

From: [Stiefel, Michael B](#)
To: [Elizabeth Rorie](#)
Cc: [Vojin Janjic](#)
Subject: TVA ANNUAL REPORTS FOR THE PESTICIDE GENERAL PERMIT
Date: Friday, February 12, 2016 9:15:28 AM

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Beth:

Attached are TVA's annual reports for calendar year 2015 as required by the Pesticide General NPDES Permit.

Thanks,

Mike

Mike Stiefel, P.E. (TN)

Tennessee Valley Authority
Water Permitting, Compliance, and Monitoring
1101 Market Street, BR 4A
Chattanooga, TN 37402-2801

Tel: 423.751.6844 Fax: 423.751.7011 Cell: 423.902-9522



Tennessee Valley Authority, 1101 Market Street, BR 4A, Chattanooga, Tennessee 37402-2801

February 12, 2016

Division of Water Resources
Attention: Permit Section - Pesticide General Permit
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

Dear Madam or Sir:

TENNESSEE VALLEY AUTHORITY (TVA) NATURAL RESOURCES (NR) AND RIVER
MANAGEMENT (RM) - ANNUAL REPORT FOR GENERAL NPDES PERMIT NUMBERS
TNP100003 AND TNP1000009 - DISCHARGES FROM THE APPLICATION OF PESTICIDES

Enclosed are completed annual reports for herbicide treatments in water or water's edge at TVA
dams and reservoirs in calendar year 2015. These reports include:

1. Aquatic vegetation management in TVA reservoirs (TNP100003); and
2. Herbicide applications in areas adjacent to TVA dams and reservoirs to reduce or
eliminate invasive plant species, enhance waterfowl and/or other wildlife habitat, and to
maintain the integrity of rip-rap and other manmade structures (TNP100009).

Please note that TVA is submitting separate annual reports for vegetation control on TVA
transmission line rights-of-way (TNP100005) and at Coal and Gas Operations sites
(TNP100013).

If you have any questions or need additional information, please call Mike Stiefel at (423) 751-
6844 in Chattanooga, or you may contact him by email at mbstiefel@tva.gov.

Sincerely,

A handwritten signature in blue ink that reads "Terry E. Cheek".

Terry E. Cheek
Senior Manager
Water Permits, Compliance, and Monitoring

Enclosures

Division of Water Resources
Page 2
February 12, 2016

MBS:SMF

Enclosures

cc (Enclosures) :

D. G. Brewster, CAB 1A-GVA

E. R. Crews, PSC 1E-C

B. M. Hartis, FAB 1A-GVA

M. B. High, PSC 1E-C

S. R. Kramer, LP 1F-C

G. R. Signer, WT 6A-K

R. C. Tolene, WT 7B-K

ECM, ENVrecords

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 1 of ## 4

1. Have any discharges from pest control activities occurred in this calendar year?
- a No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:
- a Mosquito and Other Flying Insect Pest Control b Weed and Algae Pest Control
- c Animal Pest Control d Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:
Chickamauga Reservoir, Tennessee River. A total of 29 sites within the 35,400 acre reservoir were treated in calendar year 2015.
- b. Size of treatment area (in acres or linear feet). 118 acres or _____ linear feet.
- c. Name or location of any waters of the state to which discharges occurred:
Chickamauga Reservoir (Tennessee River) in Hamilton, Meigs, and Rhea counties, TN. Applications occurred in the vicinity of public recreation areas such as ramps, parks, piers, and non-profit camps.
- d. Target Pest(s): Submerged vegetation (i.e., hydrilla, southern naiad, spinyleaf naiad, American pondweed, small pondweed, Watershield

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A):

Company Name: Aqua Services, Inc.

Street: 23360 Highway 431

City: Guntersville State: AL ZIP Code: 35976

Contact: Terry Goldsby

Phone: 256-582-9101

E-mail: terry@aquaservicesinc.com

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application. Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):
<u>Tribune</u>	<u>100-1390</u>	<u>224</u> lbs or <u>gallons</u>	<u>Komeen</u>	<u>67690-25</u>	<u>312</u> lbs or <u>gallons</u>
Application method:					
a <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons	a <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons
b <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons	b <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons
c <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		_____ lbs or gallons	c <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		_____ lbs or gallons
d <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons	d <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons
e <input checked="" type="checkbox"/> Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses)		<u>224</u> lbs or <u>gallons</u>	e <input checked="" type="checkbox"/> Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses)		<u>312</u> lbs or <u>gallons</u>
f <input type="checkbox"/> Chemigation		_____ lbs or gallons			_____ lbs or gallons
g <input type="checkbox"/> Other (specify):		_____ lbs or gallons			_____ lbs or gallons

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 1 of ## 4 (continued)

1. Have any discharges from pest control activities occurred in this calendar year?
- a. No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:
- a. Mosquito and Other Flying Insect Pest Control b. Weed and Algae Pest Control
- c. Animal Pest Control d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:
Chickamauga Reservoir, Tennessee River. A total of 29 sites within the 35,400 acre reservoir were treated in calendar year 2015.
- b. Size of treatment area (in acres or linear feet): 118 acres or _____ linear feet.
- c. Name or location of any waters of the state to which discharges occurred:
Chickamauga Reservoir (Tennessee River) in Hamilton, Meigs, and Rhea counties, TN. Applications occurred in the vicinity of public recreation areas such as ramps, parks, piers, and non-profit camps.
- d. Target Pest(s): submerged vegetation (i.e., hydrilla, southern naiad, spinyleaf naiad, American pondweed, small pondweed, Watershield

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A)

Company Name: Aqua Services, Inc.

Street: 23360 Highway 431

City: Guntersville State: AL ZIP Code: 35976

Contact: Terry Goldsby

Phone: 256-582-9101

E-mail: terryg@aquaservicesinc.com

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons. Add additional pages if necessary.

Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Product Name	Quantity Applied (lbs or gallons of product):
<u>Current</u>	<u>70506-248</u>	<u>312</u> lbs or <u>gallon</u>		
Application method:				
a. <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons	a. <input type="checkbox"/> Aerially by fixed-wing	_____ lbs or gallons
b. <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons	b. <input type="checkbox"/> Aerially by rotary aircraft	_____ lbs or gallons
c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		_____ lbs or gallons	c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)	_____ lbs or gallons
d. <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons	d. <input type="checkbox"/> Aquatic vehicle mounted sprayer	_____ lbs or gallons
e. <input checked="" type="checkbox"/> Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses)		<u>312</u> lbs or <u>gallon</u>	e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications)	_____ lbs or gallons
f. <input type="checkbox"/> Chemigation		_____ lbs or gallons		_____ lbs or gallons
g. <input type="checkbox"/> Other (specify): _____		_____ lbs or gallons		_____ lbs or gallons

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 2 of ## 4

1. Have any discharges from pest control activities occurred in this calendar year?

- a. No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:

- a. Mosquito and Other Flying Insect Pest Control b. Weed and Algae Pest Control
- c. Animal Pest Control d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

a. Provide a description of the treatment area within this Pest Management Area, including location description:

Nickajack Reservoir, Tennessee River. A total of 14 sites within the 10,370 acre reservoir were treated in calendar year 2015.

b. Size of treatment area (in acres or linear feet): 56 acres or _____ linear feet.

c. Name or location of any waters of the state to which discharges occurred:

Nickajack Reservoir (Tennessee River) in Marion and Hamilton counties, TN. Applications occurred in the vicinity of public recreation areas such as ramps, parks, piers, and non-profit camps.

d. Target Pest(s): Submerged vegetation (i.e., hydrilla, southern naiad, spinyleaf naiad, American pondweed, small pondweed, Watershield

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A):

Company Name: Aqua Services, Inc.

Street: 23360 Highway 431

City: Guntersville

State: AL

ZIP Code: 35976

Contact: Terry Goldsby

Phone: 256-582-9101

E-mail: terryg@aquaservicesinc.com

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name Tribune

EPA Reg. No. 100-1390

Quantity Applied (lbs or gallons of product):

Application method:

- a. Aerially by fixed-wing _____ lbs or gallons
- b. Aerially by rotary aircraft _____ lbs or gallons
- c. Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) _____ lbs or gallons
- d. Aquatic vehicle mounted sprayer _____ lbs or gallons
- e. Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses) 112 lbs or gallons
- f. Chemigation _____ lbs or gallons
- g. Other (specify): _____ lbs or gallons

Product Name Komeen

EPA Reg. No. 67690-25

Quantity Applied (lbs or gallons of product):

Application method:

- a. Aerially by fixed-wing _____ lbs or gallons
- b. Aerially by rotary aircraft _____ lbs or gallons
- c. Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) _____ lbs or gallons
- d. Aquatic vehicle mounted sprayer _____ lbs or gallons
- e. Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses) 74.5 lbs or gallons

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 2 of ## 4 (continued)

1. Have any discharges from pest control activities occurred in this calendar year?
- a. No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:
- a. Mosquito and Other Flying Insect Pest Control b. Weed and Algae Pest Control
- c. Animal Pest Control d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:
Nickajack Reservoir, Tennessee River. A total of 14 sites within the 10,370 acre reservoir were treated in calendar year 2015.
- b. Size of treatment area (in acres or linear feet): 118 acres or _____ linear feet.
- c. Name or location of any waters of the state to which discharges occurred:
Chickamauga Reservoir (Tennessee River) in Marion and Hamilton counties, TN. Applications occurred in the vicinity of public recreation areas such as ramps, parks, piers, and non-profit camps.
- d. Target Pest(s): submerged vegetation (i.e., hydrilla, southern naiad, spinyleaf naiad, American pondweed, small pondweed, Watershield

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A):

Company Name: Aqua Services, Inc.

Street: 23360 Highway 431

City: Guntersville State: AL ZIP Code: 35976

Contact: Terry Goldsby

Phone: 256-582-9101

E-mail: terryg@aquaservicesinc.com

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Product Name	Quantity Applied (lbs or gallons of product):
<u>Current</u>	<u>70506-248</u>	<u>69</u> lbs or <u>gallons</u>		
Application method:				
a. <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons	a. <input type="checkbox"/> Aerially by fixed-wing	_____ lbs or gallons
b. <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons	b. <input type="checkbox"/> Aerially by rotary aircraft	_____ lbs or gallons
c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		_____ lbs or gallons	c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)	_____ lbs or gallons
d. <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons	d. <input type="checkbox"/> Aquatic vehicle mounted sprayer	_____ lbs or gallons
e. <input checked="" type="checkbox"/> Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses)		<u>69</u> lbs or <u>gallons</u>	e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications)	_____ lbs or gallons
f. <input type="checkbox"/> Chemigation		_____ lbs or gallons		_____ lbs or gallons
g. <input type="checkbox"/> Other (specify):		_____ lbs or gallons		_____ lbs or gallons

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 3 of ## 4

1. Have any discharges from pest control activities occurred in this calendar year?
- a. No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:
- a. Mosquito and Other Flying Insect Pest Control b. Weed and Algae Pest Control
- c. Animal Pest Control d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area).

- a. Provide a description of the treatment area within this Pest Management Area, including location description:
Pickwick Reservoir, Tennessee River. A total of 2 sites within the 43,100 acre reservoir were treated in calendar year 2015.
- b. Size of treatment area (in acres or linear feet): 7 acres or _____ linear feet.
- c. Name or location of any waters of the state to which discharges occurred:
Pickwick Reservoir (Tennessee River) in Hardin County, TN. Applications occurred in the vicinity of public recreation areas such as ramps, parks, piers, and non-profit camps.
- d. Target Pest(s): Submerged vegetation (i.e., hydrilla, southern naiad, spinyleaf naiad, American pondweed, small pondweed, Watershield

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A):

Company Name: Aqua Services, Inc.

Street: 23360 Highway 431

City: Guntersville State: AL ZIP Code: 35976

Contact: Terry Goldsby

Phone: 256-582-9101

E-mail: terryg@aquaservicesinc.com

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):
<u>Tribune</u>	<u>100-1390</u>		<u>Komeen</u>	<u>67690-25</u>	
Application method:			Application method:		
a. <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons	a. <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons
b. <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons	b. <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons
c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		_____ lbs or gallons	c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		_____ lbs or gallons
d. <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons	d. <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons
e. <input checked="" type="checkbox"/> Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses)		<u>11</u> lbs or <u>gallons</u>	e. <input checked="" type="checkbox"/> Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses)		<u>42.5</u> lbs or <u>gallons</u>
f. <input type="checkbox"/> Chemigation		_____ lbs or gallons			_____ lbs or gallons
g. <input type="checkbox"/> Other (specify): _____		_____ lbs or gallons			_____ lbs or gallons

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 4 of ## 4

1. Have any discharges from pest control activities occurred in this calendar year?
- a. No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:
- a. Mosquito and Other Flying Insect Pest Control b. Weed and Algae Pest Control
- c. Animal Pest Control d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:
Beech Reservoir, Beech River. A total of 3 sites within the 875 acre reservoir were treated in calendar year 2015.
- b. Size of treatment area (in acres or linear feet): 6 acres or _____ linear feet.
- c. Name or location of any waters of the state to which discharges occurred:
Beech Reservoir (Beech River) in Henderson County, TN. Applications occurred in the vicinity of public recreation areas such as ramps, parks, piers, and non-profit camps.
- d. Target Pest(s) Submerged vegetation (i.e., hydrilla, southern naiad, spinyleaf naiad, American pondweed, small pondweed, Watershield

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A).

Company Name: Aqua Services, Inc.

Street: 23360 Highway 431

City: Guntersville State: AL ZIP Code: 35976

Contact: Terry Goldsby

Phone: 256-582-9101

E-mail: terryg@aquaservicesinc.com

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):
<u>Tribune</u>	<u>100-1390</u>		<u>Current</u>	<u>70506-248</u>	
Application method:			Application method:		
a. <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons	a. <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons
b. <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons	b. <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons
c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		_____ lbs or gallons	c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		_____ lbs or gallons
d. <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons	d. <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons
e. <input checked="" type="checkbox"/> Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses)		<u>11</u> lbs or <u>gallons</u>	e. <input checked="" type="checkbox"/> Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses)		<u>27.5</u> lbs or <u>gallons</u>
f. <input type="checkbox"/> Chemigation		_____ lbs or gallons			_____ lbs or gallons
g. <input type="checkbox"/> Other (specify):		_____ lbs or gallons			_____ lbs or gallons

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 4 of ## 4 (continued)

1. Have any discharges from pest control activities occurred in this calendar year?
- a. No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:
- a. Mosquito and Other Flying Insect Pest Control b. Weed and Algae Pest Control
- c. Animal Pest Control d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:
Beech Reservoir, Beech River. A total of 3 sites within the 875 acre reservoir
were treated in calendar year 2015.
- b. Size of treatment area (in acres or linear feet): 6 acres or _____ linear feet.
- c. Name or location of any waters of the state to which discharges occurred:
Beech Reservoir (Beech River) in Henderson County, TN. Applications occurred in
the vicinity of public recreation areas such as ramps, parks, piers, and non-profit camps.
- d. Target Pest(s): submerged vegetation (i.e., hydrilla, southern naiad, spinyleaf naiad, American pondweed, small pondweed, Watershield

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A):

Company Name: Aqua Services, Inc.

Street: 23360 Highway 431

City: Guntersville State: AL ZIP Code: 35976

Contact: Terry Goldsby

Phone: 256-582-9101

E-mail: terryg@aquaservicesinc.com

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Product Name	Quantity Applied (lbs or gallons of product):
<u>Clipper</u>	<u>59639-161</u>	<u>1</u> lbs or gallons		
Application method:			Application method:	
a. <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons	a. <input type="checkbox"/> Aerially by fixed-wing	_____ lbs or gallons
b. <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons	b. <input type="checkbox"/> Aerially by rotary aircraft	_____ lbs or gallons
c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		_____ lbs or gallons	c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)	_____ lbs or gallons
d. <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons	d. <input type="checkbox"/> Aquatic vehicle mounted sprayer	_____ lbs or gallons
e. <input checked="" type="checkbox"/> Direct mixture (includes metering, subsurface applications) (Airboat with submerged trailing hoses)		<u>1</u> lbs or gallons	e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications)	_____ lbs or gallons
f. <input type="checkbox"/> Chemigation		_____ lbs or gallons		_____ lbs or gallons
g. <input type="checkbox"/> Other (specify): _____		_____ lbs or gallons		_____ lbs or gallons

D. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. On the basis of 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 and imprisonment for knowing violations. A false statement is subject to the penalties of perjury.

Printed Name: Rebecca C. Tolene

Title: Vice President, Natural Resources

E-Mail: rctolene@tva.gov

Signature/Responsible Official: 

Date:

02	10	2016
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Annual Report Preparer (Complete if the Annual Report was prepared by someone other than the certifier)

Preparer Name: Mike Stiefel

Organization: Tennessee Valley Authority, Water Permits, Compliance, and Monitoring

Phone: 423-751-6844

Date:

02	03	2016
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E-Mail: mbstiefel@tva.gov

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 1 of ## 1

1. Have any discharges from pest control activities occurred in this calendar year?
- a. No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
 - b. Yes. Proceed to question 2

2. Indicate the pesticide use pattern for the Pest Management Area:
- a. Mosquito and Other Flying Insect Pest Control
 - b. Weed and Algae Pest Control
 - c. Animal Pest Control
 - d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):
- a. Provide a description of the treatment area within this Pest Management Area, including location description:
Vegetation control on reservoir land tracts and levees
 - b. Size of treatment area (in acres or linear feet): ~22 acres or _____ linear feet.
 - c. Name or location of any waters of the state to which discharges occurred:
Chickamauga Reservoir (Tennessee River) McKinley Branch Sub-impoundment (11 acres) and Washington Ferry Wildlife Management Area Sub-impoundment (11 acres)
 - d. Target Pest(s): Giant Cutgrass

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A):

Company Name: Aqua Services, Inc.

Street: 23360 Highway 431

City: Guntersville State: AL ZIP Code: 35976

Contact: Terry Goldsby

Phone: 256-582-9101

E-mail: terryg@aquaservices.com

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Application method:	Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Application method:
<u>Rodeo®</u>	<u>62719-324</u>	<u>11</u> lbs or gallons	<ul style="list-style-type: none"> a. <input type="checkbox"/> Aerially by fixed-wing _____ lbs or gallons b. <input type="checkbox"/> Aerially by rotary aircraft _____ lbs or gallons c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) _____ lbs or gallons d. <input type="checkbox"/> Aquatic vehicle mounted sprayer _____ lbs or gallons e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications) _____ lbs or gallons f. <input type="checkbox"/> Chemigation _____ lbs or gallons g. <input checked="" type="checkbox"/> Other (specify): <u>Airboat and hand spray guns</u> _____ lbs or gallons 				<ul style="list-style-type: none"> a. <input type="checkbox"/> Aerially by fixed-wing _____ lbs or gallons b. <input type="checkbox"/> Aerially by rotary aircraft _____ lbs or gallons c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) _____ lbs or gallons d. <input type="checkbox"/> Aquatic vehicle mounted sprayer _____ lbs or gallons e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications) _____ lbs or gallons

D. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. On the basis of 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 and imprisonment for knowing violations. A false statement is subject to the penalties of perjury.

Printed Name: Rebecca C. Tolene

Title: Vice President, Natural Resources

E-Mail: rctolene@tva.gov

Signature/Responsible Official: 

Date: 02 10 2016

Annual Report Preparer (Complete if the Annual Report was prepared by someone other than the certifier)

Preparer Name: Michael B. Stiefel

Organization: TVA Environmental Permits, Compliance, and Monitoring

Phone: 423 751 6844 N/A

Date: 02 03 2016

E-Mail: mbstiefel@tva.gov

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 1 of ## 1

1. Have any discharges from pest control activities occurred in this calendar year?
 a. No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
 b. Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:
 a. Mosquito and Other Flying Insect Pest Control b. Weed and Algae Pest Control
 c. Animal Pest Control d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:

Vegetation control on and in the vicinity of TVA dams

- b. Size of treatment area (in acres or linear feet): ~74 acres or _____ linear feet.

c. Name or location of any waters of the state to which discharges occurred:

Haley Cr., Big Cr., Lost Cr., Browns Cr., Piney Cr., Dry Cr., Dry Br. (Henderson Co.); Tennessee R. (Hardin, Marion, Loudon Co.); Little Tenn. R. (Loudon Co.); Ocoee R. (Polk Co.); Duck R. (Bedford, Coffee Co.); Nolichucky R. (Green Co.); South Fork Holston R. (Sullivan, Washington Co.); Clinch River (Anderson, Campbell Co.); French Broad River (Sevier Co.)

- d. Target Pest(s): Nuisance vegetation

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A):

Company Name: _____

Street: _____

City: _____

State:

ZIP Code: _____

Contact _____

Phone _____

E-mail: _____

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons. Add additional pages if necessary.

Product Name Rodeo®

EPA Reg. No. 62719-324

Quantity Applied (lbs or gallons of product):

Product Name Habitat®

EPA Reg. No. 241-426-67690

Quantity Applied (lbs or gallons of product):

Application method:

- a. Aerially by fixed-wing _____ lbs or gallons
 b. Aerially by rotary aircraft _____ lbs or gallons
 c. Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) 45 lbs or gallons
 d. Aquatic vehicle mounted sprayer _____ lbs or gallons
 e. Direct mixture (includes metering, subsurface applications) _____ lbs or gallons
 f. Chemigation _____ lbs or gallons
 g. Other (specify): _____ lbs or gallons

Application method:

- a. Aerially by fixed-wing _____ lbs or gallons
 b. Aerially by rotary aircraft _____ lbs or gallons
 c. Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) 8.2 lbs or gallons
 d. Aquatic vehicle mounted sprayer _____ lbs or gallons
 e. Direct mixture (includes metering, subsurface applications) _____ lbs or gallons

y):

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 1 of ## 1 (continued)

1. Have any discharges from pest control activities occurred in this calendar year?
- a. No discharge from pest control activities this calendar year. Note. Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:
- a. Mosquito and Other Flying Insect Pest Control b. Weed and Algae Pest Control
- c. Animal Pest Control d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:

Vegetation control on and in the vicinity of TVA dams

- b. Size of treatment area (in acres or linear feet) ~74 acres or _____ linear feet.

- c. Name or location of any waters of the state to which discharges occurred:

Haley Cr., Big Cr., Lost Cr., Browns Cr., Piney Cr., Dry Cr., Dry Br. (Henderson Co.); Tennessee R. (Hardin, Marion, Loudon Co.);

Little Tenn. R. (Loudon Co.); Ocoee R. (Polk Co.); Duck R. (Bedford, Coffee Co.); Nolichucky R. (Green Co.); South Fork Holston R. (Sullivan, Washington Co.); Clinch River (Anderson, Campbell Co.); French Broad River (Sevier Co.)

- d. Target Pest(s): Nuisance vegetation

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A):

Company Name: _____

Street: _____

City: _____

State:

ZIP Code: _____

Contact _____

Phone _____

E-mail: _____

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Product Name	Quantity Applied (lbs or gallons of product):
<u>Element®</u>	<u>62719-37</u>			
Application method:			Application method:	
a. <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons	a. <input type="checkbox"/> Aerially by fixed-wing	_____ lbs or gallons
b. <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons	b. <input type="checkbox"/> Aerially by rotary aircraft	_____ lbs or gallons
c. <input checked="" type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		<u>4.4</u> lbs or <u>gallons</u>	c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)	_____ lbs or gallons
d. <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons	d. <input type="checkbox"/> Aquatic vehicle mounted sprayer	_____ lbs or gallons
e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications)		_____ lbs or gallons	e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications)	_____ lbs or gallons
f. <input type="checkbox"/> Chemigation		_____ lbs or gallons		_____ lbs or gallons
g. <input type="checkbox"/> Other (specify): _____		_____ lbs or gallons		_____ lbs or gallons

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 1 of ## 1 (continued)

1. Have any discharges from pest control activities occurred in this calendar year?
- a. No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:
- a. Mosquito and Other Flying Insect Pest Control b. Weed and Algae Pest Control
- c. Animal Pest Control d. Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:

Vegetation control on and in the vicinity of TVA dams

- b. Size of treatment area (in acres or linear feet): ~74 acres or _____ linear feet.

c. Name or location of any waters of the state to which discharges occurred:

Haley Cr., Big Cr., Lost Cr., Browns Cr., Piney Cr., Dry Cr., Dry Br. (Henderson Co.); Tennessee R. (Hardin, Marion, Loudon Co.); Little Tenn. R. (Loudon Co.); Ocoee R. (Polk Co.); Duck R. (Bedford, Coffee Co.); Nolichucky R. (Green Co.); South Fork Holston R. (Sullivan, Washington Co.); Clinch River (Anderson, Campbell Co.); French Broad River (Sevier Co.)

- d. Target Pest(s): Nuisance vegetation

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A):

Company Name: _____

Street: _____

City: _____

State:

ZIP Code: _____

Contact _____

Phone _____

E-mail: _____

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: Yes No Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name	EPA Reg. No.	Quantity Applied (lbs or gallons of product):	Product Name	Quantity Applied (lbs or gallons of product):
<u>Element[®]</u>	<u>62719-37</u>	<u>4.4</u> lbs or <u>gallons</u>	_____	_____
Application method:			Application method:	
a. <input type="checkbox"/> Aerially by fixed-wing		_____ lbs or gallons	a. <input type="checkbox"/> Aerially by fixed-wing	_____ lbs or gallons
b. <input type="checkbox"/> Aerially by rotary aircraft		_____ lbs or gallons	b. <input type="checkbox"/> Aerially by rotary aircraft	_____ lbs or gallons
c. <input checked="" type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)		<u>4.4</u> lbs or <u>gallons</u>	c. <input type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer)	_____ lbs or gallons
d. <input type="checkbox"/> Aquatic vehicle mounted sprayer		_____ lbs or gallons	d. <input type="checkbox"/> Aquatic vehicle mounted sprayer	_____ lbs or gallons
e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications)		_____ lbs or gallons	e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications)	_____ lbs or gallons
f. <input type="checkbox"/> Chemigation		_____ lbs or gallons		_____ lbs or gallons
g. <input type="checkbox"/> Other (specify): _____		_____ lbs or gallons		_____ lbs or gallons

D. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. On the basis of 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 and imprisonment for knowing violations. A false statement is subject to the penalties of perjury.

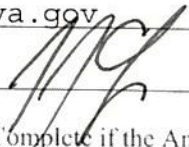
Printed Name: John J. McCormick

Title: Vice President, Safety, River Management, and Environment

E-Mail: jjmccormic@tva.gov

Signature/Responsible

Official:



Date: 02 10 2016

Annual Report Preparer (Complete if the Annual Report was prepared by someone other than the certifier)

Preparer Name: Michael B. Stiefel

Organization: TVA Environmental Permits, Compliance, and Monitoring

Phone: 423 751 6844 N/A

Date: 02 09 2016

E-Mail: mbstiefel@tva.gov