
Environmental Awareness

READING FOCUS

Cognitive Lesson Objective: Know the environmental issues facing all Air Force personnel.

Cognitive Samples of Behavior:

1. Identify the six major environmental issues and their impact.
2. State the consequences a military member might face for violating environmental statutes.
3. Identify personal actions in protecting the environment.

Affective Lesson Objective: Respond to the environmental issues facing all Air Force personnel.

Affective Sample of Behavior: Comply with the Air Force environmental guidance.

Issues concerning the protection and cleanup of the environment have become a high priority for the President, Secretary of Defense, DoD, Department of the Air Force, and local communities, both military and civilian. The Air Force's agenda to meet the challenges and expectations of achieving and maintaining a commitment to environmental quality will require the integration of environmental planning, resource management, and regulatory compliance into our daily activities.

Air Force Environmental Commitment

General McPeak, former Air Force Chief of Staff stated: "Protecting the environment is a part of our mission. I expect the Air Force to lead the DoD into an era of environmental excellence."

The Air Force is strongly committed to environmental quality in all areas of past, present, and future operations. Specific goals are to:

1. complete cleanup of the past by restoring hazardous waste sites,
2. ensure our present operations comply with all federal, state, and local environmental standards,
3. prevent future pollution by reducing hazardous material use and release of pollutants into the environment to as near zero as feasible,

4. use the environmental impact analysis process to support decision making and protect the environment, and
5. protect and enhance our natural resources, including wetlands, historic sites, and endangered species through sound stewardship and management.

The Air Force cannot conduct daily operations without awareness of their impact on the environment. All military and civilian personnel have the legal responsibility to abide by environmental laws and regulations. They will be held accountable for illegal, careless, or irresponsible behavior. Air Force personnel must:

1. be aware of major environmental issues facing the Air Force and society,
2. know the dangers that daily activities (on and off duty) may pose, and
3. take action to prevent problems and report violations when they occur.

DoD and Air Force Programs

The Air Force has established several management programs to achieve our aim toward environmental excellence: installation restoration, environmental compliance, pollution prevention, environmental planning, and natural and cultural resources.

The Installation Restoration Program (IRP). IRP is a DoD-wide program that identifies, investigates, and cleans up past waste disposal or hazardous material storage sites.

The Environmental Compliance Program. This is also a DoD-wide program to ensure our present operations comply with all federal, state, and local environmental standards.

The Pollution Prevention Program. This program has been established to prevent future pollution by reducing use of hazardous and toxic materials and the generation of wastes by means of source reduction, recycling, and environmentally sound treatment.

The Environmental Planning Program. This program provides the process to study and analyze the environmental impact of mission requirements. The planning process supports decision-making and allows commanders to monitor all areas and activities of base development and operations.

The Natural and Cultural Resources Program. This program provides for the protection and enhancement of our natural and cultural resources, including wetlands, historic sites, and endangered species through sound stewardship and management.

Environmental Issues

The Air Force has a reputation among federal agencies for leadership in environmental matters. We have earned that reputation through aggressive compliance with the environmental regulations, including the issues surrounding air and water pollution, solid and hazardous wastes, energy conservation and pollution of the workplace and living environment.

Air Pollution. Air pollution is certainly not a new phenomenon. Several serious episodes focused attention on the need to control the quality of the air we breathe. Initial efforts to address the nation's air pollution problem began with the passage of the Clean Air Act (CAA). The CAA was intended to prevent, control, and abate air pollution by controlling emissions from stationary (power plants and other industrial activities) and mobile (vehicle) sources. Air pollution control legislation has been steadily expanded and updated to reflect national awareness and concern with maintaining basic protection of public health and the environment. You can help reduce air pollution by:

1. choosing alternative transportation for on- and off-base activities (carpooling, mass public transit, bicycling),
2. properly operating and maintaining your motor vehicle's exhaust and air-conditioning system,
3. properly operating and maintaining your home air-conditioning units, refrigerators, and other household devices, and
4. sharing your air pollution awareness with personal and professional colleagues.

Water Pollution. Water pollution is a major national concern and is a high priority in environmental programs. Water pollution occurs when toxic materials foul rivers, streams, lakes, and watersheds. Major water pollutants include untreated sewage or any chemical that is used on, disposed of, or leaked onto or into the ground. Many underground storage tanks have leaked and contaminated the ground water. Overuse of pesticides and fertilizers has also caused contamination. Water pollution has caused many previous sources of fresh water to become contaminated. The growing population, expanding industry, and increasing agricultural production have created an increasing demand for fresh water. Water conservation is rapidly becoming the way of life in many communities.

Air Force installation wastewater discharge consists of sewage, industrial waste, and storm water runoff. Sewage and industrial wastewater are typically discharged to an on-base treatment facility or to an off-base publicly owned treatment facility. Storm water typically discharges directly to a receiving stream or surface water body. On-base treatment facilities are normally regulated by discharge permits issued by federal or state agencies. Drinking water on and off base is regulated to ensure safe drinking water is supplied. You can help prevent water pollution by:

1. not dumping wastes at unauthorized sites or leaving toxic chemicals at unattended locations,
2. not dumping toxic materials down the drain or on the ground (oil from your vehicle, household cleaning products, etc.),
3. reporting illegal dumping or contamination of our water resources, and
4. limiting use of pesticides and fertilizers on your lawns.

Solid Waste. Solid waste is any non-hazardous trash, rubbish, garbage, bulky wastes, liquids, or sludges that are normally discarded and are (or could be) taken to a sanitary landfill. Ours is a “throw away” society--if we don't need it, we trash it! Each person in the United States produces an average of over 4 pounds of trash each day. Most refuse ends up in landfills; however, landfill space is rapidly becoming inadequate. Source reduction and recycling are the solution. Within the Air Force, we recycle about 14 percent of our solid waste. The percentage of waste recycled can be increased if everybody becomes involved. Preventive measures you can take include the following:

1. Reduce waste volume. Use returnable or reusable containers and purchase products with minimum packaging.
2. Recycle such items as paper, glass, aluminum, and plastics. Recycling centers are available throughout the country.
3. Compost yard and food waste to decay, forming a material that can be used as a fertilizer.
4. Don't litter. Pick up discarded trash and recycle it or dispose of it properly.
5. Use recycled products like paper towels, other paper products, retreaded tires, and many other consumer products.

Hazardous Wastes. Hazardous wastes are those waste materials that are ignitable, corrosive, reactive or exceed specific toxic limits. Air Force installations typically generate waste solvents, oils, paints, and paint sludges that often must be regulated as hazardous waste. Hazardous waste releases include accidental and operational discharge of hazardous materials from leaking pipes or storage tanks; equipment failures; and improper storage, handling, and disposal practices.

A major source of hazardous waste remains virtually unregulated and unknown. Millions of tons of hazardous waste a year come from our careless disposal of insect sprays, antifreeze, chlorine bleach, nail polish, and dozens of other household products. At home we nonchalantly toss half-full cans of paint thinner and pesticides into the garbage. Discarding such items does not amount to much--only one-half of 1 percent of the garbage thrown out in each home. However, each person throws away more than one-half ton of garbage annually, and the pile continues to grow. It's essential that hazardous substances are controlled or cleaned up quickly. Preventive actions are the key to avoiding hazardous waste releases. You can take the following actions:

1. Reduce the use of hazardous materials through conservation and substitution.
2. Use all household hazardous products in an environmentally safe manner, dispose of extra products by using them for their intended purpose, or turn in excess quantities to your local hazardous waste manager.
3. Monitor your hazardous material storage areas and transport systems, such as pipelines.
4. Know and understand what cleanup actions are required of you in your job if hazardous materials are used or hazardous waste is generated.

Workplace and Living Environment (Indoor) Pollution. Workplace and living environment (indoor) pollution involves a variety of indoor pollutant emissions and improper storage and disposal of hazardous industrial or household wastes. Buildings and homes have their own form of pollution: burned oil, gas, wood, and tobacco give off harmful gases; formaldehyde and asbestos exist in building materials; pesticides and solvents are commonly-kept household items. Pesticides, paint, and solvent fumes can be a health hazard to occupants and workers. Lead poisoning is also a major pollutant concern. It's the nation's number one environmental health threat to children who may eat lead-based paint chips as well as drink contaminated water supplied through old lead pipes. Preventive measures include:

1. Ensure you use protective equipment when removing lead-based paints or asbestos or handling extremely toxic substances.
2. Keep pesticides and solvents properly stored and limited to essential use only.
3. Use latex paint in place of oil-based paints.

Energy Conservation. Energy conservation is the organized effort to reduce energy use. Pollution is a common by-product of most energy utilization and production processes. The production of steam or electricity by a power plant requires the combustion of coal, fuel oil, or gas, which produces various waste streams. Our natural resources are not limitless and their use is becoming increasingly more costly. The United States is the largest energy user on Earth. We are an energy-dependent nation. Conservation measures you can take are:

1. turn off lights and appliances when not in use,
2. improve insulation in your home or facility,
3. set thermostats at energy-efficient levels,
4. maintain proper care of your vehicle with engine tune-ups and reduce speed to conserve gas, and
5. use carpools or public transportation.

Consequences

Air Force members must be aware that violations of federal and state environmental statutes can result in both civil and criminal penalties. No one, including federal officials, is immune from prosecution. Commanders and supervisors who are held legally liable for the criminal acts of their subordinates will feel serious consequences. Individuals can also receive administrative and UCMJ actions (Article 15, etc.) for environmental violations. The best way to avoid criminal penalty is to be 100 percent committed to complying with the law. Each person has the responsibility to question suspicious acts or directives and to report them to appropriate individuals or agencies.

Personal Actions

Each person must realize that almost any action he or she takes can impact the environment. Your commitment as an Air Force member should be to adopt effective environmental goals and take personal action to ensure you:

1. **Reduce** the amount of waste you generate. (Buy products with minimum packaging and use returnable containers.)
2. **Reuse** materials or waste to the greatest extent possible.
3. **Recycle** as much as possible: paper, glass, aluminum, and plastic.
4. **Do not** dump wastes at unauthorized sites or leave toxic substances unattended.
5. **Do not** dispose of gas, oil products, pesticides, solvents, etc., down drains or pour them out onto the ground.
6. **Do not** release freon into the atmosphere; for example, from vehicle and facility air conditioners, and appliances. Use freon recycling equipment to capture and recycle the gas.
7. **Read** labels and become informed about hazards--heed warnings.
8. **Report** illegal dumping of wastes. (We must be environmental watchdogs.)

Bibliography:

1. AFI 32-7040, *Air Quality Compliance*, 09 May 1994
2. AFI 32-7041, *Water Quality Compliance*, 10 December 2003
3. AFI 32-7080, *Pollution Prevention Program*, 12 May 1994
4. AFPAM 36-2241, Vol 2, *USAF Supervisory Examination Study Guide*, 1 July 2005