

**STATE OF CONNECTICUT
MEMORANDA OF AGREEMENT
Between
The Department of Public Health
And The Department
of Energy and Environmental Protection
DPH LOG #2013-1502**

**FULLY
EXECUTED**

1. Purpose

This Memorandum of Agreement ("MOA") is entered into by and between the Department of Public Health ("DPH") and the Department of Energy and Environmental Protection ("DEEP", together "Departments") for the purpose of clarifying and streamlining the review and approval of permits issued pursuant to § 22a-66z of the Connecticut General Statutes ("CGS").

This MOA replaces the MOA dated May 1994 between the DPH and the Department of Environmental Protection, which is now DEEP.

WHEREAS, pursuant to CGS § 25-32, DPH has jurisdiction over all matters concerning the purity and adequacy of any water supply source used for obtaining water;

WHEREAS, pursuant to CGS § 22a-66z, the Commissioner of DPH is required to approve the issuance of permits for the introduction of chemicals into waters of the state for the control of aquatic vegetation, fish populations or other aquatic organisms where such introduction will occur in areas tributary to reservoirs, lakes, ponds or streams used for public water supply;

WHEREAS, pursuant to § 19-13-B80 of the Regulations of Connecticut State Agencies ("RCSA"), the Commissioner of DPH is required to approve the addition of chemicals, other than those chemicals used on September 1, 1964, to public water supplies;

WHEREAS, pursuant to CGS § 22a-5, DEEP is responsible for carrying out the environmental policies of the state;

WHEREAS, pursuant to CGS § 22a-66z, the Commissioner of DEEP is authorized to issue permits for the introduction of chemicals into waters of the state for the control of aquatic vegetation, fish populations or other aquatic organisms, unless the introduction of chemicals will occur in an area tributary to reservoirs, lakes, ponds or streams used for public water supply, in which case the Commissioner of DEEP shall not issue a permit without the approval of the Commissioner of DPH as required by the provision;

WHEREAS, the Commissioner of DEEP agrees to review and approve permits for the introduction of chemicals into waters of the state for the control of aquatic vegetation, fish populations or other aquatic organisms where such introduction will occur in in areas

tributary to reservoirs, lakes, ponds or streams used for public water supply, in accordance with the Permit Review Standards in paragraph 8 of this MOA on behalf of the Commissioner of DEEP and in solely an administrative capacity for the Commissioner of DPH;

WHEREAS, while CGS § 22a-66z applies to the introduction of chemicals in an area of a water of the state that is located within 200 feet of a public water supply well when such well is located in a public water supply watershed, the Departments agree not to apply this MOA to such situation. The Commissioner of DPH agrees to review permit applications that are not denied by DEEP pursuant to CGS § 22a-66z for the introduction of chemicals in an area of a water of the state that is located within 200 feet of a public water supply well that is located in a public water supply watershed and provide the Commissioner's approvals, including any required permit conditions, or denials to the DEEP.

WHEREAS, the Departments agree that the provisions of CGS § 22a-66z do not apply to the introduction of chemicals in an area of a water of the state that is located within 200 feet of a public water supply well when the well is not located in a public water supply watershed. Nevertheless, the Departments agree that each has authority to prevent and control pollution and protect public health within that area, the DEEP through its basic authority to issue permits for any discharge into the waters of the state and the DPH through the provisions of CGS §§ 25-32 and 25-34 to prevent pollution or threatened pollution to public drinking water supply sources. Therefore, the Commissioner of DPH agrees to review permit applications presented to the DEEP that are not denied by DEEP for the introduction of chemicals in an area of a water of the state that is located within 200 feet of a public water supply well that is not located in a public water supply watershed and advise the DEEP whether the Commissioner would approve the application, whether the Commissioner would approve the application with conditions, or whether the Commissioner would deny such application; and

WHEREAS, the Departments agree that, pursuant to CGS § 22a-66z, the Commissioner of DPH, but not the Commissioner of DEEP, has the authority to review and approve or deny applications for the introduction of chemicals by the DEEP, the DPH or public water supply utilities into waters of the state used for water supply furnished to the public or tributary to such water supply. The Commissioner of DPH agrees to review and approve, with or without conditions, or deny such applications in an expedited manner.

2. Definitions.

- (A) "Affected public water system" means the public water system that is downstream of the area into which the introduction of chemicals occurs and owns or operates the distribution reservoir, or operates the public water supply well that is within 200 feet of the water of the state into which the introduction of chemicals occurs, and has the responsibility of meeting the treatment requirements and water quality standards of the Safe Drinking Water Act;

- (B) "Applicant" means the person who is applying for a permit to introduce a chemical into waters of the state for the control of aquatic vegetation, fish populations or other aquatic organisms;
- (C) "Distribution reservoir" means a reservoir from which water directly flows or is pumped to treatment or purification facilities;
- (D) "Public water supply watershed" means the land area that drains to a reservoir, lake, pond or stream used for public water supply;
- (E) "Public water supply well" means a ground water well used as a public water supply; and
- (F) "Storage reservoir" means an artificial impoundment of substantial amounts of water, used or designed for the storage of a public water supply and the release thereof to a distribution reservoir.

3. Term Of Agreement

This MOA will begin on July 1, 2012 and will terminate on June 30, 2015.

4. Cancellation

This MOA shall remain in full force and effect unless cancelled by either of the Departments. Either Department can cancel this MOA without cause by providing written notice of such intention to the other Department with thirty (30) days advance notice.

5. Statutory Authority

The statutory authority for the Departments to enter into this MOA is as follows:

- (A) For the DPH, CGS §§ 4-8 and 19a-2a and
- (B) For the DEEP, CGS §§ 4-8 and 22a-6.

6. Funding Level

This is a no-cost agreement between DPH and DEEP.

7. Now, therefore the Commissioners of DPH and the DEEP recognize that each Commissioner has non-delegable functions under the provisions of CGS § 22a-66z and agree as follows:

(A) The Commissioner of DPH, or the Commissioner's designee, agrees to:

- (i) Approve without review permit applications submitted pursuant to CGS § 22a-66z for the introduction of chemicals into a public water supply watershed if the Commissioner of DEEP has reviewed and approved the permit in accordance with the Permit Review Standards in paragraph 8 of this MOA. Such approval shall also constitute the Commissioner of DPH's approval under RCSA § 19-13-B80.
- (ii) Review permit applications that have not been denied by DEEP for the introduction of chemicals into a public water supply watershed that do not comply with the Permit Review Standards in paragraph 8 of this MOA, and provide to the DEEP the Commissioner of DPH, or the Commissioner of DPH's designee's, approval, including any required permit conditions, or denial of such application.
- (iii) Review permit applications that have not been denied by DEEP for the introduction of chemicals into an area of a water of the state that is located within 200 feet of a public water supply well when such well is located in a public water supply watershed and provide to the DEEP the Commissioner of DPH's, or the Commissioner of DPH's designee's, determination whether to approve, approve with any conditions, or deny such application.
- (iv) Review permit applications that have not been denied by DEEP for the introduction of chemicals into an area of a water of the state that is located within 200 feet of a public water supply well when such well is not located in in a public water supply watershed and advise the DEEP regarding whether the Commissioner of DPH, or the Commissioner of DPH's designee, would approve, approve with any conditions, or deny such application.
- (v) Provide to DEEP, on an annual basis, updated contact information for public water systems statewide for DEEP's use for notification purposes.

(B) The Commissioner of DEEP agrees to:

- (i) Review and approve permit applications submitted pursuant to CGS § 22a-66z for the introduction of a chemical into a public water supply

watershed that comply with the Permit Review Standards in paragraph 8 of this MOA in an administrative capacity for the Commissioner of DPH.

- (ii) Provide to the DPH at dph.sourceprotection@ct.gov an electronic copy of all permits issued and denial letters sent to applicants for the introduction of chemicals into a public water supply watershed or into an area of a water of the state that is within 200 feet of a public water supply well. With respect to permits issued, provide to DPH the Geographic Information System data files that provide the location or locations of the chemical application, as well as the dose or doses of the chemical application, if feasible.
- (iii) Provide to the Commissioner of DPH, or the Commissioner of DPH's designee, for review and approval or denial any permit application for the introduction of chemicals into a public water supply watershed that do not comply with the Permit Review Standards in paragraph 8 of this MOA. If the permit application is approved by both the Commissioner of DPH, or the Commissioner of DPH's designee, and the Commissioner of DEEP, include in any permit issued the Commissioner of DPH's, or the Commissioner of DPH's designee's, required permit conditions, if any. If the permit application will be denied by the Commissioner of DEEP, do not provide the permit application to the Commissioner of DPH, or the Commissioner of DPH's designee, for review and approval or denial.
- (iv) Provide to the Commissioner of DPH for review and approval or denial any permit application for the introduction of a chemical into an area of a water of the state that is located within 200 feet of a public water supply well when such well is located in public water supply watershed. If the permit application is approved by both the Commissioner of DPH, or the Commissioner of DPH's designee, and the Commissioner of DEEP, the permit shall include any conditions required by the Commissioners if any. If the permit application will be denied by the Commissioner of DEEP, do not provide the permit application to the Commissioner of DPH, or the Commissioner of DPH's designee, for review and approval or denial.
- (v) Provide to the Commissioner of DPH for review and advice, any permit application for the introduction of a chemical into an area of a water of the state that is located within 200 feet of a public water supply well when such well is not located in a public water supply watershed that is approved by DEEP. If the permit application is approved by the Commissioner of DEEP, include in any permit issued the Commissioner of DPH's, or the Commissioner of DPH's designee, suggested permit conditions, if any. If the permit application will be denied by the Commissioner of DEEP, do not provide the permit application to the Commissioner of DPH, or the Commissioner of DPH's designee, for review and advice.

8. Permit Review Standards

- (A) Permit applications subject to this MOA shall be reviewed by the Commissioner of DEEP in accordance with the following Permit Review Standards.

(i) **Group 1.**

(a) The Commissioner of DEEP may approve permits applications for the introduction of the following chemicals into a public water supply watershed, subject to the conditions listed in Paragraphs 8(A)(i)(b) and Paragraphs 8(B)(i) and (ii).

(I) Copper Sulfate;

(II) Chelated copper compounds, including, but not limited to, copper triethanolamine, copper carbonate, and copper ethylenediamine;

(III) Aluminum sulfate (Alum); and

(IV) Sodium carbonate peroxyhydrate.

(b) Conditions: the Commissioner of DEEP shall not approve a permit application unless the following conditions are satisfied:

(I) Total dissolved copper concentrations shall not to exceed 1.3 parts per million (ppm); and

(II) Dissolved aluminum concentrations shall not exceed 0.2 ppm.

(ii) **Group 2.**

The Commissioner of DEEP may approve permit applications for the introduction of the following chemicals into a public water supply watershed, if the conditions in Paragraphs 8(B)(i) and (ii) of this MOA are satisfied:

(a) Fluridone. No applications of fluridone shall be approved that are closer than ¼ mile upstream of the distribution reservoir.

(b) Glyphosate.

(I) No applications glyphosate shall be approved that are closer than ½ mile upstream of the distribution reservoir.

(II) A sample for glyphosate shall be collected between the dam or water body outlet and no further than 100 yards downstream of the dam or water body outlet. The sample shall be collected between 48 and 72 hours following

application of glyphosate into the waters of the state. Analysis of the sample shall be conducted in a DPH certified laboratory. The sample result shall be submitted to the affected public water system and to the DPH Drinking Water Section via email at dph.sourceprotection@ct.gov. The applicant shall bear the cost of the analysis. If the level of glyphosate in the sample is high, the DPH may initiate the appropriate action.

(c) Carfentrazone.

(I) Carfentrazone. No applications of carfentrazone shall be approved that are closer than $\frac{1}{4}$ mile upstream of the distribution reservoir.

(II) If naphthalene is a component of the formula of carfentrazone, a sample for naphthalene shall be collected between the dam or water body outlet and no further than 100 yards downstream of the dam or water body outlet. The sample shall be collected between 48 and 72 hours following application of carfentrazone. Analysis of the sample shall be conducted in a DPH certified laboratory. The sample result shall be submitted to the affected public water system and to the DPH Drinking Water Section via email at dph.sourceprotection@ct.gov. The applicant shall bear the cost of the analysis. If the level of naphthalene in the sample is high, the DPH may initiate the appropriate action.

(d) Imazapyr. No applications of imazapyr shall be approved that are closer than $\frac{1}{2}$ mile upstream of the distribution reservoir.

(e) Imazamox.

(I) Application of imazamox shall not exceed 500 parts per billion (ppb);

(II) Applications of imazamox no greater than 50 ppb shall be approved within $\frac{1}{4}$ mile of a treatment plant intake of a distribution reservoir. Applications between 51 ppb and not exceeding 500 ppb may be permitted if the treatment plant intake is closed and kept closed until the water concentration can be shown to be less than 50 ppb.

(f) Phoslock. The maximum permissible application rate of phoslock is 80 ppm.

(iii) Group 3. Limited Use Chemicals

The Commissioner of DEEP may approve permits applications for the introduction of the following chemicals if the conditions in Paragraphs 8(B)(i) and (ii) of this MOA are satisfied.

- (a) Triclopyr. No applications of triclopyr into a public water supply watershed may occur unless the following conditions are met:
- (I) The applicant demonstrates that there is a specific need for this chemical (i.e., a specific target plant in a specific location).
 - (II) The DEEP and the DPH shall conduct specific reviews of the permit application. Factors in the review may include, but are not limited to: proximity to water supply intake or public water supply wells, volume of chemical, area of application, water body level, and history of pesticide use in the water body.
 - (III) The maximum permissible application rate is not exceeded.
 - (IV) The permit may require the applicant to comply with conditions including, but are not limited to: monitoring downstream for triclopyr, 3, 5, 6-trichloro-2-pyridinol (TCP) and/or other potential byproducts, onsite inspections, water level manipulation, etc.
 - (V) The Commissioner of DPH, or the Commissioner of DPH's designee, shall complete the Commissioner's review and provide the Commissioner's decision, including any required permit conditions, to DEEP. The Commissioner of DEEP shall include the Commissioner of DPH's permit conditions in any permit issued by the Commissioner of DEEP.
- (b) Flumioxazin (clipper). No applications may occur unless the following conditions are met:
- (I) The applicant demonstrates that there is a specific need for this chemical (i.e., a specific target plant in a specific location).
 - (II) The Commissioner of DEEP and the Commissioner of DPH, or the Commissioner of DPH's designee, shall conduct specific reviews of the permit application. Factors in the review may include, but are not limited to: proximity to water supply intake or public water supply wells, volume of chemical, area of application, water body level, and history of pesticide use in the water body.

- (III) The maximum permissible application rate of Flumioxazin (clipper) is not exceeded.
- (IV) The permit may require the applicant to comply with conditions including, but are not limited to: Monitoring downstream for Flumioxazin and/or other potential byproducts, onsite inspections, water level manipulation, etc.
- (V) The Commissioner of DPH, or the Commissioner of DPH's designee, shall complete the Commissioner, or the Commissioner's designee's, review and provide the Commissioner, or the Commissioner of DPH's designee's, decision, including any required permit conditions, to DEEP. The Commissioner of DEEP shall include the Commissioner of DPH, or the Commissioner of DPH's designee's, permit conditions in any permit issued by the Commissioner of DEEP.

(iv) **Group 4.**

Application of any chemical **not** listed in Groups 1, 2, and 3 above into a public water supply watershed is prohibited.

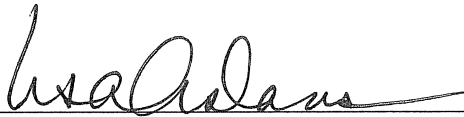
- (B) If the Commissioner of DEEP approves a permit, the permit shall include the following requirements:
 - (i) The applicant shall send to the affected public water system copies of the approved permit.
 - (ii) The applicant shall notify the affected public water system and the DPH Drinking Water Section via email at dph.sourceprotection@ct.gov no later than 48 hours prior to the application of the chemical.

9. Revisions and Amendments

- (A) A formal amendment, in writing, shall not be effective until executed by both DPH and DEEP and, where applicable, the Attorney General.
- (B) Such amendments shall be required for extensions to the final date of the MOA period and to the terms and conditions of this MOA, including, but not limited to revisions to:
 - (i) The MOA's objectives, services, or plan;
 - (ii) Completion of objectives or services; **and/or**
 - (iii) Any other MOA revisions determined material by DPH or DEEP, or both.
- (C) No amendments may be made to a lapsed MOA.

Acceptances and Approvals:

For the Department of Public Health:



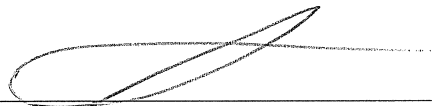
Lisa A. Davis, MBA, BSN, RN

Deputy Commissioner

11/15/12

Date

For the Department of Energy and Environmental Protection:



Macky McCleary, Deputy Commissioner

10/12/12

Date