

## **APPENDIX A**

### **U. S. Army Garrison Activities and Tenant Organizations**



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## U.S. Army Garrison Activities

### U.S. Army Garrison Activity Process Matrix

Process	DIO	DOIM	DCFA	DSHE-FIRE
Art, photography, and x-ray	X	X		
Batteries and battery shops	X		X	
Cleaning and degreasing	X		X	
Paint removal operations	X	X		
Metal working and finishing				
Electrical maintenance	X			
Laboratory operations	X			
Pyrotechnics, explosives, and propellants				
Painting operations	X	X	X	
Pesticides	X		X	
Vehicle maintenance	X		X	
Air pollution	X			
Water resources	X			
Class I ODCs				X



## Directorate of Installation Operations

The Directorate of Installation Operations (DIO) is an Aberdeen Proving Ground (APG) service agency providing support to agencies in the Aberdeen and Edgewood Areas. This support includes maintenance of buildings and facilities, logistical support, vehicle and equipment maintenance, and ammunition support. Operational supervision of the installation dining facilities also falls within its scope of operations.

DIO employs, in its seven divisions, 459 civilian and 38 contract personnel. DIO processes include art, photography, and x-ray; cleaning and degreasing; painting and paint removal; electrical maintenance; painting; pesticide application; vehicle maintenance; and generation of air pollution. Its operations include battery shops, laboratories, and water sources.

DIO uses a wide variety of hazardous materials and generates significant quantities of hazardous and nonhazardous wastes through its demolition and remediation activities. Hazardous materials include paints (water- and solvent-based), solvents, fuels, oils, lubricants, hydraulic fluids, antifreeze, battery acid, and an array of laboratory chemicals. Hazardous wastes include paint wastes, used rags, spent vehicle fluids, blast media wastes, spent batteries and acid, fluorescent light tubes and ballasts, and laboratory wastes.

The DIO Supply and Warehousing Division coordinates supply needs for the entire installation. DIO contracts out a vehicle maintenance operation with Engineering Documentation Systems, Inc. (EDSI) and oversees the hazardous materials supply function including requisitioning, distribution, and inventory management for various tenant organizations and for the APG service agencies.

In addition to distributing hazardous materials, DIO accepts unused hazardous materials if redistribution to another APG organization is possible. Since most APG organizations are research oriented, DIO accepts only unopened material in new condition since opened materials would have to be tested to meet quality control requirements. Hence, a large proportion of the hazardous wastes generated by APG laboratories consists of unused materials for which the shelf life has expired or for which the exact purity is unknown.

Except for expired shelf-life items that are disposed of as hazardous waste, only the vehicle maintenance and the cleaning and degreasing operations use significant quantities of hazardous materials. However, due to its role in procurement and distribution, DIO is a significant player in any pollution prevention initiatives that involve central control.

**DIO Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building B4303	Roger Parks	4-1109	Activity Environmental Coordinator
Building B4304	Barry Decker	4-1153	P2 Coordinator/EPCRA Tier II Reporting
Building B5413	Richard Conway	4-2154	Re-Nu-It Centers
Building B4304	Gary Testerman	4-1151	Energy Coordinator
Building B4304	Ray McDermott	4-2352	Installation Boiler Conversions
Building E5771	Ron Gentry	5-2196	Chief, EA Water/Wastewater Section
Building B335	Linda Kimmel	3-0400	COR, AA Water/Wastewater Contract with City of Aberdeen
Building 5110	Abdul Sheikh	3-3303	Entomologist
Building E5185	Debbie Rezek	5-4380	Supply Technician
Building 320	William Vick	4-1610	Account Property Officer

**Directorate of Information Management**

The Directorate of Information Management (DOIM) provides APG information dissemination services. Three of its Visual Information (VI) sections (Devices, Exhibits/Graphics, and Audiovisual/Photography) are housed in separate buildings. DOIM-VI processes include art, photography, display/model fabrication, and painting.

The primary hazardous materials users are Devices and Photography, which use paints, solvents, inks, photographic processing chemicals, and machinery maintenance materials. The majority of purchases are made off-site with a government purchase card.

DOIM-VI processes generate hazardous wastes that include photographic processing wastes, small amounts of paint wastes, contaminated blast media, metal shavings, and paint booth filters.

### **DOIM Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 4725	Phil Mackenzie	4-1335	DOIM, Environmental Coordinator
Building 2373	Bill Kilby	3-4802	Team Leader, Devices
Building 324	Mike Brown	3-2268	Team Leader, Audiovisual

### **Directorate of Community and Family Activities**

The Directorate of Community and Family Activities (DCFA) provides a variety of services to APG personnel, their families, and guests through recreational programs and special-interest facilities. DCFA, with operations at the Aberdeen and Edgewood Areas, has 14 major program divisions, but only five use hazardous materials that may be amenable to pollution prevention initiatives. The five divisions are Automotive Crafts, Golf Courses, Bowling Alley, Chesapeake Challenge, and Outdoor Equipment Maintenance. The Supply Branch of the Support Services Division provides housekeeping support and light maintenance for all DCFA recreational facilities.

DCFA operations include battery shops, and its processes include cleaning and degreasing, painting, pesticide application, and vehicle maintenance. Art, photography, and x-ray processes are no longer performed at DCFA. DCFA uses hazardous materials that include batteries, solvents, paints, pesticides, and vehicle fluids, and it generates hazardous wastes that include waste solvents and solvent-laden rags.

The Automotive Crafts shop is a self-service automobile repair shop for use by APG personnel for personal vehicles. The program's instructors assist with repairs, supply appropriate tools, and collect vehicle maintenance fluids.

Ruggles Golf Course and Plumb Point Golf Course, both at Aberdeen Area, and Exton Golf Course at Edgewood Area are open to all APG and Harford County residents. The courses, which must support themselves, obtain all materials outside of the installation logistics system.

The Bowling Alley serves all APG residents and must support itself for procurement of all materials, which must be obtained outside the installation logistics system.

The Chesapeake Challenge is an amusement area consisting of miniature golf, batting cages, and a go-cart track. Maintenance of the go-carts requires the use of some hazardous materials.

Outdoor Equipment Maintenance is responsible for the upkeep of picnic areas, docks, playgrounds, and other community equipment. The hazardous materials it uses include gasoline at two boating activities and redwood stain.

**DCFA Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 305	Douglas Conley	4-4515	Support Services Division Chief
Building 2319	Cal Adams	3-2884	Automotive Crafts Program Manager
Building 2314	Preston Hill	3-8931	Maintenance Branch Manager
Building 5600	Marc Williams	3-9452	Golf Course Manager
Building 2342	Dave Brewner	3-4041	Bowling Alley Manager
Building 3409	Wayne Doyle	3-4497	Chesapeake Challenge Manager
Building 2407	Cheryl Roark	3-4124	Outdoor Equipment Maintenance Manager

**Fire Prevention and Protection Division**

The APG Directorate of Safety, Health and Environment’s Fire Prevention and Protection Division (DSHE-FIRE) provides fire prevention and firefighting capabilities. Its equipment maintenance requires the use of small amounts of paints, cleaners, and other chemicals. Ninety-nine percent of the material used for firefighting is water. The remaining one percent consists of foams, dry agents, and Halons, which are used in fixed, fire suppression systems throughout the installation and contain nonsolvent Class I ozone-depleting chemicals (ODCs).

**DSHE-FIRE Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 2200	Kevin Farrell	4-0577	Fire Protection Specialist
Building 2200	Barry Bennett	4-0505	Fire Protection Specialist

## Primary Tenant Organizations

### Primary Tenant Organization Process Matrix

Process	ATC	ARL	CHPPM	ECBC	MRICD	OC& S/SM PT	SBCCOM
Art, photography, and x-ray	X	X	X		X		X
Batteries and battery shops	X					X	
Cleaning and degreasing	X	X		X		X	
Paint Removal operations	X					X	
Metal working and finishing	X				X	X	
Electrical maintenance							
Laboratory operations	X	X	X	X	X		
Pyrotechnics, explosives, and propellants		X			X		
Painting operations	X	X		X		X	
Pesticides							
Vehicle maintenance	X					X	
Air pollution	X	X	X	X	X	X	
Water resources							
Class I ODCs	X	X					
Radiation Waste		X					



## **U.S. Army Aberdeen Test Center**

The U.S. Army Aberdeen Test Center (ATC) mission is to plan and conduct research related to the development and administration of tests of the design, engineering, production, and performance of Department of Defense (DoD) materiel; to develop test procedures, methods, and instrumentation suited to emerging technologies; to maintain and modernize test facilities, ranges, and courses; and to test materiel from development through deployment.

ATC, formerly the U.S. Army Combat Systems Test Activity, plans and conducts development and production tests primarily of artillery and ammunition, including weapons and weapons systems, rockets and missile systems, munitions, components, survey and target acquisition equipment, armor plate, combat vehicles, and general- and special-purpose vehicles. Secondly, the scope includes automotive equipment, fire-control systems, and personal equipment. ATC also provides test and evaluation guidance to materiel developers and producers. Within the Defense Department, ATC is a major range and test facility as well as the main test activity of the U.S. Army Developmental Test Command (DTC). ATC has developed one of the nation's foremost capabilities in testing a broad spectrum of the U.S. Army materiel acquisition process from concept through production and deployment.

ATC operates the Military Environmental Technology Demonstration Center, which tests and demonstrates innovative environmental technologies in an effort to bring ideas from the drawing board to the marketplace. The Center partners with other organizations to efficiently use existing capabilities and facilities.

Operations are performed by military, civilian, and contract employees at several locations throughout the APG Aberdeen Area. ATC services include art, photography, x-ray, batteries and battery shop, cleaning and degreasing, painting and paint removal, metal working and finishing, laboratory operations, and vehicle maintenance.

ATC uses a wide variety of hazardous materials, with minor purchases from off-site vendors and others through the Directorate of Logistics Supply Systems. Some of the hazardous materials, which include Class I ozone-depleting chemicals (ODCs), are compressed gases; paints (water- and solvent-based as well as chemical agent resistant coating, or CARC); solvents (methylene chloride, SK-6605, X-It Plus, Stoddard, etc.); film and photographic developing chemicals; fuels; oils; lubricants; hydraulic fluids; antifreeze; and laboratory chemicals. ATC produces hazardous wastes in the form of used, spent, and expired hazardous materials as well as contaminated rags and blasting media.

The Atmospheric Services Laboratory (ASL) is part of ATC. ASL conducts atmospheric testing, such as releasing helium-filled balloons with or without tethers and electronic equipment attached. The laboratory uses no hazardous materials and generates no hazardous wastes that would be amenable to the implementation of pollution prevention initiatives.

#### **ATC Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 525	Jim Gum	3-3371	Operations Chief, Arms Shop
Building 525	Dick Gillie	3-4664	Arms Shop, Magna-Flux
Building 525	Jim Gum	3-3371	Arms Shop, Sign Shop
Buildings 362/363	Bob Durgin	3-3714	Chemistry Branch Chief
Buildings 362/363	Judy Galloway	3-7990	Chemistry Branch, Laboratory Operations
Buildings 338/337	Larry Erby	3-4583	Motor Pool
Buildings 338/337	Donald Harris	3-2027	Motor Pool
Building 733	Marshall Hess	3-3635	Small Arms Shop, Small Arms Maintenance

### **U.S. Army Research Laboratory**

The U.S. Army Research Laboratory (ARL) is a major subordinate command of the Army Materiel Command (AMC) with headquarters in Adelphi, MD. ARL conducts research and develops new weapons systems, associated ammunition, combat vehicles, and general- and special-purpose vehicles. It performs tank gun accuracy, live fire trajectory, and ballistics testing.

ARL missions include (1) leading the Army's research and technology program to enhance the lethality and survivability of weapons systems, (2) conducting research to optimize soldier performance and soldier-machine interactions, (3) determining the survivability, lethality, and vulnerability of Army systems to the full spectrum of battlefield threats, (4) performing research in computer and information sciences to ensure advanced computer technology is used in the materiel development process, (5) building instrumentation and conducting field measurements to support the development of smart weapons systems, and (6) researching materials

that include polymers, ceramics, metals, and various composite component characteristics.

Research, funded by the federal government and private sector contracts, is conducted in both field and controlled laboratory environments. ARL processes include art, photography, and x ray; cleaning and degreasing; laboratory operations; pyrotechnics, explosives, and propellants; and painting. Operations at the Aberdeen and Edgewood Areas are staffed by 1,100 civil service and contract personnel with limited military personnel support.

The Laboratory stocks some 11,000 material line items of which approximately 770 are Emergency Planning and Community Right-To-Know Act (EPCRA) Section 312 Tier II reportable chemicals. The items include Class I ODCs. Hazardous materials are used and/or wastes generated, primarily, in the following activities: explosives testing, chemical research, propellants testing, vulnerability testing, x-ray photography, halon substitute research, materials research, and melt-and-pour operations. Hazardous materials include cleaning/laboratory solvents such as acetone, trichloroethylene (TCE), acetonitrile, methanol, ethanol, and hexanol as well as paints, developers, depleted-uranium bullets, and armor scrap. Hazardous wastes include solvents, solvent-laden rags, ammunition, and radiation wastes.

#### **ARL Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 433	Dick Schwanke	3-6350	Environmental Programs Manager
Building 4600	Jamie Lariviere	4-0955	SARA Title III Data Coordinator
Building 3345	Karen Ferguson	3-9106	Hazardous Materials/Wastes Coordinator
Building 434	Denise McIntyre	3-6523	ARL Supply
Building 4600	Brian Moyer	4-0967	Pollution Prevention Program Manager

#### **Center for Health Promotion and Preventive Medicine**

The Center for Health Promotion and Preventive Medicine (CHPPM) is primarily offices and an analytical laboratory. The Center's mission is to provide worldwide technical support for the implementation of preventive

medicine, public health, and health promotion/wellness services for all aspects of the U.S. Army and Army Community. This is accomplished while anticipating and rapidly responding to operational needs and adapting to a changing world environment. It includes chemical analysis activities and research to identify health issues related to the environment and new products.

The professional disciplines at CHPPM include chemists, physicists, engineers, physicians, optometrists, audiologists, nurses, industrial hygienists, toxicologists, and entomologists as well as their subspecialties. Processes include art, photography, and x-ray as well as laboratory operations. Except for the Entomology and Water Quality Sampling Laboratories in building E5165, all CHPPM laboratories are housed in building E-2100 in the APG Edgewood Area.

CHPPM uses a wide variety of chemicals purchased, primarily, through the Directorate of Installation Operations Supply Systems, with minor purchases from off-site vendors. Activities that use hazardous materials and/or generate hazardous wastes include glass cleaning, analytical laboratory processes, and chemical analyses. CHPPM uses hazardous materials that include solvents and strong acids required in extractions. It disposes of large quantities of sulfuric and nitric acids, stannous chloride, methylene chloride, various solvents, and mercury wastes.

**CHPPM Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building E2100	COL Little	5-7156	Building Coordinator

**Edgewood Chemical Biological Center**

The Edgewood Chemical Biological Center (ECBC) researches and develops obscuration, flame, and nonlethal weapons; engineering products; life-cycle support services capabilities; and methods that will enable U.S. forces to survive and sustain mission operations on a 21<sup>st</sup> century digitized battlefield through nuclear, biological, and chemical (NBC) defense. ECBC, a component of the U.S. Army Soldier and Biological Chemical Command (SBCCOM), operates a number of laboratories, engineering facilities, and supporting facilities in several buildings in the APG Edgewood Area. Among the supporting facilities is an experimental fabrication facility. ECBC processes include cleaning and degreasing; laboratory operations; welding, metal working and finishing; and painting.

Hazardous materials, which ECBC procures through many methods, include laboratory reagents, dyes, oils, lubricants, strong acids and bases, compressed gases, paints, and fuels. The cleaning, degreasing, painting, metal-working, and general laboratory operations produce hazardous wastes that include paints, solvents and cleaners, decontamination solutions, and laboratory chemicals.

#### **ECBC Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Welding and Machine Shop	Tom Chopper	5-5846	Welding Shop Supervisor
Welding and Machine Shop	Dave Blake	5-3613	Machine Shop Supervisor
ECBC	Maryalice Miller	5-3564	Pollution Prevention Program Coordinator for Acquisition

### **Medical Research Institute of Chemical Defense**

The Medical Research Institute of Chemical Defense (MRICD), in the APG Edgewood Area, conducts research on medical protection against chemical and biological weapons and is the DoD lead laboratory for medical chemical defense research. MRICD conducts laboratory testing of the effects of chemical munitions and other materials on laboratory animals. Operations include x-ray processes to evaluate the effects of the tested materials and analyses using chemical analytical equipment. Processes include photography and x-ray, laboratory operations, and generation of air pollution.

Most MRICD operations are in buildings E3081 and E3100 in the Edgewood Area. MRICD employs 160 civilian and 100 military personnel, with 90% of them working in building 3100.

MRICD procures hazardous medical/laboratory chemicals and materials through the APG Directorate of Installation Operations. The primary activities that use hazardous materials and/or generate hazardous wastes include bioassays; testing conducted with radioisotopes, skin and agent testing; medical management of chemical casualty testing; x-ray photography; and sterilization. Hazardous materials include medical/laboratory chemicals such as ethylene oxide used in autoclaves, acetonitrile used in high-pressure liquid chromatography, and methanol used in dishwashing. Hazardous wastes include solvents and rinse water solutions.

**MRICD Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 3100	Dawn Valdivia	5-4562	Environmental Programs Coordinator
Building 3100	Ben Casole	5-4380	Branch Chief, Safety and Chemical Operations

**U.S. Army Ordnance Center and School and the School of Military Packaging Technology**

The U.S. Army Ordnance Center and School (OC&S) at Aberdeen Proving Ground (APG) is the United States' largest training center for civilian and military personnel (including Army, Air Force, Marine, and international forces) in the field of maintenance and integrated management of combat firepower and ground mobility materiel. OC&S, a major subordinate command of the U.S. Army Training and Doctrine Command, is also the Army's center for maintenance planning and serves as the central point for the career management of Ordnance Corps personnel worldwide.

OC&S occupies about one-third of the usable ground and numerous buildings at the installation and has facilities at both the Aberdeen and Edgewood Areas. It employs 1,200 civilian, military, and contract personnel. More than 11,000 students are enrolled in the school annually, with approximately 2,500 in class at any one time.

OC&S offers a wide range of training that includes military occupational skill courses for new soldiers, mid-level leadership and supervisory instruction for junior, noncommissioned officers, technical enhancement courses for warrant officers, and leadership, resource management, and other advanced courses for senior noncommissioned and career officers. OC&S also plays a major role in providing training for members of the Army Reserve and National Guard.

Supply support for hazardous and nonhazardous materials is provided through Air Force and Marine Logistics as well as the APG Directorate of Installation Operations, with all orders reviewed by the OC&S Environmental Programs Manager. Product substitutions are difficult because, due to educational and technical requirements, OC&S must use the same products that are used elsewhere in the Army.

The primary OC&S activities that use hazardous materials and/or generate hazardous wastes include chemical warfare and other training; automotive

maintenance, repair, and bodywork; painting and paint removal; metal working and finishing; and cleaning and degreasing. Hazardous materials used include battery components, cleaning solvents, paints, and vehicle emissions and maintenance materials. Hazardous wastes are primarily the result of painting operations.

OC&S environmental staff members screen all hazardous material requisitions and local purchase requests before sending them to the logistics office for processing. As a result of this screening process, OC&S has selected several environmentally preferable hazardous material replacements that have reduced hazardous waste generation related to coatings, cleaning supplies, solvents, and rechargeable batteries.

OC&S has a centralized pharmacy, the Activity Distribution Site (ADS) that accomplishes all hazardous material and affirmative procurement item selections and purchases. The OC&S ADS provides inventory tracking information to the Installation HAZMART, which maintains inventory, reference, and statistical information for regulatory reporting purposes.

#### **OC&S Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 3072	Keith Katz	3-3654	Environmental Programs

The School of Military Packaging Technology (SMPT), part of OC&S, teaches packing methods for military equipment. This equipment may be machine parts, weapons, ammunition, or other equipment used by the Army. Packaging generally entails cleaning or otherwise preparing the parts for shipment.

SMPT is housed primarily in a single building in a secured area of Aberdeen Proving Ground. It also has a model shop in building 303 and a testing laboratory in building 360. SMPT cleaning and degreasing processes use hazardous materials that include naphtha-based solvent, P-D-680, oils and coatings, degreasers, spray paint, and ink. Oils and lubricants are used as protective coatings for metal parts to be shipped, and solvents are used to clean coatings off metal parts. SMPT disposes of small amounts of spent cleaners as hazardous wastes.

#### **SMPT Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 360	John Antal, Jr.	3-4770	Environmental Coordinator



## Secondary Tenant Organizations

### Secondary Tenant Organization Process Matrix

Process	DPSDBO	KUSAHC	DENTAC	NGIC/ 203 <sup>rd</sup> MIB
Art, photography, and x-ray	<b>X</b>	<b>X</b>	<b>X</b>	
Batteries and battery shops				
Cleaning and degreasing		<b>X</b>		<b>X</b>
Paint removal operations				<b>X</b>
Metal working and finishing				<b>X</b>
Electrical maintenance				
Laboratory operations		<b>X</b>		
Pyrotechnics, explosives, and propellants				
Painting operations				<b>X</b>
Pesticides				
Vehicle maintenance				
Air pollution				
Water resources				
Class I ODCs				



## Defense Printing Service Detachment Branch Office

The Defense Printing Service Detachment Branch Office (DPSDBO), a division of the Department of the Navy, provides printing support for Aberdeen Proving Ground. Services include photocopying and some printing services such as preparation of books and booklets, pamphlets, maps, and brochures. Processes are art, photography, and x-ray.

DPSDBO, at Aberdeen Area, uses hazardous materials for printing and photographic processes. The materials include nine types of ink, fountain solutions, solvents, and metal plate developer as well as photographic developer and fixer solutions. The materials are obtained from the Defense Printing Service headquarters in Philadelphia, Pennsylvania.

Air emissions from DPSDBO operations contain the following hazardous chemicals: 2-butoxy ethanol, carbon black, glycerol, acetic acid, petroleum distillate, phosphoric acid, naphtha, 2-ethyl-1, 3-hexanediol, and other volatile organic compounds.

### DPSDBO Contact Information

Location	Contact	Phone	Job Title/Responsibility
Building 342	Jim Andrews	3-2226	Manager and Environmental Coordinator

## Kirk U.S. Army Health Clinic

Kirk U.S. Army Health Clinic (KUSAHC) is the primary facility for health and medical services to the APG community. KUSAHC, which was downsized from a hospital and occupies one building in the Aberdeen Area, provides primary care medical services, including general medicine, occupational health, and preventive medicine to more than 70,000 beneficiaries. The Troop Medical Clinic in the Edgewood Area provides sick call to active military and occupational health services to civilians in that area.

KUSAHC processes include art, photography, x-ray, cleaning and degreasing, and laboratory operations. The processes use hazardous materials that include fixer and developer solutions as well as floor wax, wax stripper, window cleaner, germicide, all-purpose cleaner, metal cleaner, and bleach. Housekeeping chemicals are procured and disposed by the contractor for housekeeping services. Laboratory operations produce a significant

hazardous waste stream that includes spent wright stain. The Pharmacy disposes of expired hazardous drugs through the Directorate of Safety, Health, and Environment’s Hazardous Waste Tracking System (HWTS).

**KUSAHC Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 2501	Gary L. Gerdom	3-1893	Environmental Coordinator

**Dental Clinic**

The Dental Clinic (DENTAC) in the Aberdeen Area (building 2501) and the DENTAC in the Edgewood Area (building E4110) provide outpatient and emergency dental care services to their respective communities. Their processes include art, photography, and x-ray.

Hazardous materials used at the clinics include fixer and developer solutions for x-rays as well as materials used for dental fillings and molds. Only x-ray operations use significant quantities of hazardous materials and produce a significant hazardous waste stream that comprises spent fixer and developer solutions.

**DENTAC Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 2501	SSG Lewis	3-1797	Satellite Accumulation Site Management
Building E4110	SSG Rompa	5-1787	Satellite Accumulation Site Management

**National Ground Intelligence Center and 203<sup>rd</sup> Military Intelligence Battalion**

The National Ground Intelligence Center (NGIC) tests foreign equipment and builds working models of foreign equipment. The working models are then used to create signatures of the foreign military equipment for smart weapons. NGIC at Aberdeen Proving Ground is housed along with the 203<sup>rd</sup> Military Intelligence Battalion. Within the building are a vehicle bay, a model shop, and storage space for old foreign equipment.

Hazardous materials used at NGIC include paint products, epoxy resin,

alcohols, glues, spray lacquers, welding flux, and solder. The materials are acquired through the DIO supply system and are used primarily to build models. Use of these products results in small amounts of air emissions and hazardous wastes.

#### **NGIC Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 4727	Raphael Corpuz	3-7775	Environmental Coordinator, NGIC
Building 4727	Joe Koch	3-7810	Operations Officer
Building 4727	Jeff Miller	3-5296	Division Chief

The 203<sup>rd</sup> Military Intelligence Battalion (203<sup>rd</sup> MIB; formerly Foreign Military Intelligence Branch, FMIB) is a subordinate activity of NGIC. The battalion is the only battlefield technical intelligence organization in the active Army force structure. The 203<sup>rd</sup> MIB mission is to deploy to provide technical intelligence support and information to combined, joint, or Army commands. The battalion obtains materials through the APG DIO supply system.

#### **203<sup>rd</sup> MIB Contact Information**

<b>Location</b>	<b>Contact</b>	<b>Phone</b>	<b>Job Title/Responsibility</b>
Building 4727	CW2 Dalle	3-7834	Environmental Coordinator
Building 4727	1st SGT Upperman	3-7801	Environmental Coordinator
Building 4727	Mike Corbin	3-7764	Environmental Coordinator



## **Other Organizations**

### **Maryland Army National Guard – Armory and Army Aviation Support Facility**

The Maryland Army National Guard – Armory and Army Aviation Support Facility (MD ARNG) maintains an armory, warehouse, vehicle maintenance shop, and heliport with an aviation support facility at the Edgewood Area. The armory consists of office space, equipment and armament storage, and a motor park. There is no industrial activity, and the warehouse is limited to overflow storage. The vehicle maintenance shop performs organizational maintenance on wheeled vehicles, using a water-bath cleaner and bead blaster, and only occasional touch-up painting. Higher level maintenance and vehicle painting are performed off-site at the Combined Support Maintenance Shop in Havre de Grace, MD. Aircraft organizational and intermediate-level maintenance is performed at the Aviation Support Facility at Weide Heliport. The heliport performs soap and water aircraft washing and diluted solvent engine washing on a closed system recycling wash rack as well as spot painting with epoxy and polyurethane paints. Aberdeen Proving Ground recycles used oils, and Safety-Kleen maintains two parts cleaners. Waste JP-8 aviation fuel is used in ground support equipment. Depot maintenance and aircraft painting are performed off-site at the Aviation Classification and Repair Activity Depot at Groton, CT.

### **U.S. Army Test, Measurement, and Diagnostic Equipment Support Center**

The U.S. Army Test, Measurement, and Diagnostic Equipment (TMDE) Support Center calibrates and tests equipment to assure its integrity. TMDE's 20 employees service electrical and mechanical equipment and, as needed, replace alkaline batteries. Compressed air and small amounts of denatured alcohol in spray cans are used for cleaning.

### **Army Environmental Center**

The Army Environmental Center (AEC) coordinates and oversees Army environmental policy and programs. AEC supports military-funded environmental development and provides technical guidance and work plan development in other areas to the Department of the Army Headquarters, major Army commands, installations, and other activities. AEC environmental programs involve restoration under the Installation

Restoration Program (IRP) and Base Realignment and Closure (BRAC) Program, compliance, conservation, pollution prevention, validation, demonstration, transfer, quality assurance and quality control, training, information management and reporting, and related resource management and planning. AEC activities use toner for copiers, printers, and other document production and reproduction equipment. Minor amounts of cleaning products, such as glass cleaner, are maintained and used at the facility.

### **Developmental Test Command, Management Engineering Team**

Headquarters, Developmental Test Command (HQ DTC), oversees and provides support for the testing activities at Yuma Proving Ground (YPG), Dugway Proving Ground (DPG), White Sands Missile Range (WSMR), and their subordinates. At these DTC installations and test centers, military hardware of all descriptions is tested under a variety of real and simulated conditions. HQ DTC activities, however, occur in an office setting. Toner cartridges for printers and copiers, small amounts of household cleaning supplies, paper waste, and fluorescent lights make up the majority of HQ DTC's waste stream. APG contractors handle all waste disposal issues for HQ DTC, including the changing of the fluorescent bulbs and the recycling of toner cartridges and batteries. HQ DTC stocks only minimal amounts of cleaning and office supplies and makes every attempt to purchase environmentally friendly alternatives.

### **Army Materiel Systems Analysis Activity**

The Army Materiel Systems Analysis Activity (AMSAA) reports directly to the Army Materiel Command, providing the Army with independent evaluation and analysis support for all materiel systems such as the analysis of data generated during testing. Its mission includes evaluating the performance, effectiveness, reliability, and supportability of Army systems to help the Army decide how to best equip and sustain its forces. In addition, AMSAA supports large studies and analyses conducted by other major commands and agencies by providing them with item and system level performance, effectiveness, reliability, and logistics data.

As an analysis activity, no AMSAA operations use hazardous materials or generate hazardous wastes. Solid wastes, including toner cartridges and wastes generated by reproduction and copying operations, are recycled. AMSAA staff members use small amounts of touch-up paint.

## **APG Resident Agency 3rd MP Group**

The APG Resident Agency 3<sup>rd</sup> Military Police Group, Criminal Investigations Division (CID), investigates criminal activities at the installation. CID uses small quantities of the following hazardous materials: windshield wiper fluid containing methanol, fingerprinting ink (U.S. Fingerprint Co., Kansas City, MO), medium weapon oil (MIL-L-46000B, 9150-00-935-6597, Bray Oil Co. Inc.), fingerprint dusting powders, solvent degreaser, and cyanoacrylate adhesive. The Resident Agency uses a fuming room and personal protective equipment for respiratory protection during application of the cyanoacrylate adhesive used in fingerprint enhancement.

## **Chaplain Activities**

The Chaplain Activities organization conducts religious services of various faiths and provides other chaplain and clergy functions for the Aberdeen Proving Ground community. The activity maintains a small amount of household cleaners, and liquid paraffin is used in candles during services.

## **Technical Escort Unit**

The Technical Escort Unit (TEU) is responsible for the escort of chemical warfare materiel and agents at Aberdeen Proving Ground and for emergency response to releases of such materials. The only hazardous materials it uses are small amounts of testing and decontamination chemicals in emergency response activities. The chemicals include chlorine-based materials used for decontamination; colorimetric contamination detection tubes, which contain mercuric cyanide and copper sulfate; lithium and nickel-cadmium batteries; and small amounts of cleaning solvents.

## **Directorate of Safety, Health and Environment; Environmental Compliance Division**

Hazardous Waste Management: The Environmental Compliance Division (ECD) oversees the entire APG hazardous waste and special medical waste management program. In this capacity, the division conducts compliance inspections; manages storage facilities; provides contract waste disposal services; disseminates guidance on waste handling and disposal; obtains permits for hazardous waste storage and treatment units; files required waste

minimization, generation, and disposal reports; and conducts training for installation customers involved in executing the APG hazardous waste and special medical waste management program.

ECD ensures compliance via quarterly and/or annual inspections of more than 200 hazardous waste satellite accumulation sites, 17 temporary storage (less than 90-day) sites, and several permitted storage and treatment units. Division contract waste disposal services include contract lab packing services, waste pickup, and off-site permitted disposal at commercial treatment, storage, and disposal facilities located throughout the United States. ECD also operates a 90-day temporary storage site in the APG Aberdeen Area and a permitted storage facility in the Edgewood Area for the consolidated collection and storage of hazardous wastes prior to pickup for off-site disposal.

Radioactive Waste Management: ECD operates the radioactive waste storage facility at building 5111. Principal wastes it handles are laboratory materials and depleted uranium instruments and articles. The central storage facility is the collection point for radioactive waste. There is no mixed (radioactive and hazardous) waste at the facility. All containers are shipped in and out without being opened. No industrial operations that would generate hazardous wastes are performed.

### **Directorate of Safety, Health and Environment; Environmental Conservation and Restoration Division**

The Directorate of Safety, Health and Environment (DSHE) Environmental Conservation and Restoration Division (ECD), an APG service agency, ensures installation compliance with the National Environmental Policy Act (NEPA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Within the Defense Department, CERCLA compliance is accomplished under the Installation Restoration Program (IRP) and the Formerly Used Defense Sites (FUDS) program.

The ECD Conservation Section oversees the installation's natural and cultural resources. It employs three contractors who are responsible for digitization of historical sites, archeological services, and historical building evaluations. None of the contractors are known to use hazardous materials or generate hazardous wastes.

The ECD Environmental Restoration Section, with headquarters at Edgewood Area building E4430, is primarily responsible for implementation of the IRP at installation sites contaminated with chemical warfare agents, surety materials, munitions, explosives, contaminated equipment, and other

hazardous wastes. The section is responsible for sampling and analysis activities, remedial investigations and feasibility studies, and removal and remedial actions within the 13 IRP study areas and at other APG sites in the Edgewood and Aberdeen Areas. The activities, conducted by Environmental Restoration Section contractors, generate solid and hazardous wastes from the excavation of contaminated media, decontamination of investigation-related equipment, and other investigation and remediation activities. Because the activities are required as part of the IRP or FUDS operations and because the wastes are classified as “one-time generation” wastes, specific pollution prevention initiatives to reduce these waste streams are not applicable. The activities are conducted in accordance with Environmental Protection Agency, Maryland Department of the Environment (MDE), and Army-approved work plans, feasibility studies, records of decision, and other decision documents required under CERCLA. The requirements for these documents include consideration of measures to reduce the generation of waste and protect human health and the environment.

## **U.S. Army Corps of Engineers**

The U.S. Army Corps of Engineers (COE) at Aberdeen Proving Ground provides construction design, supervision, inspection, contracting, and support services for the demolition and construction of buildings at the installation. Principal activities at the COE office include preparation and modification of plans and design documents; inspection and oversight of construction, contracting and contract negotiations; and quality assurance and control of construction. The office does not directly handle hazardous materials or generate hazardous wastes.

COE oversees contractors who use hazardous materials in construction projects, and it must confirm that prime contractors and subcontractors adhere to contract requirements for all generated waste. The contracts have stringent requirements for what may be used for backfill and for how wastes are handled. Specifications, developed by DSHE, ECD, require contractors to minimize the use of materials containing semi-volatile/volatile organic compounds (VOCs) in order to reduce air emissions during construction. Construction materials that contain VOCs include paints, solvents, cleaners, sealers, glues, and mastics. Contractors are specifically prohibited from installing materials that continue to leach chemicals to the environment after cure. Contractors are also prohibited from using ozone-depleting chemicals.

## **Directorate of Law Enforcement and Security**

The Directorate of Law Enforcement and Security (DLES) is responsible for law enforcement and security for the Aberdeen and Edgewood Areas of Aberdeen Proving Ground. DLES uses a minimum of hazardous materials that include nickel-cadmium batteries and household cleaners. The batteries, which are used in hand-held radios, are recharged at the station and reused. Most of the batteries used are alkaline, which do not have to be disposed of as hazardous waste. DLES have photocopiers that use toner cartridges, which are recycled and reused.

## **Project Manager Chemical Demilitarization**

The Project Manager Chemical Demilitarization (PMCD) has the mission to safely and effectively dispose of all U.S. chemical warfare materiel while ensuring maximum protection of the public, the workers, and the environment. At Aberdeen Proving Ground, the project manager for alternative technologies approaches has the responsibility to pilot test a neutralization-based process for the disposal of distilled mustard agent. Pilot testing will be conducted at the Aberdeen Chemical Agent Neutralization Facility (ACANF), which is scheduled to begin hazardous waste operations in 2003. At Aberdeen Proving Ground, the product manager for non-stockpile chemical materiel is responsible for its disposal, including former production facilities, recovered chemical weapons, and miscellaneous chemical warfare materiel. Disposal of APG former production facilities and of miscellaneous chemical warfare materiel is ongoing and is coordinated through the garrison. Recovered chemical weapons will be handled in the Munitions Assessment and Processing Systems building, which is scheduled to begin hazardous waste operations in 2003. PMCD also manages a contractor-operated Chemical Demilitarization Training Facility (CDTF) for training personnel from other Army installations. General Physics Corporation operates the CDTF, which includes a laboratory. The laboratory is multidisciplinary and produces approximately five gallons of waste per year. The CDTF laboratory has reduced waste generation so that only three on-site hazardous waste satellite accumulation sites are required. All PMCD operations are conducted in accordance with the Resource Conservation and Recovery Act, Clean Air Act, and Clean Water Act administered by the U.S. Environmental Protection Agency and the MD E. The APG DSHE provides installation oversight.

## **Aberdeen Test Center (Phillips Army Airfield)**

Phillips Airfield is a small-scale aviation support facility for Aberdeen Proving Ground and other nearby military installations. Phillips Airfield aircraft maintenance activities involve little hazardous materials usage and no hazardous waste generation. No pollution prevention initiatives are applicable at the facility due to the inflexibility of technical manuals pertaining to aircraft maintenance. Spot painting of aircraft, cleaning and degreasing of parts, and other processes related to repair/servicing of aircraft have already been streamlined to the greatest permissible degree. Used oil generated at the airfield is turned in through the Directorate of Installation Operations, and off-specification fuel (JP8) is accepted by a local off-site fire training school. No de-icing activities take place at the airfield.

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