



MEMORANDUM

TO: Public Works and Environmental Concerns Committee

THROUGH: Carl S. Goldsmith, Director of Public Works *CG*

FROM: David P. Gorman, PE, Asst. Director of Public Works *DPG*

SUBJECT: Mosquito Control Contract for 2016 and 2017

DATE: October 23, 2015

Staff requests that the Committee provide a recommendation to the Board of Trustees regarding the Mosquito Control Contract for 2016 and 2017, with the option to extend for 2018. The Village's longtime contractor, Clark Environmental Mosquito Management, proposes to hold their price for both years at \$88,710 per year, which is the same price held since 2006. The following services would remain unchanged:

- Larval site monitoring and larvicide application for 192 sites,
- Four 30-day larvicide applications in 4,320 street catch basins,
- One 180-day larvicide application in 350 backyard catch basins,
- Three pre-hatch applications by helicopter of 60 acres of standing water sites,
- Maintain a phone hotline for residents and
- Four adulticide applications (spraying) for the community events.

The control program will continue with pre-hatch and larvicide treatments. Pre-hatch and larvicide applications are highly effective against Culex mosquitoes, which is the species that carries the West Nile Virus (WNV). Aedes (floodwater) mosquitoes do not carry WNV and they breed in open water as well as damp areas, including wet grass. Traps have been collecting both Culex and Aedes mosquitoes.

Adulticide treatment (spraying) is not very effective or efficient in managing either Culex or Aedes mosquitoes except for short-term relief for community events. Four adulticide applications are still included at no extra cost for community events. The cost for additional spraying by trucks on all Village streets would be an extra \$80/mile of treatment. Given that we have 142 miles of streets per GIS, each Village-wide application would cost \$10,720. This would only be used if necessary for temporary treatment of isolated areas that may be problematic due to localized flooding over an extended time.

Our contract specifies a relatively new, more environmentally responsible larvicide called Natular that is derived from a soil bacterium and chrysanthemum flowers.

Recommendation:

Staff has been very satisfied with Clarke's customer service to residents, their surveillance of open waters by their in-house helicopter service, and their willingness to hold their prices. Therefore, Staff recommends that the Village renew its contract with Clarke.



**Clarke Environmental Mosquito Management, Inc.,
Professional Services Outline for 2016-2017
Village of Lombard
Environmental Mosquito Management (EMM) Program**

Part I. General Service

- A. Aerial Survey and Geographic Information System (GIS) Mapping
- B. Computer System and Record Keeping Database
- C. Public Relations and Educational Brochures
- D. Mosquito Hotline Citizen Response – (800) 942-2555
- E. Comprehensive Insurance Coverage naming the Village of Lombard additionally insured
- F. Program Consulting and Quality Control Staff
- G. Monthly Operational Reports, Periodic Advisories, and Annual Report
- H. Regulatory compliance on local, state, and federal levels

Part II. Surveillance and Monitoring

- A. Floodwater Mosquito Migration Model:
The use of weather data and computer model to predict the arrival of *Aedes vexans* brood (hatch) and peak annoyance periods.
- B. Arbovirus Surveillance:
 - 1. Clarke New Jersey Light Trap Network to monitor and evaluate adult mosquito activity.
- C. Weather Monitoring – Operational Forecasts

Part III. Larval Control

- A. Targeted Mosquito Management System (TMMS™) computer database and site management.
- B. Larval Site Monitoring: 12 inspections
 - 1. Three (3) complete inspections of up to 192 sites as outlined by most recent Clarke GIS Survey.
 - 2. Six (6) targeted inspections of up to 74 breeding areas as determined by the computerized Clarke Targeted Mosquito Management System™.
 - 3. Three (3) targeted inspections of up to 63 known *Culex spp.* breeding areas as determined by the computerized Clarke Targeted Mosquito Management System™.
 - 4. Inspections of sites called in by residents on the Mosquito Hotline.
- C. Prescription Larval Control will be performed with Natular® mosquito larvicide as described in the following sections.
 - 1. Larval Control: The program provides for treatment as needed of single brood or 30 day residual product with backpack or hand equipment.
 - 2. Helicopter Prehatch: Three (3) treatments using Natular™ of up to 60 acres for floodwater mosquito control.
 - 3. Catch Basins: Four (4) treatments of up to 4,320 street side catch basins, inlets and manholes using a Natular™T30 for control of up to 30 days. The primary method of treatment delivery will be by bicycle.
 - 4. Catch Basins: Back Yard Catch Basins: One (1) treatment of up to 350 backyard catch basins using an extended residual slow release insecticide (Natular™XRT) for control of up to 180 days.



Part IV. Adult Control

- A. Adulticiding in mosquito harborage areas:
 - 1. Four (4) scheduled truck Ultra Low Volume (ULV) treatments using Merus™ a botanical insecticide (pyrethrin) for any community special events.
- B. Adulticiding in Residential Areas:
 - 1. As authorized by the Village of Lombard, community-wide truck ULV treatments of up to 154 miles of streets using Merus™ a botanical insecticide (pyrethrin). Treatments may be on a section or city basis at a cost of \$80.00 per mile (minimum of 10 miles).
- C. Adulticiding Operational Procedures
 - 1. Notification of community contact.
 - 2. Weather limit monitoring and compliance.
 - 3. Notification of residents on Clarke Call Notification List.
 - 4. ULV particle size evaluation.
 - 5. Insecticide dosage and quality control analysis.

2016-2017 EarthRight™ Payment Total Price for Parts I, II, III, IV \$88,710.00**

****NPDES Permit:** A National Pollutant Discharge Elimination System (NPDES) permit is necessary for the execution of the work for mosquito control effective October 31, 2011. Any additional costs associated with activities and/or services that may be required by Clarke in order to comply with an NPDES permit are not included in this proposal.



EarthRight™

**Clarke Environmental Mosquito Management, Inc.,
Client Agreement Authorization for 2016-2017
Village of Lombard
EarthRight™ Program**

- I. **Program Payment Plan:** For Parts I, II, III, and IV as specified in the 2016-2017 Professional Services Price Outline, the total for the 2016-2017 program is \$88,710.00 per year. The payments will be due according to the payment schedule below. Any additional treatments beyond the core program will be invoiced when the treatment is completed. Village of Lombard has the option to extend this program for 2018 at 2016-2017 rates.

PROGRAM PAYMENT PLAN

Month	2016	2017	2018
June 1	\$22,177.50	\$22,177.50	\$22,177.50
July 1	\$22,177.50	\$22,177.50	\$22,177.50
August 1	\$22,177.50	\$22,177.50	\$22,177.50
September 1	\$22,177.50	\$22,177.50	\$22,177.50
TOTAL	\$88,710.00	\$88,710.00	\$88,710.00

For Village of Lombard:

Sign Name: _____ Title: _____ Date: _____

For Clarke Environmental Mosquito Management, Inc.:

Name: Emily Glasberg Title: Key Accounts Manager Date: 10/21/15



EarthRight™

**Clarke Environmental Mosquito Management, Inc.,
Client Authorization for 2016-2017
Village of Lombard
EarthRight™ Program**

Administrative Information:

Invoices should be sent to:

Name: _____
Address: _____
City: _____ State: _____ Zip _____
Office Phone: _____ Fax: _____ P.O. # _____
E-mail: _____ County: _____

****In an effort to be more sustainable, we ask that you provide us with an
Email address that the invoices should be sent to.****

Treatment Address (if different from above):

County: _____

Address: _____
City: _____ State: _____ Zip _____

Contact Person for Village of Lombard:

Name: _____ Title: _____
Office Phone: _____ Fax: _____ E-Mail: _____
Home Phone: _____ Cell: _____ Pager: _____

Alternate Contact Person for Village of Lombard:

Name: _____ Title: _____
Office Phone: _____ Fax: _____ E-Mail: _____
Home Phone: _____ Cell: _____ Pager: _____

Please sign and return a copy of the complete contract for our files to:

Clarke Environmental Mosquito Management, Inc., Attn: Emily Glasberg
675 Sidwell Court, St Charles, IL 60174 or email eglasberg@clarke.com