

K Schwall



UNITED STATES MARINE CORPS  
MARINE CORPS BASE  
BOX 555008  
CAMP PENDLETON CALIFORNIA 92055-5008

IN REPLY REFER TO:  
5090  
ENVSEC  
January 23, 2012

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Mr. David W. Gibson  
Executive Officer  
San Diego Regional Water Quality Control Board  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

2012 JAN 23 A 10:42  
SAN DIEGO REGIONAL  
WATER QUALITY  
CONTROL BOARD

SUBJECT: APPLICATION FOR NPDES GENERAL PERMIT NO. CAG990004

Dear Mr. Gibson:

Enclosed is the application package to obtain a National Pollutant Discharge Elimination System (NPDES) permit for biological and residual discharges to waters of the United States from vector control applications. The application package includes a Notice of Intent, Pesticide Application Plan, and a Pesticide Application Contract.

If you have any questions, please contact me at (760) 725-9753 or Matt Winterbourne at (760) 763-7221.

Sincerely,

M. J. BONSAVAGE, P.E.  
Head, Environmental Engineering Div  
Assistant Chief of Staff,  
Environmental Security  
By direction of the  
Commanding Officer

Enclosures:

- 1. Notice of Intent
- 2. Pesticide Application Plan
- 3. Pesticide Application Contract

**ATTACHMENT G – NOTICE OF INTENT**

**WATER QUALITY ORDER NO. 2011-0002-DWQ  
GENERAL PERMIT NO. CAG 990004**

**STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
FOR BIOLOGICAL AND RESIDUAL PESTICIDE DISCHARGES  
TO WATERS OF THE UNITED STATES  
FROM VECTOR CONTROL APPLICATIONS**

**I. NOTICE OF INTENT STATUS (see Instructions)**

Mark only one item <input checked="" type="checkbox"/> A. New Applicator <input type="checkbox"/> B. Change of Information: WDID# _____
<input type="checkbox"/> C. Change of ownership or responsibility: WDID# _____

**II. DISCHARGER INFORMATION**

A. Name Marine Corps Base Camp Pendleton			
B. Mailing Address P.O. Box 555008			
C. City Camp Pendleton	D. County San Diego	E. State California	F. Zip Code 92055
G. Contact Person Lt. Col. Todd Kerzie	H. Email address Todd.Kerzie@usmc.mil	I. Title Facilities Maintenance Officer	J. Phone 760-725-3807

**III. BILLING ADDRESS (Enter Information only if different from Section II above)**

A. Name Marine Corps Base Camp Pendleton			
B. Mailing Address P.O. Box 555008			
C. City Camp Pendleton	D. County San Diego	E. State California	F. Zip Code 92055
G. Email address Mary.Crawford@usmc.mil	H. Title Budget Analyst	I. Phone California	

**IV. RECEIVING WATER INFORMATION**

A. Biological and residual pesticides discharge to (check all that apply)\*:

1. Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.  
 Name of the conveyance system: Groundwater recharge ponds, SRTTP settling ponds

2. Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.  
 Owner's name: \_\_\_\_\_  
Name of the conveyance system: \_\_\_\_\_

3. Directly to river, lake, creek, stream, bay, ocean, etc.  
 Name of water body: Lake O'Neill, various ponds and creeks

\* A map showing the affected areas for items 1 to 3 above may be included.

B. Regional Water Quality Control Board(s) where application areas are located  
(REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 9  
(List all regions where pesticide application is proposed.)

A map showing the locations of A1-A3 in each Regional Water Board shall be included.

**V. PESTICIDE APPLICATION INFORMATION**

A. Target Organisms:  Vector Larvae  Adult Vector

B. Pesticides Used: List name, active ingredients and, if known, degradation by-products

Name	Active Ingredient
Scourge	Resmethrin and Piperonyl Butoxide
Altosid	(s) Methoprene (CAS #65733-16-6)
Vectobac	Bacillus Thuringiensis subspecies israelensis and Bacillus
VectoLex	sphaericus fermentation solids and soluble

C. Period of Application: Start Date 3/1/12 End Date 9/30/12

D. Types of Adjuvants Added by the Discharger: N/A

**VI. PESTICIDES APPLICATION PLAN**

A. Has a Pesticides Application Plan been prepared?\*

Yes  No

If not, when will it be prepared? \_\_\_\_\_

\* A copy of the PAP shall be included with the NOI.

B. Is the applicator familiar with its contents?

Yes  No

**VII. NOTIFICATION**

Have potentially affected governmental agencies been notified?

Yes  No

\* If yes, a copy of the notifications shall be attached to the NOI.

**VIII. FEE**

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

Yes  NO  NA Payment will be made electronically

**IX. CERTIFICATION**

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Mark Bonsavage

B. Signature: 

Date: 12/09/11

C. Title: Environmental Engineering Division Head

**X. FOR STATE WATER BOARD USE ONLY**

WDID:	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received: \$	Check #:

## Pesticide Application Plan

Pest Management Area: United States Marine Corps, Marine Corps Base Camp Pendleton,  
San Diego County, California

### A. Pesticide Discharge Management Team

The following person will be responsible for managing pests in relation to the specified pest management area:

Name	Title	Department/Division	Phone	Email
Lt. Col. Todd Kerzie	Facilities Maintenance Officer	AC/S Facilities, Facilities Maintenance Department	760-725-3807	Todd.kerzie@usmc.mil

The following person will be responsible for developing and revising the PAP:

Name	Title	Department/Division	Phone	Email
Lt. Col. Todd Kerzie	Facilities Maintenance Officer	AC/S Facilities, Facilities Maintenance Department	760-725-3807	Todd.kerzie@usmc.mil

The following person will be responsible for developing, revising, and implementing corrective actions and other effluent limitation requirements:

Name	Title	Department/Division	Phone	Email
Mark Bonsavage	Supervisor Environmental Engineer	AC/S Environmental Security, Engineering Division	760-725-9753	mark.bonsavage@usmc.mil

The following person(s) will be responsible for pesticide applications in the specified pest management area:

Name	Title	Department/Division	Phone	Email
Barbara Vajda	Environmental Protection Specialist	AC/S Facilities, Facilities Maintenance Department	760-763-5941	Barbara.vajda@usmc.mil

The pesticide applications for the specified pest management area are performed by:

In-House Personnel	<input type="checkbox"/>	Contractor Personnel	<input type="checkbox"/>	In-House and Contractor Personnel	<input checked="" type="checkbox"/>
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## B. Target Area Description and Vector Description

### Area Description and Pest Problem:

Marine Corps Base Camp Pendleton (MCBCP) comprises approximately 125,000 acres on the southwest coast of California in northern San Diego County. The Pacific Ocean borders the base on the west side and the nearest communities include Oceanside and Carlsbad to the south Fallbrook and the Cleveland National Forest to the east, and San Clemente to the northwest. MCBCP lies in the Santa Margarita watershed which provides both municipal and agricultural water supply, recreation and fishing environments, and freshwater and wildlife habitat. The relatively undeveloped portion of the installation comprises the last remaining major open space and wildlife habitat in coastal Southern California. The installation layout consists of several dispersed cantonment or developed areas, numerous firing ranges and maneuver areas, an airstrip, and an impact area occupying most of the center of the installation. MCBCP supports approximately 36,000 military personnel and employs 5,600 civilians. The largest concentration of development is at the southeastern corner of the installation.

The receiving water systems within MCBCP subject to pesticide applications for control will include any navigable waters and adjoining tributaries, waters of the State, and waters of the US contained within MCBCP boundaries that breed mosquitoes, black flies, or midges to include flood control channels, basins, storm drainage facilities, ponds, wetlands, and any stagnant water found to be a breeding ground for mosquito populations.

Potential vector-borne diseases that can occur and have historically occurred in the greater Southern California region are West Nile virus (WNV), St. Louis encephalitis (SLE), and Western equine encephalitis (WEE). St. Louis encephalitis and WEE are rare viral diseases that can cause serious illness and death in humans. They can be transmitted by *Culex tarsalis* and *Cx. quinquefasciatus* mosquitoes that breed in natural and man-made water sources (such as sewage drainage ditches). West Nile virus is present in the County of San Diego and the birds present on the installation and in the surrounding area are capable of harboring WNV. The common raven, *Corvus corax*, and crow *Corvus brachyrhynchos* are found in the County and are a common host of WNV. West Nile virus causes an emerging illness that has resulted in thousands of human and equine cases annually and many fatalities since its introduction to North America in 1999. Potential emergency response actions include increased surveillance for mosquitoes and human cases, area-wide pesticide application for adult mosquitoes, implementing personal protective measures including distribution of repellents, and education of the public on mosquito bite avoidance are imperative in preventing human cases of said diseases.

Due to outdoor activities of military personnel training at MCBCP and outdoor recreational activities present, personnel and family members can be at risk for encountering vectors harboring disease. Due to the risks of acquiring abovementioned diseases MCBCP has established a pest management plan which entails treatment of water sources to prevent the emergence and sustainment of vector populations.

(Source of location data: *Integrated Pest Management Plan, United States Marine Corps, Marine Corps Base, Camp Pendleton, California and Mountain Warfare Training Facility, Bridgeport, California* Chapter 2, May 2004.)

**C. Discussion of the factors influencing the decision to select pesticide applications for mosquito control;**  
Please see the Best Management Practices for Mosquito Control in California 2010.

*(Best Management Practices for Mosquito Control in California. 2010. Available by download from the California Department of Public Health-Vector-Borne Disease Section at <http://www.westnile.ca.gov/resources.php> under the heading Mosquito Control and Repellent Information. Copies may also be requested by calling the California Department of Public Health-Vector-Borne Disease Section at (916) 552-9730 or the County of San Diego Vector Control Program at (858) 694-2888.)*

**D. Control Tolerances or Action Thresholds**

Treatment thresholds are established for mosquito development by the Naval Hospital Camp Pendleton Preventive Medicine Department (NHCP PMD) where potential disease vector and/or nuisance risks are evident. Only those sources that represent imminent threats to public health, quality of life, or interference with operational training are treated. Treatment thresholds are based on the following criteria: mosquito species present, mosquito stage of development, nuisance or disease potential, mosquito abundance, flight range, proximity to populated areas, size of source, presence/absence of natural enemies or predators, and presence of sensitive/endangered species. When thresholds are exceeded, an appropriate control strategy is implemented. Control strategies are selected to minimize potential environmental impacts while maximizing efficacy. The method of control is based on the above threshold criteria but also habitat type, water conditions and quality, weather conditions, cost, site accessibility, size of site and a number of other factors as specified by NHCP PMD.

The Contractor shall apply larvicides by helicopter to water-holding areas on the MCBCP as designated by NHCP PMD. All aerial larviciding operations are subject to review and approval by the Assistant Chief of Staff, Environmental Security. Treatment areas are subject to change as determined by environmental factors such as rain and the reduction of standing water due to evaporation.

**E. Control Measure Description**

*Select control measures that you will implement to comply with effluent limitations. Discuss the factors influencing the decision to select pesticide applications as well as alternative control methods and their limitation. Include the approximate amount of product that is anticipated to be used and how this amount was determined. Evaluate available BMPs and describe the BMPs to be implemented.*

As per the California Mosquito-Borne Virus Surveillance and Response Plan, factors to consider when selecting a pesticide include: 1) efficacy against the target species or life cycle stage, 2) pesticide resistance, 3) pesticide label requirements, 4) availability of pesticide and application equipment, 5) environmental conditions, 6) cost, and 7) toxicity to non-target species, including humans. Environmental Conditions will be assessed prior to application (temperature, precipitation, wind speed): Adulticiding will occur only when target flying insects are present in proper weather conditions. If weather is not permissive, treatments will be performed during the next available time slot when weather conditions permit.

*(California Mosquito-Borne Virus Surveillance and Response Plan. 2010. [Note: this document is updated annually by CDPH]. Available by download from the California Department of Public Health-Vector-Borne*

## F. Other control methods used (alternatives) and their limitations;

With any sources of mosquitoes or other vectors, the Camp Pendleton Integrated Pest Management Plan's (IPMP) first goal is to look for ways to eliminate the source, or if that is not possible, for ways to reduce the potential for vectors. The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California.

Specific alternative control measures used by the IPMP include:

- Drain or fill stagnant water pools, puddles, and ditches (where this can be done without adverse ecological consequences);
- Remove containers that catch/trap water (e.g., buckets, old tires, cans);
- Keep roof drains and gutters clear of debris so water does not accumulate;
- Grade landscaped areas so that water does not stand in temporary pools use drain tiles, as needed;
- Landscape with trees that do not normally develop limb cavities where water may accumulate;
- Use Oil of citronella candles to produce smoke that repels mosquitoes when humans are outside on patios or in picnic areas;
- Keep screens tight fitting and in good repair to keep mosquitoes from being a problem inside dwellings; and
- Wear long-sleeve shirts and long pants to decrease exposure to diseases carried by mosquitoes.

Active Ingredient(s) to be applied to the pest management area (attach pesticide label):

## G. How much product is needed and how this amount was determined;

The need to apply product is determined by surveillance. Actual use varies annually depending on mosquito abundance. The pesticide amounts presented below were taken from the 2008-2009 IPMP as an estimate of anticipated pesticide use for 2012. Other public health pesticides in addition to those listed below may be used as part of the program's best management practices.

**Table 1: Trade Names and Active Ingredients of Pesticides to be Applied on Camp Pendleton.**

Trade name:	Active Ingredient:	Concentrate:	EPA Reg No.
Scourge	Resmethrin and Piperonyl Butoxide	4.14% + 12.42% MF FII	432- 716
Altosid	(S)-Methoprene (CAS #65733-16-6)	4.25%	2724-448
Vectobac	<i>Bacillus thuringiensis</i> subspecies <i>israelensis</i> fermentation solids and soluble	2.80%	73049-10
Aquabac	<i>Bacillus thuringiensis</i> subspecies <i>israelensis</i> fermentation solids and soluble	2.86%	62637-3
VectoLex	<i>Bacillus sphaericus</i>	7.50%	74039-20



**Table 2: Approximate Amounts of Products that are Anticipated to be Used Based on Historical Data of Product Usage.**

<b>LARVICIDE APPLICATION THIRD OPTION APRIL 14, 2008 THRU APRIL 13, 2009</b>							
<b>DATE OF SERVICE</b>	<b>DATE PAID</b>	<b>SERVICE &amp; INVOICE NO.</b>	<b>QUANTITY OF LOADS</b>	<b>CLN QUANTITY &amp; POUNDS USED</b>	<b>Vectlex CG. 8 Bags Per Load</b>	<b>Aquabac 200G 4 Bags Per Load</b>	<b>Total Bags</b>
				<b>29,800</b>			
4/24/2009			7.5	3,600	60	30	90
5/17/2009			7.5	3,600	60	30	90
6/21/2009			7.5	3,600	60	30	90
7/17/2009			7.5	3,600	60	30	90
8/7/2009			7.5	3,600	60	30	90
8/27/2009			8	3,840	64	32	96
9/20/2009			7	3,360	56	28	84
10/16/2009			7	3,360	56	28	84
				0	0	0	0
				<b>28,560</b>			
			<b>59.5</b>	<b>1,240</b>	<b>476</b>	<b>238</b>	<b>714</b>
				<b>BALANCE</b>	<b>19,040</b>	<b>9,520</b>	
					<b>Total Pounds</b>	<b>Total Pounds</b>	

Reporting Requirements:

DoD Instruction 4150.7 requires that pest management operations and pesticide applications on military installations be recorded, reported, and archived. Pesticide applications shall be reported after each application on an electronic report form provided by the Government and submitted to the NAVFAC Southwest PPMC via the NHCP PMD. The Government will conduct an inventory of the larvicide product at the start of each application period and again at the end of each application day to account for the total amount of larvicide used during that particular day of operation.

Adjuvants and surfactants used (if applicable) Not Applicable

Rate of application (provide rate):

Larvicide application will be in accordance with the product label to obtain effective control.

Adulticiding is applied at maximum label rate for the adulticide used or as determined by Government Pest/Disease Vector Consultant.

Frequency of application (provide frequency):

Application shall commence in early to mid spring and cease in mid to late fall and as determined by the Government and in direct coordination with the San Diego County Health Department. The Government will determine the frequency, time, and specific location of applications based on NHCP PMD mosquito surveillance, environmental conditions, and installation security posture.

Aerial spray operations shall be conducted only under weather conditions that provide safe operating conditions for the aircraft and reduces the risk of pesticide into non-target areas. The Contractor, in consultation with the Government, shall make the final decision on whether the operation shall proceed.

Larviciding will occur within one day of positive survey results (over one larva per dip), and will remain in effect for 30 days. Evidence of adult emergence after control is instituted is grounds for retreatment using a larvicide that doesn't contain an insect growth regulator if necessary.

Adulticide frequency will be dependent on adult mosquito surveys using traps, visual observations, and complaints. Adulticiding will occur only when target flying insect is present in proper weather conditions. If weather is not permissive, treatments will be performed during the next available time slot when weather conditions permit.

Application area description and maps:

*Attach a map of the pest management area and a description of the types and locations of the anticipated application area, the target area to be treated, and adjacent or other non-target areas potentially affected.*

Any area that retains standing water for more than 96 hours can produce an adequate environment for mosquito production. In accordance with Best Management Practices for Mosquito Control in California, the preferred method of mosquito control will be mosquito habitat source reduction.

Contractors use pesticides as a last resort to reduce mosquito population abundance. Areas on MCBCP that could be subject to larviciding and/or adulticiding include and are not limited to: drainage canals, riparian regions, wetland areas, ornamental ponds/waterscapes, catch basins, and any aquatic site or low lying area that withholds water for more than 96 hours. The abovementioned areas where pesticide application will occur reside in storm water drainage systems and can impact the watershed in which they reside.

The objective is to reduce the population of adult mosquitoes and to prevent the transmission of West Nile virus and other mosquito-borne diseases on Marine Corps Base Camp Pendleton. The Government will establish the dates of larvicide application based on mosquito surveillance and in coordination with larvicide applications by the counties of San Diego, Orange and Riverside, California. All applications shall be performed within the fence line of Marine Corps Base Camp Pendleton.

The Contractor shall apply larvicides by helicopter to water-holding areas on the MCB Camp Pendleton as designated by Naval Hospital Camp Pendleton Preventive Medicine Department (NHCP PMD). All aerial larviciding operations are subject to review and approval by the Assistant Chief of Staff, Environmental Security.

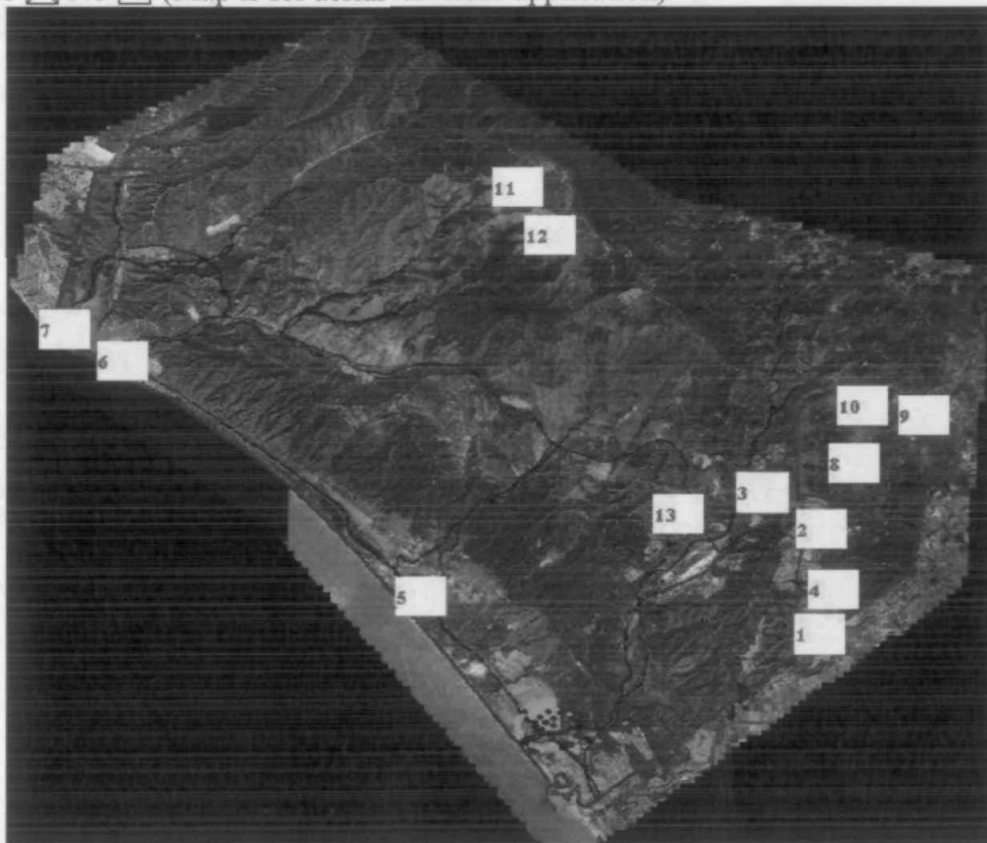
Larvicide treatment shall only be conducted in areas that hold water and where mosquito larvae are present or where the potential of mosquito breeding is high. The total area treated shall be determined by the Government prior to each application based on the presence of water and the presence of mosquito larvae or if it is found that areas potentially support the breeding of mosquitoes. Current estimated acreage is approximately 300-350 acres per application. The following areas potentially scheduled for treatment are based on historical data, but shall not be limited to:

- Pond adjacent to Rodeo Grounds/Golf Course (Pilgrim Creek)
- Pond adjacent to Deluz Housing Area
- Entire area of Lake O'Neill

- Horse Stables (Pilgrim Creek)
- Las Flores Boy Scout Camp
- Outlet at San Onofre Creek
- Percolation ponds adjacent to Stuart Mesa Rd. and Santa Margarita River

During the normal course of the aerial application; the Contractor shall treat observed water holding areas not listed for scheduled treatment. The Contractor is authorized to treat up to 50 acres per scheduled application. Treatments exceeding this amount must be approved by the Contracting Officer. The Contractor shall only treat such areas that are within the clearance area as provided by Long Rifle and Air Traffic Control.

Map attached. Yes  No  (Map is for aerial larvicide application)



**Figure 1: Map of Pest Management Area and Locations of Aerial Larvicide Application.**

**Description of the larvicide application areas on map:**

1. Pond adjacent to rodeo grounds (Pilgrim creek pond)
2. Pond adjacent to Deluz housing area
3. Entire area of Lake O'Neill and adjacent percolation ponds
4. Golf course pond
5. Outlet of Las Flores creek
6. Outlet of San Onofre creek
7. Outlet of San Mateo creek
8. Pond on Naval Weapons Station Fallbrook
9. Pond on Naval Weapons Station Fallbrook
10. Pond on Naval Weapons Station Fallbrook
11. Case Springs north pond
12. Case Springs south pond
13. STP 8 percolation ponds

Water Quality Standards

Established Water Quality Standards for waters of the U.S. located in this pest management area to which there may be a discharge (provide reference from State or other source).

Water quality standards in regards to vector/pest control operations will be in accordance with *Water Quality Control Plan, San Diego Basin (9)*, and Chapter 3. According to the State Water Resources Control Board, there are no 303 (d) listed water bodies in San Diego County impaired for the pesticides that MCB Camp Pendleton, AC/S Environmental Security – Integrated Pest Management Program (IPMP) applies. The following image shows search results with no water identified as impaired for resmethrin/pyrethroids (Scourge) use. There were no search options available for the following aquatic pesticides that are currently in use, listed by active ingredient: *Bacillus thuringiensis israelensis* (Vectobac, Aquabac) and *Bacillus sphaericus* (VectoLex).

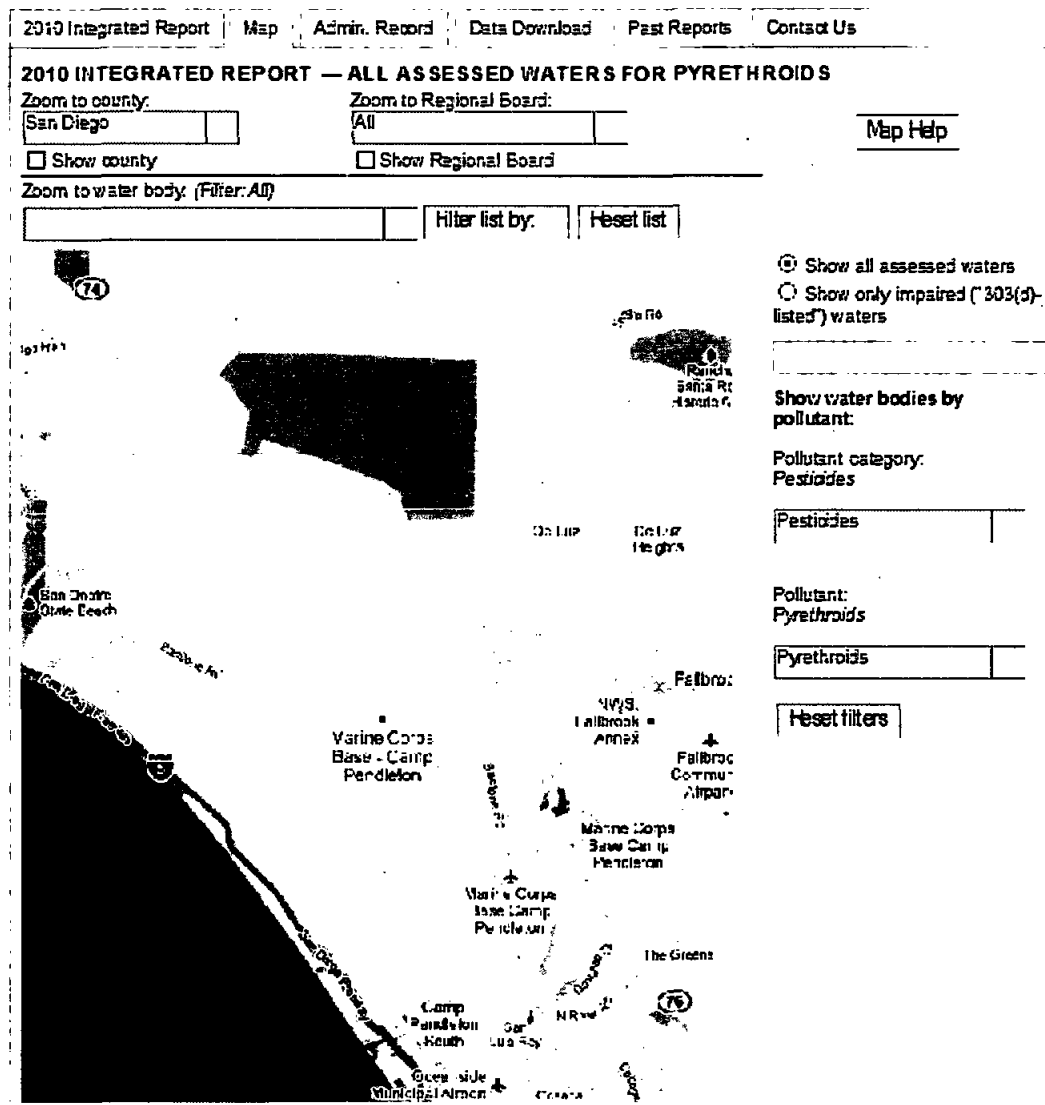


Figure 2: Search Results from California State Water Resources Control Board 2010 Integrated Report for Water Bodies on Camp Pendleton impaired for Pyrethroids (Scourge).

## ☒ Spill Prevention

The best means by which a spill can be reduced or prevented is to take precautionary measures, such as providing adequate storage facilities for all pesticide chemicals, monthly inspection of these facilities, and ensuring that emergency equipment is on hand for spill cleanup. The following guidelines should be followed for reducing the probability and severity of a spill:

- Train personnel in proper procedures for handling pesticides during receipt, storage, formulation, loading, application and disposal.
- Advise and train pest control personnel in proper spill prevention, emergency response and containment procedures.
- Identify locations and operations where spills are likely to occur.
- Prepare pesticide spill emergency response and spill control countermeasure plans for shops and storage areas, consistent with the total hazardous materials management and spill contingency plans for the facility, *i.e.* Navy Hazardous Materials Management Guide (NESO 20.2-024A).
- Post emergency phone numbers in conspicuous locations.
- Prepare and maintain spill kits.
- Inspect storage areas monthly and spill kits quarterly.

(Reference: *Technical Guide 15, Pesticide Spill Prevention and Management*, Armed Forces Pest Management Board, AFPMB.org, 2011)

The Contractor and KO will consult with installation environmental and fire department personnel to determine installation requirements for Contractor spills of hazardous materials. The Contractor is financially responsible for all associated costs to clean up spills as a direct result of the action or inaction. The Contractor shall reimburse the government for all costs incurred to the government during and after a spill.

Vehicles used to transport pesticides shall be equipped with a fire extinguisher, a spill containment kit capable of containing any potential pesticide spill, an emergency eye wash station, at least two gallons of emergency wash water for personal decontamination, and a first aid kit.

Pesticides shall be applied by or under the direct supervision of trained, certified or licensed applicators. The Contractor shall not mix pesticides on on-site Government property unless specifically authorized to do so by the KO. If mixing is authorized, it shall be done at an approved pre-existing facility or over an approved containment device. The Contractor shall not store pesticides on on-site Government property unless specifically authorized by the KO. If storage is authorized, it shall be done at an approved pre-existing facility.

Fueling operations or storage of petroleum products shall be maintained off-site, and a spill prevention and management plan shall be developed and implemented to contain and clean up spills. Transport vessels and vehicles, and other equipment (e.g., mowers, pumps, etc.) shall not be serviced or fueled in the field except under emergency conditions; hand-held gas-powered equipment shall be fueled in the field using precautions to minimize or avoid fuel spills within the tidal wetland/marsh. Other, specific best management practices shall be specified as appropriate in project-specific Waste Discharge Requirements. In addition to these water quality mitigation measures, the contractor will have an acceptable Site Safety and Materials Handling Plan.

## *Spill Response Procedures*

If a pesticide spill occurs, specific procedures will be followed for providing first aid, notifying proper authorities, and cleaning up and decontaminating the spill area.

### Spill-related Training/Certification:

Pesticide application personnel will be certified by the State of California or by the DoD, and trained in the following spill related categories:

- Identification
- Safety and First Aid
- Care of Injured
- Site Security
- Containment and Control
- Spill Reporting
- Clean up (Dry and Liquid)
- Decontamination
- Disposal

### Notification Procedures:

Spills that involve pesticides equal to or exceeding the designated reportable quantity (RQ) specified in EPA's Clean Water Act list of hazardous substances, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) list of hazardous substances, must be reported. All pesticide spills will be reported in accordance with Navy, OPNAVINST 5090.1C and the base/installation's spill contingency instruction. Pesticide spills will be reported to the spill coordinator designated in the base/installation's spill contingency instruction. The coordinator in turn will report the spill to the EPA as required.

## *Adverse Incident Response Procedures*

PRIDE (Contractor) will support the efforts of the Emergency Operations Center Team, the Environmental Affairs Office, the Safety Office, the Hazardous Materials Emergency Response Team and other organizations including the Fire Department and the Urban Search and Rescue Team, as necessary, in the event of hazardous materials spill. Initial Approach: PRIDE will partner with and provide support to the Environmental Affairs Office and the Fire Department to contain the spill including limiting the spill from exiting property from the surface or through the storm drains. Phase II Approach: Should evacuation of specific buildings become necessary, PRIDE will assist the emergency response teams, as necessary, to ensure an orderly evacuation and PRIDE will survey and secure all evacuated buildings. Phase III Approach: PRIDE will support the site emergency response teams and the Environmental Affairs Office to assess damage, begin the process of clean-up both external and, if necessary, internal to buildings. Should the hazardous materials spill require closing of one or more of the Site's entrances, PRIDE will assist the emergency response teams, as necessary, to ensure an orderly egress of employees through those entrances of the Site remaining open.

### Equipment Maintenance and Calibration

The Contractor shall provide repair and maintenance as necessary to keep all equipment in good operating condition, and take appropriate action regarding the following:

- All tanks, hoses, pumps, control valves, and gauges shall be free of visible deterioration, shall not leak, and shall operate at the manufacturer's recommended rates and pressures. Equipment that has failed shall be replaced and/or repaired by the Contractor prior to resuming operations.
- Screens, strainers, and filters shall be used and maintained in accordance with the pump, sprayer, and nozzle manufacturer's instructions.
- Spray nozzles shall deliver spray patterns as specified by the nozzle manufacturer. Nozzles that become clogged or eroded shall be repaired or replaced by the Contractor prior to resuming operations.
- Ultra-Low Volume (ULV) equipment shall be calibrated to assure proper flow rate and droplet size of pesticide as required by the label. ULV equipment shall be calibrated, including droplet size analysis, 15 days prior to start of work and thereafter

## **H. Schedules and Procedures**

### *Schedule of Application:*

Application of larvicide and/or larvicide will be in accordance with abovementioned action control thresholds and aerial spray schedule as set forth by the contractor.

### *Schedule of Equipment Maintenance and Calibration:*

The ULV equipment will be clean and maintained in proper running order. The contractor shall ensure and document that the ULV machine is applying the proper size droplets in order to effectively control flying insects in accordance with the machine manufacturer and/or the insecticide label. Documentation shall be sent to the KO every 90 days or every 50 hours of use, whichever comes first. The machine use log must be kept up-to-date.

### *Pesticide Monitoring Schedules and Procedures:*

Pest Surveillance will be performed by Naval Hospital Camp Pendleton Preventive Medicine Staff to assess public health impact as well as maintain records of said surveillance.

Monitoring includes checking that the amount of pesticide applied is correct, performing regular maintenance on equipment and spot checking for observable adverse incidents. Visual assessments of the application site must be performed during pesticide applications and during post-application surveillance.

Representative monitoring locations and the process for determining them:

Monitoring locations are outlined in the IPMB, Naval Base Ventura County September, 2010.

Locations are determined by monitoring extreme high tides using tide charts or the National Oceanic and Atmospheric Agency website. Maps will be also used to identify water holding sites.

### *Schedule for monitoring:*

Mosquito Adults: Monitoring will be conducted weekly during the months of May through November. During control operations, surveys will be conducted prior to application of adulticide. For visual surveys, post treatment surveys will be conducted immediately after the treatment and within 24 hours after application with traps

## I. Best Management Practices to Enhance Vector Reduction

Integrated Mosquito Management (IMM) is a comprehensive mosquito prevention/control strategy that utilizes all available mosquito control methods singly or in combination to exploit the known vulnerabilities of mosquitoes in order to reduce their numbers to tolerable levels while maintaining a quality environment. IMM does not emphasize mosquito elimination or eradication. Integrated mosquito management methods are specifically tailored to safely counter each stage of the mosquito life cycle. Prudent mosquito management practices for the control of immature mosquitoes (larvae and pupae) include such methods as the use of biological controls (native, noninvasive predators), source reduction (water or vegetation management or other compatible land management uses), water sanitation practices as well as the use of EPA-registered larvicides. When source elimination or larval control measures are not feasible or are clearly inadequate, or when faced with imminent mosquito-borne disease, application of EPA-registered adulticides by applicators trained in the special handling characteristics of these products may be needed. Adulticide products are chosen based upon their demonstrated efficacy against species targeted for control, resistance management concerns and minimization of potential environmental impact.

IMM requires a thorough understanding of mosquitoes and their bionomics by control personnel; careful inspection and monitoring for their presence and conditions favoring their development; and prevention of oviposition and human/mosquito contact through effective public education, sanitation and facility maintenance. All mosquito control programs should strive to employ these IMM components to the extent possible

The following are BMPs utilized at MCBCP to control mosquito/vector population:

- Surveillance – Is the backbone of all IMM programs. Identifies problem species and population trends in order to direct and evaluate control methods.
- Mapping – Utilize maps of appropriate scale to continually monitor major sources of larval/adult mosquitoes in addition to documenting areas where control measures have been instituted.
- Set Action Thresholds – Decisions to initiate control measures should be based on the analysis of either larval or adult mosquito surveillance or other available field data. Programs must establish a mechanism on which decisions to institute control measures are based.
- Physical Control or Source Reduction – Source reduction (the elimination, removal or modification of larval mosquito habitats) typically is the most effective and economical long-term method of mosquito control, but may not be practicable for many larval habitats. These efforts often minimize and/or eliminate the need for mosquito larviciding in the affected habitat in addition to greatly reducing the need for adulticiding in nearby areas.
- Education & Community Outreach – IMM is knowledge-based and involves a concerted effort by both control personnel and the community to manage mosquito populations based upon informed decision-making. Education of the general public should be encouraged to enlist resident's support in disposing of (or modifying) oviposition habitat, proper screening methods and proper application of personal protective measures such as repellents to minimize human/mosquito contact.
- Record-keeping – Operators/applicators should record the following for each application and maintain the records for the time specified by the lead regulatory agency.

(Reference: *Best Management Practices for Integrated Mosquito Management*, American Mosquito Control Association, 2009)



## J. Documentation to Support Eligibility Considerations under Other Federal Laws

Have you included a copy of your NOI with this PAP? Yes  No

## K. Monitoring Program

Monitoring and reporting shall comply with all requirements described in Attachment C (Monitoring and Reporting Program) of the existing NPDES permit for vector control. Considering the precise application of resmethrin (Scourge), the limited treatment areas and the ability to avoid water bodies, Marine Corps Base Camp Pendleton (MCBCP) does not anticipate drift into water bodies. MCBCP does not plan on monitoring resmethrin (Scourge) treatments, unless there is a required treatment with an unavoidably close proximity to a water body or an unintentional drift incident.

MCBCP will monitor water bodies during aerial applications of larvicides. Representative sample sites will be chosen according to the number of water bodies treated during the season. A minimum of six sampling sites will be chosen based on accessibility, water body type and environmental setting. MCBCP will monitor for the visual and physical components of Table C-1 in Attachment C of the NPDES permit at the time intervals and frequencies specified in the permit. The visual and physical monitoring data will be input to the monitoring log sheet and all pertinent information will be included (See attached monitoring log sheet). Adequate data exists for the larvicides used by MCBCP to characterize aquatic toxicity. The evidence indicates that most larvicides, when used at label application rates, are not likely to have significant adverse effects on non-target aquatic organisms. In addition, because larvicides are applied directly to water bodies for control of mosquito larvae, the permit would apply for residual concentrations that remain after the treatment period. Evidence indicates that while limited potential effects may occur with some larvicides during the treatment period, the persistence of most larvicides is very short and significant residues are not likely to remain after the treatment period.

(Reference: *Monitoring Plan for Mosquito Larvicides and Adulticides*, Mosquito and Vector Control Association of California, 2011)

## L. Signature

This PAP must be signed by "either a principal executive officer or ranking elected official (i.e., a Chief Executive Officer of the Agency or a Senior Executive Officer having responsibility for the overall operations of a principal geographic unit of the agency)."

Signature:



Name:

Lt. Col. Todd Kerzie

Title:

Facilities Maintenance Officer

**Appendix A**  
**Figures**

# MVCAC Monitoring Log Sheet

## Pesticide Application Information

MVCAC member agency \_\_\_\_\_

Name of applicator \_\_\_\_\_

Date of application \_\_\_\_\_

Location \_\_\_\_\_

(Address, location name, coordinates, or coordinates)

Name of water body \_\_\_\_\_

Type of water body

(check one)

- Pond
- Lake
- Open waterway
- Channel

Dimensions, velocity, etc. (optional):

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Monitoring Information

Date of monitoring \_\_\_\_\_

Time \_\_\_\_\_

Name(s) of personnel \_\_\_\_\_

Type of pesticide (check one)

- Larvicide. Product name: \_\_\_\_\_
- Adulticide. Product name: \_\_\_\_\_

Timing of monitoring (check one)

- Background (24 hours prior to application)
- Event (within 24 hours of application)
- Post-event (within 1 week after project completion)

## Visual Observation

Current weather conditions  
(check all that apply)

- Clear/sunny
- Cloud cover
  - Partly cloudy
  - Overcast
  - Hazy
- Precipitation
  - Foggy
  - Drizzle
  - Intermittent showers
  - Steady rain
  - Heavy storm
  - Snow
- Wind
  - Calm
  - Light breeze
  - Gusty
- Air temperature
  - Cool
  - Warm/mild
  - Hot

Water color (check one)

- Colorless
- Green
- Yellow
- Brown
- Other: \_\_\_\_\_

Water clarity (check one)

- Clear (can see bottom)
- Cloudy
- Murky

Present in water?

(check all that apply)

- Floating or suspended matter
  - Bottom deposits
  - Aquatic life
  - Water surface oils (check one if present)
    - Slick
    - Films
    - Sheen
    - Gloss
    - Flecks
    - Coatings
    - Other: \_\_\_\_\_
  - Fungi, slimes, or objectionable growths
  - Potential nuisance conditions
- Describe: \_\_\_\_\_

## Field Measurement

Parameter	Result	Unit	Method of measurement
Water temperature	_____	°F	<input type="checkbox"/> Field instrument. Model _____
Electrical conductivity (EC)	_____	µmhos/cm	<input type="checkbox"/> Sent to lab, or <input type="checkbox"/> Field instrument. Model _____
Dissolved oxygen (DO)	_____	mg/L	<input type="checkbox"/> Sent to lab, or <input type="checkbox"/> Field instrument. Model _____
pH	_____		<input type="checkbox"/> Sent to lab, or <input type="checkbox"/> Field instrument. Model _____
Turbidity	_____	NTU	<input type="checkbox"/> Sent to lab, or <input type="checkbox"/> Field instrument. Model _____

**Appendix B**  
**Pesticide Labels**

# BAC<sup>®</sup> (200G)

**ACTIVE INGREDIENT:** Bacillus thuringiensis subspecies israelensis  
solids, spores and insecticidal toxins\* ..... 2.86%  
**OTHER INGREDIENTS:** ..... 97.14%  
**TOTAL:** ..... 100.00%

\*Equivalent to 7,000 International Toxic Units (ITU/mg) (0.091 Billion ITU/pound). Potency units should not be used to adjust rates beyond those specified in the Directions for Use Section. Note: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

SPECIMEN

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

FIRST AID	
<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
See back panel for additional precautionary statements and directions for use.	

EPA Reg. No. 62637-3  
EPA Establishment No. 9198-OH-1

Net Contents: 40 Pounds (18.2 kg)

## PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS – CAUTION:** Harmful if inhaled or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Mixers/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergicsensitization.

**USER SAFETY RECOMMENDATIONS:** Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**ENVIRONMENTAL HAZARDS:** Do not contaminate water when disposing of equipment washwaters. Do not apply to treated, finished drinking water reservoirs or drinking water receptacles.

## DIRECTIONS FOR USE

It is a violation of Federal law to apply this product in a manner inconsistent with its labeling.

Apply AQUABAC (200 G) to any water sites except treated, finished water reservoirs or drinking water receptacles.

### MOSQUITOES:

Habitat	Rate Required for Control*
Flood water, roadside ditches, irrigation ditches, rice fields, pastures, woodland pools, snowmelt pools, tidal water, salt marshes, catch basins, storm water retention areas, lakes, golf course ponds, irrigation ponds, ornamental zoo ponds, ornamental ponds, ponds, water gardens, greenhouses, nurseries, standing water . . . . .	2.5 - 10.0 lbs/acre

\*When late third and early fourth instar larvae predominate, larval populations are high, or water is heavily polluted and/or algae are prevalent, use 10-20 lbs/acre.

### SPECIFIC APPLICATION INSTRUCTIONS

Uniformly apply AQUABAC (200 G) in conventional aerial and ground application equipment. Use a seven to fourteen-day interval between applications. Longer periods of mosquito population suppression can result where sufficient numbers of non-target aquatic invertebrate parasites and predators are present, since these are not affected by AQUABAC (200 G) and contribute to mosquito population reduction.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**Pesticide Storage:** Store in a cool, dry place.

**Pesticide Disposal:** Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Do not reuse container.

## NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with label instructions.

In case of emergency endangering life and property involving this product, call collect, day or night, (954) 345-9321.

Valent BioSciences

**VectoLex® WSP**

Biological Larvicide

Water Soluble Pouches

ACTIVE INGREDIENT:

*Bacillus sphaericus* Serotype H5a5b, strain 2362

Technical Powder (670 BsITU/mg) . . . . . 7.5%

OTHER INGREDIENTS . . . . . 92.5%

TOTAL . . . . . 100.0%

Potency: This product contains 50 BsITU/mg or 0.023 Billion BsITU/lb.

The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No. 73049-20

List No. 05722

EPA Est. No. 33762-1A-001 (Lot No. Suffix 'N8')

EPA Est. No. 33967-NJ-1 (Lot No. Suffix 'Q5')

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

1.0 FIRST AID	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.	

**2.0 PRECAUTIONARY STATEMENTS**

**2.1 HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

**2.2 ENVIRONMENTAL HAZARDS**

Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

**3.0 DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Once the foil bag containing Water Soluble Pouches is opened, use pouches within one day.

**4.0 STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Do not contaminate water when disposing of equipment washwaters.  
**Pesticide Storage:** Store in a cool, dry place.  
**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.  
**Container Disposal:** Dispose of empty outer foil bag in trash.

**5.0 APPLICATION DIRECTIONS**

**MOSQUITO CONTROL**

VectoLex WSP is a selective microbial insecticide for use against mosquito larvae in a variety of habitats. VectoLex WSP can be applied to areas that contain fish, other aquatic life, and plants. VectoLex WSP can be applied to areas used by or in contact with humans, pets, horses, livestock, birds or wildlife.

**I. For control of mosquito larvae species\* in the following non-crop sites:**

Habitat	Rate Range
<b>Drainage/Drainage Systems:</b> Storm drains, catch basins, retention, detention and seepage ponds.	1 pouch/50 sq.ft. <sup>1</sup>

<sup>1</sup>Treatment Areas (For Use In):

Habitat	Rate Range
Ponds	Standing water
Lagoons	Storm water
Water gardens	retention areas
Hollow trees and tree holes	Catch basins
Urns	Birdbaths
Rain barrels	Fountains
Livestock watering troughs/ponds/tanks	Flowerpots and planters
Irrigation ditches	Snowmelt pools
Roadside ditches	Abandoned swimming pools
Flood water	

Any location where water accumulates and remains standing for periods of time, except treated, finished drinking water for human consumption.

<sup>1</sup>Treat on basis of surface area of potential mosquito breeding sites by placing one (1) VectoLex Soluble Pouch for up to 50 square feet of treatment area. Re-apply as needed after 1 to 4 weeks.

Longer periods of mosquito population suppression may result where sufficient numbers of non-target aquatic invertebrate parasites and predators are present since these are not affected by the product and contribute to mosquito population reduction.

\*Mosquito species effectively controlled by VectoLex WSP, including many of those known to carry/transmit West Nile Virus:

- Culex* spp.
- Aedes vexans*
- Ochlerotatus melanimon* (*Aedes melanimon*)
- Ochlerotatus stimulans* (*Aedes stimulans*)
- Ochlerotatus nigromaculis* (*Aedes nigromaculis*)
- Psorophora columbiae*
- Psorophora ferox*
- Ochlerotatus triseriatus* (*Aedes triseriatus*)
- Ochlerotatus sollicitans* (*Aedes sollicitans*)
- Anopheles quadrimaculatus*
- Coquillettidia perturbans*

**6.0 NOTICE TO USER**

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

VALENT BIOSCIENCES® CORPORATION  
 870 TECHNOLOGY WAY  
 LIBERTYVILLE, IL 60048—800-323-9597  
 04-5070/R3

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VID 7.14.05



# Altosid<sup>®</sup> SBG

## SINGLE BROOD GRANULE



AN INSECT GROWTH REGULATOR FOR APPLICATIONS TO SINGLE BROODS OF MOSQUITO LARVAE TO PREVENT ADULT MOSQUITO EMERGENCE (INCLUDING THOSE WHICH MAY TRANSMIT WEST NILE VIRUS)

## SPECIMEN LABEL

### ACTIVE INGREDIENT:

(S)-Methoprene (CAS #65733-16-6) . . . . . 0.2%

OTHER INGREDIENTS: . . . . . 99.8%

Total . . . . . 100.0%

EPA Reg. No. 2724-489

EPA Est. No. 2724-TX-1

KEEP OUT OF REACH OF CHILDREN

### CAUTION

SEE ADDITIONAL PRECAUTIONARY STATEMENTS

### PRECAUTIONARY STATEMENTS – HAZARDS TO HUMANS AND DOMESTIC ANIMALS – CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash hands thoroughly with soap and water after handling. Due to the size and abrasiveness of the granule, use protective eyewear and clothing to minimize exposure during loading and handling.

### ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of rinsate or equipment washwaters.

### FIRST AID

Call a poison control center or doctor for treatment advice.

**IF IN EYES:** • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

### FIRST AID (CONTINUED)

**IF ON SKIN OR CLOTHING:** • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read and follow all label directions.

**ALTOSID<sup>®</sup> SBG** releases effective levels of **ALTOSID<sup>®</sup>** insect growth regulator for 5-10 days after application. Applications should be continued throughout the entire season to maintain adequate control. Treated larvae continue to develop normally to the pupal stage where they die. **ALTOSID<sup>®</sup> SBG** is designed for short-term control or for single broods of mosquitoes. Applications made to pupal stages will **not** result in control. Monitoring of mosquito populations is critical to achieve proper results.

Rotary and fixed-wing aircraft equipped with granular spreaders capable of applying rates listed below may be used to apply **ALTOSID<sup>®</sup> SBG**. Ground equipment, which will achieve even coverage at these rates, may also be used. Apply **ALTOSID<sup>®</sup> SBG** uniformly and repeat application as necessary.

**NOTE:** **ALTOSID<sup>®</sup>** insect growth regulator has no effect on pupae that are present prior to and at the time of application, nor will **ALTOSID<sup>®</sup>** affect adult mosquitoes.



## APPLICATION TIMING

Apply **ALTOSID® SBG** to later instar stages of larval mosquito development. Timing of application is critical to achieve proper control. **ALTOSID® SBG** is designed for single brood mosquito larvae and applications should be made within 3 to 5 days of expected pupation. Applications made to pupae will not be effective.

## APPLICATION RATES

*Aedes*, *Anopheles*, and *Psorophora* spp.: Apply **ALTOSID® SBG** at 5-10 lb/acre (5.6-11.2 kg/ha). *Culex*, *Culiseta*: Apply **ALTOSID® SBG** at 10-20 lb/acre (11.2-22.4 kg/ha). Within these ranges, use lower rates when water is shallow [ $< 2$  feet (60 cm)] and vegetation and/or pollution are minimal. Use higher rates when water is deep [ $\geq 2$  feet (60 cm)] and vegetation and/or pollution are heavy.

## APPLICATION SITES

**Non-Crop Areas:** **ALTOSID® SBG** may be applied as directed above to temporary and permanent sites which support mosquito larval development. Examples of such sites include: uncultivated agricultural and non-agricultural non-food areas, snow pools, salt and tidal marshes, freshwater swamps and marshes (cattail, red cedar, white maple marsh), woodland pools and meadows, dredging spoil sites, drainage areas, ditches, waste water treatment facilities, dairy or poultry lagoons, retention ponds, harvested timber stacks, swales, storm water drainage areas, sewers, catch basins, tree holes, water-holding receptacles (e.g., tires, urns, flower pots, cans & other containers) and other natural and manmade depressions.

**NOTE:** Application of **ALTOSID® SBG** to sites subject to water flow or exchange will diminish the product's effectiveness and may require higher application rates and/or more frequent applications.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**STORAGE:** Store closed containers of **ALTOSID® SBG** in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Seller makes no warranty, express or implied, concerning the use and handling of this product other than indicated on the label. Buyer assumes all risks of use and handling of this material when such use and handling are contrary to label instructions.

Always read the label before using this product.

For information call 1-800-248-7763.

[www.altosid.com](http://www.altosid.com)

**Wellmark International**  
1501 East Woodfield Road 200W  
Schaumburg, Illinois 60173



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April, 2010  
Schaumburg, IL

**RESTRICTED USE CLASSIFICATION**

**Due to Acute Fish Toxicity**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicators Certification.



# SCOURGE® INSECTICIDE

with RESMETHRIN/PIPERONYL BUTOXIDE 4% + 12% MF FORMULA II

## Specimen Label

- \* A READY TO USE SYNTHETIC PYRETHROID FOR EFFECTIVE ADULT MOSQUITO (INCLUDING ORGANOPHOSPHATE RESISTANT SPECIES), MIDGE (BITING AND NON-BITING), AND BLACK FLY CONTROL
- \* TO BE APPLIED BY MOSQUITO ABATEMENT DISTRICTS, PUBLIC HEALTH OFFICIALS AND OTHER TRAINED PERSONNEL IN MOSQUITO CONTROL PROGRAMS.
- \* CONTAINS 0.3 lb/gal (36 g/L) OF RESMETHRIN AND 0.9 lb/gal (108 g/L) OF PIPERONYL BUTOXIDE
- \* FOR AERIAL AND GROUND APPLICATION

**ACTIVE INGREDIENTS:**

* Resmethrin	4.14%
**Piperonyl Butoxide Technical	12.42%
<b>OTHER INGREDIENTS†:</b>	<u>83.44%</u>
	100.00%

\*Cis/trans isomers ratio: max. 30% (±) cis and min. 70% (±) trans.

\*\*Equivalent to min. 9.94% (butylcarbityl) (6-propylpiperonyl) ether and 2.48% related compounds.

†Contains Petroleum Distillates.

PRECAUCION AL CONSUMIDOR: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

EPA REG. NO. 432-716

EPA EST. NO.

### KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<b>If Swallowed:</b>	<ul style="list-style-type: none"> <li>● Call a poison control center or doctor immediately for treatment advice.</li> <li>● Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>● Do not give any liquid to the person.</li> <li>● Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or Clothing:</b>	<ul style="list-style-type: none"> <li>● Take off contaminated clothing.</li> <li>● Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>● Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER: 1-800-331-2867</b>	
<b>[Synthetic Pyrethroid]</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.	
<b>Note To Physician:</b> Contain petroleum distillate - vomiting may cause aspiration pneumonia.	

See Side Panel For Additional  
Precautionary Statements

**NET CONTENTS:**



**BAYER ENVIRONMENTAL SCIENCE**  
A Business Group of Bayer CropScience LP  
95 Chestnut Ridge Road • Montvale, NJ 07645

**PRECAUTIONARY STATEMENTS**  
**Hazards To Humans & Domestic Animals**

**CAUTION**

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

**Environmental Hazards**

This pesticide is highly toxic to fish. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated sites may be hazardous to fish in adjacent waters. Consult your State's Fish and Wildlife Agency before treating such waters. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**Storage:** Store product in original container in a locked storage area.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and Local authorities.

**READ ENTIRE LABEL FOR DIRECTIONS**

For use only by certified applicators or under the supervision of such applicators, for the reduction in annoyance from adult mosquito infestations and as a part of a mosquito abatement program.

IN THE STATE OF CALIFORNIA: For use only by local districts or other public agencies which have entered into and operate under a cooperative agreement with the Department of Public Health pursuant to Section 2426 of the Health and Safety Code.

This product is to be used for control of *adult mosquitoes* (including organophosphate resistant species), *midges* (biting and non-biting) and *blackflies* by specially designed aircraft capable of applying ULTRA LOW VOLUME of finished spray formulation or by ground application with non-thermal or mechanical spray equipment that can deliver spray particles within the aerosol size range and at specified dosage levels.

NOTICE: This concentrate cannot be diluted in water. Mix well before using. Avoid storing excess formulation in spray equipment tank beyond the period needed for application.

**ULTRA LOW VOLUME APPLICATIONS**

For use in nonthermal ULV portable backpack equipment similar to the Hudson B.P., mix 70 fl oz (2068 ml) of this product with 1 gal (3.79 L) of refined soybean oil, light mineral oil of 54 second viscosity or other suitable solvent or diluent. Adjust equipment to deliver fog particles of 18-50 microns mass median diameter. Apply at the rate of 4.25-8.50 fl oz of finished formulation per acre (311-621 ml/ha) as a 50 ft (15.2 m) swath while walking at a speed of 2 mph (3.2 kph). This is equivalent to 0.0035-0.0070 lb ai Resmethrin/A (3.92- 7.85 gm/ha) plus 0.0105- 0.0210 lb ai piperonyl butoxide tech./A (11.77-23.54 gm/ha). Where dense vegetation is present, the higher rate is recommended.

For truck mounted nonthermal ULV equipment similar to LECO HD or

MICRO-GEN or WHISPERMIST-XL, adjust equipment to deliver fog particles of 8-20 microns mass median diameter. Consult the following chart for application rates.

Treatment lb ai/A of Scourge Wanted Resmethrin/PBO	Fl oz/A of Undiluted Spray to be Applied	Application Rate-Fl oz/Min	
		5 MPH	10 MPH
0.007/0.021	3.0(90 ml)	9.0(266.2ml)	18.0(532.3ml)
0.0035/0.0105	1.5(45 ml)	4.5(133.1 ml)	9.0(266.2 ml)
0.00175/0.00525	0.75(22.5 ml)	2.25(66.6 ml)	4.5(133.1 ml)
0.00117/0.00351	0.50(15 ml)	1.50(45 ml)	3.0(90 ml)

Where dense vegetation is present, the use of the higher rates and/or slower speed is recommended.

For best results, fog only when air currents are 2-8 mph (3.2-12.9 kph). It is preferable to fog during early morning and evening when there is less breeze and convection currents are minimal. Arrange to apply the fog in the direction with breeze to obtain maximum swath length and better distribution. Direct spray head of equipment in a manner to insure even distribution of the fog throughout the area to be treated. Avoid prolonged inhalation of fog.

Where practical, guide the direction of the equipment so that the discharge nozzle is generally maintained at a distance of more than 6 feet (1.83 m) from ornamental plants and 5-15 feet (1.5-4.5 m) or more from painted objects. Temperature fluctuations will require periodical adjustment of equipment to deliver the desired flow rate at the specified speed of travel. The flow rate must be maintained to insure the distribution of the proper dosage of finished formulation.

Spray parks, campsites, woodlands, athletic fields, golf courses, swamps, tidal marshes, residential areas and municipalities around the outside of apartment buildings, restaurants, stores and warehouses. Do not spray on cropland, feed or foodstuffs. Avoid direct application over lakes, ponds and streams.

**DIRECTIONS FOR STABLE FLY, HORSE FLY, DEER FLY CONTROL:**

Treat shrubbery and vegetation where the above flies may rest. Shrubby and vegetation around stagnant pools, marshy areas, ponds and shore lines may be treated. Application of this product to any body of water is prohibited.

For control of adult flies in residential and recreational areas, apply this product undiluted at a rate of 178 fl oz/hr (5.26 L/hr) by use of a suitable ULV generator travelling at 5 mph (8 kph) or at a rate of 356 fl oz/hr (10.53 L/hr) while travelling at 10 mph (16 kph). When spraying, apply across wind direction approximately 300 ft (91.4 m) apart.

Apply when winds range from 1-10 mph (1.6-16.0 kph). Repeat for effective control.

**DIRECTIONS FOR AERIAL APPLICATIONS**

**FOR USE WITH FIXED-WING AND ROTARY AIRCRAFT**

This product is used in specially designed aircraft capable of applying ultra low volume of undiluted spray formulation for control of *adult mosquitoes* (including organophosphate resistant species), *midges* (biting and non-biting) and *blackflies*.

Aerial application should be made preferably in the early morning or evening: Application should be made preferably when there is little or no wind.

It is not recommended to make application when wind speeds exceed 10 mph (16 kph). Repeat applications should be made as necessary. Apply preferably when temperatures exceed 50°F (10°C).

May be used as a mosquito adulticide in recreational and residential areas, and in municipalities, around the outside of apartment buildings, golf courses, athletic fields, parks, campsites, woodlands, swamps, tidal marshes, and overgrown waste areas.

Do not spray on cropland, feed or foodstuffs. Avoid direct application over lakes, ponds and streams.

<b>lb ai/A Wanted RESMETHRIN/PBO</b>	<b>Fl oz/A of Undiluted Spray to be Applied</b>
0.007/0.021	3.0 (90 ml)
0.0035/0.0105	1.5 (45 ml)
0.00175/0.00525	0.75 (22.5 ml)
0.00117/0.00351	0.50 (15 ml)

### **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following conditions, disclaimer of warranties and limitations of liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and should be followed carefully. However, because of manner of use and other factors beyond Bayer Environmental Science's control, it is impossible for Bayer Environmental Science to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** BAYER ENVIRONMENTAL SCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer Environmental Science is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. Bayer Environmental Science disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER ENVIRONMENTAL SCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

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#### **Bayer Environmental Science**

A Business Group of Bayer CropScience LP

95 Chestnut Ridge Road

Montvale, NJ 07645

S4-12-SL-9/02

Biological Larvicide

# VectoBac<sup>®</sup> CG

## Granules

**ACTIVE INGREDIENT:**

Bacillus thuringiensis, subsp. israelensis, strain AM 65-52, fermentation solids and solubles ..... 4.95%  
 OTHER INGREDIENTS ..... 95.05%  
 TOTAL ..... 100.00%

Potency: 200 International Toxic Units (ITU) per mg.  
 (Equivalent to 0.091 billion ITU per pound)

The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No. 73049-19  
 EPA Est. No. 33762-IA-001

List No. 05094

**INDEX:**

- 1.0 First Aid
- 2.0 Precautionary Statements
  - 2.1 Hazard to Humans (and Domestic Animals)
  - 2.2 Environmental Hazard
- 3.0 Directions for Use
- 4.0 Storage and Disposal
- 5.0 Application Directions
- 6.0 Notice to User

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

FIRST AID	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eyes open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
HOT LINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.</p>	

**2.0 PRECAUTIONARY STATEMENTS**

**2.1 HAZARD TO HUMANS (AND DOMESTIC ANIMALS)  
CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling. Mixers/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist respirator meeting NIOSH standards

of at least N-95, R-95 or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

**2.2 ENVIRONMENTAL HAZARD**

Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles intended for human consumption.

**3.0 DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**4.0 STORAGE AND DISPOSAL**

Do not contaminate potable water, food or feed by storage or disposal.

**STORAGE:** Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Offer for recycling, if available. If recycling is not available, then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**5.0 APPLICATION DIRECTIONS**

VectoBac CG is an insecticide for use against mosquito larvae.

Mosquitoes Habitat	Suggested Range Rate*
(Such as the following examples):	
Irrigation ditches, roadside ditches, flood water, standing ponds, woodland pools, snow melt pools, pastures, livestock watering ponds and troughs, catch basins, storm water retention areas, tidal water, salt marshes and rice fields	2.5 - 10 lbs / acre

In addition, standing water containing mosquito larvae in fields growing alfalfa, almonds, asparagus, corn, cotton, dates, grapes, peaches and walnuts may be treated at the recommended rates.

\* Use 10-20 lbs. / acre when late 3rd and early 4th instar larvae predominate, mosquito populations are high, water is heavily polluted, (sewage lagoons, animal waste lagoons), and/or algae are abundant.

Apply uniformly by aerial or ground conventional equipment. Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the treatment coordinator are responsible for considering all of these factors when making decisions. A 7 to 14 day interval between applications should be employed.

**6.0 NOTICE TO USER**

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.



**Appendix C**  
**Pesticide Application Contract**



**DEPARTMENT OF THE NAVY**  
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST  
RESIDENT OFFICER IN CHARGE OF CONSTRUCTION  
MARINE CORPS BASE, CAMP PENDLETON, BUILDING 22101  
BOX 555229  
CAMP PENDLETON, CA 92055-5229

IN REPLY REFER TO:

4315  
OP3HMK/11663  
April 21, 2011

SENT VIA FACIMILE TRANSMISSION TO:

ACEPEX  
ATTN: HENRY C. RHEE  
10643 MILLS AVE.  
MONTCLAIR, CA 91763-4612

Dear Mr. Henry C. Rhee:

**SUBJECT: CONTRACT N62473-08-D-0506/0027, WR 10194423/10196270, PEST AND WEST NILE CONTROL SERVICES, MARINE CORPS BASE (MCB), CAMP PENDLETON, CA and NWS SEAL BEACH, FALLBROOK DETACHMENT**

Enclosed is Task Order 0027 to Agreement N62473-08-D-0506/0027 for your signature. This Task Order is based on your proposal dated February 18, 2011 for N62473-07-D-5011 PTO x095 in the amount of \$3,074,481.08 per the Request for Proposal provided on January 14, 2011 and Amendments Number 0001 and 002 for pest and west nile virus control services at various locations onboard MCB, Camp Pendleton, CA and NWS Seal Beach, Fallbrook Detachment.

Please print and sign one copy of this task order and return to this office Attn: Marlanea Kirkbride. The Contracting Officer has already signed the task order. Any questions regarding the award of this task order should be directed to Michele Hovis at (760) 725-8222.

Additionally, upon receipt of this letter, please contact Marlanea Kirkbride, Code OP3H.MK, Contract Specialist at (760) 725-8195, to discuss administrative matters (such as submission of insurance) and Nate Cervantes at (760) 763-2527 to arrange a preconstruction meeting prior to beginning the actual construction work.

Sincerely,

MICHELE HOVIS  
Contracting Officer

Enclosure Task Order 0027

**ATTACHMENT J-1503020-02**

**USER GUIDE FOR PLANNED PESTICIDE USE SHEET**

This is the User Guide for completing the Planned Pesticide Use Sheet that contains:

- (1) Instructions for filing out the "Planned Pesticide Use Sheet",
- (2) A "List of Acceptable Terms", and
- (3) A blank "Planned Pesticide Use Sheet".

The "Planned Pesticide Use Sheet" shall be included as part of the Contractor's Work Plan (CWP) for Pest Control. One "Planned Pesticide Use Sheet" should be filled out for each pest that will be controlled with a pesticide. If more than one pesticide is used to control the pest, one sheet should be filled out for each of the pesticides used per pest. A new "Planned Pesticide Use Sheet" should be filled out whenever pesticides used to control a pest are changed.

The "List of Acceptable Terms" is used to fill out the "Planned Pesticide Use Sheet" (see Step 3A). After filling out applicable "Planned Pesticide Use Sheets", attach them to the CWP. Extra copies of "Planned Pesticide Use Sheets" should be maintained. Extra copies of "Planned Pesticide Use Sheets" should be maintained and the blank "Planned Pesticide Use Sheet" included at the end of the User Guide can be used to make additional copies of the form as needed.

**INSTRUCTIONS for Filling Out the "Planned Pesticide Use Sheet"**

The following is a list of instructions for filling out each line of information required on the "Planned Pesticide Use Sheet":

1. INSTALLATION, UIC - This is the name and Unit Identification Code for the installation. The UIC is a five-digit number preceded by an "N" for Navy installations and an "M" for Marine Corps installations. Ask the KO for this number.

2. APPLICATOR: This identifies the individual(s) who will be applying the pesticide.

3. OBJECTIVE

A. TARGET PEST - This is the pest or pests that you are trying to control. Choose the proper pest or pest category from the "List of Acceptable Terms".

B. PURPOSE - What is(are) the major reason(s) for controlling the pest(s)? Refer to the "List of Acceptable Terms".

4 PESTICIDE

A. TRADE NAME - This is the name that the manufacturer has given to the product. For example, Termidor™ and Maxforce™ are both trade names for fipronil.

B. COMMON NAME - This is the common or popular name (as opposed to the chemical name).

C. EPA REG NUMBER - This is usually found on the front of the label and on the container.

D. FORMULATION - This is the form that the pesticide is in when you are ready to use it. Refer to the "List of Acceptable Terms".



E. CONC AI - This is the percent active ingredient of the pesticide before it is mixed with a diluent. This information should be on the front of the label.

5. APPLICATION

A. USE % - This is the percent final concentration of the pesticide to be applied.

B. DILUENT - The liquid that is used to dilute the pesticide (e.g. water, oil, etc.). If it is undiluted, put "None".

C. RATE - The amount of pesticide that is used per unit or area. For example: 4 pounds per acre; 1 bait per 10 linear feet; 2 gallons per 100 square feet; 2 ounces per minute, etc.

D. METHOD - The method of application - how the pesticide is applied. For example: By hand, power sprayer, ULV generator, compressed air sprayer, etc.

E. UNITS TREATED - Total acres, square feet, linear feet, etc., if known. Put "Varies" if it is not a definite quantity.

F. SITE - The specific site that the pesticide will be applied to. Refer to the "List of Acceptable Terms".

G. MONTHS - The time period when the pest control work will be performed. This can be a specific month(s), season or all year.

INSTRUCTIONS for Filling Out the "Planned Pesticide Use Sheet" (cont'd)

6. SENSITIVE AREAS - Areas that should be avoided or where special caution should be taken. Refer to the "*Caution and Warning*" statements on the label.

7. INSPECTION METHODS - The method and frequency of inspections. For example, a cockroach inspection may include the monthly use of a flashlight, a flushing agent and roach sticky traps while an inspection for mole crickets on the golf course may include a walk-through evaluation every 3 days.

8. OTHER CONTROLS - Other pesticides or methods of control that are used to control the particular pest. Other methods can include biological control, mechanical control, etc., as well as preventive measures.

9. REMARKS - Any additional information that needs to be included. If a general pest category has been listed under Target Pest, the specific pests should be listed here.

**LIST OF ACCEPTABLE TERMS FOR PLANNED PESTICIDE USE SHEETS**

**TARGET PEST**

ALGAE  
ALGAE/AQUATIC WEEDS  
ANTS  
ARMY WORMS  
BAHAI GRASS  
BATS

**TARGET PEST**

FLEAS  
FUNGUS  
FUNGUS - PYTHIUM  
GRASS  
GRUBS  
HOUSEHOLD PESTS

**TARGET PEST**

SCALE INSECTS  
SNAKES  
SOD WEBWORMS  
SPIDERS  
STORED PRODUCTS PESTS  
STRUCTURAL PESTS

BEETLES  
BIRDS  
BITING FLIES  
CARPENTER ANTS  
CATERPILLARS  
CHIGGERS  
CHINCH BUGS  
COCKROACHES  
CRAB GRASS  
CRICKETS  
CULICOIDES  
EARWIGS  
FERAL ANIMALS -  
FILTH FLIES  
FIRE ANTS

**PURPOSE**

APPEARANCE  
APPEARANCE/DRAINAGE  
BARE GROUND  
BARE GROUND/SECURITY  
DECREASE MOWING  
DISEASE VECTOR  
DRAINAGE  
HEALTH PROTECTION  
  
HEALTH/NUISANCE  
  
LAWN/TURF DAMAGE

LICE  
MEDICAL PESTS  
MICE  
MITES  
MOLE CRICKETS  
MOLES  
MOSQUITO ADULTS  
MOSQUITO LARVAE  
NEMATODES  
NUISANCE PESTS  
ORNAMENTAL PESTS  
PHARAOH ANTS  
PIGEONS  
RATS  
RODENTS

**PURPOSE**

LAWN/TURF PESTS  
LAWN/TURF PROTECTION  
MAINTENANCE  
MEDICAL  
NUISANCE  
NUISANCE/DISEASE VECTOR  
NUISANCE/HEALTH  
NUISANCE/MEDICAL  
PREVENT STRUCTURAL  
DAMAGE  
PROTECT ORNAMENTAL  
PLANTS

TERMITES-FORMOSAN  
TERMITES-SUBTERRANEAN  
TICKS  
TURF DISEASE  
TURF PESTS  
TURF/ORNAMENTAL PESTS  
WASPS  
WEEDS - ALL  
WEEDS - AQUATIC  
WEEDS - BROADLEAVED  
WEEDS - GRASSY  
WHITEFLIES  
WOODY VEGETATION

**PURPOSE**

SAFETY  
SECURITY  
STING PREVENTION  
SURVEILLANCE  
TURF APPEARANCE  
TURF MAINTENANCE  
TURF PROTECTION  
WILD LIFE MANAGEMENT

**LIST OF ACCEPTABLE TERMS FOR PLANNED PESTICIDE USE SHEETS (cont'd)**

**FORMULATION**

AEROSOL  
AQUEOUS SOLUTION  
BAIT BLOCKS  
BAIT PACK  
BAIT STATIONS  
BAITS  
BRIQUETS  
CAKE (RODENT)  
CAPSULES  
CONCENTRATE  
DISPERSIBLE GRANULES  
DRY FLOWABLE  
DUST  
EMULSION  
FLOWABLE POWDER

**SITE**

ADMIN/OFFICE  
ALL BUILDINGS  
ALL OUTDOOR AREAS  
BARRACKS  
BUILDING EXTERIORS  
BUILDING INTERIORS  
BUILDINGS  
CANALS  
CHILDCARE CENTER  
CROPLAND  
DITCHES  
DUMPSTERS  
ELECTRICAL BOXES  
ELECTRONIC EQUIPMENT  
FAMILY QUARTERS  
FENCELINES  
FLOWER BEDS  
FOOD STORAGE AREAS

**FORMULATION**

FUMIGANT  
GEL  
GRANULES  
LIQUID  
LIQUID FUMIGANT  
PASTE/GLUE  
PELLETS  
POWDER  
REPELLENT  
RESIN STRIPS  
SOLID FUMIGANT  
SOLUBLE POWDER  
SOLUTION  
STRIPS/TAPE

**SITE**

FOOD WAREHOUSE  
FOOD-HANDLING AREAS  
FORESTS  
GOLF COURSE  
GREENHOUSE  
GROUND APPLICATION  
HANGAR  
HOSPITAL/MEDICAL  
IMPROVED AREAS  
INDUSTRIAL AREAS  
KENNELS  
LAKES  
LAWNS  
LAWNS - FAMILY HOUSING  
MANHOLES  
MATERIAL STORAGE  
ORNAMENTAL PLANTS

**FORMULATION**

SUSPENSION  
TABLETS  
TRACKING POWDER  
ULD SOLUTION  
ULV CONCENTRATE  
ULV SOLUTION  
WATER SOLUBLE  
WETTABLE GRANULES  
WETTABLE POWDER

**SITE**

OUTDOOR AREAS  
OUTSIDE AREAS  
PAVEMENT/ROADS  
PONDS  
RIGHT-OF-WAYS"  
RIVERS/STREAMS  
SPOIL AREAS  
STANDING WATER  
STRUCTURES  
TREES  
TURF  
TURF PROTECTION  
UNIMPROVED AREAS  
UTILITY BUILDINGS  
UTILITY RIGHT OF WAY  
WAREHOUSES - FOOD  
WAREHOUSES-NONFOOD

**PLANNED PESTICIDE USE SHEET**

INSTALLATION NAME: \_\_\_\_\_

UIC: \_\_\_\_\_

APPLICATOR: \_\_\_\_\_

TARGET PEST: \_\_\_\_\_

PURPOSE: \_\_\_\_\_

TRADE NAME: \_\_\_\_\_

COMMON NAME: \_\_\_\_\_

EPA REG NO: \_\_\_\_\_

FORMULATION: \_\_\_\_\_

CONC AI: \_\_\_\_\_

USE %: \_\_\_\_\_

DILUENT: \_\_\_\_\_

RATE: \_\_\_\_\_

METHOD: \_\_\_\_\_

UNITS TREATED: \_\_\_\_\_

SITE: \_\_\_\_\_

MONTHS: \_\_\_\_\_

SENSITIVE AREAS: \_\_\_\_\_

INSPECTION METHOD(S): \_\_\_\_\_

OTHER CONTROLS: \_\_\_\_\_

REMARKS: \_\_\_\_\_

\_\_\_\_\_

**ATTACHMENT J-1503020-03**  
**FIELD PEST MANAGEMENT RECORD FORM**

**Instructions:** A separate form shall be filled out for each pest management operation. Please "print" responses for Numbers 1-9.

1. **Date of Application:** \_\_\_\_\_
  
2. **Location:**   2a. **Inside** or **Outside** (circle one)  
  
                  2b. **Facility name and/or building #:** \_\_\_\_\_
  
3. **Type of Pest Control Operation:** \_\_\_\_\_  
(e.g., baiting, power spray, ULV, manual application of pesticide, etc.)
  
4. **Site Description:** \_\_\_\_\_  
  
(e.g., housing, office, lawn, unimproved ground, etc.)
  
5. **Pest:** \_\_\_\_\_
  
6. **Area Treated:** \_\_\_\_\_  
[Include unit: SF (square feet), LF (linear feet), AC (acre), CF (cubic feet), EA (each - for baiting only)]
  
7. **Applicator's Name:** \_\_\_\_\_
  
8. **Pesticide Used:**
  - 8a. **Pesticide Trade Name:** \_\_\_\_\_
  
  - 8b. **Pesticide Active Ingredient:** \_\_\_\_\_
  
  - 8c. **EPA or Country Registration #:** \_\_\_\_\_
  
  - 8d. **Formulation:** \_\_\_\_\_
  
  - 8d. **Quantity of pesticide applied:** \_\_\_\_\_  
[Include unit: FL (fluid ounce), GA (gallon), ML (milliliter), LT (liter), LB (pound), DR (dry ounce), GR (gram), KG (kilogram)]
  
  - 8e. **Final Concentration Applied (%):** \_\_\_\_\_
  
9. **Comments:** (Survey results, wind conditions, sanitation deficiencies, etc.)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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10. **Signature of Applicator:** \_\_\_\_\_

11. **Certification # of Applicator:** \_\_\_\_\_

**ATTACHMENT J-1503020-04**

**PEST GROUP SHEETS**

Pest Group Number	Pest Group Name
001	Arthropod Control in Food Handling Establishments
002	Cockroach Control
003	Bat Control in Buildings
004	Bee, Wasp, Hornet, and Stinging Arthropod Control
005	Pest Bird Control (including Bird Aircraft Strike Hazard reduction activities)
006	Childcare Facilities/Sensitive Areas Pest Control (Includes: Schools, Hospital, Veterinary Clinic and Kennels, Child Development Center, Youth Activities Center)
007	Filth Fly Control
009	Flea Control in and Around Buildings and Structures
010	Larval and Pupal Mosquito Control
011	Adult Mosquito Control
012	Commensal Rodents In and Around Buildings and Structures
013	Adult Mosquito Surveillance
014	Larval Mosquito Surveillance
015	Industrial, Sidewalk, Substation, Vault, and Right-Of-Way Weed Control
016	Stored Product Pest Control (Arthropods)
017	Survey for Termite and Wood Destroying Organisms
018	Ant Control
019	Other Wood Destroying Organisms (Non-Termite) Control
020	Tick Survey and Control Outdoors
021	Pest Vertebrate Control
022	Mole Cricket Control
025	Miscellaneous Arthropod Pest Control
026	Aquatic Plant Control
027	Aerial Spray Support and Operations
028	Outdoor Rodent Control

**Pest Group 001: Arthropod Control in Food Handling Establishments**

**GENERAL REQUIREMENTS:** Prevent/control all arthropod pests in food handling establishments. Arthropod pests include, but are not limited to, cockroaches, ants (excludes fire ants which are covered in later worksheet), silverfish, centipedes, ground beetles, fleas, spiders, stored product pests, etc.

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
<p><u>Time Period to Respond:</u> 24 hours</p> <p><u>Time Period to Obtain Control:</u> One week after initial treatment.</p> <p><u>Time Period to Maintain Control:</u> Four weeks after initial treatment</p>	<p><u>Work Survey:</u> Flushing agent, sticky traps, or other survey techniques may be used as applicable.</p> <p><u>Non-Chemical Control:</u> Caulk, grout, or seal cracks, crevices, entranceways, harborage entrances, etc.</p>

Level of Control:

Cockroaches - Four or more cockroaches at any stage of development per room per survey, or one or more egg capsule (either loose or attached to a female) per room per survey, shall require retreatment of the room by the Contractor at the Contractor's expense. The Performance Assessment Representative (PAR) may conduct surveys using flushing agents, sticky traps, or visual surveys.

Ants - Four or more ants per room per survey shall be cause for re-treatment of the room at the Contractor's expense. The PAR may use sticky trap or visual surveys.

Other Arthropod Pests - Three or more miscellaneous arthropod pest (not including cockroaches or ants) per room per survey shall be cause for re-treatment of the room at the Contractor's expense. PAR survey techniques shall be the same as those for "Ants" listed above.

Survey: All work shall start with a survey to determine the pests present and the location of their nesting areas. Flushing agents shall not be used when food is exposed or spaces are occupied. Report sanitation and major structural problems to the Government.

Control: Use non-chemical and chemical control techniques.

Chemical Control:

Bait stations and gel bait formulations shall be the primary chemical control tool used for cockroach and ant control. Residual pesticides shall only be used after baits have failed to reduce the pest population.

Adjacent areas to infested areas shall be treated as needed to control existing infestations. The scope and type of treatment shall be at the Contractor's discretion but does not constitute an additional or added service call.

Chemical Control: In addition to baits, or for arthropod pests other than roaches/ants, a residual liquid pesticide or dust may be applied (by crack and crevice technique) to all known or suspected harborages, feeding sites or passageways, including but not limited to utility lines pipe chases, drain line access ways, under and behind baseboards, behind cabinets, and other crevices. If the pesticide label permits, spot treatments (2 square feet) may be performed under dishwashers and refrigerators or behind stoves and other equipment. An insect growth regulator tank-mixed with a liquid residual pesticide(s) may be used.



**Pest Group 002: Cockroach Control**

**GENERAL REQUIREMENTS:** Prevent and control all cockroaches.

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
<p><u>Time Period to Respond:</u> Three days</p> <p><u>Time Period to Obtain Control:</u> Seven days</p> <p><u>Time Period to Maintain Control:</u> One month</p> <p><u>Level of Control:</u> Control is defined as two or less spot infestations in any one building. If any more than one spot infestation is found or more than six cockroaches are found in any one spot, the Contractor will be notified. Four or more cockroaches at any stage of development, or one or more cockroach egg capsule (either loose or attached to a female), per room, per survey shall require retreatment of the room by the Contractor at the Contractor's expense. Inspection surveys may be conducted using flushing agents, sticky traps, or visual surveys. Validated customer complaints are valid survey information.</p> <p><u>Work Survey:</u> All work shall start with a survey of the area to determine the pests present the location of their nesting areas. Report sanitation and food storage practice deficiencies and major pest-proofing deficiencies.</p> <p><u>Control:</u> Use non-chemical and chemical control techniques.</p> <p>Chemical Control: Bait stations and gel bait formulations shall be the primary chemical control tool used. Residual pesticides shall be used only after baits have failed to reduce the cockroach population.</p> <p>Adjacent areas to infested areas shall be treated as needed to control existing infestations. The scope and type of treatment shall be at the Contractor's discretion but does not constitute an additional or added service call.</p>	<p><u>Non-Chemical Control:</u> Caulk, grout, or seal cracks, crevices, entranceways, harborage entrances, etc.</p> <p><u>Chemical Control:</u> In addition to baits a residual liquid pesticide or dust may be applied (by crack and crevice technique) to all known or suspected harborages, feeding sites or passageways, including but not limited to utility lines pipe chases, drain line access ways, under and behind baseboards, behind cabinets, and other crevices. If the pesticide label permits, spot treatments (2 square feet) may be performed under dishwashers and refrigerators or behind stoves and other equipment. An insect growth regulator tank-mixed with a liquid residual pesticide(s) may be used. Dusts formulations may be used on porous cement, in wall voids, and other areas where applicable.</p>

**Pest Group 003: Bat Control in Buildings**

**GENERAL REQUIREMENTS:** Control/exclude bats from buildings in accordance with state regulations.

PERFORMANCE STANDARDS

INFORMATIONAL NOTES

Time Period to Respond:

Same day as ordered

Time Period to Obtain Control:

1. Single Bat Control: The bat shall be captured in one day. Release bat outside.
2. Bat Community Infestations Control: Five calendar days after initiation of treatment to get it under control.

Time Period to Maintain Control: Single Bat Control:  
Seven calendar days.

Bat Community Infestations: The designated site shall not be reinfested with bats for 90 calendar days after completion of treatment.

Level of Control: Complete elimination of the pest is required. Any sign of reinfestation is grounds for retreatment at the Contractor's expense.

Work Survey: All work should start with a survey of the area to determine the number of pests and the nature of the problem.

Use non-lethal controls. Exclusion devices shall be consistent with the normal façade of the building.

The Contractor shall obtain all required permits to perform this work.

Carcass disposal, transportation, disposition, deodorizing etc. are considered a normal part of Bat Control and are not an added service call or charge.

Lethal control operations shall be approved by the KO prior to the action. Approval will be granted on a case-by-case basis.

Deodorizing, Cleanup: Area shall be deodorized and cleaned of fecal/ urine/ blood/ saliva.

Report Fecal Buildup: If bat infestations have left a guano buildup, a written report shall be provided to the KO describing the location and general extent of the problem.

Single Bat Control: This applies to the situation when one bat has gained entry into a habitable part of a building. Control may be non-lethal by catching the bat with a hand held catch net. The bat can be taken outside and released unless the bat appears rabid, sick, or overtly aggressive. If the bat appears rabid, sick or aggressive, the bat should be humanely euthanized, and the body disposed of in accordance with local laws and ordinances.

Bat Community Infestations Control: This applies to the situation when a community of bats has infested an uninhabited area of a building such as an attic. Non-lethal exclusion can be achieved unless the animals appear rabid, sick, are aggressive, pose a severe danger to personnel during exclusion, pose a significant danger to Government personnel, or if there is no other feasible alternative.

Non-Lethal Control: Bats can be excluded from the building. Observe bats to discover their access ways into the building. Exclusion of most access ways can be performed during the day if "one way" bat doors are installed on primary exit holes. Leave bat doors in place at least three days. When primary entrances are sealed, remove any bats left indoors. If exclusion is performed during the summer, provisions have to be made to ensure that immature bats are not left in the building after the entrances have been sealed.

Animal Disposition: The installation Medical or Veterinary can be contacted to determine quarantine/testing requirements (if applicable) for bats suspected of being rabid.

**Pest Group 004: Bee, Wasp, Hornet, and Stinging Arthropod Control**

**GENERAL REQUIREMENTS:** Control stinging arthropod infestations in and around buildings, structures, and areas. Pests include, but are not limited to, bees, wasps, hornets, cicada killers, yellow jackets, and solitary wasps (mud daubers, umbrella wasps).

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
<p><u>Time Period to Respond:</u> Four hours. If swarm, respond immediately at discretion of KO.</p> <p><u>Time Period to Obtain Control:</u> 24 hours. Two calendar days to remove hives from structures.</p> <p><u>Time Period to Maintain Control:</u> Maintain control level for four weeks after initiation of treatment.</p> <p><u>Level of Control:</u> 100% control is required. Sighting of stinging arthropod nests or active entrances to nesting areas is grounds for retreatment at the Contractor's expense.</p> <p>All work shall be performed in accordance with state and local laws.</p> <p><u>Report Sanitation Deficiencies:</u> Report conditions such as inadequate food source/attractant control (open trash cans, open soda cups).</p> <p><u>Control:</u> Use non-chemical and chemical control techniques.</p> <p><u>Chemical Control:</u> Large Infestations: Control efforts for stinging arthropods shall be scheduled for the early morning or evening hours when people will not be in the area and the bees/wasps are least active. Non-pest control personnel shall not be present during treatments or shall wear protective clothing and equipment. Small Infestation: Control efforts shall be performed as soon as possible as long as risk to personnel is minimal.</p> <p><u>European Honeybee Swarms/Nests</u> Contractor shall contact state or local authorities to determine if local beekeepers can remove honeybee swarms/nests.</p>	<p><u>Definitions:</u> "Small Infestations": Mud Daubers, Umbrella Wasps, Carpenter Bees, Cicada Killers, and other solitary wasps. "Large Infestations": Hornets, Yellow Jackets, Hive Bees.</p> <p><u>Non-Chemical Control:</u> Nest Knockdown or Seal-Off: For Small Infestations.</p> <p>Trapping: Non-toxic baited traps can be set at perimeters of outdoor sites where people congregate such as picnic grounds, athletic fields, etc.</p> <p>Nest Removal: Remove aerial nests (if possible) intact from the station.</p> <p><u>Chemical Control:</u> Quick knock-down pesticides or residual pesticides may be used in accordance with label instructions.</p>

**Pest Group 005: Pest Bird Control (including Bird Aircraft Strike Hazard reduction activities)**

**GENERAL REQUIREMENTS:** (1) Prevent and control birds inside and outside buildings/structures, and (2) Prevent and control birds roosting/nesting on aircraft operation areas.

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
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Time Period to Respond:

**General Bird Control: Three working days, one day in occupied spaces.**

BASH: 24 hours

BASH Emergency Call: (Mission affected) Immediately

Time Period to Obtain Control: One day after initial service.

Time Period to Maintain Control: 30 calendar days after initial service.

Level of Control:

Indoor and Occupied Spaces: All birds shall be controlled. Physical sighting of birds is grounds for retreatment at the Contractor's expense.

Indoor Industrial and Outdoors: Sighting of five or more birds roosting at the same time in the treated area is grounds for retreatment at the contractor's expense.

For indoor bird control: The Contractor is expected to obtain initial control levels but is not expected to maintain bird control levels if structures permit birds to easily enter.

**BASH:**

Satisfactory "control" (performance) is full response to service requests within the 24-hour response time. One failed request for service is cause for an unsatisfactory rating for this line item resulting in non-payment for this line item for the month.

Contractors shall obtain all permits required to control pest birds. Only three species of birds (European starling, English sparrow, and pigeons) may be controlled without a permit from the US Fish and Wildlife Service. Use of ultrasonic, electromagnetic, sonic repellent devices or electric shock devices is prohibited.

The Contractor shall submit to/obtain permission from the KO if physical bird repellent products have sharp points and/or may pose a hazard to personnel.

Work Survey: All work should start with a survey of the area to determine the species of bird to be controlled, the location of nesting areas (if present), an examination of the specific problem to be solved, and the location of bird entry points (if applicable). Major structural modification deficiencies such as broken windows, or openings should be reported to the KO. Contractors should report food sources that contribute to bird problems such as uncovered trashcans.

Control: Non-lethal control shall be the preferred method.

Non-Chemical Control: Shooting birds with a pellet gun (air charge) is permitted only with the direct consent of the KO. These weapons must be cleared with cognizant Base Security first. Guns that use ordinance such as 22-gauge bird shot rifles are prohibited.

Chemical Control: The use of avicides is permitted ONLY with direct consent of the KO.

Other BASH requirements: Contractor shall report to the ACO all bird attractants in the runway, clear zone, overrun, and apron areas including grain grasses, berry plants, garbage collection areas, and other food sources/attractants that contribute to bird problems within 24 hours.

Non-Lethal

Control:

Indoors: Birds can be harassed or trapped-out from buildings. Bird entryways may be sealed-off using screening, flashing, or wire mesh materials. Physical bird repellents such as metal wires, monofilament lines, netting, etc. are permitted. Outdoors: Bird deterrent products such as metal wire, netting, etc. may be used. Nest destruction can be done in accordance with permits. Birds may be harassed using cracker shells, propane cannons or other pyrotechnic devices.

Lethal Control:

The contractor Destroy nests, coat eggs, and addle the eggs as needed in compliance with permits and state/federal regulations.

**Pest Group 006: Childcare Facilities/Sensitive Areas Pest Control**

(Includes: Schools, Hospital, Veterinary Clinic and Kennels, Child Development Center, Youth Activities Center)

**GENERAL REQUIREMENTS:** Control all nuisance arthropod pests (including, but not limited to), cockroaches, ants, silverfish, spiders, crickets, flies, centipedes, box elder bugs, mites, bees, wasps, other venomous arthropods, AND all species of rodents in areas where children frequent including child care, schools, day care, nurseries and other locations as designated.

**PERFORMANCE STANDARDS**

Time Period to Respond:

1. All rodent and arthropod problems except small venomous arthropod infestations: Within two working days.
2. Venomous arthropod infestations: Same day as complaint called-in.

Time Period to Obtain Control:

Occasional Arthropod Invaders Indoors: Same visit.  
Rats/Mice Indoors: Three calendar days from start of treatment.  
Cockroaches/Ants Indoors: Ten calendar days from start of treatment.  
Arthropods/Rodents In "Adjacent Areas": One week from start of treatment.  
Outdoor Play Yard/Ants: One week from start of treatment.  
Outdoor Play Yard/Small Venomous Arthropod Infestations: Same Day as Treatment.  
Outdoor/Non-Play Yard/All Pests: In accordance with applicable "Pest Group" part of this contract except that venomous arthropods must be controlled in two calendar days from start of treatment.

Time Period to Maintain Control:

Four weeks after initiation of treatment

Level of Control:

100% control is required

Work Survey: A visual survey shall be made to determine the type of pest(s) present, location of harborage areas, and the location of the children and their frequency in infested areas.

Control: Use non-chemical and chemical control.

Bait stations, gel baits, and non-lethal traps shall be the primary control methods. Pesticide applications shall not be made during hours of operations or when children are present at schools, child development centers and youth activity centers.

Non-Chemical Control:

Exclusion: Caulk, grout, or seal cracks, crevices, entranceways, harborage entrances, etc less than 2" in diameter or width. Report sanitation and food storage practice deficiencies, and major pest-proofing deficiencies.

Occasional Arthropod Invaders Indoors (i.e.: spiders, crickets, centipedes, ground beetles, box elder bugs, pill bugs, etc): Vacuum arthropods and debris.

Rats/Mice Indoors: Use mouse snap traps, rodent mechanical traps, or glue sticky boards only. Place mouse snap and mechanical traps where children cannot access them. Place glue boards in childproof containers (such as in bait stations without baits or in metal boxes where children cannot access them. Service traps and glue boards daily until pest(s) controlled.

Chemical Control:

Cockroaches/Ants Indoors: Only bait stations and gel bait formulations shall be used. Ensure that children cannot obtain access gels or wafer containers. Residual pesticides shall only be used as a last resort if baits have failed to correct the infestation.

Outdoor Play Yard/Ants: Baits shall be used in these areas. Apply after-hours. Baits shall be placed so that they are inconspicuous to children and are not an attractive nuisance.

Outdoor Play Yard/Venomous Arthropods: A quick knockdown, non-residual pesticide shall be used. Nests and dead/dying insects shall be removed.

**INFORMATIONAL NOTES: Not Applicable (N/A)**



**Pest Group 007: Filth Fly Control**

**GENERAL REQUIREMENTS:** Prevent and control filth flies including house flies, flesh flies, bottle flies, blow flies, fruit flies, and other related insects that breed or are attracted to garbage and trash in area designated by the KO. Identify source, if applicable.

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
<p><u>Time Period to Respond:</u> Two working days</p> <p><u>Time Period to Obtain Control:</u> Two calendar days from initiation of treatment</p> <p><u>Time Period to Maintain Control:</u> 30 calendar days after initiation of treatment.</p> <p><u>Level of Control:</u> Indoors: 100% control is required.</p> <p>Outdoors/dumpsters: Sighting 10 or more flies in or around a dumpster is grounds for retreatment of the dumpster and area at the Contractor's expense.</p> <p>Outdoors: Areas Not Near Dumpsters, trash cans, or food handling areas: Sighting of 5 or more flies, or three validated customer complaints within a 1 week period is grounds for retreatment at the contractors expense.</p> <p><u>Work Survey:</u> All work shall start with a survey of the area to determine the pests present and the nature of the problem. Survey tools shall include sweep netting, examination of resting sites, cone traps, fly grids, baited sticky traps, or visual inspection. Report inadequate sanitation to the Government</p> <p><u>Control:</u> Use non-chemical and chemical control techniques.</p> <p><u>Indoor space sprays:</u> Indoor space sprays shall only be allowed when non-chemical controls are not practical.</p>	<p><u>Non-Chemical Control:</u> Use flytraps as needed to control filth flies in areas where flies are regularly encountered.</p> <p><u>Chemical Control:</u></p> <p>Dumpsters (and areas near food handling establishments): Residual insecticides may be applied to dumpsters as required to obtain control. Report to the Government if dumpsters are not cleaned at least weekly.</p> <p>Outdoors (areas NOT near dumpsters, trashcans, and food handling areas): Non-pesticide flytraps may be used. Barrier pesticide applications to vegetation or area treatments may be necessary. Pesticides may be applied as required based on survey information to areas where pests have been noted.</p>

**Pest Group 009: Flea Control in and Around Buildings and Structures**

**GENERAL REQUIREMENTS:** Control flea infestations in and around buildings and structures.

**PERFORMANCE STANDARDS**

Time Period to Respond:

Two working days

Time Period to Obtain Control:

Seven calendar days after initial treatment

Time Period to Maintain Control:

30 calendar days after initial treatment.

Level of Control: 100% flea control is to be achieved. Physical sighting of a flea in the treated area is grounds for retreatment of the area at the Contractor's expense.

Work Survey: All work shall start with a survey of the area/building/structure to determine if fleas are present, and the extent of the infestation. Flea traps, sticky tape on ankle surveys, flashlight survey, or visual surveys shall be used.

Control: Non-chemical techniques shall be used to the maximum extent possible, however chemical control will most likely be a component of the control operation.

Non-Chemical Control:

Report situations that are contributing to the flea infestation problem such as feral cats in the crawlspaces etc. or if the family pet is infested and will act as a source of reinfestation to the Government.

If feral animals are the source of infestation, report these conditions to the KO. Vertebrate pest control shall be completed prior to flea control operations.

Chemical Control: Coordinate with residents/building personnel on specific treatment and reentry times. Ensure that the KO representative has coordinated with residents/personnel to complete vacuuming/cleaning/preparation prior to treatment and that family pets are scheduled for treatment on the same day as treatment. Ensure that ventilation has been turned off. Indoors, apply residual pesticide tank mixed with insect growth regulator spray to all known or suspected areas. Never apply pesticides to pets or dispense pesticides to residents/personnel. Treatment of areas outside or adjacent areas to control fleas in the designated area does not constitute an added service call or charge. After the work is complete, properly air out/ventilate structures in accordance with label directions.

**INFORMATIONAL NOTES:** Not Applicable (N/A)

**Pest Group 010: Larval and Pupal Mosquito Control**

**GENERAL REQUIREMENTS:** Control of larval and pupal mosquitoes in designated area(s) when directed by KO (medial personnel determine when to control).

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
<p><u>Time Period to Respond:</u> One day</p> <p><u>Time Period to Obtain Control:</u> Seven calendar days after initial treatment</p> <p><u>Time Period to Maintain Control:</u> 30 calendar days after initiation of treatment</p> <p><u>Level of Control:</u> More than 1 larva per dip is ground for retreatment at Contractor's expense. If using an insect growth regulator, no adult emergence is required.</p> <p><u>Timing of Application:</u> The larvacide shall be applied in accordance with manufacturer's recommendations to obtain effective control.</p> <p><u>Designation of Area:</u> The KO shall designate areas where mosquito larva should be controlled on a map supplied by the government. The areas may be intermittent water (developed from surveys for larval breeding sites), or permanent wet sites.</p>	<p><u>Potential Sites:</u> Including but not limited to:</p> <p>Intermittent Water Sites: Pastures, meadows, freshwater swamps and marshes, closed intermittent salt marshes, woodland pools, floodplains, tire dumps, recycle dumps, artificial water holding areas, dredge spoil sites, waste treatment settling ponds, ditches, other man-made depressions.</p> <p>Permanent Water Sites: Ornamental ponds and fountains, flooded crypts, transformer vaults, abandoned or unused swimming pools, construction and other man-made depressions, storm drains, storm water catch basins, roadside ditches, cesspools, septic tanks, waste treatment settling ponds.</p>

**Pest Group 011: Adult Mosquito Control**

**GENERAL REQUIREMENTS:** Application of a mosquito adulticide (ULV Formulation) at designated sites when directed by KO.

**PERFORMANCE STANDARDS**

Time Period to Respond:

24 hours

Correct Time/Day to Treat: Treat on designated time and day.

Proper Weather Conditions: Treat in proper weather conditions. If weather is not permissive, treat during next available time slot when weather conditions permit.

Use Proper Adulicide: Use only an EPA registered ULV formulation adulicide as listed under "Acceptable Pesticides" of this Pest Group. The Performance Assessment Representative (PAR) may obtain samples of the ULV formulation adulicide from the Contractor without prior notice for the purpose of chemical analysis.

Adulicide Application: The adulicide is applied at maximum label rate for the adulicide used.

Equipment: The ULV equipment is clean and maintained in proper running order.

ULV Droplet Size Documentation: ULV droplet slides, pesticide label, and ULV equipment specification literature were provided prior to any ULV equipment use (beginning of the contract) and ULV droplet slides, pesticide label, and equipment specification literature were forwarded to the KO every 90 days or every 50 hours of use, whichever comes first. The machine use log must be kept up-to-date.

Level of Control: ULV application performed as per specifications. Consult Pest Management Plan for level of control.

ULV Droplet Size Documentation: Test ULV machine for generating proper droplet sizes and range before starting any work under this contract and thereafter every 90 days OR every 50 hours of use, whichever comes first. Maintain a log of ULV machine hour use.

Obtain Droplet Samples: Sling 3 silicone treated slides (may be purchased ready for use) through the ULV aerosol cloud, or drive the machine past the silicone slides that are mounted on 5' foot high stakes. Distance for both procedures shall be 25 feet from the point of discharge. ULV machine to be operating at designated RPM/pressure/speed to simulate application.

Prepare and Turn-In Slides: Place slides in proper slide shipping packaging that shall not mar or distort the ULV droplets on the slide. Attach slide-shipping container to the Label for the pesticide used. Also attach manufacturer's specification literature on the ULV machine used. The manufacturer's literature shall contain information on the make and model of ULV machine. Deliver this package to the KO designated representative.

Determination of Droplet Sizes: The slide packages shall be forwarded to the Navy Disease Vector Ecology and Control Center (NDVECC), Jacksonville Fl. (or another entity) for determination of droplet sizes. The Contractor shall submit slides to NDVECC for ULV for the purpose of machine testing and calibration at any time through the KO. There is no charge for reading slides. The contractor shall bear all other charges.

Acceptable Pesticides: Apply an EPA registered mosquito adulicide formulated for application by "Ultra Low Volume" (ULV) equipment.

Equipment: Use only Ultra Low Volume (ULV) application equipment.

Timing of Application: Mosquito aduliciding is dependent on Adult Mosquito Surveys. Preventive Medicine will determine frequency of work.

Equipment Maintenance and Repair: All equipment shall be properly calibrated and shall generate the proper range of particle sizes as specified on the label of the pesticide used.

**INFORMATIONAL NOTES:** Not Applicable (N/A)

**Pest Group 012: Commensal Rodents In and Around Buildings and Structures**

**GENERAL REQUIREMENTS:** Prevent and control rodents indoors or within 75 linear feet of the exterior walls of designated buildings and structures. Rodent pests include, but are not limited to Norway rats, roof rats, house mice, and field mice. Service requires removal of dead animals.

PERFORMANCE STANDARDS

INFORMATIONAL  
NOTES

<p><u>Time Period to Respond:</u> Indoors: One day Outdoors: Three working days</p> <p><u>Time Period to Obtain Control:</u> Indoors, ten calendar days after initial treatment. Outdoors and Indoor Industrial areas, 30 calendar days.</p> <p><u>Time Period to Maintain Control:</u> 30 calendar days after initial treatment</p> <p><u>Level of Control:</u> Complete elimination of rodent infestations is required. Signs of rodents identified during subsequent Contractor surveys, or Government inspections, will require that the Contractor retreat at her/his own expense. Rodent signs include rodent droppings, freshly gnawed holes in screens or other media, urine stains, commodity damage, new or reopened burrows, active runways, fresh tracks, or actual sightings.</p> <p><u>Work Survey:</u> All work should start with a survey of the area to determine the pests present and harborage locations. Rodent signs include burrows, rub marks, fecal droppings, runways, gnaw marks, tracks, or other signs of rodents. Report sanitation problems, major structural deficiencies, and lack of rodent-proof food storage containers to the Government.</p> <p><u>Control:</u> Use non-chemical and chemical control techniques.</p> <p>Traps shall be serviced daily during rodent trapping operations. Caught rodents shall not be left in traps for longer than 24 hours. Removal and disposal of rodent carcasses are considered a normal part of rodent control and do not constitute an added service call or charge.</p> <p>Rodenticides shall not be used in areas where food is prepared or served without special approval from the KO.</p> <p>Rodenticide bait shall be placed only in distinctly marked, tamper-proof bait stations inaccessible to adults, children, pets and non-target species, or in burrows. All rodent baits shall be replaced as needed to keep bait acceptance high. Moldy or otherwise unacceptable bait, spillage, and all dead and dying rodents shall be removed and properly disposed of as a normal part of rodent control operations. All poisoned rodents shall be quickly collected to minimize the potential of secondary poisoning.</p> <p>If rodenticides are used outdoors, only anticoagulant rodenticides shall be used. If carcasses cannot be located, a suitable odor neutralizer shall be applied.</p>	<p><u>Non-Chemical Control:</u> Food Areas: Sticky board traps, snap traps and other mechanical traps may be used as needed.</p> <p><u>Chemical Rodent Control:</u> Rodenticides may be used in crawl spaces, basements, attics, storage sheds, and other areas as long as food is not served, stored, or prepared in those areas.</p>
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**Pest Group 013: Adult Mosquito Surveillance**

**GENERAL REQUIREMENTS:** Survey for adult mosquitoes using light trap(s) and deliver catches to Installation Preventive Medicine.

**PERFORMANCE STANDARDS**

Time Period to Respond: EFD PMC to determine frequencies.

Time Period to Obtain Control: EFD PMC to determine frequencies.

Time Period to Maintain Control: EFD PMC to determine frequencies.

Level of Control:

Equipment Provider: The Contractor shall provide the mosquito light trap(s) and all other equipment (as needed) to complete mosquito survey(s) as directed by the KO. All cost for procurement of equipment (including traps, batteries, extension cords, light bulbs, collection bags, etc.) shall be included in the bid price for this service and does not constitute grounds for any added charge under any other part of this contract.

Trap Design: New Jersey light traps (or equal), CDC Miniature light traps (or equal) (battery operated), or other commercially purchased light trap designs deemed acceptable to the Armed Forces Pest Control Board, shall be used. The Government may or may not provide electricity at the site where the KO designates that the light traps shall be placed. If no electricity is available, battery operated units shall be used. Battery operated units may be used even if electricity is provided. The government shall not supply batteries. Use the same trap design at the same location throughout the course of this contract.

Trap Placement: Place light trap(s) 2 - 3 meters off the ground at designated sites. The government shall provide a map delineating the number of sites and their location. The traps shall be placed or serviced (if light actuated) before dusk (before sunlight significantly fades), and the collection completed after dawn.

Trapping Frequency: Traps shall be set at specific days of each week (weather permitting). If weather is inappropriate for trapping (heavy rain or consistent winds above 15 MPH), perform trapping on the night following the scheduled night (or the next appropriate night). Conduct adult mosquito trapping in accordance with the weekly schedule.

Collection: All mosquitoes collected at a given site shall be placed in a resealable (zipper lock type) of plastic bag of adequate volume so that the mosquitoes will not be crushed. The bag shall be marked showing time, date, location, and collector's name. Freeze the bag for one hour. Separate out all insects except mosquitoes.

Delivery of Mosquitoes: Deliver the marked bags containing male and female mosquitoes to the installation Preventive Medicine Department on the same day of collection.

**INFORMATIONAL NOTES:** Not Applicable (N/A)

**Pest Group 014: Larval Mosquito Surveillance**

**GENERAL REQUIREMENTS:** Survey designated mosquito breeding sites for immature mosquitoes

(eggs, larvae, and pupae)

#### PERFORMANCE STANDARDS

Time Period to Respond: EFD PMC to determine frequencies.

Time Period to Obtain Control: EFD PMC to determine frequencies.

Time Period to Maintain Control: EFD PMC to determine frequencies.

Level of Control: EFD PMC to determine frequencies.

Equipment: The Contractor shall provide all equipment (as needed), to complete the assigned task(s) including, but not limited to, ladders, asepto syringes, boots, dippers, notebooks, etc. The Contractor shall sample for immature mosquitoes on the schedule designated by the KO.

Survey Designated Mosquito Breeding Sites: Areas shall be designated by the KO for IQ work, and by maps for FFP work. In the designated area(s), there may be differing aquatic environments to sample from including but not limited to, wetlands, standing pools of water, tree holes, artificial containers, clogged rain gutters, land depressions with temporary pools, floodwater plains, standing ponds, underground or aboveground storm water catch basins, swamps, drainage ditches, tire dumps, recycling areas, or any area where mosquitoes can breed. It is the responsibility of the Contractor to survey all areas where mosquitoes commonly breed in the designated area(s).

Previous Experience: Larval mosquito surveys are very technique sensitive. Only Contractor personnel, with significant previous experience sampling for immature mosquitoes, shall perform larval surveys.

#### Survey Techniques:

In larger bodies of water such as ponds, lakes, catch water basins, etc., perform surveys around the water perimeter using an enamel dipper (style and type approved by the Installation Preventive Medicine Department and the KO). Complete a sufficient number of dips to develop an accurate average dip count for the body of water. Different species of mosquito larvae must be surveyed using different dipping techniques. It may be necessary to proceed carefully, or to act swiftly depending on the species being sampled, as water disturbance or casting shadows could result in the larvae diving to the bottom. It is the Contractor's responsibility to know the proper sampling technique(s) for the mosquito species present.

In smaller water bodies such as rain gutters, artificial containers, tree holes etc., samples shall be taken using an asepto style syringe.

Reporting Larval Mosquito Catches: The Contractor shall record (in legible handwriting) the results of the survey for each location sampled. The Contractor shall complete the number of samples designated by the KO for each location. The Contractor shall note the number of immature mosquitoes sampled, the type of immature mosquito sampled, germane comments regarding the sampled mosquitoes, and sum or average the totals. The report shall be given to the KO within one day of the survey being completed.

INFORMATIONAL NOTES: Not Applicable (N/A)



**Pest Group 015: Industrial, Sidewalk, Substation, Vault, and Right-Of-Way Weed Control**

**GENERAL REQUIREMENTS:** Provide bare ground weed control in cracks in sidewalks, and paved surfaces, at fence line locations, and in transformer vaults, around fire hydrants, and other locations as designated by the KO.

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
<p><u>Time Period to Respond:</u> 5 working days</p> <p><u>Time Period to Obtain Control:</u> 14 days after initiation of work</p> <p><u>Time Period to Maintain Control:</u> Season long control is required. (i.e.: from the time of application through Dec. 31 of that calendar year)</p> <p><u>Level of Control:</u> All vegetation removed</p> <p><u>Work Survey:</u> All work shall start with a survey of the area to determine the nature of the problem and the weed species present.</p> <p><u>Control:</u> Use non-chemical and chemical control techniques.</p> <p><u>Chemical Control:</u> <u>Use:</u> If the Contractor deems that two or more herbicides are acceptable for use and control at a given site, then the Contractor shall use the herbicide with the lower rate of application.</p> <p><u>Non-Target Effects:</u> The Contractor shall assume full and total liability for all non-target herbicide effects including, but not limited to, cleanup, plant replacement, replanting costs, reseeding, resodding, and other actions as required.</p>	<p><u>Non-Chemical Control:</u> Mechanical line trimming, steam treatments, and other mechanical removal methods are recommended.</p>

**Pest Group 016: Stored Product Pest Control (Arthropods)**

**GENERAL REQUIREMENTS:** Control and prevent stored product pests at designated sites.

PERFORMANCE STANDARDS

INFORMATIONAL NOTES

Time Period to Respond:

Three working days

Time Period to Obtain Control:

24 hours from initiation of treatment

Time Period to Maintain Control:

1. Survey: N/A

2. Residual Treatments: 30 calendar days from initial treatment for ground /crawling arthropods.

3. ULV Application: Seven calendar days from treatment for flying arthropods.

Level of Control: Sighting of any exposed, living, stored product pest(s) after 72 hours shall require retreatment of the area at the Contractor's expense.

Work Survey: All work shall start with a survey of the designated area(s).

Survey Report. The identification and location of all stored product pest species noted in the survey should be recorded in a simple, legible, hand written report which should be turned in to the KO. The Contractor shall report to the KO (in a simple, legible, hand-written report) all instances where environmental control is lacking, including but not limited to, poor sanitation, goods improperly stored, on lack of inspection for incoming goods. The report shall be turned in the day it is written or at the beginning of the next business day.

Residual treatments shall never be applied directly to any foods or food containers.

ULV Treatments: All entrances to the treated area(s) shall be posted prohibiting entry until ventilation has been completed. All post-treatment ventilation procedures shall be completed.

ULV Equipment Maintenance/Repair: All ULV equipment shall be properly calibrated and shall generate the proper range of particle sizes as specified on the label of the pesticide used.

ULV Droplet Size Documentation: The ULV machine shall be calibrated for generating proper droplet sizes and range before starting any work under this contract and thereafter every 90 days or every 50 hours of use, whichever comes first. Maintain a log of ULV machine hour use.

Pheromone Traps: The Contractor may set and monitor pheromone traps (in accordance with manufacturer's recommendations) for the following stored product pests: Indian meal moth, cigarette beetle, and red/confused flour beetle in all areas designated for Stored Product Pest Control. The traps may be left up during ULV applications.

Chemical Control: Pesticides may be applied as a remedial or as a preventive treatment.

Residual Treatments: Residual treatments may be performed as directed treating all appropriate areas to control stored product pests. An Insect Growth Regulator (IGR) can be tank mixed with the residual pesticide.

Ultra Low Volume (ULV) treatments: ULV treatments may be performed as directed to designated areas

Obtain Droplet Samples: Sling 3 silicone treated slides (may be purchased ready for use) through the ULV aerosol cloud, or drive the machine past the silicone slides, which are mounted, on 5' foot high stakes. Distance for both procedures should be 25' from the point of discharge. ULV machine to be operating at designated RPM/pressure/speed to simulate application.

Prepare and Turn-In Slides: Place slides in proper slide shipping packaging that will not mar or distort the ULV droplets on the slide. Attach slide-shipping container to the Label for the pesticide used and the manufacturer's specification literature on the ULV machine used (make and model of ULV machine inclusive). Deliver this package to the KO designated representative.

Determination of Droplet Sizes: The slide packages will be forwarded to the Navy Disease Vector Ecology and Control Center (NDVECC), Jacksonville, Florida for determination of droplet sizes. The Contractor may submit slides to NDVECC for the purpose of machine testing and calibration at any time throughout the term of this contract, through the KO.

**Pest Group 017: Survey for Termite and Wood Destroying Organisms**

**GENERAL REQUIREMENTS:** Survey for all termite species and other wood destroying organisms including fungal rots, carpenter ants, and wood boring beetles.

**PERFORMANCE STANDARDS**

Time Period to Respond: If swarm, immediately. Otherwise, 1 week.

Time Period to Obtain Control: Not Applicable (N/A)

Time Period to Complete Work:

Complete inspection and submit report within ten working days. Use the Termite and Wood Decay Inspection - DD Form 1070 shown below.

Time Period to Maintain Control: N/A

Level of Control: N/A

Survey: At the direction of the KO, perform surveys for wood destroying organisms.

Service: The Contractor shall perform complete inspections of housing units, garages, buildings, and other structures as designated by the KO to determine infestations or damage to wood structural components or other wood, which may be caused by termites or other structural or wood infesting pests. The inspections shall include both the indoor and exterior of buildings and structures and any attached fences, sheds, carports, etc. (i.e. inspect the property of the structure)

The interior inspections shall include the all floors and all basements and crawlspaces (both interior as well as can be managed without destructive testing) and exterior.

The Contractor shall also inspect for conditions which will promote attack by structural pests to wood, such as poor drainage, wood in ground contact, etc. and report those findings.

Use of sounding and probing tools shall be the primary method. Other methods may include, but are not limited to use of moisture meters, auditory meters, and termite dogs, etc.

Reports: A written Termite/Wood Destroying Pest Inspection Report shall be completed for each building/unit inspected.

Reports shall be forwarded to the KO within 10 working days after the units are inspected.

**INFORMATIONAL NOTES:** Not Applicable (N/A)

TERMITE AND WOOD DECAY INSPECTION (Use with Pest Group Sheet 017)						DATE INSPECTED	BUILDING NUMBER
INSTALLATION			TYPE BUILDING   PERM   TEMP		INSPECTOR		
<b>I. FAVORABLE TERMITE AND FUNGI INFESTATION CONDITIONS</b>							
WOOD IN CONTACT WITH SOIL			FORM BOARDS LEFT IN CONCRETE			POOR VENTILATION UNDER BUILDING	
WOOD MEMBERS SET IN CONCRETE FLOOR			WOOD STEPS IN CONTACT WITH SOIL			WATER COLLECTIONS UNDER BUILDING	
WOOD STEPS WITHOUT SHIELDS			WOOD SIDING IN CONTACT WITH SOIL			VINES AND SHRUBS AGAINST BUILDING	
WOOD STEPS IN CONTACT WITH SOIL			PIPES IN CONTACT WITH SOIL AND WOOD			LEAKY PLUMBING IN PUTTING	
WOOD SIDING IN CONTACT WITH SOIL			NO SHIELDS ON FOUNDATION			WOOD SCRAP PILED TINDER BUILDING	
PIPES IN CONTACT WITH SOIL AND WOOD			FAULTY TERMITE SHIELD			LOOSE WIRE IN CONTACT WITH SOIL	
NO SHIELDS ON FOUNDATION			OTHER (Specify)				
FAULTY TERMITE SHIELD							
<b>II. LOCATION OF INFESTATIONS</b>							
FOUNDATION TIMBERS			WOOD PILLARS			BASEBOARDS	
WOOD PILLARS			SILLS			DOOR FRAMES	
SILLS			CROSS BEAMS			WINDOW FRAMES	
CROSS BEAMS			FURNITURE			STEPS	
FURNITURE			FLOOR JOIST			ROOF	
FLOOR JOIST			FLOOR			OTHER (Specify)	
FLOOR			STUDS				
STUDS							
<b>III. TYPE OF TERMITE</b>			<b>IV. TYPE OF FUNGI</b>			<b>V. DAMAGE</b>	
SUBTER-RANEAN	NONSUBTER RANEAN	WOOD DECAY	WOOD STAINING	STRUCTURAL WEAKENING	SUPERFICIAL	ESTIMATED COST	
<b>VI. REPAIR AND TREATMENT</b>							
TYPE		RECM	ACCOMP	TYPE		REC M	ACCOMP
REMOVAL OF WOOD FROM SOIL CONTACT				REPAIR OF TERMITE SHIELDS			
SEALING CRACKS IN CONCRETE				REMOVAL OF CONCRETE FORMS			
POINTING UP POOR MORTAR				REMOVAL OF VINES AND SHRUBS			
LOWERING GRADE LEVEL				REMOVAL OF WOOD TRASH			
CAPPING CONCRETE FOUNDATION				OTHER (Specify)			
IMPROVING DRAINAGE UNDER BUILDING							
IMPROVING VENTILATION UNDER							

BUILDING						
<b>VII. CHEMICAL CONTROL</b>						
APPLICATION OF POISON DUST TO SHELTER TUBES			CHEMICAL USED			
YES <input type="checkbox"/> <input type="checkbox"/> NO YES <input type="checkbox"/> NO <input type="checkbox"/>						
SOIL POISON			TRENCH DEPTH	LINEAR FEET	CHEMICAL USED	
YES <input type="checkbox"/> NO <input type="checkbox"/>						
REPLACEMENT OF DAMAGED WOOD	NO. OF M BD FELT REPLACED	UNTREATED	DIPPED	SOAKED	SPRAYED	PRESSURE TREATED
YES <input type="checkbox"/> NO <input type="checkbox"/>						
DRILLING AND FLOODING TREATMENTS			CHEMICAL USED			
YES <input type="checkbox"/> NO <input type="checkbox"/>						
WOOD INJECTION FOR DRY WOOD TREATMENT			CHEMICAL USED			
YES <input type="checkbox"/> NO <input type="checkbox"/>						
<b>VIII. COST</b>						
LABOR		MATERIAL		OTHER		TOTAL
<b>IX. TREATMENT EFFECTIVENESS</b>						
DATE	REMARKS				INSPECTOR	
DATE	REMARKS				INSPECTOR	
DATE	REMARKS				INSPECTOR	
DATE	TITLE OF INDIVIDUAL AFFECTING REPAIR AND TREATMENT		SIGNATURE			

(DD Form 1070, FEB 58)

**Pest Group 018: Ant Control**

**GENERAL REQUIREMENTS:** Prevent and control ants in and around buildings and structures.

PERFORMANCE STANDARDS

INFORMATIONAL  
NOTES

<p><u>Time Period to Respond:</u> Ten working days</p> <p><u>Time Period to Obtain Control:</u> 30 calendar days after initiation of treatment.</p> <p><u>Time Period to Maintain Control:</u> One year after initiation of treatment.</p> <p><u>Level of Control:</u> 100% control is required. Visual sightings of pests, additional damage, or other signs of pests shall be grounds for retreatment at the Contractor's expense.</p> <p><u>Survey:</u> All service calls shall start with a survey of the area to determine the level of ant infestation and the location of their nesting areas (if possible). The Contractor shall use a flushing agents, sticky traps, flashlight surveys, or other survey techniques as applicable. Report sanitation and food storage practice deficiencies, and major pest proofing deficiencies to the KO.</p> <p><u>Control:</u> Use non-chemical and chemical control techniques. Bait stations and bait formulations, or non-repellant granular insecticides, shall be the primary chemical control tools used.</p> <p style="text-align: center;"><u>Carpenter Ant Control:</u></p> <p>The Contractor shall control indoor infestations of carpenter ants using the preferred control methods of baits and dusts. Drilling through structural materials to inject pesticides will not be performed without the prior written approval of the KO. When drilling is authorized, drill holes shall be aesthetically and permanently filled upon service completion.</p> <p><u>Pharaoh Ant Control</u> (<i>Monomorium pharaonis</i>)</p> <p>a) <u>Survey:</u> In addition to general surveillance techniques (or other attractive food item) the contractor shall pre-bait with non-toxic jelly, honey or peanut butter placed on 3x5 index cards in order to help located ants (to help to observe their trails and find their nesting areas).</p> <p>b) <u>Floor Plan Diagram:</u> Following the survey of the building, the Contractor shall document all findings on a floor plan diagram. The location of ant activity shall dictate treatment locations. This diagram shall be delivered to the KO at least two days prior to beginning treatment.</p> <p>c) <u>Chemical Control:</u> Bait stations and bait formulations, or non-repellant granular insecticides shall be the ONLY chemical control tools used for pharaoh ant control. Baits will be place in all locations where ants were found to be active (ant trails were observed). Baseboard spraying is strictly prohibited. Any holes made in walls, floors, etc, shall be patched and repainted to match existing decor unless the location of the patch is inconspicuous. Holes drilled into wood to facilitate injection of pesticides shall also be patched to matched existing decor after completion of control.</p>	<p><u>Non-Chemical Control:</u> Caulk, grout, or seal cracks, crevices, entranceways, harborage entrances, etc.</p> <p><u>Chemical Control:</u> Indoors: Dusts formulations may be used on porous cement, in wall voids, and other areas where applicable. If holes must be drilled in walls, wall "portals" may be used for repeated injections if installed in inconspicuous locations.</p> <p>Adjacent areas, outside areas, etc. may be treated as needed to control existing infestations.</p> <p>Outdoor Perimeter Treatments: Perimeter treatments may be performed for ants that nest outside and forage inside. Granular baits, residual sprays, or other approved perimeter treatments may be applied in a three-foot wide band and one foot up foundation walls around exteriors of structures (in accordance with label directions).</p>
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**Pest Group 019: Other Wood Destroying Organisms (Non-Termite) Control**

**GENERAL REQUIREMENTS:** Prevent, manage, and control non-termite wood destroying organisms including, but not limited to powder post beetles (Lyctids and Bostrichids), Anobiids (furniture and deathwatch beetles), old house borer, carpenter ants, and carpenter bees.

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
<p><u>Time Period to Respond:</u> Ten working days</p> <p><u>Time Period to Obtain Control:</u> 30 calendar days after initiation of treatment.</p> <p><u>Time Period to Maintain Control:</u> One year after initiation of treatment.</p> <p><u>Level of Control:</u> 100% control is required. Visual sightings of pests, additional damage, or other signs of pests shall be grounds for retreatment at the Contractor's expense.</p> <p><u>Survey:</u> Control operations shall always be a direct result of a survey for wood destroying organisms and as directed by the KO.</p> <p>Report conditions that contribute to wood organism infestation including ground to wood contact, damaged, clogged, or holed rain gutters, or any other condition that may contribute to water content in wood exceeding 20%</p> <p><u>Non-Reinfesting Beetles:</u> If the infestation is a species a beetle that will not reinfest seasoned dead wood, treatment shall not be performed. Provide a report per detailing the species of beetle and the fact that it will not reinfest seasoned dead wood.</p> <p><u>Wood Not Salvageable:</u> Report if the wood is so far deteriorated that treatment for wood destroying organisms should not be performed until the lumber has been replaced. Do not treat this lumber, as it is unnecessary use of pesticide. The contractor shall treat new lumber in this location after it has been installed.</p> <p>The contractor shall assume liability for refinishing wood or replacing it as necessary (if the damage is a result of the contractor's treatment) to restore the decor to the original condition before the treatment.</p>	<p><u>Chemical Control:</u> Wood Injection: The contractor may apply by wood injection an EPA registered pesticide labeled for wood infesting organisms and the site. The pesticide may be in solid, liquid, or other forms as applicable. Drilled holes should be repaired to match existing decor.</p> <p>Wood Exterior Treatment: Suitable EPA registered preservative pesticides may be applied to structural lumber to control existing infestations. Surface treatments may not be applied to any painted, varnished, or any sealed surface as painted, varnished, or sealed surfaces may become marred.</p> <p>Carpenter Bees: Exposed wood may be treated with an approved product. Existing tunnels may be treated with a labeled aerosol or dust formulation. Holes can be plugged a few days later with wood putty.</p>

**Pest Group 020: Tick Survey and Control Outdoors**

**GENERAL REQUIREMENTS:** Survey for and control of ticks outdoors.

<b>PERFORMANCE STANDARDS</b>	
<u>Time Period to Respond:</u> Three Calendar Days	
<u>Time Period to Obtain Control:</u> 1. Surveys: Complete within three working days  2. Treatment: Complete within three working days	
<u>Time Period to Maintain Control:</u> Four weeks after initiation of treatment	
<u>Level of Control:</u> 1. Improved Areas: (Lawns, turf, athletic fields, etc. Three or more ticks collected by tick drag or flag, three customer complaints, or three tick visual sightings are grounds for retreatment at the Contractor's expense.  2. Semi-Improved Areas or Non-Improved Areas: [Fallow fields (grasses longer than 6"), forested, scrub, or like areas]: Ten or more ticks collected by tick drag or flag, three customer complaints, or three tick visual sightings is grounds for retreatment at the Contractor's expense.	
<u>Survey:</u> Survey area as ordered by the KO. Survey technique(s) used shall be either (1) tick dragging, or (2) tick flagging. Drag material shall be 3' wide by 4' long and flags should be 2' square in size. The material shall be white muslin. Tick surveyors shall not wear any personnel protection pesticides or arthropod repellents on the day before or during tick surveys or at any time when handling tick trapping, survey, or collection equipment.	
Contractor shall obtain a simple map of the installation and delineate the area that was surveyed on the map. The Contractor shall identify the area with a code. The Contractor shall turn the map in to the KO within one day of the survey. The Contractor will also turn in, along with the map, the tick tally report for the ticks that were captured and counted in the area. The Contractor will mark the report with the same code as was marked on the map.	
The Contractor shall apply a residual liquid or granular pesticide labeled for the site to the area that has been surveyed. Post signs after application stating that pesticides have been applied and when "re-entry" is permitted. Remove signs after re-entry time.	
INFORMATIONAL NOTES: Not Applicable (N/A)	

**Pest Group 021: Pest Vertebrate Control**

**GENERAL REQUIREMENTS:** Control pest vertebrate animals including, but not limited to, feral dogs and cats, squirrels, skunks, snakes, opossums, raccoons, and mongoose. Comply with local laws and regulations.

<b>PERFORMANCE STANDARDS</b>	<b>INFORMATIONAL NOTES</b>
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<p><b><u>Time Period to Respond:</u></b>  Within 24 hours. Emergency (animal possibly rabid) or indoors, immediately.</p> <p><b><u>Time Period to Obtain Control:</u></b>  Three working days after initiation of treatment. Emergency or indoors, 24 hours.</p> <p><b><u>Time Period to Maintain Control:</u></b> Not Applicable (N/A)</p> <p><b><u>Level of Control:</u></b>  Complete elimination of the pest is required.</p> <p>The Contractor shall obtain all applicable permits from the State of Washington. Carcass disposal, transportation, disposition, deodorizing etc. are considered a normal part of vertebrate control and are at no additional cost to the government.</p> <p><b><u>Work Survey:</u></b> All work shall start with a survey of the area to determine the pest(s) present and the nature of the problem.</p> <p><b><u>Control:</u></b> Live trapping, loop poles, or other mechanical techniques shall be used. Set and service traps as designated. Do not leave old bait in traps. Rebait traps whenever they are serviced. Leg hold traps or other devices that will harm animals are prohibited.</p> <p>Non-lethal control is required unless the animal appears rabid, sick, is extremely aggressive and poses a danger to the contractor during trapping, or poses a danger to personnel.</p> <p>Captured animals shall be scrutinized for sickness. If sickness is suspected, animals shall be humanely euthanized. Coordinate with Base Medical Department for carcass disposition (disposal or transport as applicable). If animals appear healthy, transport/release if possible, or dispose of at the discretion of the KO.</p> <p>Lethal control is prohibited without direct consent of the KO. If permitted, firearms use shall always be coordinated with Base Security.</p> <p><b><u>Deodorizing, Cleanup:</u></b> Deodorize, cleanup fecal/ urine/ blood/ saliva (as applicable) that is a direct result of a control operation (ordered in this contract). Cleanup of materials/urine, etc that have been in-place prior to control operations are not required.</p>	<p><b><u>Animal Control/Disposition:</u></b>  Feral Cats: Captured feral cats may be taken to the local humane society or animal shelter.</p> <p>Wild Vertebrates That Do Not Transmit Rabies: Captured animals may be transported to remote areas of the Station and release or release in-area after exclusion is performed. If transport/release is not possible/practical the animal may be euthanized humanely and the carcass disposed of in accordance with county/local laws.</p>
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**Pest Group 022: Mole Cricket Control**

<b>GENERAL REQUIREMENTS:</b> Control mole crickets in lawns.
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PERFORMANCE STANDARDS	INFORMATIONAL NOTES
<p><u>Time Period to Respond:</u> Seven calendar days.</p> <p><u>Time Period to Obtain Control:</u> One week after initiation of treatment.</p> <p><u>Time Period to Maintain Control:</u> Sixty days after initiation of treatment.</p> <p><u>Level of Control:</u> The mole cricket population shall be reduced to two mole crickets or less per 4 square feet in all areas. Retreatments, if required, shall be performed at one-week intervals until the required Level of Control is established.</p> <p><u>Survey:</u> The contractor shall perform a survey of designated areas. Include maps and drawings as required to clearly identify the location and/or extent of buildings and areas at which pest control services will be required. In particular, be sure to include a map showing the specific locations and size (if appropriate) of areas in which scheduled control will be required. Surveys shall include visual inspections for damaged turf including the use of an irritant such as soapy water to detect the presence of mole crickets. Surveys reports shall be provided to the KO within one day of the survey being completed.</p> <p>Bait shall not be applied when rain is likely to occur overnight after application.</p>	<p><u>Control:</u></p> <p><u>Non-Chemical Control:</u> Chemical control may be augmented with the use of parasitic nematodes.</p> <p><u>Chemical Control:</u> If baits are used, they can be applied in the late afternoon (after 5:00 PM) on days when a minimum of ½-inch of water has fallen either as rain or by irrigation. The Contractor may provide irrigation if required at no additional cost. Water for irrigation may be made available for the Contractor's use at fire hydrants located throughout the activity area; however, the KO should be contacted prior to their use.</p>

**Pest Group 025: Miscellaneous Arthropod Pest Control**

**GENERAL REQUIREMENTS:** Prevent and control nuisance arthropod pests in and around buildings and structures. Includes but is not limited to spiders, silverfish, scorpions, crickets, centipedes, millipedes, box elder bugs, mites, beetles, etc. (Excludes ants, cockroaches, filth flies, and bees/wasps/hornets covered in separate sections.)

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
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<p><u>Time Period to Respond:</u> Seven days</p> <p><u>Time Period to Obtain Control:</u> Ten days</p> <p><u>Time Period to Maintain Control:</u> Thirty days</p> <p><u>Level of Control:</u></p> <ul style="list-style-type: none"> <li>• Sensitive areas: 100% control</li> <li>• Food Handling: 4 or more arthropods/room/survey is cause for retreat (callback)</li> <li>• Offices/Admin: 3 or more arthropods/room/survey is cause for callback</li> <li>• Industrial Areas: 5 or more arthropods/room/survey is cause for callback</li> <li>• Out of Doors: Five (5) or more arthropods in a 100 square foot area is cause for callback.</li> <li>• Scorpions and Mites: 100% control is required in ALL locations.</li> </ul> <p><u>Survey:</u> All services shall start with a survey of the area to determine the pests present, their identification, and the location of their nesting areas. Report sanitation and food storage practice deficiencies, and major pest-proofing deficiencies to the KO.</p> <p><u>Control:</u> Use non-chemical and chemical control techniques.</p>	<p><u>Non-Chemical Control:</u> Caulk, grout, or seal cracks, crevices, entranceways, harborage entrances, etc.</p> <p>Indoor Invaders or Occasional Nuisance Pests: Spiders, Centipedes, Crickets, Ground Beetles, Box elder Bugs, and Occasional Nuisance Indoor Invaders: Use of vacuum cleaners to cleanup debris and the arthropods is recommended. Pesticide use is generally not needed.</p> <p><u>Chemical Control:</u> Indoor "Other Arthropods": Scorpions, Mites: Use of vacuum cleaners to pick up arthropods and debris is recommended. Pesticides may be applied in cracks and crevices where they may harbor. If needed, apply pesticides in the appropriate formulation behind cabinets, files, under refrigerators, etc limited treatment to 2-foot square areas (per label directions).</p> <p>Outdoor Perimeter Treatments: Perimeter treatments may be performed for all pest species that nest outside, and invade indoors. Granular baits or residual sprays may be applied in a band around exteriors of structures as needed.</p> <p>Outdoor Pests: Granular area applications or spray areas may be used as needed to control pests.</p> <p>Spiders: Generally, pesticides are not needed for spider control: See non-pesticide control above. Miscellaneous Arthropods (non-venomous): Residual pesticides may be used as needed after non-chemical controls have been attempted.</p>
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**Pest Group 026: Aquatic Plant Control**

**GENERAL REQUIREMENTS:** Control aquatic weeds in ditches, ponds, lakes, and other aquatic sites.

PERFORMANCE STANDARDS	INFORMATIONAL NOTES
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<p><u>Time Period to Respond:</u> One Week</p> <p><u>Time Period to Obtain Control:</u> Three weeks after initial application of herbicides</p> <p><u>Time Period to Maintain Control:</u> Two months from time of application</p> <p><u>Level of Control:</u> All vegetation removed</p> <p><u>Survey:</u> All designated area(s) shall be surveyed to determine the undesirable vegetation present. Select best treatment(s) based on survey information and location of necessary treatment.</p> <p>Permits may be required to perform this work (i.e., NPDES permit). The contractor shall obtain all permits and provide a copy to the KO.</p> <p><u>Posting:</u> Post/Notify as required by applicable regulations.</p> <p><u>Misapplication or Non-Target Effects:</u> The Contractor assumes all liability for all actions that may result from herbicide misapplication or non-target effects including cleanup, replanting, and re-grading as applicable.</p>	<p><u>Non-Chemical Control:</u> Mechanical Control: Vegetation may be removed mechanically whenever possible.</p> <p><u>Chemical Control:</u> Herbicides: Approved herbicide(s) may be applied to designated areas. Liquid or granular formulations may be used.</p>
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**Pest Group 027: Aerial Spray Support and Operations**

**GENERAL REQUIREMENTS:** N/A

**Pest Group 028: Outdoor Rodent Control**

**GENERAL REQUIREMENTS:** Eliminate gophers and other ground burrowing rodents on the installation. Rodent pests include, but are not limited to gophers, moles, and other ground-burrowing rodents. Service requires removal of dead animals.

**PERFORMANCE STANDARDS**

Time Period to Respond:

Three working days

Time Period to Obtain Control:

30 calendar days.

Time Period to Maintain Control:

30 calendar days after initial treatment

Level of Control: Eliminate gophers and other ground burrowing rodents on the installation to a total of not more than two rodent mounds and/or holes existing at any one time within any one acre, rectangular or circular.

Work Survey: All work should start with a survey of the area to determine the pests present and harborage locations. Rodent signs include burrows, rub marks, fecal droppings, runways, gnaw marks, tracks, or other signs of rodents. Report sanitation problems, major structural deficiencies, and lack of rodent-proof food storage containers to the Government.

Control: Use non-chemical and chemical control techniques.

Traps shall be serviced daily during rodent trapping operations. Caught rodents shall not be left in traps for longer than 24 hours. Removal and disposal of rodent carcasses are considered a normal part of rodent control and do not constitute an added service call or charge.

Only anticoagulant rodenticides shall be used outdoors.

If carcasses cannot be located, a suitable odor neutralizer shall be applied.

After rodent control treatment is completed, the Contractor shall rake all mounds and cover all holes to restore the appearance of the ground.

INFORMATIONAL NOTES: Not Applicable (N/A)

**ATTACHMENT J-1503020-05**

**EPA AND CAMP PENDLETON APPROVED PESTICIDES**

<b>Favorites</b>	<b>Pesticide Type</b>	<b>Formulation</b>	<b>Pesticide Name</b>	<b>EPA Number</b>
Yes	Fumigant	Solid Fumigant	FUMITOXIN TABLETS	72959-1
Yes	Fungicide	Emulsion	BANNER MAXX	100-641
Yes	Fungicide	Solution	DACONIL WEATHER-STIK	50534-209
Yes	Fungicide	Emulsion	HERITAGE	100-1093
No	Herbicide	Solution	AQUA NEAT	228-365
No	Herbicide	Solution	Aquamaster	524-343
No	Herbicide	Solution	GARLON 3A	62719-37
No	Herbicide	Solution	GARLON 4	62719-40
Yes	Herbicide	Solution	Glyphosate 4	73220-6-74477
No	Herbicide	Solution	Milestone	62719-519
No	Herbicide	Emulsion	PENDULUM 3.3 EC HERBICIDE	241-341
No	Herbicide	Solution	PROKOZ GLYPHOSATE PRO 4	72112- 4
Yes	Herbicide	Solution	REWARD LANDSCAPE AND AQUATIC HERBICIDE	10182-404
Yes	Herbicide	Solution	RODEO	524-343
No	Herbicide	Emulsion	ROUNDUP	524-308
No	Herbicide	Solution	ROUNDUP	524-445
Yes	Herbicide	Emulsion	ROUNDUP PRO	524-475
No	Herbicide	Solution	Roundup Pro Concentrate	524-529
No	Herbicide	Dust/Granule	Telar	352-522
Yes	Insect Growth Regulator	Dust/Granule	ALTOCID BRIQUETS	2724-375-50809
Yes	Insect Growth Regulator	Dust/Granule	ALTOCID PELLETS	2724-448-64833
No	Insect Growth Regulator	Dust/Granule	ALTOSID PELLETS	2724-448
Yes	Insecticide	Solution	CATALYST	2724-450
Yes	Insecticide	Aerosol	CB-80 EXTRA	9444-175
Yes	Insecticide	Aerosol	CY-KICK	499-470



Yes	Insecticide	Dust/Granule	DELTA DUST	432-772
Yes	Insecticide	Suspension	DEMON WP	10182-100
Yes	Insecticide	Bait	DUAL CHOICE ANT BAIT	11540-20
Yes	Insecticide	Emulsion	DURSBAN PRO	62719-166
Yes	Insecticide	Liquid	JT Eaton Kills Bed Bugs	45385-28-56
Yes	Insecticide	Bait	MAXFORCE EC BAIT GEL	64248-21

Yes	Insecticide	Bait	MAXFORCE FC ROACH BAIT GEL	432-1259
Yes	Insecticide	Bait	MAXFORCE ROACH KILLER BAIT GEL	64248-5
Yes	Insecticide	Suspension	MERIT 75 WSP INSECTICIDE	3125-439
Yes	Insecticide	Solution	PHANTOM	241-392
Yes	Insecticide	Solution	SCOURGE INSECTICIDE WITH SPB1382/PIPERONYL BUTOXIDE 4% + 12% MF FII	432-716
Yes	Insecticide	Suspension	SUSPEND SC	432-763
Yes	Insecticide	Dust/Granule	TALSTAR GC GRANULAR INSECTICIDE	279-3167
Yes	Insecticide	Solution	TERMIDOR SC	432-901
Yes	Insecticide	Dust/Granule	VECTOBAC G BIOLOGICAL LARVICIDE GRANULES	275-50
Yes	Insecticide	Aerosol	WASP FREEZE	499-362
Yes	Rodenticide	Bait	AC-90 FORMULA	56-56
Yes	Rodenticide	Bait	EATONS BAIT BLOCKS	56-42
Yes	Rodenticide	Bait	Gopher Getter AG Bait	36029-7
Yes	Rodenticide	Bait	Gopher Getter AG Bait Wilco	36029-7
Yes	Rodenticide	Dust/Granule	ROZOL BLUE TRACKING POWDER	7173-172
Yes	Rodenticide	Bait	TALON-G PELLETS	10182-38
Yes	Rodenticide	Bait	WILCO GOPHER GETTER	36029-1
Yes	Rodenticide	Bait	ZP RODENT BAIT	12455-18

<b>ATTACHMENT J-1503020-06</b> <b>TASK ORDER REQUIREMENTS</b>
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1. **Objective:** The objective is to reduce the population of adult mosquitoes and to prevent the transmission of West Nile Virus and other mosquito-borne diseases on Marine Corps Base Camp Pendleton and NWS Seal Beach, Fallbrook Detachment. The Government will establish the dates of larvicide application based on mosquito surveillance and in coordination with larvicide applications by the counties of San Diego, Orange and Riverside, California. All applications shall be performed within the fence line of Marine Corps Base Camp Pendleton and Naval Weapons Station Seal Beach, Fallbrook Detachment.
2. **Requirements:**
  - a. All pesticide applications and pest management operations shall be performed in accordance with DoD Instruction 4150.7, OPNAVINST 6250.4 series, MCO P5090.2 series and all applicable Great State of California and local regulations.
  - b. The Contractor shall apply larvicides by helicopter to water-holding areas on the MCB Camp Pendleton and NWS Seal Beach, Fallbrook Detachment as designated by Naval Hospital Camp Pendleton Preventive Medicine Department (NHCP PMD). All aerial larviciding operations are subject to review and approval by the Assistant Chief of Staff, Environmental Security. Treatment areas are subject to change as determined by environmental factors such as rain and the reduction of standing water due to evaporation.
  - c. The Contractor shall perform aerial application of larvicides containing the active ingredients *Bacillus thuringiensis* var. *israelensis* and/or *Bacillus sphaericus*. The larvicide formulations shall be suitable for aerial application contact with the water is mandatory. The larvicides shall be approved by the NAVFAC Southwest professional pest management consultant (PPMP) prior to use per OPNAVINST 6250.4 series. Pesticides will be mixed and applied in accordance with the pesticide label.
  - d. Larvicide treatment shall only be conducted in areas that hold water and where mosquito larvae are present or where the potential of mosquito breeding is high. The total area treated shall be determined by the Government prior to each application based on the presence of water and the presence of mosquito larvae or it is found that areas potentially support the breeding of mosquitoes. Current estimated acreage is approximately 300-350 acres per application. The following areas potentially scheduled for treatment are based on historical data, but shall not be limited to:
    - (1) Pond adjacent to Rodeo Grounds/Golf Course (Pilgrim Creek)
    - (2) Pond adjacent to Deluz Housing Area
    - (3) Entire area of Lake O'Neill
    - (4) Horse Stables (Pilgrim Creek)
    - (5) Las Flores Boy Scout Camp
    - (6) Outlet at San Onofre Creek
    - (7) Outlet at San Mateo/trestles
    - (8) Naval Weapons Station Detachment, Fallbrook
    - (9) Naval Weapons Station Detachment, Fallbrook
    - (10) Naval Weapons Station Detachment, Fallbrook

- (11) Pond at Case Springs
- (12) Pond at Case Springs
- (13) Kilo 1, Kilo 2, adjacent to DZ Basilone
- (14) Percolation ponds adjacent to Stuart Mesa Rd. and Santa Margarita River

➤ The above locations are identified on the site map found in Attachment 1503020-07.

- e. During the normal course of the aerial application; the Contractor shall treat observed water holding areas not listed for scheduled treatment. The Contractor is authorized to treat up to 50 acres per scheduled application. Treatments exceeding this amount must be approved by the Contracting Officer. The Contractor shall only treat such areas that are within the clearance area as provided by Long Rifle and Air Traffic Control.
- f. The Contractor shall ensure that safety of the aircraft and the pesticide dispersal equipment. The dispersal equipment shall be mounted directly to the aircraft; sling-mounted application equipment shall not be used. The helicopter shall be equipped with a radio able to transmit and receive on the following frequencies to ensure continued communication with Range Control (Long Rifle) and/or Air Traffic Control aboard Camp Pendleton during the application:
  - 1. Frequencies: VHF 128.775 Air Traffic Control  
VHF 123.2 Range Operations (Long Rifle)
- g. Larviciding operations shall result in an 80% or better reduction in larval mosquitoes at the treatment site determined by comparing pre-treatment and post-treatment mosquito larval collections made by Government personnel trained in mosquito survey and control subject to weather and other conditions that affect the effectiveness of the larvicide.
- h. Reporting Requirements: DoD Instruction 4150.7 requires that pest management operations and pesticide applications on military installations be recorded, reported, and archived. Pesticide applications shall be reported after each application on an electronic report form provided by the Government and submitted to the NAVFAC Southwest PPMC via the NHCP PMD.
- i. The Government will conduct an inventory of the larvicide product at the start of each application period and again at the end of each application day to account for the total amount of larvicide used during that particular day of operation.
- j. The Government will consult and coordinate with mosquito control and health agencies in San Diego and Orange Counties regarding the period and frequency of control operations.
- k. The Government will provide trained on-site monitors to ensure Contractor adherence to the contract requirements and effectiveness of the control operation.
- l. The Government will coordinate all application schedules with Range Control (Long Rifle) and the Provost Marshal's Office (PMO). The Government will provide the desired date and time of application to the Contractor. The pilot shall plan his/her flight schedule based on the information provided.
- m. The Government will randomly conduct pre-treatment mosquito larval surveys of selected areas to be treated 24 hours prior to the aerial application. The Government may require additional applications, at no cost to the Government, if mosquito larval surveys at the selected areas 24 hours after treatment

indicate less than 80% control of mosquito larvae. The Government will determine numbers of larvae at a water holding site by a minimum of 10 collections using a one pint dipper. Numbers of larvae used for comparing pre- and post-treatment results will be the average of the 10 collections.

**3. Frequency and Time of Performance:**

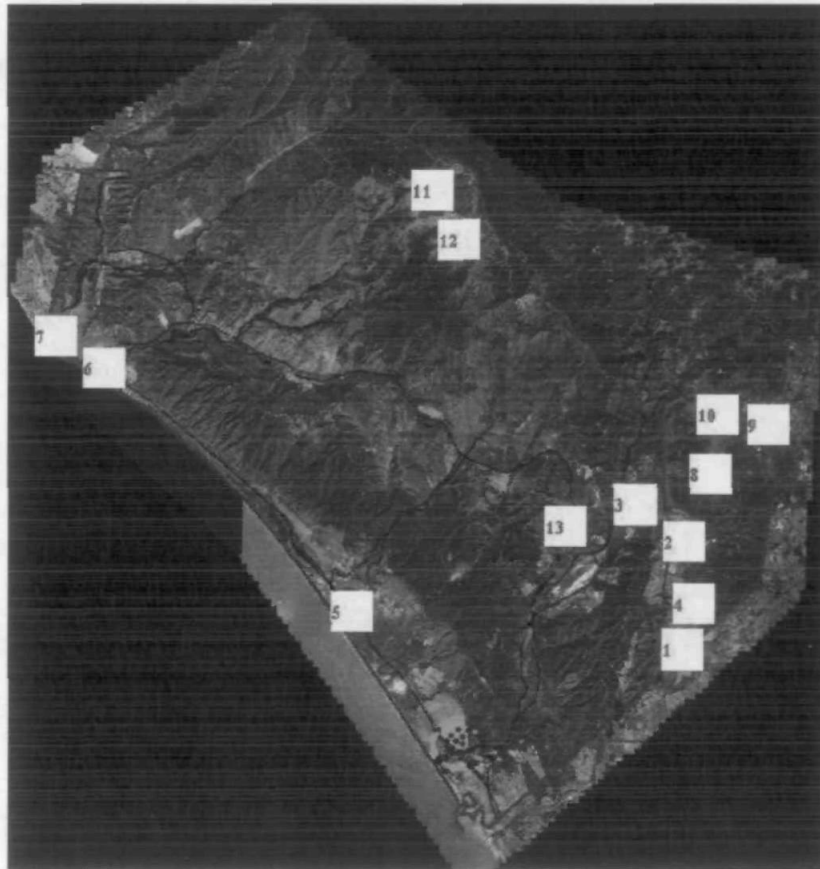
- a. Application shall commence in early to mid Spring and cease in mid to late Fall and as determined by the Government and in direct coordination with the San Diego County Health Department. The Government will determine the frequency, time, and specific location of applications based on NHCP PMD mosquito surveillance, environmental conditions, and installation security posture.
- b. Aerial spray operations shall be conducted only under weather conditions that provide safe operating conditions for the aircraft and reduces the risk of pesticide into non-target areas. The Contractor, in consultation with the Government, shall make the final decision on whether the operation shall proceed.
- c. Clearance must be obtained through Range Operations (Long Rifle) at least 72 hours prior to each day of application. Lead time is subject to change at Range Operations discretion. Range Operations may be reached at (760) 725-4277.

**4. Submittal Requirements:** The Contractor shall provide the following submittals:

- The company applying the pesticide is a California Licensed Pest Control Business. Submittal is required at the time that the Request for Proposal is submitted. Shall be kept current.
- The company applying the pesticide has a FAA Licensed Part 137 Operator and is insured per California law. Submittal is required at the time that the Request for Proposal is submitted. Shall be kept current.
- Pilot Licenses, Certifications and Qualifications: The pilot has an FAA Commercial Pilot Certificate, maintains a California Journeyman Aircraft Pilot Pest Control certificate, is certified to apply pesticides by aircraft by the Great State of California, is registered in San Diego County and has a minimum of 2,500 hours of aerial application experience. Submittal is required at the time that the Request for Proposal is submitted. Shall be kept current.
- The Contractor must obtain and maintain a current Range Safety Certification as directed by the Range Safety Officer at Marine Corps Base Camp Pendleton. The Contractor shall make arrangements with the Performance Assessment Representative (PAR) to attend the Range Safety training in order to obtain the certification. Range Safety can be reached at (760) 725-4277 for training dates and times.
- The aircraft and application equipment used is safe and that the application equipment is mounted directly to the aircraft and not by a sling. Equipment submittal is required 15 days after award of the task order.
- Larvicide: The application of the larvicide complies with DoD Instruction 4150.7, OPNAVINST 6250.4 series, and MCO 5090.2 series (Pesticide approval and reporting requirements). Provide manufacturer's name and data, MSDS, application method, and formulation. Submittal is required at the time that the Request for Proposal is submitted. The approved submittal shall not be changed unless directed to do so by the Contracting Officer.

- Documentation: The Contractor shall submit documentation of the larviciding operation over designated and non-designated areas, to include the date, location, GIS coordinates, pesticide identification information and formulation, applicator name, quantities applied and other information required by the electronic reporting form. The documentation of each application shall be submitted to the NHCP PMD within two working days after each application. The PMD can be reached at (760) 725-1270.
  - The Contractor shall submit a Monthly Report (applicable to the season only), that is application and site specific, of the larviciding operation over designated and non-designated areas, to include the date, location, GIS coordinates, pesticide identification information and formulation, applicator name, and the quantities applied. A copy of the Monthly Report shall be sent to the PAR and the FSC Technical Writer.
  - The Contractor shall gather and maintained the data as part of the Technical Libray and submit the Technical Library in accordance with the Task Order specifications.

<b>ATTACHMENT J-1503020-07</b>
<b>LARVICIDE APPLICATION MAP</b>



**ATTACHMENT J-1503020-08  
HISTORICAL DATA**

**LARVICIDE APPLACATION FIRST OPTION APRIL 14, 2007 THRU APRIL 13 2008**

DATE OF SERVICE	DATE PAID	SERVICE & INVOICE NO.	QUANTITY OF LOADS	CLIN QUANTITY & POUNDS USED	Vectlex CG. 8 Bags Per Load	Aquabac 200G 4 Bags Per Load	Total Bags
				24,800			
4/26/2007			7.5	3,600	60	30	90
5/25/2007			6.5	3,120	52	26	78
6/22/2007			6.5	3,120	52	26	78
7/19/2007			6	2,880	48	24	72
8/10/2007			5.5	2,640	44	22	66
9/7/2007			5	2,400	40	20	60
10/4/2007			5	2,400	40	20	60
				0	0	0	0
				0	0	0	0
				20,160			
			42	4,640	336	168	504
				BALANCE	13,440	6,720	
					Total Pounds	Total Pounds	

**LARVICIDE APPLACATION SECOND OPTION APRIL 14, 2008 THRU APRIL 13, 2009**

DATE OF SERVICE	DATE PAID	SERVICE & INVOICE NO.	QUANTITY OF LOADS	CLIN QUANTITY & POUNDS USED	Vectlex CG. 8 Bags Per Load	Aquabac 200G 4 Bags Per Load	Total Bags
				29,800			
5/1/2008			7.5	3,600	60	30	90
6/2/2008			8	3,840	64	32	96
6/30/2008			8	3,840	64	32	96
7/28/2008			9	4,320	72	36	108
8/25/2008			8	3,840	64	32	96
9/19/2008			7	3,360	56	28	84

10/20/2008			5.5	2,640	44	22	66
				0	0	0	0
				0	0	0	0
				<b>25,440</b>			
			<b>53</b>	<b>4,360</b>	<b>424</b>	<b>212</b>	<b>636</b>
<b>BALANCE</b>					<b>16,960</b>	<b>8,480</b>	
					Total Pounds	Total Pounds	

**LARVICIDE APPLACATION THIRD OPTION APRIL 14, 2008 THRU APRIL 13, 2009**

DATE OF SERVICE	DATE PAID	SERVICE & INVOICE NO.	QUANTITY OF LOADS	CLIN QUANTITY & POUNDS USED	Vectlex CG. 8 Bags Per Load	Aquabac 200G 4 Bags Per Load	Total Bags
				<b>29,800</b>			
4/24/2009			7.5	3,600	60	30	90
5/17/2009			7.5	3,600	60	30	90
6/21/2009			7.5	3,600	60	30	90
7/17/2009			7.5	3,600	60	30	90
8/7/2009			7.5	3,600	60	30	90
8/27/2009			8	3,840	64	32	96
9/20/2009			7	3,360	56	28	84
10/16/2009			7	3,360	56	28	84
				0	0	0	0
				<b>28,560</b>			
			<b>59.5</b>	<b>1,240</b>	<b>476</b>	<b>238</b>	<b>714</b>
<b>BALANCE</b>					<b>19,040</b>	<b>9,520</b>	
					Total Pounds	Total Pounds	

**ATTACHMENT J-1502000-09**

**SECTION F DELIVERIES OF PERFORMANCE**

<u>Annex/ Sub-annex</u>	<u>Spec Item</u>	<u>Report Title</u>	<u>Quantity</u>	<u>Submit to</u>	<u>Due Date/Frequency</u>
0200000	2.1.3	Accident Prevention Plan	1 ea	KO	Within 15 days after award
0200000	2.1.4	Activity Hazard Analysis (AHA)	1 ea	KO	Within 15 days after award or as requested by the KO
0200000	2.1.5	Alcohol and Drug Abuse Prevention Plan	1 ea	KO	Within 15 days after award
0200000	2.1.14	Contractor Safety Program	1 ea	KO	Within 15 days after award
0200000	2.1.18	Emergency Response Plan	1 ea	KO	Within 15 days after award
0200000	2.1.27	Health Hazard Control Plan	1 ea	KO	Within 15 days after award
0200000	2.3.3	Permits and Licenses	1 ea	KO	Within 15 days after award or as requested by the KO
0200000	2.3.4	Insurance	1 ea	KO	Within 15 days after award
0200000	2.6.2	Work Schedule	1 ea	KO	Within 15 days after award and monthly thereafter.
0200000	2.6.5	Quality Management System	1 ea	KO	Within 15 days after award
0200000	2.6.5.2	QC Plan	1 ea	KO	Within 15 days after award
0200000	2.6.5.4	Submittals	1 ea	KO	Within 15 days after award or as requested by the KO
0200000	2.7.1.4	Site Safety and Health Officer (SSHO)	1 ea	KO	Within 15 days after award
0200000	2.8.1	Current List of Employees	Ongoing	KO	Within 15 days after award and maintain current
0200000	2.9	Contractor Safety Program Records	As requested	KO	Upon request by KO
0200000	2.9.5	Safety Certification	1 ea	KO	Within 15 days after award
0200000	2.13	Technical Library	As requested	KO	Within 24 hours upon request from the Task Order KO
0200000	2.15.1	Work Reception	1 ea; Ongoing	KO	Within 15 days after award; Maintain current
1503020	3	Scheduled Services	3 ea	KO	At the time the RFP is



		(FFP)			submitted; Within 15 days of award; Monthly Report; as requested; at the completion of the Task Order
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<b>ATTACHMENT J-H-01</b>
<b>Wage Determination</b>

See Basic Wage Determination

<b>ATTACHMENT J-B-01</b>
<b>CLINS/ELINS</b>

Provided as a separate file.

**LARVICIDE APPLACATION FIRST OPTION APRIL 14, 2007 THRU APRIL 13 2008**

DATE OF SERVICE	DATE PAID	SERVICE & INVOICE NO.	QUANTITY OF LOADS	CLIN QUANTITY & POUNDS USED	Vectlex CG. 8 Bags Per Load	Aquabac 200G 4 Bags Per Load	Total Bags	UNIT PRICE POUND	CONTRACT TOTAL	BASE PAYMENT
				24,800						
4/26/2007			7.5	3,600	60	30	90			
5/25/2007			6.5	3,120	52	26	78			
6/22/2007			6.5	3,120	52	26	78			
7/19/2007			6	2,880	48	24	72			
8/10/2007			5.5	2,640	44	22	66			
9/7/2007			5	2,400	40	20	60			
10/4/2007			5	2,400	40	20	60			
				0	0	0	0			
				0	0	0	0			
				20,160					\$0.00	\$0.00
			42	4,640	336	168	504	\$0		
					13,440	6,720				



LARVICIDE APPLICATION THIRD OPTION APRIL 14, 2008 THRU APRIL 13, 2009

DATE OF SERVICE	DATE PAID	SERVICE & INVOICE NO.	QUANTITY OF LOADS	CLIN QUANTITY & POUNDS USED	Vectlex CG. 8 Bags Per Load	Aquabac 200G 4 Bags Per Load	Total Bags	UNIT PRICE POUND	TOTAL COST OF EACH SERVICE	TOTAL CONTRACT AMOUNT AND BASE PAYMENTS
				29,800						
4/24/2009			7.5	3,600	60	30	90			\$0.00
5/17/2009			7.5	3,600	60	30	90			\$0.00
6/21/2009			7.5	3,600	60	30	90			\$0.00
7/17/2009			7.5	3,600	60	30	90			\$0.00
8/7/2009			7.5	3,600	60	30	90			\$0.00
8/27/2009			8	3,840	64	32	96			\$0.00
9/20/2009			7	3,360	56	28	84			\$0.00
10/16/2009			7	3,360	56	28	84			\$0.00
				0	0	0	0			\$0.00
				28,560						\$0.00
			59.5	1,240	476	238	714	\$0		\$0.00

BALANCE

19,040

9,520

Total Pounds Total Amount

FAVORABLE PAYMENT

\$0.00  
\$0.00  
\$0.00  
\$0.00  
\$0.00  
\$0.00  
\$0.00

\$0.00