INTEGRATED PEST MANAGEMENT PLAN U.S. ARMY GARRISON

FORT GREELY, ALASKA

1 OCTOBER 2013



INTEGRATED PEST MANAGEMENT PLAN

U.S. ARMY GARRISON

FORT GREELY, ALASKA

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Integrated Pest Management Plan U.S. Army Garrison Fort Greely, Alaska

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EXECUTIVE SUMMARY

1. SITE. Fort Greely is located in central Alaska, 100 miles from the City of Fairbanks and just 5 miles south of the town of Delta Junction, Alaska. The post covers over 6,700 acres, bounded on the west by the Richardson Highway, and on the east by Jarvis Creek. Fort Greely consists of Allen Army airfield, located on the north side of the installation. The Ground Based Midcourse (GMD) Missile Defense Complex, located on the southern third of the installation. The testing and the sighting of the GMD components is the primary mission of the installation. The cantonment area occupies 235 buildings on 200 acres. Approximately 225 active duty military personnel are assigned to the post, with over 500 dependents. Over 1,100 civilians work on post each day. Military housing on Fort Greely is undergoing conversion to Residential Community Initiative (RCI).

2. SCOPE. Pest management services are currently the responsibility of the Base Operations Contractor, Bering-Kaya Support Services (BKSS), has employed a full time in-house pest controller who is either certified by the State of Alaska or the DOD in pest control. The contents of this Integrated Pest Management Plan (IPMP) apply to all activities and individuals working, residing or otherwise doing business on Fort Greely.

3. OVERVIEW. Integrated pest management (IPM) is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. Federal Agencies are mandated to use IPM by Public Law (Section 136r-I of title 7, United States Code). This plan is a framework through which an IPM program is defined and accomplished on the installation. It describes program elements including health and environmental safety, pest identification, pest management, and pesticide storage transportation, use and disposal. This Integrated Pest Management Plan (IPMP) is a guide to reduce reliance on pesticides and to enhance environmental protection; it reflects current DOD/Army policies, procedures and standards and incorporates the requirements of the Environmental Protection Agency (EPA) and the State of Alaska.

4. RESPONSIBILTIES. The Fort Greely Installation Pest Management Coordinator (IPMC) oversees the program. Pest prevention, through good sanitation practices, is the responsibility of all individuals who occupy or maintain buildings or open spaces on the installation. Pest management personnel follow the Integrated Pest Management Outlines in Appendix A. Before pesticides are applied, non-chemical control efforts will be used to the maximum extent possible.

5. IMPACT. Without an IPM program for Fort Greely, pests can interfere with the military mission, lower morale, damage real property, increase maintenance costs, and potentially expose installation personnel to disease.

6. PEST MANAGEMENT ROLES AND RESPONSIBILITIES. The major aspects of the pest management program dealing with pest surveillance, control and the locations where pesticides are stored are addressed in the plan.

7. MAINTENANCE. This plan is a working document that will be frequently updated. This is particularly true for Appendices B and C. Please send comments or suggested changes to:

Installation Pest Management Coordinator:	Richard D. Barth
Mailing Address:	P.O. Box 31310, Fort Greely, AK, 99731
Office Location:	Building 601
Office Phone Number:	(907) 873-4202, Fax 1117
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ACRONYMS AND ABBREVIATIONS

AR	Army Regulation
CDC	Child Development Center
DoD	Department of Defense
EPA	Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
IMCOM	Installation Management Command
IPM	Integrated Pest Management
IPMC	Installation Pest Management Coordinator
IPMP	Integrated Pest Management Plan
MSDS	Material Safety Data Sheet
PUF	Plan Update Form
PUP	Pesticide Use Proposal
USAEC	U.S. Army Environmental Command
YSC	Youth Services Center

INTEGRATED PEST MANAGEMENT PLAN

1. BACKGROUND

1.1 Purpose. Federal Agencies are mandated by Public Law (Section 136r-I of title 7, United States Code) to use Integrated Pest Management (IPM). This IPMP for Fort Greely describes past, anticipated pests, outlines the resources necessary for surveillance and control of these pests including administrative, safety and environmental requirements.

1.2 Authority. This IPMP is written under to meet the requirements of:

1.2.1. Section 136 et seq. of title 7, United State Code, Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended.

1.2.2. DOD Instruction 4150.07, DOD Pest Management Program, 29 May 2008.

1.2.3. AR 200-1, Environmental Protection and Enhancement, 13 December 2007.

1.3 Plan Maintenance. The Fort Greely Installation Pest Management Coordinator (IPMC) maintains this IPMP. Pen and ink changes are made to this plan throughout the fiscal year, and this plan is reviewed and updated annually to reflect all changes made in the pest management program during each fiscal year. Annual updates of this plan are sent to the US Army Environmental Command, Pest Management Consultant not later than 31 October of each year.

2. RESPONSIBILITIES

2.1 Garrison Commander

2.1.1. Designate an Installation Pest Management Coordinator, in writing, for all pest management activities.

2.1.2. Approve and support the IPMP.

2.1.3. Ensure that all pest management operations are conducted safely and have a minimal impact on the environment.

2.1.4. Ensure that adequate funds and staffing are provided to support the installation pest management program requirements.

2.2. Director of Public Works

2.2.1. Support the IPMC requirements for the installation.

2.2.2. Provide Pest Control Shop Building 349 with vehicle storage in Buildings 348.

2.2.3. Request and monitor contract pest management operations.

2.2.4. Obtain and maintain adequate vehicle, supplies of pesticides, pesticide dispersal equipment, and ensure that equipment is properly maintained.

2.2.5. Nominates a COTR for Chapter 8 Pest Control of the BOS contract.

2.2.6. Cooperate and coordinate with the installation medical authority and the IPMC on Pest Control issues.

2.3. Installation Pest Management Coordinator

2.3.1. Determine the pest management requirements for the installation.

2.3.2. Coordinate pest management activities between Fort Greely and AEC.

2.3.3. Annually review and update the Fort Greely IPMP.

2.3.4. Provide answers to questions concerning pest management from Pest Controllers, Garrison personnel, residence and AEC, pest controllers, garrison personnel and residence.

2.3.5. Gather pest management relevant information, especially pesticide use on the installation, and report it to AEC on an annual basis.

2.3.6. Serve as COTR, coordinate, and monitor all contracts dealing with pesticide application. COTR must keep a copy of each contract on file.

2.3.7. Submit all pest management contracts to AEC for review and approval.

2.3.8. Coordinate with local, State and Federal agencies, as necessary, to conduct the installation's pest management program and permits.

2.3.9. Ensure that installation personnel performing pest control are certified, as required.

2.3.10. Maintain adequate records of pest management operations including the Pesticide Use Proposal (PUP) and Out of Cycle Pesticide Use Request (OCPUR) and the Plan Update Form (PUF)

2.4. Director of Family Morale, Welfare, and Recreation

2.4.1. Provide information to staff pertaining to this plan.

2.4.2. Notify parents of pest control activities. When pest control activities are to be conducted in the facilities, provide information 24 hours prior to any pest control work.

2.4.3. Provide health and safety information about pest control activities to parents.

2.4.4. Maintain pest-free facilities for child and youth activities. Eliminate pest entry points in buildings and conditions that would attract or support pest infestations.

2.5. Commander, Bassett Army Community Hospital

2.5.1. Conduct surveillance for pests that could adversely affect the health and welfare of the installation.

2.5.2. Coordinate with local health officials to determine the prevalence of disease vectors and other public health pests in the area surrounding the installation.

2.5.3. Monitor pesticide sales at the Commissary and the Post Exchange.

2.5.4. Evaluate the health aspects of the pest management program.

2.5.5. Conduct surveillance for pests that destroy food stored in installation facilities.

2.5.6. Provide medical surveillance for government employed pest controllers.

2.5.7. Coordinate any requests for residual pesticide treatment in child and youth services facilities with Preventive Medicine Services. No residual treatments will be made without prior consent of Preventive Medicine.

2.6. Pest Management Personnel/Contractors

2.6.1. Assure pesticides are used only after non-chemical methods have been evaluated / attempted and determined ineffective.

2.6.2. Evaluate all pesticides prior to use and assess the risk associated with the treatment. The least hazardous pesticide should always be used first, unless it had been proven ineffective.

2.6.3. Provide the IPMC with documentation as required by the IPMP.

2.6.4. Use only DOD or State approved pesticides.

2.6.5. Coordinate with the IPMC, Preventive Medicine and the Child and Youth Services Director regarding and proposed application of pesticide at CYS facilities. Proper notification and posting must be made prior to application in accordance with Appendix B of this plan.

2.6.6. Manage and dispose of empty container in accordance with federal, state and local regulations.

2.6.7. Comply with all the requirements of the IPMP.

2.6.8. Ensure personnel are trained in pesticide handling, use, and disposal practices and are certified by the State of Alaska or DoD.

2.6.9. Only mix enough pesticide needed for each application. However, if waste pesticide is generated at Fort Greely, transfer the waste to the Hazardous Waste Management Contractor for proper disposal.

2.7. Building Occupants

2.7.1. Apply good sanitary practices to prevent pest infestations.

2.7.2. Use all nonchemical pest control techniques available to the fullest extent before requesting further assistance from pest control contractors.

2.7.3. Cooperate fully with contractors in scheduling pest management operations, to include preparing the areas to be treated.

2.7.4. Obtain, through the Installation Pest Management Coordinator, approval before requesting any contract pest control services.

2.7.5. Do not put food out for stray or wild animals that will attract and sustain pest.

2.7.6. Complaints and or infestation can be addressed by submitting a work order to DPW at 873-3188 and/or IPMC at 873-4202.

3. INTEGRATED PEST MANAGEMENT (IPM)

3.1. Legal Mandate. Federal Agencies are mandated by Public Law to use Integrated Pest Management (IPM). IPM is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. The Army is committed to IPM at its facilities and installations as the best approach to control pests and reduce pesticide reliance and resistance.

3.2. IPM Operations. Although IPM emphasizes the use of nonchemical strategies, chemical control may be an option used in conjunction with other methods. The IPM Outlines found in Appendix A, describe methods for detecting, monitoring, and controlling specific pests. The annual Pesticide Use Proposal (PUP) lists all the pesticides Fort Greely intends to use during the upcoming calendar year. It is included in the annual update of this IPMP and includes pesticide names, active ingredients and percentages, EPA registration numbers, label signal words, target pests, and intended sites. Department of Defense (DoD) policy mandates that professional pest management personnel approve all pesticides applied to DoD installations. Appendix E documents the Child and Youth Services Pest Management Program.

4. PRIORITY OF PEST MANAGEMENT WORK

4.1. Noxious/Invasive Plants and Animals. Executive Order 13112 requires all federal agencies to prevent the introduction to invasive species, to provide for their control, and to minimize the economic, ecological, and human health impacts that invasive species may cause. Invasive species are defined as an alien species whose introduction does or is likely to cause economic or environmental harm or human health concerns. Alien species are further defined as any species, including its seeds, eggs, spores, or other biological material capable of propagating the species, that are not native to that ecosystem. Due to the installations close proximity to the Delta Junction's agricultural community it is

imperative that annual invasive weed surveys be conducted. This will ensure the community does not hold the installation responsible for introduction and harborage of invasive weeds as a result of all the out of state cargo brought to the installation.

4.2. Other Undesirable Vegetation. Vegetation requiring control consists of three general types: lawn and turf weeds, weeds along roads and in and around improved grounds not in lawns, and weeds interfering within range like areas and fence lines. Broadleaf weeds are present in family housing lawns and their control through use of a selective herbicide would improve lawn appearances. Weed control is performed from mid-April to late-October on an as-needed basis, based on visual inspections. Mowing of grassy areas is used to limit the reproductive success of weeds. Herbicide application is forbidden on playgrounds, and its use in other sensitive areas is avoided or kept to a minimum. Soil sterilants may be applied to electrical transformer sites, above ground storage tanks, airfield hardstands and runways. Sterilants are applied to areas where vegetation growth is compliance, safety, security concern, or interferes with a specific mission. Areas treated with sterilants generally need be treated only once every 3 to 5 years. Physical removal of brush and weeds, as with blading or rotary axe-type equipment, has been used as an alternative to sterilant chemicals, but has been found to be more labor-intensive and less effective than sterilants, and too hazardous for some areas.

4.3. Structural Pests. Pests that cause damage to buildings and other wooden structures at Fort Greely is primarily carpenter ants and wood-destroying fungi; termites do not exist in Alaska. Structural damage caused by these pests is not an annual occurrence and damage done in the past has been rare. Carpenter ant infestations are controlled as needed, using glue traps, baits, and aerosol flushing, and removal of the colony if it can be located. Structural damage caused by fungi is best controlled by preventive measures, such as using treated lumber and minimizing humidity in buildings through adequate ventilation. Wood that has been significantly damaged by fungus must generally be replaced. No wood-protection chemicals are applied by Fort Greely Pest Control personnel.

4.4. Pests Found in and Around Buildings.

4.4.1. This category includes cockroaches, bedbugs, silverfish, spiders, fleas, wasps, and other pests. These pests are controlled to maintain the quality of life and morale of building occupants and household residents. Actual eradication of these pests is not feasible, but effective controls can be employed to temporarily eliminate them or greatly reduce their numbers. The cockroach is the most common and important pest in this category. It is significant because of its potential to carry disease, and its adverse effect on morale when visible in dining areas, lavatories, and living units. The only species of cockroach found on Fort Greely are the American cockroach. Surveillance is the most important tool in cockroach control, as it informs the pest controller of the pest species involved, the degree of infestation, and what control measures will be most effective. The use of adhesive traps, monitored by both the pest controller and the building occupant, aid in the positive identification of the species; no chemical pesticides are used without positive identification. An integrated approach to cockroach management includes education of the building occupants, proper sanitation, physical exclusion, and chemical control. Preventive control measures such as proper sanitation and sealing crevices within the building reduce the chance of pest survival by limiting food and shelter, and are

preferred over chemical controls. A similar integrated approach involves the removal of food source, physical exclusion and chemical control, where necessary is used in the management of other infestation pests such as silverfish, firebrats, ants, fleas, and clover mites.

4.4.2. Stored food products and certain textiles may be infested with a variety of moths, beetles, weevils, and other invertebrates. The Veterinary Command, Alaska carries out inspections and product surveillance. Infested product is removed from the storage facility, and spilled product or unsanitary conditions that could support further infestation are eliminated. Infestations are reported to the IPMC, and the contract pest controllers for follow-up pest control.

4.5. Public Health Pests

4.5.1. Mosquitoes are major pests on the installation. The potential for insect-borne diseases has been low in the past, the introduction of West Nile Virus into North America in 1999 may reach Alaska in the future, but to date has not been found. The MEDDAC-AK Preventive Medicine branch is responsible for mosquito surveillance, and helping to determine when pesticide applications are advisable. Light-trapping is an ineffective means of counting flying insects in Alaska because of the prolonged summer daylight hours; MEDDAC-AK routinely surveys using a light traps with CO₂ to determine species, sex and numbers of mosquitoes collected. Recommendations for chemical control are therefore based on public complaints, and larval surveys. Disease vectors will be identified. Insecticide applications are done on an as-needed basis to keep insect populations below vector or nuisance levels, and are performed with "ultra-low volume" application equipment. DPW operates propane magnet traps that are used for nuisance control of mosquitoes around guard shacks and recreational areas.

4.5.2. Swallow bugs are blood-feeding parasites of birds that occasionally make their way into living quarters and bite humans. These pests are managed by limiting the construction of bird nests on post buildings, and treating interior areas found to be infested.

4.5.3. Filth flies become an occasional problem during summer and autumn. Management of these potential disease vectors focuses on the restriction of breeding opportunities and prevention of entry into buildings. Proper sanitation and disposal of garbage is the responsibility of all Fort Greely personnel.

4.5.4. Bees and wasps are commonly found in and around buildings and other structures and cause significant problems where they build nests in entryways. The stings are painful, and envenomization from bee, yellow jacket, and wasp stings may produce allergic reactions in some individuals. Wasps are a significant problem in family housing and weapons-training ranges, where outdoor nests are in proximity to large numbers of people. Individual wasp nests are destroyed with aerosol pesticide on an as-needed basis. If a large honeybee hive is discovered in an area that may cause conflict with human activities, a local beekeeper may be contacted and given an opportunity to safely remove the hive.

4.6. Turf and Ornamental Pests. Scale insects, aphids, spruce bark beetles, and other pests of trees and ornamental plants become significant pests only when damaging populations occur. Chemical

control operations shall be based solely on need, and all efforts are made to avoid environmental problems caused by the overuse of pesticides. Spider mites and clover mites are a persistent nuisance pest in plantings around family quarters and troop barracks in early summer, and are controlled on an as-needed basis.

4.7. Vertebrate Pests

4.7.1. Rodents are important animal pests at Fort Greely. Mice, voles, red squirrels, and arctic ground squirrels can all destroy or contaminate stored food, and can damage or even undermine structures by gnawing and burrowing. Arctic ground squirrels have been known to gnaw outdoor wiring at the airfield and other facilities. Holes gnawed by rodents through wood and siding also allow other pests to enter buildings, and rodent nests in attics and wall-spaces provide habitat for mites and other arthropod pests. Rodent control is programmed in response to occupant complaints or problems discovered during inspections of warehouses or food storage areas. Rodents inside buildings are managed using an integrated approach of sanitation, exclusion, and lethal control. Live-trapping and relocation is the preferred control for red squirrels and arctic ground squirrels; several dozen squirrels may be trapped and relocated in a year. Poison baits may be used only as a last resort and under strict controls.

4.7.2. Migratory Birds. Swallows are the primary bird pests at Fort Greely. While these birds contribute to the control of mosquitoes and other insect pests, their habit of constructing nests on building exteriors can cause damage to the buildings, create a nuisance and eyesore with accumulated droppings, and represent a potential health threat to occupants. The health risk is from mites carried by the birds that migrate from nests into building interiors. Physical exclusion of birds from potential nesting sites is the preferred means of control. Annual permits issued by US Fish and Wildlife Service and Alaska Department of Fish and Game for Fort Greely allow limited destruction of active swallow nests to discourage future nest-building. US Fish and Wildlife Service exemptions to the Federal Migratory Bird Treaty Act are currently required for bird control activities on post. To discourage nest-building on structures, nests containing no eggs or nestlings may be destroyed without a permit, but only after inspection by the IPMC or a designated certified pest controller.

4.7.3. Large Mega Fauna:

4.7.3.1. Moose are largest of the deer family weighting as much as 1,600 lbs. This fact alone makes them dangerous. Combined with their normally calm demeanor gives many people a false sense of security. In fact cow moose are the most dangerous during calving period in the spring. Many moose and caribou inhabit the wooded areas in and around Ft Greely. Recent surveys indicate as many as 50 moose on the installation with several moose spotted on the Airfield. Chemical immobilization is being considered as a management tool on the airfield.

4.7.3.2. Black and Grizzly Bears inhabit wooded areas around Ft Greely. Both species of bears can be very dangerous. All Bear encounters and issues will be managed case by case jointly between DES, IPMC and the State of Alaska Department of Fish and Game.

4.7.3.3. Bison and Caribou. Ft Greely is in the middle of a local bison and caribou herd migration. Bison can weigh as much a 2200 lbs. Their demeanor lures people into a false sense of security. They are most dangerous during the breeding season. Very few contacts occur here on Ft Greely.

4.7.4. Various other wild animals, such as porcupines, mink, muskrats, and marmots may occasionally interfere with post operations; fox and beavers may become nuisances at the Fort Greely recreation areas. No routine control programs are established for these pests. Live-trapping and relocation may be attempted where possible and safe. Licensed Animal Damage Control experts may be used to control nuisance animals when designated by the IPMC.

4.7.5. Feral Cats and Dogs.

4.7.5.1. Stray dogs are normally the responsibility of the DA police. However management will be conducted jointly with the IPMC. Stray dogs taken into custody will be transported in a suitable kennel to Ellie's Dog Gone Kennels at 895-4440 in Delta Junction as a free service. Stray dogs will remain at Ellie's kennel until which time that the Fort Wainwright, Veterinary Command, can make arrangements for further transport to the Fairbanks North Star Borough Animal Control shelter.

4.7.5.2. Stray cats will be live-trapped by pest controllers. They will be held in Building 349 with food, water and heat, until arrangements can be made with Fort Wainwright, Veterinary Command, for further transport to the Fairbanks North Star Borough Animal Control Shelter.

4.8 Quarantine and Regulated Pests. Currently no animal pests in this category are found on Fort Greely. In the event of quarantine requirement guidance will come from the Public Health Command. However we do have invasive plants that have the ability to enter post via vehicle traffic especially construction type of equipment.

4.9 Other Pest Management Requirements. Pest management technicians are responsible for carcass removal including road kills. In addition, the pest management technicians provide services for odor control in buildings, other structures on the installation. Odors may arise from dead animals in walls, crawl spaces, etc.; decaying vegetation, molds and fungi; or from other sources.

5. HEALTH AND SAFETY

5.1. Medical Surveillance of Pest Management Personnel. All Government personnel who apply pesticides on the installation are included in a medical surveillance program. An initial, pre-employment physical examination is conducted to establish that the individual is physically capable of wearing a respirator, if required, and to establish a baseline red blood cell cholinesterase level. This physical examination also includes liver and kidney function tests, a complete blood count and a respiratory evaluation. A physical examination of the same scope as the initial examination is conducted annually.

5.2. Hazard Communication. Installation pest management personnel are given hazard communication training, to include hazardous materials in the workplace. Following initial hazard communication classes, additional training is given to new employees or when new hazardous materials

are introduced into the workplace. Material Safety Data Sheets for all pesticides and other toxic substances used in the pest management program can be found in the pest controller's office, Buildings 349 and 601. Copies of MSDS's are kept on each pest control vehicle for pesticides used that day.

5.3. Personal Protective Equipment. Approved masks, respirators, chemical resistant gloves and boots, and protective clothing are provided to the Government pesticide applicators. These items are used as required during the mixing and application of pesticides. Pesticide-contaminated protective clothing is not laundered at home. The clothing is laundered commercially or at the Pest Control Shop in Building 349. Severely contaminated clothing is not laundered, but is considered a pesticide-related waste and disposed of by the installation hazardous waste contractor (ECC Building 637) in accordance with current environmental regulations.

5.4. Fire Protection. Pesticide storage building adjacent to Building 349 contains the majority of pesticides stored on Fort Greely. This building is in compliance with standards for pesticide facilities (AFPMB TG 17, *Design of Pest Management Facilities*). The pesticide storage area is heated to prevent freezing and rupture of liquid pesticide containers. The IPMC has provided pre-fire plans to the Fire Department. In addition, pesticide inventories are sent to the Fire Department when changes are made or annually. The Fort Greely Fire Chief determines, based on the pre-fire plans, which fire control efforts to employ depending on the size and type of fire at the time a fire call is reported. All fire extinguishers associated with pest control operations will be inspected monthly and replaced, as needed.

5.5. Protection of the Public. Precautions are taken during pesticide application to protect the public, on and off the installation. Whenever pesticides are applied outdoors, care is taken to make sure that any spray drift is kept away from individuals, including the applicator. At no time are personnel permitted in a treatment area during pesticide application unless they have met the medical monitoring standards and are appropriately protected.

6. ENVIRONMENTAL CONSIDERATIONS

6.1. Sensitive Areas. Certain areas on Fort Greely are regarded as "sensitive," and are approached with extra caution and consideration in regards to pesticide application. Sensitive areas include any wetlands or water bodies, lands that drain directly into water bodies, schools and playgrounds, the childcare center and the Jarvis Creek. Sensitive areas listed on pesticide labels are considered before pest control operations are conducted. No pesticides are applied directly to wetlands or water areas (e.g., lakes or ponds), unless use in such sites is specifically approved on the label and the proposed application is approved by the Environmental Office. This last statement particularly applies to pesticides applied on or near open water.

6.2. Endangered/Protected Species and Critical Habitats. There are no threatened and endangered species existing on Fort Greely. The Aleutian Shield Fern is currently the only endangered plant species in Alaska, but does not occur on Fort Greely or in Interior Alaska. Migratory birds utilize Fort Greely as a feeding, breeding, or nesting area. Swallows, hawks, geese, swans, sand hill cranes and a host of neotropical birds inhabit Fort Greely a portion of each year. Migratory birds are protected under the Migratory Treaty Bird Act. The IPMC periodically evaluates ongoing pest control operations and

evaluates all new pest control operations to ensure compliance with the Endangered Species Act. No pest management operations are conducted that are likely to have a negative impact on endangered or protected species or their habitats without prior approval from the AEC Pest Management Consultant.

6.3. Environmental Documentation. The Integrated Natural Resource Management Plan and its associated EA, as well as a copy of this plan are kept on file in the DPW Environmental Office. Copies of the yearly IPMP review forms and the PUP forms are also kept in the DPW Environmental Office.

6.4. Pesticide Spills and Remediation. In accordance with the installation spill response plan, pesticide spill cleanup kits are maintained in the pesticide storage areas of Building 349, the pesticide storage building adjacent to Building 349 and on each pest control vehicle. All pesticide spills are reported to the Fire Department at 873-FIRE in accordance with the Fort Greely Environmental Procedure, Chapter 5, Spill Reporting and Response. Contact the IPMC at 873-4202. Once spills are cleaned up and reported the contents of the spill is to be removed to the installation hazmat facility, Building 637. Contact ECC at 873-1007 for pick up of contaminated materials.

6.5. Prohibited Activities

6.5.1. A pesticide will not be used in any manner that is inconsistent with its label.

6.5.2. Pesticides whose registration has been canceled by the EPA or the State of Alaska will not be used unless otherwise approved by the AEC Pest Management Consultant.

6.5.3. Pesticide misuse, which includes use inconsistent with the label, is a violation of Federal Law. In accordance with DoD policy, Fort Greely personnel will record and report any instances of pesticide misuse and falsification of records by contractors to the State of Alaska. Furthermore, Fort Greely personnel will cooperate with the State and the EPA in any subsequent investigation or actions.

6.5.4. Herbicides will not be used to control weeds at Child and Youth Services Facilities in areas where children play.

7. PROGRAM ADMINISTRATION

7.1. Pest Management Operations. Most pest management services provided on Fort Greely are performed under contract. All contract personnel applying pesticides on Fort Greely are certified by the State of Alaska in the categories of work being performed. Pesticides used by the contractor are stored in HAZMAT storage at Building 349. Herbicides and fungicides uses (primarily granular "weed-and-feed"-type products) are stored in outdoor metal chemical storage lockers near the pest control shop facilities. These facilities meet current Army and Federal guidelines and regulations. Pest management operations are conducted in accordance with Appendices A (IPM Outlines) of this plan.

7.2. Contracts/Quality Assurance:

7.2.1. All contracts dealing with pest management will be sent to the AEC Pest Management Consultant prior to submission for bids or completion of purchase orders. For those contracts that are renewed annually, AEC will be notified of the upcoming renewal date and advised if any changes in the contract specifications have changed. Exception to this policy will be the need for emergency pest control services. In this case, the AEC Pest Management Consultant will be contacted by the IPMC for verbal approval with a follow-up written approval.

7.2.2. In accordance with Executive Order 12856 and Secretary of Defense Memorandum, Subject. Comprehensive Pollution Prevention Strategy, 11 August 1994, pest management contracts are initiated on an "as needed" basis. Monthly or periodic spraying will be eliminated unless deemed necessary after surveying and monitoring pest population levels. The Executive Order states that the military will decrease its usage of toxic chemicals and pollutants by 50 percent. Use of IPM techniques will be required in all contracts, unless otherwise exempted by the IPMC. Pest problems threatening the health, safety, or welfare of installation personnel shall receive priority.

7.2.3. BKSS provides support on Fort Greely for all facilities except Doyon, RCI, AAFES and DCA control properties. BKSS supports much of the pest management program through its own Alaska State Certified pest controller. BKSS provides internal quality assurance for this operation. Salcha Delta Soil and Water Conservation District (SDSWCD) provide landscaping and invasive weed control services to Fort Greely. The IPMC serves as the Contract Officer Technical Representative (COTR) for all pest control related contracts.

7.2.4. Contractors who conduct pest control on Fort Greely must:

7.2.4.1. Show proof of liability insurance.

7.2.4.2. Have State certification and licensing in the category or categories of work to be performed or be DOD pest certified.

7.2.4.3. Use only EPA or State registered pesticides.

7.2.4.4. Furnish Fort Greely with legible copies of pesticide labels and the MSDS of all pesticides proposed for use.

7.2.4.5. Furnish Fort Greely personnel information for pest management record keeping.

7.2.5. A copy of each contract dealing with pest control will be forwarded to the Installation Pest Management Coordinator.

7.2.6. All contractors providing pest management services will adhere to the following:

7.2.6.1. Application of pesticides will be in accordance with label directions.

7.2.6.2. The contractor must comply with all Federal, State, and local regulations.

7.2.6.3. Pesticides must be mixed, stored, and disposed of in accordance with Federal, State, and local regulations, and the provisions of this plan.

7.2.6.4. Contractors other than the Government/Contracted pest controllers mentioned above will bring pesticides onto the installation on a daily basis and will not store pesticides on Fort Greely overnight.

7.3. In-House pest control: In the event contract pest control services cannot be obtained in a timely manner the IPMC may direct pest control operations in-house DOD certified personnel.

7.4. Inter Service Support Agreements. Bassett Army Community Hospital, Preventive Medicine and Environmental Health Section will provide routine pest control surveys and as needed when requested by the IPMC.

7.5. Reports and Records. All contractors provide pesticide use information to the IPMC. Pest management operations are recorded on the Pest Management Maintenance Record (DD Form 1532-1) or other comparable record approved by the IPMC for the building or site where the work was performed. Pounds of pesticide active ingredient are provided to AEC by the IPMC on an annual basis.

7.6. Training and Certification. Government employed pest controllers will serve up to a 2 year apprenticeship and within that time they will have to obtain DoD certification in the appropriate categories for which work is performed. Contractors performing pest management services on Fort Greely will be certified by the State of Alaska in the appropriate categories for which work is performed.

7.7. Pesticide Security. All vehicles entering the installation are checked and validated by security personnel. Only vehicles belonging to the government or contractor stated above are allowed to carry pesticides on the installation. If pest control is scheduled from companies other than those listed in this plan, then the IPMC will contact the Security Office and identify the name of the company and the date that services have been scheduled.

7.8. Coordinates with DoD, Federal, State and Local agencies:

7.8.1. The AEC Pest Management Consultant provides technical review of the IPMP, and gives special attention to any pesticide application that uses restricted use pesticides or uses any pesticide that may significantly contaminate surface or ground water.

7.8.2. Liaison is maintained between IPMC and Preventive Medicine personnel at Bassett Army Community Hospital to determine the prevalence of disease vectors and other public health pests in the area surrounding the installation.

7.8.3. USF&WS and ADF&G personnel are consulted for permits and on all other wildlife control issues.

8. PEST CONTROL SHOP W/ HAZMAT STORAGE

8.1. Admin area: An operational phone and line will be maintained, PC with internet access for research, MSDS, and record keeping, office desk and general admin supplies.

8.2. Laundry and locker area. A washer and dryer will be maintained to allow for laundering of pesticide contaminated uniforms. Freshly cleaned uniforms will be put on at the beginning of daily pest control operations. They will be maintained clean in assigned lockers. Soiled or contaminated uniforms will be kept in hamper and washed on a weekly basis.

8.3. Shower and toilet area. All pest control personnel will have access to a shower and locker facility. Pest control personnel are required to shower after daily operations and in the event of a spill. Pest controller shall keep and maintain uniforms within the laundry facility. Pest control personnel shall arrive at the beginning of the day and depart the end of the day in street clothing.

8.4. HAZWASTE. It is extremely unlikely that any HAZWASTE will be generated. However, in the event HAZWASTE is generated it will be taken to the HAZWASTE Facility located at Building 637 at the end of the workday.

8.5. Equipment storage and cleaning. All government owned pest control equipment will be maintained in Building 349. All gasoline powered equipment will be purged of fuel prior to winter storage. All pesticide mixing and storage vessels will be cleaned and tripled rinsed at the end of each mission day. Pesticide mixtures will not be allowed for overnight storage in any equipment without the permission of the IPMC.

8.6. Rinse waters. All rinse waters will be retained to use as dilute for future herbicide mixtures and missions. Rinse water will be retained using a 275 gallon poly container for storage.

8.7. HAZMAT Storage. All pesticides and herbicides will be stored in a HAZMAT locker designed for pesticide storage with separate environmentally controlled units capable of maintaining product at 50 degrees F inside while -50 degrees F outside. The HAZMAT storage is located on the north side and adjacent to Building 349.

8.8. FIRE and SAFTEY. The IPMC will serve as the Fire and life safety officer for Building 349.

9. GOVERNMENT OWNED EQUIPMENT

9.1. Pest Control Vehicles. Pesticides shall be transported only in the lockable storage compartments of the assigned vehicles. Pesticides will not be transported in the cab at any time. The use of the assigned vehicle for other than pest management purposes is not permitted. Transportation of pesticides (from supply and to the job site) will be accomplished using the vehicle assigned to the pest controllers, with utility beds having external lockable storage compartments. Care should be taken to secure pesticides to prevent damage to the containers and spillage of the pesticide. At no time will pesticides be left unsecured in the vehicle when unattended. A portable eye lavage and spill kit will be carried in the pest control vehicle when in use. All vehicles will have a label affixed stating "CONTAMINATED WITH PESTICIDES".

9.2. Power sprayer. The 300 gallon power sprayer is currently only used for applying bird repellent for Cliff Swallows. It is to be tripled rinsed at the end of each day of use. Rinsate will be used for subsequent operations or re-applied to a suitable site when subsequent use is not possible. It will be

winterized in September of each year and kept on a rack in the garage portion of Building 349. Prior to use each spring the sprayer will receive PMCS before uses.

9.3. Handheld sprayers. One and two gallon sprayers are primarily used for insect control and will be kept either at Building 349 or on the pest control truck. They are to be tripled rinsed at the end of each day of use. They will be winterized in September of each year and kept on a rack in the garage portion of Building 349. Prior to use each spring the sprayer will receive PMCS before uses.

9.4. Backpack sprayer. 3-5 gallon power backpack sprayers primary uses is foliage removal and weed control. They are to be tripled rinsed at the end of each day of use. Rinsate will be used for subsequent operations or re-applied to a suitable site when subsequent use is not possible. They will be winterized in September of each year and kept on a rack in the garage portion of Building 349. Prior to use each spring the sprayer will receive PMCS before uses.

9.5. UTV with Boom sprayer. Procurement of this equipment has not yet been made. Budget priority needs to be given to this piece of equipment to meet the invasive weed requirements.

9.6. Traps: Snap, sticky, live, jaw, conibear and snares may be used for vertebrate and invertebrates. It is important to keep them clean and order free along with any bait. Traps and all associated equipment will be maintained and stored in the pesticide storage area of Building 349.

10. SALE AND DISTRIBUTION OF PESTICIDES

10.1. AAFES. Pesticides sold in the Post Exchange, Building 601, are registered by the EPA for general use; restricted use products are not approved for resale by AAFES. Pesticide products are grouped into several separate categories: products applied to pets for ectoparasite control; repellents; household; and lawn and garden products. Additional guidelines on pesticides in exchanges can be found in Paragraph 10-4h, AR 40-5.

10.2. Commissary. Pesticides sold in the Commissary, Building 601, are packaged as ready-to-use products such as aerosol cans and baits. Additional guidelines on pesticides in commissaries can be found in Paragraph 10-4h, AR 40-5.

11. PEST MANAGEMENT IN CHILD AND YOUTH SERVICES FACILITIES

11.1. Pest Management in Child and Youth Services (CYS) Facilities is found in Appendix C. This documentation includes additional information to the Pest Management Plan for CYS facilities along with the parent notification letter, pesticide notification registry, IPM Outlines, and the PUP.

11.2. The CYS Program was just granted national certification in the IPM Star Program. Additional documentation for the IPM Star Program can be found in the IPM Resource Books at the Installation Pest Management Coordinator's Office and at each CYS facility.

12. PEST MANAGEMENT REFERENCES

12.1. The Federal Insecticide, Fungicide and Rodenticide Act (thru PL 100-460, 100-464 to 100-526, and 100-532).

12.2. Title 29, Code of Federal Regulations, 2008 (or current) revision, Section 1910, Occupational Safety and Health Standards.

12.3. DODI 4150.07, DoD Pest Management Program, 29 May 2008.

12.4. AR 200-1, Environmental Protection and Enhancement, 13 December 2007.

12.5. AFPMB TG 17, Design of Pest Management Facilities, 2008.

Appendix A

INTEGRATED PEST MANAGEMENT OUTLINES

- A.1.1. Broadleaf Weeds
- A.1.2. Undesirable Vegetation
- A.1.3. Pests found in and around buildings
- A.1.4. Rodents and Shrews
- A.1.5. Migratory Birds
- A.1.6. Vertebrate Pests
- A.1.7. Ornamental Pests
- A.1.8. Mosquitoes
- A.1.9. Fungus and Molds

INTEGRATED PEST MANAGEMENT OUTLINE A1.1

PEST: Broadleaf Weeds.

SITE: Fields and Parade sites.

A.1.1.1. Purpose: To control invasive and noxious weeds preventing damage to improved turf.

A.1.1.2. Surveillance

A.1.1.2.1. Conducted by: Certified pest controller.

A.1.1.2.2. Methods: Visual observation.

A.1.1.2.3. Frequency: Annually and ongoing though the growing season (May through September).

A.1.1.3. Pest Management Techniques

A.1.1.3.1. Nonchemical

A.1.1.3.1.1. Type: Mechanical and Physical.

A.1.1.3.1.1.1. Method and Location: Mechanical removal of undesirable broadleaf weeds. This method is appropriate where a limited number of plants are found, but is not recommended when broadleaf weeds are numerous.

A.1.1.3.1.1.2. Conducted by: DPW- Grounds & Maintenance personnel.

A.1.1.3.1.2. Type: Biological.

A.1.1.3.1.2.1. Method and Location: None.

A.1.1.3.1.2.2. Conducted by: NA

A.1.1.3.1.3. Type: Cultural.

A.1.1.3.1.3.1. Method and Location: Vehicle inspections entering the installation.

A.1.1.3.1.3.2. Conducted by: DA Police and BKSS Guards.

A.1.1.3.2. Chemical

A.1.1.3.2.1. Basis for Treatment: Presence of broadleaf weeds in turf.

A.1.1.3.2.2. Method and Location: Hand, Power or Boom sprayer. Chemical is applied to unwanted vegetation in accordance with label directions. Weed-n-Feed is applied as a granular application to lawn areas.

A.1.1.3.2.3. Conducted by: Certified pest controller.

A.1.1.3.2.4. Pesticide: Only pesticides approved by the PMC are approved for use on Ft Greely.

A.1.1.3.2.5. Control Standard: Vegetation is killed within 30 days following treatment.

A.1.1.4. Precautions for Sensitive Areas: Avoid direct application to any body of water. Avoid drift that could damage desirable plants; do not spray if wind speed is in excess of five miles per hour.

A.1.1.5. Prohibited Practices: None.

A.1.1.6. Environmental Concerns: None.

A.1.1.7. Remarks: None.

INTEGRATED PEST MANAGEMENT OUTLINE A.1.2

PEST: Undesirable Vegetation.

SITE: Fence lines, building perimeters, storage yards, and secured sites.

A.1.2.1. Purpose: To control unwanted vegetation damage to property, reduce fire hazards, and enhance security.

A.1.2.2. Surveillance

A.1.2.2.1. Conducted by: Certified pest controller.

A.1.2.2.2. Methods: Visual observation.

A.1.2.2.3. Frequency: Ongoing though the growing season (May through September).

A.1.2.3.Pest Management Techniques

A.1.2.3.1. Nonchemical

A.1.2.3.1.1. Type: Mechanical and Physical.

A.1.2.3.1.1.1. Method and Location: Mowing and string trimmers.

A.1.2.3.1.1.2. Conducted by: DPW Grounds & Maintenance personnel.

A.1.2.3.1.2. Type: Biological.

A.1.2.3.1.2.1. Method and Location: None.

A.1.2.3.1.2.2. Conducted by: NA.

A.1.2.3.1.3. Type: Cultural.

A.1.2.3.1.3.1. Method and Location: Public Education at venues of opportunity.

A.1.2.3.1.3.2. Conducted by: IPMC.

A.1.2.3.2. Chemical

A.1.2.3.2.1. Basis for Treatment: Presence of vegetation at sites listed above.

A.1.2.3.2.2. Method and Location: Hand or power sprayer. Chemical is applied to unwanted vegetation in accordance with label directions.

A.1.2.3.2.3. Conducted by: Certified pest controllers.

A.1.1.3.2.4. Pesticide: Only pesticides approved by the PMC are approved for use on Ft Greely.

A.1.2.3.2.5. Control Standard: Vegetation is killed within two weeks following treatment.

A.1.2.4. Precautions for Sensitive Areas: Avoid contact with foliage or green stems of desirable plants and trees. Avoid direct application to any body of water or storm water conveyances. Avoid drift that could damage desirable plants; do not spray if wind speed is in excess of five miles per hour.

A.1.2.5. Prohibited Practices: None.

A.1.2.6. Environmental Concerns: None.

A.1.2.7. Remarks: None.

INTEGRATED PEST MANAGEMENT OUTLINE A.1.3

PEST: Pests Found In and Around Buildings.

SITE: Office areas, break areas, warehouses, and administrative areas.

A.1.3.1. Purpose: To control household pests (cockroaches, spiders, ants, other crawling insects, flies, fleas, bees, and wasps) in areas where food is stored and served or other areas where pests interfere.

A.1.3.2.Surveillance

A.1.3.2.1. Conducted by: Occupants and certified pest controller.

A.1.3.2.2. Methods: Complaints, visual observation, and sticky traps.

A.1.3.2.3. Frequency: On-going during normal installation activities. The certified pest controller will evaluate the problem during a service call.

A.1.3.3.Pest Management Techniques

A.1.3.3.1.Nonchemical

A.1.3.3.1.1. Type: Mechanical and Physical.

A.1.3.3.1.1.1. Method and Location: Sticky traps are placed in kitchens and bathrooms when minor infestations of cockroaches occur. Cockroach harborage is eliminated by caulking (or filling with other materials) minor cracks, crevices, holes in walls and floors, or other areas where the structure has provided small openings that could be used by cockroaches. Screens are used to prevent entry by flying insects.

A.1.3.3.1.1.2. Conducted by: Maintenance personnel.

A.1.3.3.1.2. Type: Biological.

A.1.3.3.1.2.1. Method and Location: None.

A.1.3.3.1.2.2. Conducted by: NA

A.1.3.3.1.3. Type: Cultural.

A.1.3.3.1.3.1. Method and Location: Good Sanitation, Spilled food is cleaned up and stored food items are placed in closed containers. Good housekeeping is used to eliminate trash, disused boxes, old equipment, and other materials that provide harborage for crawling pests. Areas in and around buildings where these pests interfere with the mission are kept clean to minimize infestations.

A.1.3.3.1.3.2. Conducted by: Building occupants.

A.1.3.3.2.Chemical

A.1.3.3.2.1. Basis for Treatment: Infestations of cockroaches, ants, spiders, other crawling pests, flies, gnats, or mosquitoes are found in buildings.

A.1.3.3.2.2. Method and Location: Aerosol application of pesticide directly to flying insects (other than bees and wasps). Crack, crevice and/or spot treatment of pesticides where crawling pests have been located. Granular applications will be used for ants in outside areas only. Fogging will be used in areas with excessive infestations or difficult to access areas such as the utilidors.

A.1.3.3.2.3. Conducted by: Building occupants (self-help) and certified pest controllers.

A.1.1.3.2.4. Pesticide: Only pesticides approved by the PMC are approved for use on Ft Greely. Currently using MGK Pyrocide 300.

A.1.3.3.2.5. Control Standard: No pests are found 30 days after use.

A.1.3.4. Precautions for Sensitive Areas: None.

A.1.3.5. Prohibited Practices: Exposed bodies of water.

A.1.3.6. Environmental Concerns: Acute hazard to fish.

A.1.3.7. Remarks: None.

INTEGRATED PEST MANAGEMENT OUTLINE A.1.4.

PEST: Rodents, Voles and Shrews

SITE: All buildings.

A.1.4.1. Purpose: To control mice in warehouses, offices, and other buildings.

A.1.4.2. Surveillance

A.1.4.2.1. Conducted by: Building occupants, maintenance personnel, and certified pest controller.

A.1.4.2.2. Methods: Visual observation for mouse damage and droppings.

A.1.4.2.3. Frequency: Daily by building occupants. As required by certified pest controller.

A.1.4.3. Pest Management Techniques

A.1.4.3.1. Nonchemical

A.1.4.3.1.1 Type: Mechanical and Physical.

A.1.4.3.1.1.1. Method and Location: Openings to the buildings that are greater than 1/4-inch are eliminated. Particular attention is given to doors that do not closely and areas on the outside of the buildings where pipes and other utilities enter the building. Sticky glue boards and snap traps are often used to capture mice when an infestation is found in offices.

A.1.4.3.1.1.2. Conducted by: The certified pest controller places glue boards and snap traps for minor infestations; extensive infestations are rarely encountered. Maintenance personnel make building modifications to exclude rodents.

A.1.4.3.1.2. Type: Biological.

A.1.4.3.1.2.1. Method and Location: None.

A.1.4.3.1.2.2. Conducted by: NA

A.1.4.3.1.3. Type: Cultural.

A.1.4.3.1.3.1. Method and Location: Good sanitation is practiced to reduce food and water for rodents and shrews. Spilled food is cleaned up and not left exposed overnight and break areas are kept clean at all times. Bags, boxes, pallets, and other potential harborage are removed from areas where rodents could hide. Food is kept in closed containers.

A.1.4.3.1.3.2. Conducted by: Building occupants.

A.1.4.3.2. Chemical

A.1.4.3.2.1. Basis for Treatment: Infestation of rodents, voles and shrews in and around buildings.

A.1.4.3.2.2. Method and Location: Place bait stations out of sight and in travel routes resting areas and feeding locations.

A.1.4.3.2.3. Conducted by: Pest Controller

A.1.1.3.2.4. Pesticide: Only pesticides approved by the PMC are approved for use on Ft Greely.

A.1.4.3.2.5. Control Standard:

A.1.4.4. Precautions for Sensitive Areas: May be used in and around child and youth service facilities.

A.1.4.5. Prohibited Practices: None.

A.1.4.6. Environmental Concerns: None.

A.1.4.7. Remarks: As long as entry points into buildings exist, then trapping or baiting may be the only alternative for control.

INTEGRATED PEST MANAGEMENT OUTLINE A.1.5.

PEST: Migratory Birds.

SITE: To control birds in and around buildings and structures.

A.1.5.1. Purpose: To control birds where their presence interferes with the mission or public health. This includes swallows, ravens, gulls, an any waterfowl I.A.W. the MTBA and USF&W permits.

A.1.5.2.Surveillance

A.1.5.2.1. Conducted by: Certified pest controller.

A.1.5.2.2. Methods: Visual observation.

A.1.5.2.3. Frequency: Weekly, usually in the spring through fall.

A.1.5.3. Pest Management Techniques

A.1.5.3.1. Nonchemical

A.1.5.3.1.1. Type: Mechanical and Physical.

A.1.5.3.1.1.1. Method and Location: Modification of buildings to exclude birds. This includes netting and bristle wire. Batting strips and monofilament line have been used to render soffit vents, eaves, and other potential nesting sites less attractive to birds, and bird houses have been constructed to encourage nesting in designated areas.

A.1.5.3.1.1.2. Conducted by: Facility maintenance.

A.1.5.3.1.2. Type: Biological.

A.1.5.3.1.2.1. Method and Location: None.

A.1.5.3.1.2.2. Conducted by: NA

A.1.5.3.1.3. Type: Cultural.

A.1.5.3.1.3.1. Method and Location: Keep building windows and doors closed when not in use. Discourage bird feeding.

A.1.5.3.1.3.2. Conducted by: Facility occupants.

A.1.5.3.2. Chemical

A.1.5.3.2.1. Basis for Treatment: In an effort to discourage nesting and resting site within the main garrison and the airfield. Bird Shield is used as a repellant.

Integrated Pest Management Plan U.S. Army Garrison Fort Greely, Alaska A.1.5.3.2.2. Method and Location: Nesting and resting sites.

A.1.5.3.2.3. Conducted by: Certified Pest Controllers.

A.1.1.3.2.4. Pesticide: Only pesticides approved by the PMC are approved for use on Ft Greely.

A.1.5.3.2.5. Control Standard: Birds should relocate.

A.1.5.4. Precautions for Sensitive Areas: Wetlands and also see Installation Policy Letter #39.

A.1.5.5. Prohibited Practices: In Accordance With the Migratory Bird Act.

A.1.5.6. Environmental Concerns: None.

A.1.5.7. Remarks: Annual permits issued by US Fish and Wildlife and the Alaska Department of Fish and Game to Fort Greely allowing the destruction of active swallow nests to discourage future nest-building. To discourage nest-building on structures, nests containing no eggs or nestlings may be destroyed without a permit, but only after inspection by the Installation Pest Management Coordinator.

INTEGRATED PEST MANAGEMENT OUTLINE A.1.6

PEST: Other Vertebrate Pests.

SITE: Outside locations.

A.1.6.1. Purpose: To control squirrels, arctic ground squirrels, porcupines, mink, muskrats, fox, beavers and marmot may occasionally interfere with post operations.

A.1.6.2. Surveillance

A.1.6.2.1. Conducted by: Certified pest controller.

A.1.6.2.2. Methods: Visual observation for the presence of unwanted animals mentioned above.

A.1.6.2.3. Frequency: Weekly by the certified pest controller.

A.1.6.3. Pest Management Techniques

A.1.6.3.1. Nonchemical

A.1.6.3.1.1. Type: Mechanical and Physical.

A.1.6.3.1.1.1. Method and Location: Live-trapping and relocation may be attempted where possible and safe. Licensed recreational trappers may be used to control nuisance animals when designated by the IPMC.

A.1.6.3.1.1.2. Conducted by: Certified Animal Damage Control Officer or IPMC

A.1.6.3.1.2. Type: Biological.

A.1.6.3.1.2.1. Method and Location: None.

A.1.6.3.1.2.2. Conducted by: NA

A.1.6.3.1.3. Type: Cultural.

A.1.6.3.1.3.1. Method and Location: Public Education and Proper Sanitation.

A.1.6.3.1.3.2. Conducted by: IPMC

A.1.6.3.2. Chemical

A.1.6.3.2.1. Basis for Treatment: Infestation when all other IPMP have been ineffective.

A.1.6.3.2.2. Method and Location: Bait stations.

A.1.6.3.2.3. Conducted by: Certified pest controller.

Integrated Pest Management Plan U.S. Army Garrison Fort Greely, Alaska A.1.1.3.2.4. Pesticide: Only pesticides approved by the PMC are approved for use on Ft Greely.

A.1.6.4. Precautions for Sensitive Areas: None.

A.1.6.5. Prohibited Practices: None.

A.1.6.6. Environmental Concerns: None.

A.1.6.7. Remarks: Removal of vertebrate pest can inadvertently upset area residents who either disagree with and pest control efforts in general or who do not fully understand the nature of the problem. Because of this it is always best to conduct this type of operation out of sight of the general public.

INTEGRATED PEST MANAGEMENT OUTLINE A.1.7.

PEST: Ornamental Pests.

SITE: Wherever desirable plans are found on the installation.

A.1.7.1. Purpose: To control scale insects, aphids, spruce bark beetles, and other pests of trees and ornamental plants. Control will only be performed when large numbers of pests are present and significant damage will occur. Chemical control operations shall be based solely on need, and all efforts are made to avoid environmental problems caused by the overuse of pesticides. Spider mites and clover mites are a persistent nuisance pest in plantings around family quarters and troop barracks in early summer, and are controlled on an as-needed basis.

A.1.7.2.Surveillance

A.1.7.2.1. Conducted by: Certified pest controller.

A.1.7.2.2. Methods: Visual observations.

A.1.7.2.3. Frequency: On-going throughout the year.

A.1.7.3.Pest Management Techniques

A.1.7.3.1. Nonchemical

A.1.7.3.1.1. Type: Mechanical and Physical.

A.1.7.3.1.1.1. Method and Location: Sticky tape on tree trunks.

A.1.7.3.1.1.2. Conducted by: Certified pest controller.

A.1.7.3.1.2. Type: Biological.

A.1.7.3.1.2.1. Method and Location: None.

A.1.7.3.1.2.2. Conducted by: NA

A.1.7.3.1.3. Type: Cultural.

A.1.7.3.1.3.1. Method and Location: None

A.1.7.3.1.3.2. Conducted by: NA

A.1.7.3.2. Chemical

A.1.7.3.2.1. Basis for Treatment: Pests are found in numbers necessary to produce damage.

A.1.7.3.2.2. Method and Location: Hand or power sprayer.

A.1.7.3.2.3. Conducted by: Certified pest controller.

A.1.1.3.2.4. Pesticide: Only pesticides approved by the PMC are approved for use on Ft Greely.

A.1.7.3.2.5. Control Standard: Pests are killed within one week following treatment.

A.1.7.4. Precautions for Sensitive Areas: None.

A.1.7.5.Prohibited Practices: None.

A.1.7.6.Environmental Concerns: None.

A.1.7.7. Remarks: Healthy and well maintained plants are the best method for ornamental pest control. Plants not under stress are more resistance to pest related disease and infestations.

INTEGRATED PEST MANAGEMENT OUTLINE A.1.8.

PEST: Mosquitoes.

SITE: Standing water for mosquito larvae and outdoor areas for mosquito adults.

A.1.8.1.Purpose: To prevent mosquitoes from transmitting diseases (e.g., West Nile Virus) or interfering with outdoor missions or recreational activities.

A.1.8.2. Surveillance

A.1.8.2.1. Conducted by: Certified Pest Controller or Preventive Medicine (68S) for larvae and adult mosquitoes.

A.1.8.2.2. Methods: Visual observation for larvae by dipping. Light Traps with CO2 for adult mosquitoes.

A.1.8.2.3. Frequency: During the mosquito season (April-September).

A.1.8.3. Pest Management Techniques

A.1.8.3.1. Nonchemical

A.1.8.3.1.1. Type: Mechanical and Physical.

A.1.8.3.1.1.1. Method and Location: Drain or fill standing water. Place screens on windows and keep windows and doors closed when not in use. 25 propane magnets are used.

A.1.8.3.1.1.2. Conducted by: DPW maintenance personnel eliminate standing water. Building occupants maintain screens and keep doors and windows closed.

A.1.8.3.1.2. Type: Biological.

A.1.8.3.1.2.1. Method and Location: None.

A.1.8.3.1.2.2. Conducted by: NA

A.1.8.3.1.3. Type: Cultural.

A.1.8.3.1.3.1. Method and Location: None.

A.1.8.3.1.3.2. Conducted by: NA

A.1.8.3.2. Chemical

A.1.8.3.2.1. Basis for Treatment: Only when a disease vector species is identified and positive with an effective infectious agent. (MGK Pyrocide 300 by ULV)

A.1.8.3.2.2. Method and Location: Hand or power sprayer for larvacide. Ultra Low Volume fogging for adult mosquitoes.

A.1.8.3.2.3. Conducted by: Certified pest controller.

A.1.1.3.2.4. Pesticide: Only pesticides approved by the PMC are approved for use on Ft Greely.

A.1.8.3.2.5. Control Standard: Mosquitoes are killed within 30 days following larval treatment and one day following ULV fogging.

A.1.8.4. Precautions for Sensitive Areas: Wetlands and water sources.

A.1.8.5. Prohibited Practices: None.

A.1.8.6. Environmental Concerns: None.

A.1.8.7. Remarks: Scourge is a restricted use pesticide.

INTEGRATED PEST MANAGEMENT OUTLINE A.1.9.

- PEST: Fungi and molds
- SITE: Government owned buildings
- A.1.9.1. Purpose: To control fungi that damage grass. Mold in and around utilidor and basements.

A.1.9.2.Surveillance

- A.1.9.2.1. Conducted by: Certified pest controller.
- A.1.9.2.2. Methods: Visual observation.
- A.1.9.2.3. Frequency: Weekly, usually in the late winter and spring.

A.1.9.3. Pest Management Techniques

A.1.9.3.1. Nonchemical

A.1.9.3.1.1. Type: Mechanical and Physical.

A.1.9.3.1.1.1. Method and Location: Insure adequate ventilation for inside infestations.

A.1.9.3.1.1.2. Conducted by: Facility maintains personnel.

A.1.9.3.1.2. Type: Biological.

A.1.9.3.1.2.1. Method and Location: None.

A.1.9.3.1.2.2. Conducted by: NA

A.1.9.3.1.3. Type: Cultural.

A.1.9.3.1.3.1. Method and Location: Provide adequate sanitation and ventilation to indoor structures.

A.1.9.3.1.3.2. Conducted by: Facility maintains personnel.

A.1.9.3.2. Chemical

A.1.9.3.2.1. Basis for Treatment: Fungus and mold found on surface areas.

A.1.9.3.2.2. Method and Location: Hand or power sprayer.

A.1.9.3.2.3. Conducted by: Certified pest controller.

A.1.9.3.2.4. Pesticides: 10% Bleach water solutions.

Integrated Pest Management Plan U.S. Army Garrison Fort Greely, Alaska A.1.9.3.2.5. Control Standard: Fungus is killed within 30 days following treatment.

- A.1.9.4. Precautions for Sensitive Areas: None.
- A.1.9.5. Prohibited Practices: None.
- A.1.9.6.Environmental Concerns: None.
- A.1.9.7.Remarks: None.

APPENDIX B

POINTS OF CONTACT AT FORT GREELY:

1. Richard D. Barth, IPMC	(907) 873-4202
2. Derek D. Miller, Chief Environmental	(907) 873-3105
3. Christine Boerst, Chief DPW	(907) 873-4582
4. Leroy D. Delong, DPW, Pest Controller	(907) 873-3247
5. CPT Paul Hester, Chief Environmental Health (BACH)	(907) 361-5503

APPENDIX C

CHILD AND YOUTH SERVICES FACILITIES

CHILD AND YOUTH SERVICES PEST MANAGEMENT PROGRAM

EXECUTIVE SUMMARY

1. SCOPE. IPM Star is an accreditation program based on proven state and EPA pest management techniques. The IPM Institute of North America performs confidential evaluation of IPM programs at Army Child Development Centers and Youth Services Centers. Those meeting its rigorous standards are "IPM Star Certified" in recognition of the excellence of their programs. This initiative is a joint effort between the USEPA, IMCOM, USAEC and USAPHC.

2. SITE. Fort Greely, Alaska is a diverse military community with two separate facilities that provide major or limited services for children on the installation. There is one full time Child Development Center (CDC), Building 847, Youth Services Center (YSC), Building 653 and an indoor playground, Building 650. All total, approximately 160 children are served throughout the installation.

3. OVERVIEW. These facilities have maintenance requirements that provide for excellent services, including pest management. Fort Greely embraces the use of Integrated Pest Management (IPM) practices in facilities where children are present. IPM is defined as, "A sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks." Basically it means using a comprehensive approach to maximize exclusion, suppression, or elimination of pests non-chemically while minimizing the amount of pesticides used in day care and youth centers.

4. ADDITIONAL ASPECTS. The IPM Star implementation in CYS facilities is the Washington State Compliance Guide for the Use of Pesticides at Public Schools (K-12) and Licensed Day-Care Centers, June 2002 which directs that all schools in the State will implement procedures for notification and posting of pesticide applications to provide a greater level of protection for children. Since the State of Alaska does not have an IPM program for schools, child development, or youth centers, the document for Washington State is used. The guide requires notification of all parents before any applications of pesticides in the CDC or YSC. Notification will be done by letter when a child is first enrolled and also 48 hours prior to selected applications. Parents complete a request to be notified during the enrollment process. The Fort Greely Pest Management Contractor will coordinate with the Child and Youth Services Director prior to any applications to ensure notification and adherence to the IPM Star plan.

5. ROLE & RESPONSIBILTIES. Fort Greely personnel will implement the IPM Star plan to minimize use of pesticides in the CDC and YSC.

APPENDIX C

E.1. Initial Notification.

Initial notification will be conducted when a participant is enrolled in the program. This memorandum requests that parents read the provided information concerning pesticide use in the child development and youth centers. If parents want to be notified prior to any pesticide applications, they must return the memorandum with signature to be kept in the child's files.

E.2. Notification Prior to Application. After a pest control problem has been identified which requires use of non-exempt chemical applications, the following notification procedures will be followed.

E.2.1. All parents requesting notification will receive a memorandum sent via their child (written notice), telephone, or email advising them of the planned pesticide application.

E.2.2. A general announcement will be placed on the child development/youth center bulletin board and via internet to ensure all interested parties receive the information.

E.3. Signage during Application. Twenty-four hours prior to the planned application signage will be posted by installation pest control personnel advising of the planned application. The signage will be removed no earlier than 48 hours after completion of pesticide application. The signage will contain the following information.

E.3.1. Site/area to be treated

E.3.2. Chemical to be applied

E.3.3. Time/date of treatment

E.3.4. Re-entry times

E.4. Exemptions from notification. The following chemicals are exempt from the notification procedures listed above. Due to their nature they are considered practically harmless and are used in everyday activities like cleaning and other activities:

E.4.1.Germicides, disinfectants, bactericides, sanitizing agents, water purifiers and swimming pool chemicals used in normal cleaning activities

E.4.2.Personal insect repellants

E.4.3.Human or animal ectoparasite control products administered by a qualified health professional or veterinarian.

E.4.4. Manufactured paste or gel bait insecticides placed in areas where human or pets do not have reasonable access to the bait.

E.4.5. Aerosols used as a contact to remove site specific pests such as wasp or spiders etc.

Integrated Pest Management Plan U.S. Army Garrison Fort Greely, Alaska

APPENDIX C

E.5. EMERGENCY NOTIFICATION.

E.5.1.The local Child and Youth facility administrator may direct an emergency application of pesticide without prior notice section in the event of an immediate threat to human health provided the administrator provides for notice to any person who has requested prior notice under this section.

E.5.2.Subsequent Notification of Parents, Guardians, and Staff Members. Not later than the earlier of the time that is 24 hours after a facility applies a pesticide under this section or on the morning of the next business day, the facility administrator should provide to each parent or guardian of a student or facility attendee listed on the registry, any staff members listed on the registry, and the designated contact persons.

CHILD AND YOUTH SERVICES PEST MANAGEMENT PROGRAM

LIST OF FORT GREELY FACILITIES PARTICIPATING IN THE IPM STAR

PROGRAM FOR CHILD AND YOUTH SERVICES

1. Child Development Center, Building 653.

POC: Ms. Noel Mitchell, 873-4493.

This facility, located in the interior of the cantonment area, serves approximately 50 children from six weeks to five years of age. The building was constructed in the 1990's, with very few renovations resulted in a sound structure that is not conducive to pest infestations. Good facility integrity and housekeeping practices have kept pest problems to a minimum. No pesticide applications have been made in this facility for more than two years.

2. School Age Services (K-6), Building 653.

POC: Ms. Noel Mitchell, 873-4493.

This facility, located in the interior of the cantonment area, serves approximately 25 children from Kindergarten through the 6th grade. The building was constructed in the 1990's, with very few renovations resulted in a sound structure that is not conducive to pest infestations. Good facility integrity and housekeeping practices have kept pest problems to a minimum. No pesticide applications have been made in this facility for more than two years.

3. Youth Services, Building 847

POC: Ms. Michele Garrett, 873-3405. This facility, is located in the center of the cantonment area, was originally designed as the NCO club. It now provides recreational and educational services for children 7th to the 12th grade.

4. Indoor Playground, Building 650.

POC: Ms. Noel Mitchell, 873-4493. This facility, is located in the movie theater annex, was originally designed as the installation arts and craft shop. It now provides an indoor play for children area during the winter months.

Child and Youth Services

Directorate of Morale, Welfare, and Recreation

Fort Greely, Alaska 99703-6500

Dear Parents:

XX-XX-XXXX

Fort Greely Child and Youth Services are implementing a preventive Integrated Pest Management program (IPM) within our facilities. IMP principles dictate the use of alternative pest control methods instead of application of pesticides. Pesticides can and will be used as a final control measure after all other control methods have been exhausted. This memo is notification that Fort Greely may use pesticides within the Child and Youth Services facilities when needed throughout the year. Each facility will post notification twenty four (24) hours in advance of general pesticide applications. General pesticide applications include spraying baseboards for insects or kitchens for ants and cockroaches; no pesticides will be applied in outdoor grassy areas. Applications of baits, germicides (e.g., bathroom cleaners), sanitizers, etc. are not considered general applications. You can be notified of these events by completing the attached registration form. This registry will be used to ensure that those families who feel the need to be advised of chemical application will receive at least forty-eight (48) hour advance notification. An exception to the 24-hour rule will be for emergencies in the event of an immediate threat to human health. Following such an event, a notification will be made not later than the earlier of the time that is 24 hours after a facility applies a pesticide under this section or on the next business day morning.

A brochure is available at each Child or Youth Service facility that explains the details of the IPM program. All pesticide applications for these facilities will be done by DoD or State certified individuals. As part of the Child and Youth Services plan and the Integrated Pest Management Plan, applications will be done after hours or on weekends, when children are not present in the area of application. A complete list of pesticides and Material Safety Data Sheets are available for review at each facility upon request.

We understand the concern that parents will have for their children who may have high-risk profiles. This program is to help reduce any fears and provide cooperation in minimizing risk for all children. This office will work with parents on any concern that they may have. Maintaining a safe, pest free environment for our children is our priority.

Further technical questions may be addressed to Mr. Richard Barth, Installation Pest Management Coordinator, at 873-4202. All questions concerning administration of this program may be addressed to this office at 873-4493.

Sincerely,

Linda Jo Mock

FGA Child and Youth Services Coordinator

Fort Greely Child and Youth Services

Integrated Pest Management Registry

2013-2014

Please return this completed form to the Child and Youth Service facility manager if you would like to participate in the Integrated Pest Management Program. You will receive 24 hour notice* of preventive pest control in your child's school.

Facility Name:	
Module Number:	
Child's Name:	
Parent's Name:	
Parent's Daytime Telephone:	
Parent's Work Telephone:	
Cell Phone:	
Parent's E-mil:	
Additional	
Notes:	

* An exception to the 24-hour rule will be for emergencies in the event of an immediate threat to human health. Following such an event, a notification will be made not later than the earlier of the time that is 24 hours after a school applies a pesticide under this section or on the morning of the next business day.

APPENDIX D

D.2. Notification Prior to Application. After a pest control problem has been identified which requires use of non-exempt chemical applications, the following notification procedures will be followed.

D.2.1. All parents requesting notification will receive a memorandum sent via their child (written notice), telephone, or email advising them of the planned pesticide application.

D.2.2. A general announcement will be placed on the child development/youth center bulletin board and via internet to ensure all interested parties receive the information.