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*Note.* This supplemental file was submitted by the authors along with the respective peer-reviewed article and has been posted online due to space limitations at <https://www.neha.org/jeh/supplemental>. The *Journal of Environmental Health* did not copy edit this file. The authors have provided this supplemental file as an extra resource should the reader want more information.

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## Appendix (supplementary material)

### FEMA Clarification Request (General)

1. Please provide documentation for the state’s contribution to the mosquito spraying.  
**Response:** The finance person for the Health Department would be the point of contact for this question.
2. In the 2018 PAPPG v3.1, p. 72, it says “FEMA only provides Public Assistance funding for the increased cost of mosquito abatement. This is the amount that exceeds the average amount based on the last three years of expenses for the same period.” Please provide this documentation.  
**Response:** The North Carolina Department of Agriculture requires that pesticide application records be maintained for three years. It is a straightforward process to calculate expenses if the data is set up in a weekly format. The attached adulticiding worksheet captures this data with every application. The key is to develop annual reporting of these applications using a weekly format.
3. For materials, what was the dry ice used for?  
**Response:** Dry ice is used for the pre- and post-light trapping to determine the efficacy of the aerial application. The dry ice is used as a lure to attract mosquitoes in the area.

### FEMA Clarification Request (Ground)

1. Provide the concentration of the adulticide used.  
**Response:** This information comes directly from the product label. The application rate is three ounces per minute.  
Permethrin (3-phenoxyphenyl) methyl (+/-) cis, trans-3-(2,2-dichlorethenyl)-2,2-dimethyl cyclopropanecarboxylate .....3.0%  
Piperonyl Butoxide\* .....15.0%  
OTHER INGREDIENTS\*\* ..... 82.0%  
Contains 0.222 pounds of Permethrin and 1.113 pounds of PBO per gallon
2. Provide application area maps.  
**Response:** Attached is a map of all the treatment zones in Brunswick County. The date the application is conducted is written in the treatment area after each application.
3. Provide a description of area targeted (i.e., population centers, county-wide, etc.)  
**Response:** Use the same treatment map and include the municipalities data layer.
4. Provide frequency and duration of treatments.  
**Response:** Provide a listing of all adulticide records conducted during the response. Then, subtract the three year historical average treatments. The result shows the increased need for the emergency effort.
5. What was the ULV application timing (time of day)?

**Response:** Report the time the employees arrived until they clocked out. Depending on the time of year, an hour before sunset until 11:00PM.

6. Please provide any local policies, plans, procedures, or coordination with entities governing local abatement.

**Response:** Submit the Pesticide Discharge Management Plan (PDMP) from your NPDES permit.

**FEMA Clarification Request (Aerial)**

1. Description of area targeted (i.e., population centers, county-wide, etc.).

**Response:** Submit the aerial polygons used for the aerial application.

2. Frequency and duration of treatments.

**Response:** A single treatment within spray blocks provided to the contractor.

3. Application timing (time of day).

**Response:** Use the contracted specifications of 30 min before sunset until 10:30PM

4. Any local policies, plans, procedures, or coordination with entities governing local abatement.

**Response:** Submit the Pesticide Discharge Management Plan (PDMP) From your NPDES permit.

5. FEMA requests proof that the aerial product (Dibrom) and ULV product (Biomist 3-15) are approved in North Carolina for adulticide purposes. What evidence can you provide?

**Response:** Every pesticide is registered every year through the NCDA. Contact the pesticide section and ask proof of product registration for that year.

**List of Potential Attachments (available upon request)**

1. Statement of Needs Letter
2. United States Fish and Wildlife Service review
3. Aerial Treatment Request for Proposals
4. Aerial Treatment Bid Tabulation
5. Aerial Treatment Contract Scope of Work
6. Request from County to the North Carolina Legislature for the 25% match
7. Authorization to Aerial Treatment Contractor Allowing Insecticide Applications in County
8. Notification Letter NCDACS Aerial Mosquito Treatment in Brunswick County
9. NCDA Aerial Exemption Letter
10. Board of Commissioners Action Agenda Item for Aerial Treatment
11. Aerial Treatment Talking Points for Health Department Nurses and Public Information Officer
12. Beekeeper Messaging Reverse Notification 911 System
13. Notification to Schools and Parks
14. Public Notification Press Releases and Daily Notifications
15. Adulticide Worksheet
16. Mosquito Identification Worksheet
17. Landing Count Worksheet

**Brunswick County Request for Proposals for Post-Disaster Mosquito Control**  
*See Supplemental: Request for Proposal*