# Appendix 5

 MOE Permit Number:

## Guidance for Bacillus thuringiensis var. israelensis (Bti) and Bacillus sphaericus (B. sphaericus) efficacy monitoring

### Collection Data

Date:

Collector's Name:

Location No.:

Location Description (if no location no.):

### Breeding Site Description

Site Type (Check one):

Ditch [ ]  Temporary Pool [ ]  Permanent Pool [ ]  Storm Water Management Pond[ ]  Sensitive Area [ ]  Describe:

Other Type of Surface water Site \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Organic level\* of water: low [ ]  moderate [ ]  high [ ]

Water Temperature:

Pool Length (m): Width (m): Depth (m):

Emergent Vegetation: Nil [ ]  Low [ ]  Mod. [ ]  High [ ]

\*Organic content of the water can be determined by taking a clear glass container and dipping it below the water surface. Hold the glass container up to the light. If you can see through the water the organic content is low, if the water is translucent the organic content is moderate and if you cannot see through the water the organic content is high. If algae or scum is found on the water surface the water should be considered as high organic content.

### Pre-Larviciding Sequential Sampling

Pool rating: Nil [ ]  Low [ ]  Moderate [ ]  High [ ]

Pool Rating

A. If no larvae are collected, the site is rated as “nil”.

B. If only 1 to 6 larvae are collected in 10 dips, this site is rated as “low”.

C. If 7-30 larvae are collected in 10 dips, this site is rated as “moderate”.

D. If >30 larvae are collected in 10 dips, this site is rated as “high”.

E. If the number of larvae collected in at least 5 dips is 51 or more, the site is rated as “high”.

Note: if the surface area of the site is greater than 50 m by 50 m (2500 m2), then the number of dips taken should be doubled.

| Dip No. | No. of Larvae | Cumulative No. |
| --- | --- | --- |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |

### Species Identification

Culex pipiens CP, Culex restuans CR, Culex salinarius CS, Aedes vexans AV, Coquillettidia pertubans CP, Anopheles punctipennis AP,Ochlerotatus triseriatus OT, Ochlerotatus cantator OC, Ochlerotatus trivattatus OTR.

| Species Code | Larva Instar (1-4) | No. Identified |
| --- | --- | --- |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |

### Post-Larviciding Sequential Sampling

Pool rating: Nil [ ]  Low [ ]  Moderate [ ]  High [ ]

| Dip No. | No. of Larvae | Cumulative No. |
| --- | --- | --- |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |

Bti - check for larval control within 24-48 hours of application

B.sphaericus- check for larval control 48 hours after application. First and second instar larvae are likely to be present on recheck. B. sphaericusrecycles in larval cadavers.