FEDERAL AVIATION ADMINISTRATION

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ANNUAL FACILITY ENVIRONMENTAL REPORT

Contents

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Introduction

FAA's environmental accomplishments*, which are presented in the pages that follow, illustrate that FAA's environmental management program continues to mature. In 1998, environmental awareness continued to permeate FAA culture as project disposal plans that addressed hazardous materials became more prevalent for planned modernization of National Airspace System (NAS) facilities.

Following FAA's accomplishments, information on directives, guidance and other activities developed or conducted by the various Regions, Centers, and Headquarters program levels within FAA are presented. Lastly, inspection and assessment information is presented showing trends of external and internal evaluations and actions.

Please note that this report addresses FAA facilities and does not include airports, per se. Airports in the U.S. are not generally operated by FAA, even though there are FAA facilities and activities on U.S. airports.

In 1998, FAA's environmental organizational structure underwent some transitions. FAA's Office of Environment and Energy's (AEE) structure and responsibilities (facility environmental policy, agency reporting, and programmatic review) did not change in 1998. However, as a result of an Airway Facilities reorganization in late 1997, there was a modification to FAA's implementation of environmental policy. The changes were based on a need to modify and improve FAA's overall implementation of NAS facilities. In 1998, two programs implemented FAA environmental policy: (1) ANS-500 (which is part of the NAS Transition and Integration Program (ANS)), and (2) ANI (a new program titled the NAS Implementation Program). ANI consists of two components: an Engineering Center, and nine "Implementation Centers" (one in each FAA Region). Airway Facilities' Training Policy Program (AFZ-100) maintained their structure and responsibility for training programs. A chart illustrating FAA's environmental organizational structure is provided at the end of the document.

* Based primarily on Region and Center responses to FAA's 1998 annual facility environmental questionnaire.

Major Accomplishments

Fuel Storage Tanks (FSTs)

FAA's multi-year fuel storage tank program efforts came to fruition at the end of 1998: FAA Regions and Centers successfully met the EPA December 1998 deadline. FAA's implementation policy to make conversions to battery standby power, or a change to above ground storage tanks or clean-burning propane played an important role in some FAA Regions' ability to meet the deadline. A noteworthy result of FAA deadline activities was a significant decrease in both the William Hughes Technical Center's (Atlantic City, NJ) and the Eastern Region's petroleum storage capacity. FAA removed a total of 3,710 USTs as a result of its multi-year deadline activities.

FAA Regions and Centers successfully met the EPA December 1998 deadline.

FST cleanup activities continued in most FAA Regions and Centers as a result of FAA's activities in regards to the EPA deadline. For example, in FAA's Alaskan Region, petroleum release investigations were conducted at three stations, Big Delta, Gulkana, and Woody Island. Activities in some of the other Regions involved site investigations, removal of affected soil, and/or groundwater monitoring. For more information, see the Environmental Remediation section.

In addition to FAA FST deadline activities, FAA implemented the FST module of the Environmental and Safety Information System (ESIS) in 1998. This implementation resulted in a validation of FST information and a review of FST lifecycles and operational compliance issues. These actions transitioned FAA's FST program into more of an operations mode.

Pollution Prevention (P2)

A P2/Waste Minimization Plan at the Cleveland Systems Support Center resulted in a 16% reduction in chemicals over a 9 month period.

- Waste Minimization Initiatives

FAA Regions and Centers implemented a variety of P2 initiatives in 1998, as well as continued positive P2 initiatives from prior years. 1998 Region and Center P2 accomplishments included:

(1) Alaskan Region —
- The off-specification fuel from decommissioned tanks was reclaimed and used as a feedstock for Regional energy and heat production facilities. This activity both reduced waste generation and reduced out-of-pocket costs for the Region.

(2) Eastern Region —
- The Eastern Region's tank replacement program helped their P2 program by achieving the following since the tank program's inception date: a) 38 percent of the Region's FSTs were eliminated; b) 39 percent of the Region's critical facilities are now supported by non-fossil fuel; and c) the Region's approximately 447,000 gallons of bulk fuel storage capacity was reduced to less than 238,000 gallons of bulk fuel storage capacity.
- Chemical inventories were consolidated and items were offered to each systems support center (SSC) to reduce quantities of expiring chemicals.

(3) Great Lakes Region —
- The Ohio Systems Management Office (SMO) completed implementation of a P2/Waste Minimization Plan at the Cleveland Systems Support Center (SSC) during 1998. As a result, the Ohio SMO was able to document an overall 16 percent reduction in chemicals present over a nine-month period.
- Because of the success at the Cleveland SSC, the Ohio SMO initiated a P2 program plan for the Toledo SSC.

(4) Northwest Mountain Region —
- A P2 Plan was completed for the Denver, CO, Air Route Traffic Control Center (ARTCC).
- A waste minimization audit was also performed at the ARTCC and as a result, yearly goals were established that include reducing toxic and hazardous substance acquisitions, increasing the volume of materials captured for recycling, and applying procurement practices that ensure the purchase of products made from recycled materials.


Denver ARTCC

(5) Southern Region —
- Replaced 34 diesel emergency engine generators with clean burning propane engine generators.

(6) Western Pacific Region —
- Personnel continued to reduce the inventory of toxic chemicals and purchase alternative products.

(7) Technical Center —
- The Center continued its P2 initiatives that had been integrated into routine program and project actions and as standard operating procedures.
- The flow of solid waste and the disposal and/or recovery of construction materials generated from commissionings, decommissionings, and/or renovations were tracked. For example, as part of the Technical Center's Security Ops Center Project, all of the asphalt roads related to the project were milled and re-used.


FAA 's Security Ops Center

- Recycling

FAA accomplished both an increase in the number of facilities recycling and an increase in the kinds of materials recycled in 1998. Some facilities in all FAA Regions and Centers recycled aluminum, ethylene glycol, high-grade white paper, mixed grade and colored paper, scrap metal, used oil, and valve-regulated lead acid batteries. Other items being recycled by some FAA Regions and/or Centers were: cardboard, flooded lead acid batteries, newspaper, plastics, toner cartridges, waste solvents, dry cell batteries, nickel-cadmium batteries, and fluorescent lamps. A few FAA facilities also recycled organic material and pallets.

Specific Region and Center recycling highlights included:

FAA's Alaskan Region recycled and/or reclaimed more than 51,000 lbs. of oils, fuels, antifreeze and batteries. In addition, over 4,600 lbs, of Halon were reclaimed.

(1) Alaskan Region —
- Recycled and reclaimed more than 51,000 lbs. of oil, fuels, antifreeze, and miscellaneous batteries.
- Completed removal of 70 percent of all of its halon fire extinguishers. This resulted in over 4,600 lbs. of Halon 1211/1301 being reclaimed.
- Reclaimed over 15 million pounds of contaminated soils through a thermal treatment process.

(2) Central Region —
- Instituted mercury recovery from fluorescent lamps.
- Approximately 3,000 lbs. of copper wire was recycled.

(3) Great Lakes Region —
- Approximately 13,600 lbs. of obsolete electronic equipment was recycled.

(4) Technical Center —
- Retained the proceeds from the sale of materials recovered through recycling and/or waste prevention programs.
- Continued its employee education and involvement initiative by distributing Recycling Brochures, which described what types of waste the Technical Center recycles, and placed additional recycling containers throughout the Technical Center. These actions fostered increased recycling by providing more opportunities for employees to recycle their glass, aluminum, and plastic containers.
- Additional desk-side cardboard recycle bins were also placed as new opportunities arose.

(5) Mike Monroney Aeronautical Center —
- 22,600 lbs. of lead acid batteries were recycled.
- 7,000 spent fluorescent lamps were shipped to a recycling center where each component of the lamps was extracted and fully recycled.
- 130 lbs. of elemental mercury and 7 lbs. of mercury switches were recycled.
- 11,688 lbs. of scrap aluminum was sold for recycling.
- 784,680 lbs. of scrap steel was sold.

In April 1996, the President signed Executive Order (EO) 12999, *Educational Technology: Ensuring Opportunity for All Children in the Next Century*. In 1998, facilities in six of FAA's Regions and both Centers donated surplus computer equipment to local schools and colleges. Other entities receiving the computer equipment included: the State of Washington, churches, libraries, and non-profit organizations.

• Beneficial Landscaping and Pesticide Management

FAA beneficial landscaping and pesticide management activities increased in 1998. These activities are relative to the President's Memorandum, *Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds*, and reducing pesticide usage. Activities included:

(1) Alaskan Region —
- Planted indigenous plants along wind break fences and dense native grasses to landscape new employee housing. These plantings resulted in minimal maintenance and erosion, and maximum vegetative survival.

(2) Northwest Mountain Region —
- Conducted a beneficial landscaping project at the Denver, CO, air route traffic control center (ARTCC)'s east lot.

(3) Western Pacific Region —
- As part of a mitigation package for the Montgomery, CA, Airport instrument landing system (ILS), the ILS path was designed to maintain/retain hydrological links between vernal pools. Cart bridges were designed to reduce shading on the vernal pools.

(4) The Technical Center —
- Continued to implement its Interim Moving Plan.

FAA facilities primarily used two methods to minimize pesticide usage in 1998: opportunity assessments to evaluate what the facilities currently use and what the actual needs are, and application of "environmentally friendly pesticides." Some FAA facilities also used: stones in place of grass; traps as opposed to poison bait; plants that require less frequent maintenance; and plants that allow reduced applications of pesticides. Additionally, for the first time, the Aeronautical Center and some facilities in three FAA Regions developed integrated pest management plans.

- Life Cycle Management and Affirmative Procurement

Life cycle management is incorporated into FAA's acquisition system. In 1998, the disposal aspect of life cycle management was emphasized.

FAA's disposal guidance was modified in 1998 to allow for excess equipment with components potentially made of hazardous materials to be transferred to the Defense Logistics Agency (DLA)'s Defense Reutilization and Marketing Services (DRMS) for disposal on a fee-for-service basis. This disposal option was made available to FAA as a result of the January 23, 1998 Memorandum of Understanding between the General Services Administration (GSA) and DLA. Also, through DRMS, computer demanufacturing (which is a form of recycling) was made possible for FAA's very out-dated computer equipment.

Development of facility equipment disposal plans became more prevalent for many NAS modernization projects. While the disposal plans looked at a variety of issues, the presence or possible presence of hazardous materials and the disposal of such were major issues addressed by the plans. The disposal plans also looked at the issue of whether the removal and/or installation of equipment would result in any potential hazardous materials releases (i.e., asbestos, lead paint, etc.).

In the area of affirmative procurement, many facilities in FAA Regions and Centers purchased the following affirmative procurement items:

- ✈ paper with post consumer materials
- ✈ energy efficient computers
- ✈ energy efficient lighting

Affirmative procurement items purchased by some facilities in FAA Regions and Centers included:

- ✈ office recycling containers, plastic desktop accessories, toner cartridges, binders, plastic trash bags, office waste receptacles – all containing recovered plastic
- ✈ laminated paperboard, structural fiberboard, traffic control cones, traffic barricades – all containing recovered materials
- ✈ recycled engine coolants

- ✈ water conservation equipment
- ✈ re-refined lubricating oil
- ✈ alternative-fueled vehicles

• Energy and Water Conservation

Although FAA's energy and water conservation implementation budget was substantially reduced for FY 1998, several FAA Regions and both Centers were able to accomplish some energy and water initiatives. Many of the initiatives were either built into various construction or modification projects or were accomplished through energy grants.

➢ *FAA Regions*

1998 Regional highlights included:

(1) Alaskan Region —
- Six next generation weather radar (NEXRAD) stations were optimized by revising ventilation systems to provide positive pressure in the buildings and reduce heat loss. Digital controls were scheduled to be installed at each site to control the heating and cooling systems.
- The maintenance shop and flight service station (FSS), located in Barrow, were converted from fuel oil to natural gas. The Region estimated that the conversions would cut energy consumption in half.
- A complete replacement of the heating, ventilation and air conditioning (HVAC) system at the Anchorage air traffic control tower (ATCT) was under construction.

(2) Central Region —
- Small energy conservation projects, such as replacement of air conditioning units and improvements to lighting/sensors and heating controls were completed. Replacement of the air conditioning units generated an estimated cumulative annual saving of approximately $1,110 and the control improvements generated cumulative annual savings of approximately $2,160.

(3) Great Lakes Region —
- Installed flow controls for the chilled water loop at the Indianapolis, IN, air route traffic control center (ARTCC).

(4) New England Region —
- Comprehensive energy audits, which also included a water conservation component, were conducted at four facilities.
- Walk-though energy audits were also conducted at four additional facilities.

(5) Northwest Mountain Region —
- The Seattle, WA, Air Route Traffic Control Center (ARTCC) performed $700,000 worth of work under a Department of Energy (DOE) Energy Savings Performance Contract. The FAA received a Certificate of Commendation from the DOE's Federal Energy Management Program for the work done at the ARTCC. The ARTCC also received a Kings County Green Works Membership Certificate.
- The Denver, CO, ARTCC replaced older fluorescent lights with new energy saving fluorescent lights.

The Seattle Air Route Traffic Control Center performed $700,000 worth of work under an Energy Savings Performance Contract.

Radiant barriers, electronic ballasts, and hydronic heating system changes saved 35% in heating/cooling costs at the Fort Worth-Meacham Air Traffic Control Tower.

(6) Southwest Region —

- Radiant barriers, electronic ballasts, and changes to a hydronic heating system were made at the Fort Worth-Meacham, TX, air traffic control tower (ATCT), resulting in a 35 percent savings in heating/cooling costs.
- A radiant barrier was included in the Austin-Bergstrom, TX, air surveillance radar (ASR) system modification and was expected to save 35 percent in heating/cooling costs.
- Energy audits were performed at the following two facilities: Houston, TX, air traffic control tower (ATCT) and Silver City, NM, air route surveillance radar (ARSR).
- An audit was completed as part of the energy saving performance contract for the Addison, TX, air traffic control tower (ATCT).
- The City of Albuquerque's Water Conservation Plan was incorporated into the Region's draft Energy and Water Conservation Order.

➢ *FAA Centers*

The Technical Center's energy and water initiatives included:

(1) Water Pump Changes: Three condenser pumps in the utilities plant that serves the Technical Center's main building and hanger were replaced with new, higher efficiency pumps and high efficiency, variable frequency drive motors.
(2) Lighting Projects: Six different lighting projects were conducted which resulted in 654 lighting fixtures either replaced or retrofitted and resulted in a savings of approximately 340,371 kWh/year.
(3) Exit Sign Replacement: A total of 250 exit signs were replaced in one building with new LED-type exit signs which only use 2 watts per fixture. The energy savings were projected to be about 25,000 kWh/year.

The Aeronautical Center's accomplishments included:

(1) An additional 27 heating, ventilation and air conditioning (HVAC) zones were added to the Energy Monitoring and Control Systems Control enabling some boilers to be shut down for the cooling season and placed in dry storage until required for the heating season.
(2) Plate and frame heat exchangers were installed in three major buildings to reduce energy usage and improve efficiency of existing heating and cooling systems.
(3) More efficient HVAC equipment and lighting were installed during building renovations.
(4) Automatic controls were installed on lighting and computers.

- Employee and Public Outreach

FAA activities to promote environmental awareness to both its employees and the public increased substantially. In 1998, FAA participated in the following national environmental awareness celebrations: Earth Day, National P2 Week, Energy Awareness Month, and America Recycles Day. All four of the celebrations were highlighted in FAA's Headquarters' employee newsletter *Intercom*.

FAA HQ

➢ *Earth Day*

Earth Day celebrations were conducted in three Regions, both Centers and at Headquarters. The Great Lakes Region created an interactive database program for all Regional implementation employees and SMO environmental support employees. The program contained environmental tips and facts as well as a calendar of events for local Earth Day activities near each of the Region's five SMOs. The Northwest Mountain Region's Earth Day activities included informational displays in the Regional Office. In the Southwest Region, informational handouts and product vendors provided employees with exposure to various P2 and energy conservation products and services. The Technical Center distributed material to all Center employees via electronic mail. The Aeronautical Center started the celebration with Arbor Day tree planting, a dedication, and a sapling giveaway. Their "Earth Week" celebration also included: (1) environmental education displays; (2) an alternative fuel vehicles exhibit; (3) daycare coloring contest and awards presentation; (4) an environmental questionnaire contest and awards presentation; and (5) a brown bag luncheon with a featured speaker.

At Headquarters, both the Office of Environment and Energy (AEE) and Airway Facilities' ANS-500 celebrated Earth Week in the lobby of the FAA Headquarters Building. AEE held a Recycled Paper Airplane Contest and provided three exhibits in the FAA lobby. AEE-200's display focused on FAA facility environmental and conservation accomplishments, as well as different initiatives FAA has undertaken to protect the environment, such as P2 and overflight policies. Handouts were provided for both adults and kids, such as: *P2 and Recycling at Home and in the Office*; *FAA's P2 Substitution Guide*; *Car Pooling—Saving Money and the Environment*; the *Earth Day 1998 Freddy Activities Book*; and two different coloring books. The other two AEE displays focused on: (1) FAA's new noise modeling system for assessing environmental impacts of air traffic actions, and (2) the various outreach techniques used by FAA to inform the public of agency regulatory and airport-related activities. ANS-500's display focused on the theme of "Earth...Who Can Live Without It?" The display highlighted some of FAA's recent environmental accomplishments and the challenges that lay ahead.

➢ *National P2 Week*

National P2 Week was celebrated by FAA for the first time in September. FAA P2 accomplishments were highlighted in a four panel display developed by AEE-200, which was placed in the lobby of the FAA Headquarters Building. Handouts included three fact sheets (*P2 that You Can Do*; *Yes, You Can Help Prevent Pollution at Home*; and *Saving Energy and P2*) and an activities book entitled *Make Less Waste—How You Can Help the Environment*.

➢ *Energy Awareness Month*

In October, Energy Awareness Month celebrations were conducted in two Regions, one Center and at Headquarters. Great Lakes Region's ANI-400 distributed a memorandum which described FAA's energy use history and EO 12902, *Energy Efficiency and Water Conservation at Federal Facilities*. Also distributed was FAA's *Design Handbook for Energy Efficiency and Water Conservation*. ANI-400 also highlighted Regional energy conservation projects on the Environment, Safety & Energy's Internet site under http://www.agl.faa.gov/agl400/circle, (AGL-400). The Northwest Mountain Region posted "You Have the Power" banners and flyers and sent a newsletter to field employees. The Aeronautical Center placed energy awareness signs at the three Center exits and held an Energy Awareness Jingle Contest. At Headquarters, a display provided suggestions for employees on how to cut down their energy usage, enhance conservation, and save the agency money.

➢ *America Recycles Day*

FAA celebrated its second annual America Recycles Day (ARD) in November. At the Technical Center, material on recycling was distributed to all Center employees via electronic mail. At Headquarters, AEE-200 celebrated with a large banner and a display in FAA's Headquarters lobby. The national ARD theme for 1998 was: "If you're not buying recycled, you're not really recycling." AEE-200's display identified common recycled products that FAA employees could purchase, either for home or for work. Handouts included: two "Buying Recycled" guides; a fact sheet on EO 13101, *Greening the Government Through Waste Prevention, Recycling and Federal Acquisition*; a bookmark; an activities book; and stickers.

➢ *Year-Round Activities*

FAA Regions, Centers and Headquarters also promoted employee and public environmental awareness year-round through newsletters, web sites, brochures, and combinations of these. In 1998, some FAA Regions and Centers used the Internet or FAA's Intranet to highlight Regional/Center facility accomplishments, provide employees with helpful information, and promote environmental awareness. Examples included:

(1) Eastern Region —
- Produced a Regional Environmental, Safety & Energy newsletter, titled *The Environmentalist*, on a quarterly basis that is available on the Internet at: http://www.aos.tc.faa.gov/EastReg/enviro. The newsletter is also available in hard copy.

(2) Great Lakes Region —
- Developed an Environment, Safety & Energy Internet site: http://www.agl.faa.gov/agl400/circle.htm.

(3) Southwest Region —
- Developed a Regional Energy Intranet site that is a clearinghouse for Regional energy management information.

(4) Aeronautical Center —
- Placed the Center's P2 Plan on the Internet at: http://www.mmac.jccbi.gov/amp/ppptl.htm.

(5) AEE-200 —
- Produced and distributed a biweekly *Environmental Regulatory Bulletin*.
- Maintained an Internet site at: http://www.aee.faa.gov/aee-200.

Environmental Media Areas: Air, Hazardous Waste, Water Pollution Control, EPCRA and Spill/Release Notification

- Air

Five FAA Regions and the Technical Center continued to possess existing air permits or received air permits in 1998 as a result of Federal, state, and/or local air pollution control requirements. Engine generators, boilers and fuel storage tanks were the major reasons for the permits and/or registrations in the Regions. As in 1997, the Western Pacific Region (which includes California) and the Technical Center continued to be the two FAA locations with the majority of air construction and operating permits and/or registrations.

Two FAA Regions were able to achieve permit flexibility for air emissions generated at air route traffic control centers (ARTCCs). The Alaskan Region initiated actions with the Alaska Department of Environmental Conservation (ADEC) regarding the five standby engine generators at the Anchorage ARTCC. The Alaskan Region asked for and received in late December, 1997, a "State of Alaska Air Quality Pre-approved Limit" approval from the ADEC. Alaska's "pre-approved limit" sets a limit on a source's ability to emit air contaminants (at the request of an owner or operator) by limiting the amount of fuel that can be burned per year. The pre-approved limit acts like a permit, but is technically not an air permit. The Northwest Mountain Region also sought permit flexibility and requested a permit exemption from the Colorado Department of Public Health and Environment (CDPHE) for engine generators and boilers at the Denver International Airport. The CDPHE granted the exemption.

In 1998, the Technical Center installed one new generator and three natural gas fired boilers, none of which required air permits. The Technical Center was also able to decrease air emissions generation in 1998 through the elimination of four permitted point sources (three engine generators greater than 1.0 MMBTUH and one tank (VOC >2K gals.)).

The Southern Region phased out 454 halon fire extinguishers at 11 Systems Support Centers.

FAA continued its efforts in incrementally reducing its use of ozone depleting substances (ODS). At the end of 1998, the Alaskan Region had made the most progress towards phasing out all ODS in equipment, with approximately 30 percent of ODS containing equipment remaining.

Some FAA Regions focused on EPA's April Final Rule regarding halon-containing equipment. For example, the Southern Region phased out 454 halon fire extinguishers at 11 Systems Support Centers (SSCs) and is now using CO2 and water mist fire extinguishers. The Alaskan Region phased out numerous fire extinguishers at 18 different installations and/or facilities. Other ODS phaseout activities by the Regions and Centers involved replacing the ODS in chillers with ODS substitutes; replacing a halon suppression system with a water system; decommissioning equipment containing ODS, such as

refrigerators and window air conditioning units; and using ODS substitutes in all aircraft maintenance.

- Hazardous & Solid Wastes

FAA has facilities that generate varying amounts of hazardous waste and that fall into all three of the Federal hazardous generator categories. As in 1997, most FAA hazardous waste generators were under the Federal conditional exemption small quantity generator category and FAA continued to have no RCRA Subtitle C treatment, storage or disposal facilities.

The most common and highest volume of waste generated by FAA facilities was fuel contaminated soil/debris resulting from fuel spill cleanups or site remediations. Other types of wastes generated by at least one facility in five or more FAA Regions and Centers were: waste fuels; waste flammable liquids; waste corrosive liquids; mercury containing batteries and/or equipment; waste paint and paint-related materials; and hazardous waste solids, not otherwise specified. The Regions and Centers also recycled various wastes under EPA's recycling and universal waste regulations.

- Polychlorinated Biphenyl (PCB) Management

1998 was an active year for FAA Regions and Centers in regards to PCBs management. With the Environmental Protection Agency (EPA) finalizing the PCB Disposal Amendments rulemaking in mid-June, most all FAA Regions both conducted PCB inventory activities and started initiatives to comply with the new individual marking requirements. Only three FAA Regions have PCB transformers: Eastern, New England and Southwest. Collectively these Regions registered with EPA approximately 200 transformers, located at approximately 64 facilities in 10 states, as required under the PCB final rule.

FAA Regions and Centers generated approximately 56,595 kilograms of PCB wastes consisting of PCB contaminated oil and/or PCB contaminated equipment. In addition, 920,521 kilograms of PCB contaminated soil/debris wastes were generated as a result of site remediation or spill cleanup. Over 98 percent of this latter type of waste was attributable to remediation activities being conducted at the Technical Center. (See the Environmental Remediation section for more information on the Technical Center's Remediation activities.) There were also two PCB-related fire incidents in 1998. One occurred in the New England Region at a VHF omnidirectional ranging terminal radar (VOR) and the other occurred in the Great Lakes Region.

- Water Pollution Control

Water pollution and abatement involves compliance with a variety of Federal, state and local laws and requirements. For FAA, there is little variability from year to year in the types of facility water management activities.

In 1998, most FAA facilities continued to discharge to public sewer systems; only three FAA facilities actively treated their waste prior to it entering a public sewer system and/or have been required to have a pretreatment permit. Another FAA facility's discharge to the public sewer system was still under review, at the end of December 1998, to determine if a pretreatment permit is necessary. FAA has approximately ten facilities which discharged wastes (i.e., non-contact cooling water, wastewater) to surface waters via point sources for which a National Permit Discharge Elimination System (NPDES) permit was either required or was under review for applicability.

FAA Regions and the Technical Center reported 168 facilities having Class V injections wells (i.e., subsurface disposal systems) governed under the Safe Drinking Water Act (SDWA). This increase over last year's number resulted from SDWA amendment activities and FAA's increased inventory activities.

In addition, most FAA Regions and Centers employed best management practices to avoid non-point source pollution when FAA facilities were upgraded and/or modernized in 1998. FAA Regions and Centers also consulted with and obtained appropriate permits from Federal, state and local entities in conjunction with water resources. Specific activities included:

(1) The Alaskan Region obtained a wetlands permit for road construction for a medium intensity airport lighting system with runway alignment indicator lights (MALSR) for the Ketchikan (KTN) Airport.
(2) In the Eastern Region, FAA consulted with New York's Coastal Zone Management Program regarding proposed cable trenching for an approach lighting system (ALS) at JFK Airport, NY. A scope of work was submitted for a 90 day public review.
(3) The Western Pacific Region consulted with both the Corps of Engineers and their Regional Water Quality Control Board in regards to a new air traffic control tower (ATCT) at the Oakland Airport, CA. The Region received a permit and engineered cable duct banks to bore under potential wetland areas. A construction laydown buffer zone was also placed between the adjacent wetlands.

The Eastern Region obtained Coastal Zone Management Program clearances regarding proposed cable trenching for an approach lighting system (ALS) at JFK Airport, NY.

- Emergency Planning and Community Right-to-Know (EPCRA)

EO 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements*, requires that Federal Facilities comply with EPCRA. Federal facilities are deemed EPCRA-covered facilities if they have one or more chemicals present in certain quantities at their facilities. As in previous years, FAA facilities which triggered reporting requirements in 1998 (EPCRA Sections 311/312 and 302/303), did so as a result of chemicals used in or for power supply (i.e., diesel, gasoline, and propane used by engine generators and sulfuric acid in lead acid batteries). FAA's number of EPCRA-covered facilities fluctuates year to year as a result of commissioning and decommissioning facilities, source reduction, conversion to DC or battery standby power, and other activities.

- Spill/Release Notification

In 1998, FAA's spill/release notifications increased 35 percent over 1997. However, 92 percent of the 62 releases were petroleum hydrocarbon releases, with most being related to FST removal and/or upgrade activities. Of the known released quantities (32 of 62), 78 percent of them were 50 gallons or less.

Most of the above notifications were made to state environmental, health, or natural resource departments. In a few cases, city or county authorities were also notified. Emergency release notifications to a Local Emergency Planning Committee and/or a State Emergency Response Commission occurred in six instances as well.

Environmental Remediation

FAA facilities initiated or completed 67 FST-related cleanups in 1998. Also, approximately 16 FST cleanups which had been started prior to 1998 were still ongoing. In addition, almost all FAA Regions and Centers initiated one or more CERCLA and/or RCRA cleanup activities in 1998.

- FAA Regions

Of FAA's nine Regions, the Alaskan Region has always conducted significantly more environmental remediations. Reasons for this higher level of activity are the result of a combination of factors, such as the remote nature of the facilities, the extreme climatic conditions, high reliance on aviation within the state, and historic contamination. The Alaskan Region environmental remediations continued to be at a high level for 1998. Specific activities included:

Investigations

- Five stations were investigated for potential environmental contamination.
- Petroleum release investigations were conducted at three stations.
- A risk assessment for lead contaminated soils was initiated with Annette Island as the primary focus of the assessment.

Cleanups

- Seven stations received interim cleanups.
- Lead abatement projects were completed at four VHF Omnidirectional Ranging Terminal Radar Approach Controls (VORTACs).
- Four landfills were closed in accordance with the State of Alaska regulations and four landfill closure designs were completed.
- Forty-seven field reports produced from FY97 field activities were reviewed and finalized.

Coordination

- A supplemental Memorandum of Understanding (MOU) to the Annette Island "Metlakatla Peninsula, Alaska Environmental Remediation and Restoration MOU," was signed by the Alaskan Region.
- The Region became an active member of the Moses Point Restoration Advisory Board (RAB).

Information Management

- The Alaskan Region Environmental Restoration Master Plan was completed.
- The architecture of an Environmental Restoration database was initiated.

Significant 1998 accomplishments in the other eight FAA Regions included:

(1) Central Region —
- Continued annual groundwater monitoring activities for Ottumwa, IA, and Eldridge, IA, fuel storage tank removal sites.
- Contamination caused by a leaking underground FST system in Kansas City, MO, was addressed by soil removal and regular groundwater monitoring.

(2) Eastern Region —
- Initiated and completed a subsurface investigation in Sparta, NJ. Site closure was approved by the NJ Depart of Environmental Protection.

- An investigation and soil removal was also completed in Westbury, NY as a result of a reportable oil spill. Site closure was approved by the NY Department of Environmental Quality.
- A site characterization investigation was conducted at the Clearfield, PA air route surveillance radar (ARSR). The results indicated that the site was below PA Department of Environmental Protection's cleanup thresholds.

(3) Great Lakes Region —
- A lead dust cleanup was conducted at the Escanaba, MI, VHF omnidirectional ranging terminal radar (VOR).
- A mercury spill was remediated at the Appleton, WI, air traffic control tower (ATCT).
- A remedial investigation was conducted at the Farmington, MN, air route traffic control center (ARTCC).

(4) New England Region —
- Monitoring of groundwater continued at Bucks Harbor, ME, air route surveillance radar (ARSR) site, in coordination with the Maine Department of Environmental Protection.

(5) Northwest Mountain Region —
- A baseline human risk assessment to evaluate soil contamination at an air route surveillance radar (ARSR) site in Oregon was performed in the fall of 1998. This report presented a complete evaluation of baseline human health risk as defined by Oregon law, regulation, and guidance.

The New England Region continued groundwater monitoring at the air route surveillance radar (ARSR) site, Bucks Harbor, ME, in coordination with the Maine Dept. of Environmental Protection.

(6) Southern Region —
- Six FST sites in four different states were remediated.
- The Miami air route traffic control center (ARTCC) FST site was still being remediated at the end of 1998.

(7) Southwest Region —
- A release of 500 gallons of diesel fuel from the Dallas-Fort Worth, TX, airport surveillance radar-nine (ASR-9) was remediated. Approximately 200 cubic yards of contaminated soils were removed from the site and free product recovered. This remediation project was awaiting final closure from the State of Texas at the end of 1998.
- Two leaking petroleum storage tanks site investigations were completed and two others were underway.
- The remediation project at the West Mesa, NM, air route surveillance radar (ARSR) was completed.
- The Mount Franklin [State Park, El Paso], TX, remediation project was ongoing.

(8) Western Pacific Region
- There were 15 sites contaminated due to leaking USTs. Two sites were cleaned up. The remaining 13 sites were assessed and the data was under evaluation by the Regional Program Management. At the end of 1998, several sites had remedial designs and others were being reviewed by various local regulatory agencies.

- FAA Centers

At the Technical Center, a ten-year $47.3 million Environmental Task Order Contract was awarded to Radian International on March 2, 1998, to perform remedial construction and operations and maintenance activities. On May 26, 1998, a soil removal action (conducted by Radian

International) began at Area 20A Salvage Yard for PCB contaminated soils. The remedial measure (incineration and landfilling) was ongoing as of the end of the year and 908,692 kilograms of PCB contaminated soil and debris was disposed of either through landfilling or incineration. In addition, a five-year Environmental A/E contract valued at $10 million was awarded to TRC Environmental Corporation on October 16, 1998 for the purpose of conducting Superfund investigations, preparing remedial designs, and providing indirect support to the Technical Center's cleanup efforts. Other remediation activity updates for specific sites at the Technical Center included:


Technical Center

- Area 20A – In addition to the soil removal action described above, groundwater treatment for volatile organic compounds continued.
- Area 29 – Groundwater treatment and off-site disposal was scheduled to begin in mid-1999.
- Area 41 – The Draft Final Record of Decision was under review by EPA.
- Area B – Pre-design studies had begun.
- Mercury Cleanup – The Confirmation Study was completed and a Work Plan was under review by regulatory agencies.

At the Aeronautical Center, of the18 sites initially identified since 1994 as potentially requiring environmental remediation, nine sites remained at the beginning of 1998 which had not received a "no further action" designation. For these nine, 1998 accomplishments included:

- Outlet Lagoon/Lake Peachy – The followup data analysis regarding additional fish and benthic macroinvertebrate studies was completed. A draft response to Oklahoma Department of Environmental Quality (ODEQ)'s comments was being prepared.
- Fuel Transfer Station Area – The design for the ventilation in the Radar Training Facility (RTF) Building had been reviewed by the Center's Environmental Team and the Final Design was under preparation.
- Storm Sewer Releases – MMAC completed the resampling of outfalls that had been required by the ODEQ.
- Chlorinated Organics Plume – The Final Closure Report was submitted to the ODEQ for review.

Environmental Due Diligence Audits (EDDAs)

FAA's EDDA process is working to limit FAA's future liability.

In 1998, a total of 198 Phase I EDDAs were conducted. These EDDAs were conducted due to the following:

- property acquisition (38 percent),
- property disposal/transfer (24.7 percent),
- lease acquisition (17.7 percent),
- lease termination (16.6 percent), and
- other (3 percent).

Phase II EDDAs were conducted on five percent of the Phase I properties. In addition, there were two Phase II and one Plase III EDDAs pending at the end of 1998.

FAA's EDDA process was working in 1998 to limit FAA's future liability as some of the 1998 EDDAs were terminated and the properties not pursued.

In addition, FAA's EDDA process allowed for the identification of issues and for informed decisions to be made concerning site acceptability to FAA. FAA sometimes decided that some identified issues (such as adjacent contamination or endangered species) were acceptable. However, most of the sites that fell into the proceeding category appeared to be related to military base decommissioning. FAA's 1998 EDDA's did identify two sites that had endangered or protected species and at least two sites which were located in public parks—one in a National Park and one in a municipal park and subject to additional environmental requirements.

Natural and Cultural Resources

All FAA Regions and Centers conduct reviews and analyses as requisite to the National Environmental Policy Act (NEPA). In 1998, approximately 381 NEPA actions were completed as they relate to FAA facility siting, construction, modification, replacement, decommissioning, and repair activities. Ninety-five percent of the actions were determined to be categorical exclusions. There were also approximately 63 additional NEPA actions that were initiated in 1998 or prior but were either in progress or on hold at the end of 1998. Seventy-one percent of these were environmental assessments in varying stages of completion.

As part of FAA's compliance with EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* and the Department of Transportation (DOT) Order 5610.2, *DOT Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, it is FAA policy to conduct environmental justice reviews during NEPA reviews and analyses. 1998 data indicates a broad but sometimes fundamental execution of this FAA policy. No environmental justice issues were identified in any of the completed NEPA actions.

Of significance, FAA's Northwest Mountain Region successfully used a survey tool (EPA/US Census Bureau's LandView III Software) to identify minority and/or economically deprived populations in areas of concern. LandView III, which is a desktop mapping system that includes database extracts from various Federal agencies and presents the databases in a geographical context on maps, particularly helped the Region with new NEPA actions.

The Northwest Mountain Region successful used LandView III Software to identify minority and/or economically deprived populations in areas of concern.

- Natural Resources

FAA compliance with the Endangered Species Act (ESA), the Migratory Bird Treaty Act, and other requirements relating to sustainable development, ecosystem approach to decision-making, conservation of natural resources, and protection of water resources was accomplished in conjunction with Region and Center NEPA activities.

➢ *ESA*

The Western Pacific Region selected an alternative site location for a low level wind-shear alert system (LLWAS) station to avoid potential impacts to the endangered giant garter snake.

Endangered and threatened species impact a number of FAA facilities throughout the nation. FAA Regions and Centers used avoidance as the major technique to comply with the ESA in 1998. For example, the Western Pacific Region selected an alternative site location for a low level wind-shear alert system (LLWAS) station to avoid potential impacts to the endangered giant garter snake. If avoidance was not possible, FAA Regions attempted to mitigate the impact as much as possible. In the Western Pacific Region, engineers designed a new instrument landing system (ILS) maintenance path at the Montgomery Airport to reduce potential impacts on sensitive vernal pools, a San Diego fairy shrimp habitat. FAA Regions and Centers also scheduled construction activities as appropriate to accommodate the endangered and/or threatened species. Illustrations of this included: (1) The Alaskan Region planned a secondary surveillance radar project around nesting eagles; and (2) The Western Pacific Region delayed construction activities at the Halekala, HI, remote transmitter/receiver (RTR) to adapt to a colony of endangered Petrels; construction was only scheduled to occur during the window when the colony leaves the mountain peak.

FAA's Technical Center in New Jersey is subject to Federal, state and the Pinelands Commission endangered and threatened species laws and requirements. The Technical Center's top endangered species priority has been the formulation of management plans for high priority endangered and threatened species and fulfillment of FAA's mitigation obligations under NEPA. In 1998, the Technical Center continued comprehensive surveys of the pine snake to determine its range and habitat requirements. As a result, one pine snake population was verified as viable and self-reproducing and its denning and overwintering site was located. The Technical Center also completed surveys in the forest mitigation bank of lepidoptera species in 1998.

➢ *Migratory Bird Treaty Act*

FAA's Technical Center has always been highly involved with the Migratory Bird Treaty Act because of migratory birds which threaten flight safety at the Atlantic City International Airport, located on the Technical Center property. As such, the Technical Center had routinely maintained both Federal and State of New Jersey bird depredation permits to control migratory birds. However, on April 15, 1998, the Atlantic City International Airport and 2,000 acres of Technical Center land was leased by the South Jersey Transportation Authority (SJTA). The leasing of the airport also resulted in the Technical Center transferring the wildlife control responsibilities for the airport to the SJTA. Thus, in 1998 the Technical Center filed its last report with the U.S. Fish and Wildlife Service for depredation activities (January 1 through April 15, 1998) as required under 50 CFR. The SJTA held the Federal and State depredation permits for the remainder of 1998 and was responsible for both the remainder of 1998 and all future depredation activities and requirements.

An example of a FAA Region Migratory Bird Treaty Act activity was the take permit that the Southern Region. The permit allowed FAA to "take" an inactive osprey nest at the Gainsville, FL, remote control air to ground (RCAG) facility.

➢ *Sustainable Development*

FAA's Northwest Mountain Region has become increasingly active in sustainable development and ecosystem approaches in decision-making. In 1998, the Northwest Mountain Region assessed alternatives during the site selection process to recommend the least harmful approach within the viable alternatives both under NEPA review and sustainable design/development. The Northwest Mountain Region also developed an implementation plan and training regarding sustainable development. One of their personnel also participated on the President's Council on Sustainable Development/Climate Change Task Force's Sustainable Design/Development Working Group. Three of their engineers identified five new projects for sustainable design. The Tacoma Narrows air traffic control tower (ATCT) base building in Gig Harbor, WA, was scheduled as FAA's first sustainable design and construction project.


Tacoma Narrows Airport

➢ *Prime Farmland Protection*

As part of NEPA actions and some EDDAs, several FAA Regions and Centers consulted with their local Natural Resource Conservation Service regarding new FAA systems and the U.S. Department of Agriculture's prime farmland impact requirements.

• Cultural Resources

FAA historical, archeological and cultural activities continued to increased incrementally. Significant 1998 activities included:

(1) Eastern Region —
- Landscaped a portion of the Gateway National Recreation Area.

(2) Southern Region —
- Conducted 67 cultural and historic resources surveys at 17 different FAA facility types.

(3) Northwest Mountain Region—
- Participated as a partner in the Programmatic Agreement concerning Long-Term Management of the Medicine Wheel site (a National Historic Landmark). The partners meet on a quarterly basis to discuss issues.


Medicine Wheel Mt.

(4) Western Pacific Region —
- Conducted archeological record searches and survey.
- Conducted a historical architectural survey.
- Solicited scoping inputs from adjacent Indian Tribes and the Bureau of Indian Affairs for a proposed air traffic control tower (ATCT) at the Grand Canyon National Park.

(5) Aeronautical Center —
- Completed an archeological, protected species and wetlands survey of land on which the Aeronautical Center is located. One thousand acres were inventoried and nine archeological sites were identified, including a large WWII era landfill.

➢ *Listed & Eligible National Register of Historic Places*

1998 activities regarding the National Register of Historic Places included:


Abingdon Estate

(1) The Abingdon Estate Plantation, one of the sites at the Reagan Washington National Airport listed on the National Register of Historic Places was unveiled at a ribbon-cutting ceremony in 1998.
(2) The Rinaldo Carlton Homestead site at the Aeronautical Center was added to FAA's list of sites eligible for listing on the National Register of Historic Places.
(3) The FAA's Former Southwest Regional Office was eligible for the National Register of Historic Places. This location was also the Early Century Helium Production Plant for the United States. However, in 1997, FAA reported this property as excess and turned it over to the Government Services Administration (GSA), who sold the property in 1998. Consequently, this property was removed from FAA's list of listed and eligible National Register of Historic Places.

➢ *Other Cultural Resource Activities*

In 1998, FAA conducted disposal plan activities to modernize the NAS air traffic control computer and display equipment in twenty air route traffic control centers (ARTCCs). As a result of the disposal plan activities, it was determined that the portions of the equipment at the ARTCC in Leesburg, VA, will be given to the Smithsonian Institute's Air and Space Museum.

Directives and Guidance Documents

The Regions and Centers developed directives and guidance documents intended to help them in their effort of environment compliance, pollution prevention, and emergency preparedness and response. The documents included:

- Alaskan Region's *EOSH Checklist*
- Alaskan Region's *Roles and Responsibilities*
- Alaskan Region's draft *Facility Environmental Compliance Order, 1050.B AL-SUP* (pending signature)
- Eastern Region's NAS Center *ANI-200 SOPs*
- Eastern Region's *Emergency Spill Agreement with QHM*
- Great Lakes Region's Superior SMO *Environmental Team Manual*
- New England Region's ANI 100 *Hazardous Waste Manifest Procedures Memo*
- Northwest Mountain Region's Hazardous Waste Guidance Document
- Northwest Mountain Region's draft *Facilities Environmental Compliance, 1050.x*
- Northwest Mountain Region's *Environmental Compliance Plan*
- Northwest Mountain Region's *Denver Air Route Traffic Control Center (ARTCC) P2 Plan*
- Southern Region's *Environmental Compliance Plan*
- Southern Region's *Five Year Environmental Plan*
- Southwest Region's draft *Environmental Compliance Plan, Vol. I & II*
- Southwest Region's ANI-600 *SOP 30, NEPA & Environmental Processes*
- Western Pacific Region's draft *Environmental Compliance Plan, Vol. II*

In 1997, FAA Regions, in conjunction with ANS-500, started the development of comprehensive regional environmental compliance plans (ECPs). The ECP covers 19 program areas and identifies milestones, schedules, manpower, and funding requirements for five years. In 1998, final ECPs were completed for three FAA Regions (Northwest Mountain, Southern, and Southwest). In addition, workshops were held in two FAA Regions (Eastern and Western Pacific) and draft ECPs were developed. The final ECPs for the Eastern and Western Pacific Regions and workshops for the three remaining regions will be completed in 1999.

ANS-500 also developed and issued Notice 3900.60, *FAA Pre-construction and Maintenance Project Safety and Health Checklist*. The checklist was developed to address hazardous materials releases.

Another ANS-500 accomplishment was the initial development of an ANS-500 Intranet site. The site was being developed in stages and by the end of 1998, access to software which contained state laws and regulations was available through the site.

ANI developed Standard Operating Procedures (SOPs) to provide environmental policy implementation guidance to their personnel. SOP accomplishments included:

- *SOP 30, Version 1, NEPA & Environmental Processes*
- *SOP 90, Version 2, Environmental, Occupational Safety, and Health Program Overview* (was under review at the end of 1998)

In October of 1998, AEE's Environmental Network Order (1054.1) was signed by FAA's Administrator. The order clarified the three purposes of the network: (1) exchanging information

informally among environmental professionals and others across lines of business; (2) enhancing opportunities for professional development and internal awareness; and (3) improving customer service.

AEE, in cooperation with the FAA Environmental Network, hosted FAA's Sixth Annual Environmental Conference in May of 1998. The 1998 conference reinforced the concept of integrating environmental, economics, and equity in decision making in the context of changing local and global conditions. The FAA Administrator was the conference's opening speaker. In addition, a half-day program on environmental risk was co-sponsored by the Federal Bar Association's Sections on Environment, Energy and Natural Resources Law and Transportation Law.

During the FAA Environmental Conference, AEE and the FAA Administrator presented four FAA/AEE Environmental Excellence Awards. The awards program challenges and distinguishes those individuals and teams throughout the entire FAA structure who work to advance environmental awareness, energy and water efficiency, and pollution prevention. Two of the awards ("Natural Resources Management" and "FAA Operations") were bestowed to two Regional facility environmental personnel.

AEE-200 continued to track, review and comment on proposed and final environmental laws, regulations and other various requirements. For example, AEE-200 submitted comments to EPA's Superfund Docket in 1998 supporting the EPA proposal to update and improve upon EPA's Spill Prevention, Control, and Countermeasures Plan regulations.

In addition, AEE-200 continued its interagency activities, such as participating on the Civilian Federal Agency Task Force (CFATF). CFATF's Facility Closure Workgroup, under the direction of AEE-200 personnel, developed the *CFATF Guide on Evaluating Environmental Liability for Property Transfers*. The guide was published in August of 1998.

1998 AEE products included:

- update of the *FAA Environmental Program Notebook*
- *EPCRA Guidance* (hard copy and made available via AEE-200's Internet page: http://www.aee.faa.gov/aee-200/emer_plan/index.htm
- *Guidance Clarifying EPA's December 1998 PCB Registration Requirement* (in conjunction with ANS-500)
- *FAA 1997 Annual Facility Environmental Report*
- a biweekly publication, entitled *Environmental Regulatory Bulletin,* which contains updates of environmental requirements and news of interest for FAA facility environmental compliance personnel
- a monthly publication, entitled *Environmental FYI*, which provides information concerning environmental news, requirements, and trends relative to facility environmental compliance
- two fact sheets and the *Earth Day 1998 Freddy Activities Book* for Earth Day
- three fact sheets for National P2 Week
- a fact sheet, a activities book and a bookmark for America Recycles Day

Inspections and Assessments

Environmental Regulatory Inspections

In 1998, sixteen inspections were performed by Federal, state, or local/municipal environmental regulatory entities in six of FAA's Regions and Centers. EPA continued to increase its inspection coverage. One of the inspections was a no-notice, multi-media consolidated inspection of the Technical Center by EPA Region II and covered the following laws: TSCA, RCRA, CWA, CAA, SDWA, and EPCRA. The fifteen other inspections covered the following environmental media areas: hazardous waste management, USTs, PCBs, air (permits and ODS), NPDES (discharges to surface water), hazardous materials storage, and wastewater. In all of the inspections, either no violations were found or corrective action was initiated.

Regulatory Actions

In 1998, there were seven formal Federal or state regulatory actions—six Notices of Violation (NOVs) and one Potentially Responsible Party (PRP) Notice—issued to FAA facilities. Of the six NOVs, all but one had been remedied by the end of 1998. The outstanding NOV was not issued until late December. The PRP notice was forwarded to FAA Regional Council and involves a battery management site where EPA has attributed to FAA one waste manifest.

Still in progress from prior years was the Federal Facility Compliance Agreement for the Technical Center, in New Jersey, a CERCLA site. The Technical Center continued it's site remediation activities; see the Environmental Remediation section for more information. Regarding the six outstanding NOVs from 1997, which concerned the development of Facility Response Plans for six Alaskan Region installations, all six NOVs were remedied in 1998 to the satisfaction of EPA and the U.S. Coast Guard.

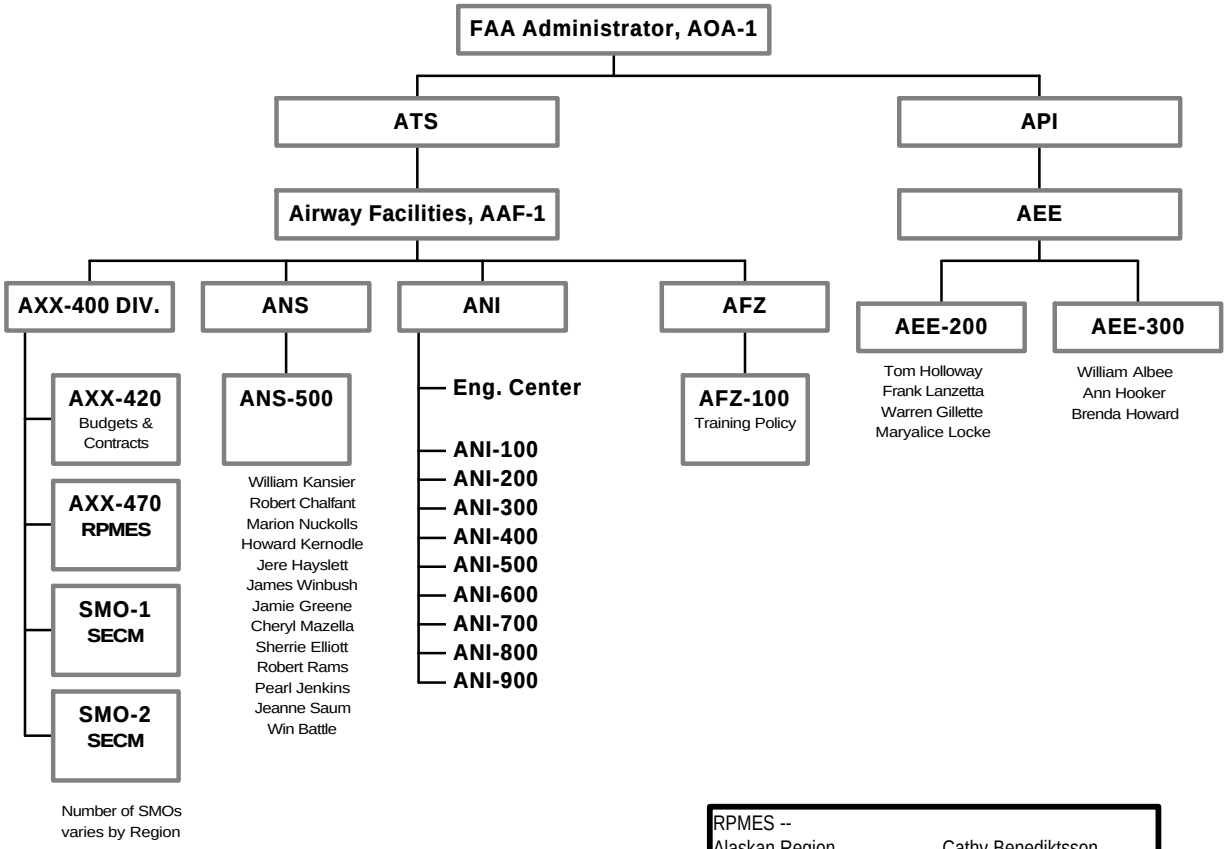
Environmental Compliance Assessment Program

In the mid-1990s, internal baseline environmental compliance inspections were initiated under a FAA program entitled the "Environmental Compliance Assessment Program" or ECAP. 1998 saw FAA's internal environmental inspection program undergoing some evolution. While only the Western Pacific Region conducted ECAP inspections 1998, FAA's ANS-500 launched a software (entitled Safety and Environmental Assessment Compliance Manager System (SEAMS)) for compiling and managing projects to correct findings from the ECAP inspections. However, ANS-500 also began a new initiative in 1998 called the Annual Inspection Program (AIP). The AIP scales down the inspection criteria of the ECAP protocols to a manageable size allowing environmental and safety inspections to be conducted every year at all staffed facilities. FAA's ECAP procedures originally called for initial baseline inspections and follow-up inspections every three years. This change to yearly inspections is believed to facilitate better environmental compliance and management of projects. Thus, while the ECAP inspections provided baseline data, the AIP will function as FAA's main internal environmental compliance inspection mechanism for the start of the 21st Century.

FAA's ANS-500 began a new initiative in 1998 called the Annual Inspection Program.

Organizational Chart

FAA Facility Environmental Compliance Program Key Components (as of December 1998)



API	Assistant Administrator for Policy, Planning & International Aviation
AEE	Office of Environment and Energy
AEE-200	Facility Environment & Safety Division
AEE-300	Policy & Regulatory Division
ATS	Associate Administrator for Air Traffic Services
AAF	Airway Facilities
ANS	NAS* Transition and Integration
ANS-500	Environmental, Energy, and Safety Division
ANI	NAS Implementation
ANI-_00	*Regional* Implementation Centers
AXX-400	*Regional* Airway Facilities Division
AXX-420	Resource Management Branch
AXX-470	Operations Branch
SECM	Safety and Environmental Compliance Manager
SMO	Systems Management Office
RPMES	*Regional* Program Manager for Environment & Safety

* NAS stands for National Airspace System

RPMES --
Alaskan Region ..... Cathy Benediktsson
Central Region ..... Michele Lott
Eastern Region .....Tony Becker
Great Lakes Region ..... James Harmon
New England Region .....Dan Kiley
Northwest Mt. Region .....Dave Powers
Southern Region .....Alan Stensland
Southwest Region ....Tom Allen
Western Pacific Region ..... Angelo Rivera
Aeronautical Center ..... Marla Noak
Technical Center .....Howard Kimpton

ANI ENGINEERING CENTER
ANI-30 Pablo Riofrio

ANI IMPLEMENTATION CENTERS--

ANI-100 [ANE] Karen Yeung
ANI-200 [AEA] Paul DiBenedetto
ANI-300 [ASO] Steve Hardee
ANI-400 [AGL] Art Schultz (430 Platform Mgr.)
ANI-500 [ACE] Matt Sibert
ANI-600 [ASW] Robert Madison
ANI-700 [AAL] John Cline (730 Platform Mgr.)
ANI-800 [ANM] Cindy Felis
ANI-900 [AWP] Susan Freeman (930 Platform Mgr.)