of waste per person per day and the number is rising; it's expected to reach 4.2 pounds per day in just the next couple of years. Yes, we are recycling more, but we're not keeping up with the amount of waste we're increasingly generating. So, let's reverse this trend. By recycling, we are creating a "cost avoidance". If we threw that 3500 pounds of material we recycled last year into the regular trash, we would have paid an additional \$350,000 for solid waste disposal off Base! Certainly there are costs associated with recycling, such as manpower and equipment, but these expenses are clearly offset by the money we save by not having to pay for disposal costs of the recycled materials. So it really is like each of us throwing a handful of change in our trashcans every day if we're not recycling.

BLUE BINS:

Let's start with that blue bin under your desk. It used to be for "high grade" white office paper only. But in an effort to increase recycling, we are now allowed to place other types of recyclables in it, including:

- | | |
|-------------------------|--------------------------|
| white typing paper | outdated manuals |
| white writing paper | white photocopy paper |
| blueprint paper | file folders |
| white scratch paper | newspaper |
| Index cards | junk mail inserts |
| magazines | computer printout paper |
| books | shredded paper (bundled) |
| colored paper (bundled) | post-it notes |



(Continued on page 4)

envelopes (plastic windows okay)

The recycling center will then manually sort the "high grade" paper out from the rest of the materials. If you generate significant amounts of a certain type of material, (Skywrighters, magazines, and books for example), bundle them together or place them in a box and tape the lid shut before you place it in the blue bin or larger paper recycling boxes. This will help the Recycling Center sort it out later.



CENTRAL RECYCLING LOCATIONS:

Your organization should also have a central location for recycling materials including contents of the blue bins. If your organization generates a large quantity of certain types of recyclable such as cardboard boxes or glass or plastic beverage containers, you should have a large container for those items. To acquire extra containers, contact the Recycling Center at 74889 or Environmental Management at 75535 x218. (A list of the AFRL facilities' recycling locations is provided as a separate attachment to this newsletter.)



BEVERAGE CONTAINERS:

All beverage containers can now be co-mingled. This includes glass - all colors, plastic, and aluminum. Many pop machines are now being stocked with plastic and glass bottles instead of aluminum cans. Thus, people have been throwing these in the trash because they only see the aluminum can boxes near the vending machines. If your organization is generating a lot of plastic and glass, designate a container for co-mingled beverage containers. Or better yet, designate separate containers for each to aid the recycling center in sorting. As is the rule for most recyclables, please remove the lids and rinse first.



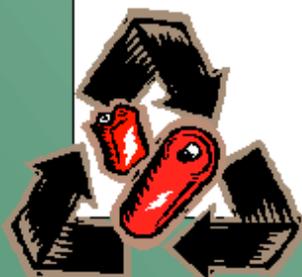
LABORATORY GLASSWARE:

Designate a special container for your lab's RECYCLABLE glassware. With the exception of PYREX, most laboratory glassware and bottles can be recycled. Make sure the bottle is empty first, rinse it (throw away the lid) and air dry the bottle under a fume hood. Remove or obliterate the container label or mark it "EMPTY" or "SAFE SCRAP" and recycle it. (Hazmat folks - no "P-listed" containers though. Those bottles get turned in as a P-listed hazardous waste through your IAP). If the glassware is broken, place it in the "broken glassware" boxes, tape them shut, and throw them away.

STYROFOAM: The Base does NOT recycle Styrofoam.

SHREDDED/CLASSIFIED PAPER:

Shredded paper is recyclable. If the operating instructions for your shredded classified material says it can be thrown away (versus incinerated) then it can also be recycled (NO carbon paper). Keep the shredded material bagged and put in the large recycled paper boxes.



(Continued on page 5)



CD-ROMs: Box them up, label "CDs" and place in the Blue Bin.

BATTERIES:



The only type of batteries the Recycling Center accepts are lead-acid batteries, both from Base organizations and your home (unless leaking). Lead-acid batteries must be taken to the recycling center – do NOT place batteries in any recycling boxes. The only batteries that may be thrown in the trash are alkaline batteries. ALL OTHER BATTERIES should be turned over to your Initial Accumulation Point (IAP) manager or Unit Environmental Coordinator (UEC) for turn-in as "Universal Waste".

RECYCLABLES FROM YOUR HOME:



The Recycling Center does accept a wide range of household recyclables. Take them to the Recycling Center, Area A Bldg 293 under the water tower just inside gate 15A. There is also a recycling trailer on "C" Street across from Bldg 22 in the large parking lot. The Recycling Center accepts paper, newspaper, books, manuals, magazines, cardboard, plastic, aluminum, glass, used oil, metals, toner cartridges, wire, and more. For more information on what the Recycling Center accepts, call them at 74889.



The Montgomery County Material Reuse Facility (McMRF) offers Montgomery County residents a free alternative to throwing away usable materials. Residents may drop off USABLE construction materials, art supplies, tools, and office furniture that would normally be discharged. These items will then be offered to local non-profit organizations for free. To find out more about McMRF or to schedule a donation please call 496-6639.

HOUSEHOLD HAZARDOUS WASTE:



The Recycling Center does NOT accept household hazardous waste. No household hazardous waste should be brought on Base for disposal anywhere. If you have excess household hazardous waste, see if you can find a friend or neighbor who can use it. If not, contact your county's Solid Waste Facility. Montgomery County residents contact the RECYCLE HOTLINE at 225-4999. Greene County residents contact 427-1199. The Montgomery County Solid Waste Facility also accepts bulk items such as household appliances and tires.

USED OIL:



If your organization generates Used Oil, see Environmental Management's Web Site for the Used Oil Policy letter and Collection Request form at: <http://www.abwem.wpaafb.af.mil/em/emc/oil/default.cfm>. The Base Recycling Center DOES accept used oil from your home; place it in the designated collection area. (Antifreeze is NOT accepted.) Many local "lube, oil, and filter" businesses will accept your used oil and antifreeze.

FLUORESCENT LIGHT BULBS:



All fluorescent light bulbs generated on Base must be turned in to the Building Manager since they contain mercury. Regular light bulbs are not recycled and should be thrown in the regular trash. Go here for more information on the fluorescent bulb program: <http://www.abwem.wpaafb.af.mil/em/emc/mercurylamp/default.cfm>

Frequently Asked Questions about Recycling

Why can't lids be recycled? Most lids are made from a different material than their accompanying container and melt at a different temperature. The lid becomes a pollutant to that recycling stream; if its melting temperature is lower than the container, the lid may catch on fire.

Who is responsible for calling the Recycling Center (74889) when the containers are full? To avoid confusion, it's preferable to have one or two designated people who are the recycling points of contact in your work area - they should be the points of contact for calling for a pickup when the recycling containers are full. However, anybody can call the recycling center to request a pickup of materials, so be the one to take the initiative - don't wait for the container to overflow! Just call 74889 and leave a message as to what and where the recyclables are that need to be removed.

Why do containers need to be rinsed before they are recycled? Cleaning or rinsing containers before recycling reduces pests, odors, germs, rodents and other undesirables while the recyclables are being stored.

Why doesn't the recycling center accept household hazardous waste? We have not been given the budget to pay for the costly disposal of these items. This includes base housing residents hazardous wastes also. Besides, local counties already provide this service.



What happens to the money made by the recycling center? Profits from the Recycling Center go towards Quality of Life activities on base that benefit us all such as upgrades to playgrounds and child care centers. Recently a colorful shredded tire material called "Boing" was placed around playground equipment on base. Not only does this material greatly absorb the shock from a fall, but it is a great means to safely recycle used tires. The biggest financial benefit from recycling however, is the amount of money SAVED by not having to pay for the transport and disposal of these recyclables as solid waste if they had been thrown in the trash.

I recycle my paper and then watch as the cleaning people dump the recycled paper boxes into the regular trash. Why do they do this? Please, if you see this happen, tell them to stop! There are separate dumpsters for recycled paper only. Perhaps it was just a mistake or maybe the individual needs some more training. Contact your building manager or Environmental Management at 77152 x218 to identify the problem and get it resolved.

I live on base. What can I place in my recycling container? Base housing residents may co-mingle plastics (#1 and 2 only), all colors glass (rinse and remove lids), and metal beverage & food containers. Bundle paper and cardboard separately and place in the container. For more information on the recycling

program
for
base
resi-

The Office of Environmental Management and the Recycling Center are always looking for waste streams to investigate for potential recycling opportunities. Such examples include any one-time generation of a large amount of waste; copper, wire or other types of metals; and cardboard. If your organization is having a picnic, make sure to provide recycling cans for beverage containers. The Recycling Center can provide assistance in this area. If you know of any recycling opportunities, have any suggestions or ways to better recycle at your organization, bring it to the attention of your supervisor, UEC, or Environmental Management at 72057 x218.

New Emergency Eyewash Rules Go Into Effect

If your work area uses hazardous chemicals in liquid, solid, vapor, mist or powder form, you probably have an emergency eyewash, whether it's a permanently plumbed unit or a self-contained unit. These units are rarely, if ever, used, but when there is an emergency, we rely on them to perform as expected. The most important first aid procedure for the chemically burned eye is copious irrigation within seconds after exposure.



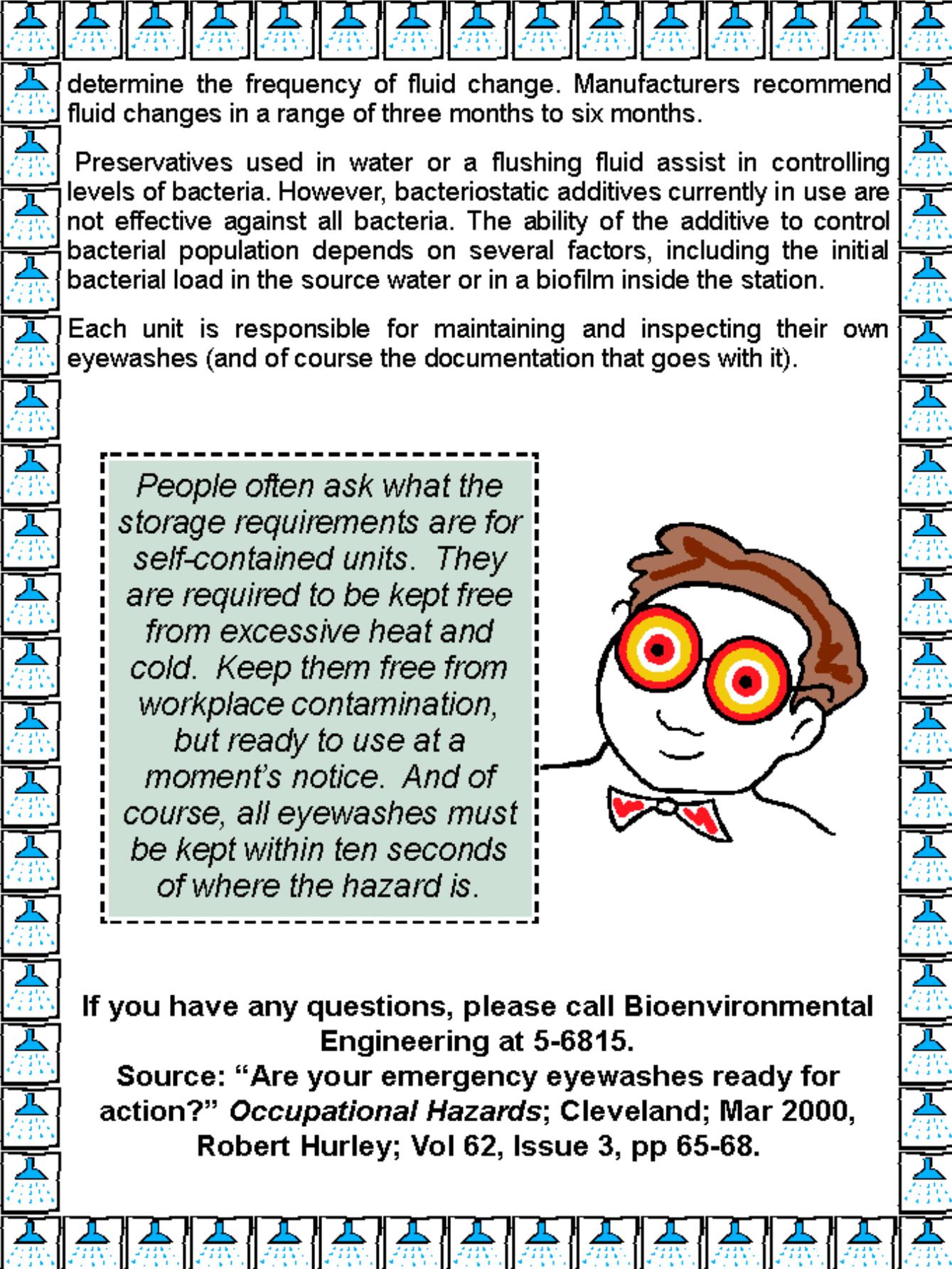
The Air Force emergency shower and eyewash program is run by a combined effort of Base Safety and Bioenvironmental Engineering, and is outlined in AFOSH 91-32, *Emergency Shower and Eyewash Units*. This regulation takes its guidance from ANSI Z358.1, which in 1998 imposed new requirements:

- "Plumbed eye wash equipment shall be activated weekly to verify proper operation and shall be inspected and maintained in accordance with manufacturer's instructions. Weekly activation of plumbed devices verifies proper operation and causes water to flow through the pipes feeding the device, bringing the pH and chlorine concentration to the level of the source water, if there is sufficient flow volume and flow time."
- "Self-contained eyewash units shall be inspected and maintained in accordance with manufacturer's instructions."

As a rule, self-contained inspected weekly to level of flushing fluid and intact. Self-contained units changes. When refilling a uses water or water with an be completely drained, to being refilled and returned to service. If the unit is filled with water only, the fluid should be changed weekly. If the fluid is water with a preservative, the fluid replacement cycle can be as frequent as monthly or



units should be ensure there is a proper the unit-activating device is require periodic fluid self-contained station that additive, the station should disinfected and rinsed prior

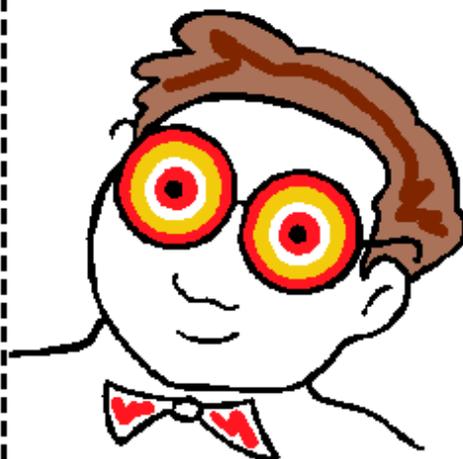


determine the frequency of fluid change. Manufacturers recommend fluid changes in a range of three months to six months.

Preservatives used in water or a flushing fluid assist in controlling levels of bacteria. However, bacteriostatic additives currently in use are not effective against all bacteria. The ability of the additive to control bacterial population depends on several factors, including the initial bacterial load in the source water or in a biofilm inside the station.

Each unit is responsible for maintaining and inspecting their own eyewashes (and of course the documentation that goes with it).

People often ask what the storage requirements are for self-contained units. They are required to be kept free from excessive heat and cold. Keep them free from workplace contamination, but ready to use at a moment's notice. And of course, all eyewashes must be kept within ten seconds of where the hazard is.



If you have any questions, please call Bioenvironmental Engineering at 5-6815.

Source: "Are your emergency eyewashes ready for action?" *Occupational Hazards*; Cleveland; Mar 2000, Robert Hurley; Vol 62, Issue 3, pp 65-68.

Adventure Camps - Are they SAFE?

By Peter Vorum, AFRL/MLBT



Dear Mom and Dad (Grandma and Grandpa) ,

Is summer camp in the offering for your kids? Each year, the U.S. Consumer Product Safety Commission estimates there are 200,000 emergency room visits made by children for playground-equipment related injuries. Most of the injuries are the result of a fall to hard ground. If the camp offers Experiential Education challenge and ropes courses, they use swings, slides, and bridges, essentially a playground out in the woods.

- be sure to check references from their brochure or web site to satisfy yourself of the safety of your child.
- check to see that the activities are appropriate for the age and physical condition of the student.
- check the company's insurance policy for medical payments coverage of all accidents. Have they or their contractor been sued by an injured party? Does a release call on the parent or the student to evaluate the safety of the event? If something happens, it's your fault, not theirs.
- ask if the staff are trained and equipped to perform first aid; do they automatically take someone who has suffered a hard fall (especially a head strike) to a doctor? Is a nurse available *on-site*? Are cell phones available to call for help in an emergency?
- does the camp use/follow recommendations in CPSC Publications 324 and 325 for low impact padding (mulch, sand, or pea gravel) under and around any lab where a fall is possible? Community standards (for schools and playgrounds) universally accept the CPSC pamphlets: pad the ground to reduce the severity of injuries. Are you building your own backyard gym set? The pamphlets are free at 1-800-638-2772 ext 1 then 300.
- if your camper is ever to be over 8 feet high, ask about proper equipment (a belaying rope attached to a full body harness), so that an injured or frightened student can be lowered to the ground safely within 30 seconds of a call for help. Check for the use a full parachute-style harness, rather than a waist belt. Ask if there is a safety net under labs that are 8 feet or higher. Ask if a safety load test is performed on the support wires, to make sure nothing will let go under a student's weight.

These suggestions are reasonable, common community standards, or are actually OSHA Standards. Camp can be fun, but it can be dangerous if not properly managed, equipped, and insured.





ESOH Training and Opportunities

FREE GAS CAP CHECK - 4 Aug 00

A representative from the Regional Ozone Action Program will be on hand 10:00 am to 2 pm on Friday, 4 August in the commissary parking lot, Kittyhawk; and the AAFES gas station, Area B to check your vehicle's gas cap. A free replacement gas cap will be provided if yours fails the test.

For more information, contact
Connie Strobbe
in Environmental Management



Are you up to date on your RCRA training? It's required every year for folks who generate hazardous waste.



RCRA HAZMAT/HAZWASTE TRAINING:

Initial Training:

21 Sep, 16 Nov 00

Annual Refresher Training:

15 Aug, 18 Oct, 13 Dec 00

DEPARTMENT OF TRANSPORTATION (DOT) TRAINING:

Initial Training:

28 Aug—1 Sep (5-day class)

Refresher Training:

16 Aug 00

Schedule RCRA and DOT with Mary Shelly, 59000

ESOH AWARENESS TRAINING:

10 Oct 00

Schedule with Public Health, 52515