



Connecticut Department of
Energy & Environmental Protection
Bureau of Central Services
Office of Planning & Program Development

Instructions for Completing a Permit Application for a Section 401 Water Quality Certificate- FERC Hydropower Projects

Use these instructions to: 1) complete the permit application form DEEP-OPPD-APP-100, 2) prepare supporting documents, and 3) publish the applicant's notice of permit application. These instructions are not a substitute for the requirements of the relevant statutes and any regulations thereunder. You should review all applicable laws prior to completing this application. Remember, it is your responsibility to comply with all applicable laws.

Introduction

The Office of Planning and Program Development (OPPD) of the Department of Energy and Environmental Protection (DEEP) administers the Section 401 Water Quality Certification for Federal Energy Regulatory Commission (FERC) hydropower projects. For any questions you may have regarding application requirements, contact OPPD at 860-424-3003.

Who Needs a Section 401 Water Quality Certificate?

Any applicant for a FERC license for an activity which may result in a discharge into the waters of the United States, including wetlands, must obtain a certification from DEEP that such discharge will comply with the applicable provisions of the Federal Water Pollution Control Act, as amended, and Connecticut's Water Quality Standards.

Any person proposing to transfer a DEEP permit must submit a completed [License Transfer Form](#) (DEEP-APP-006) and transfer fee to DEEP. The *License Transfer Form* may be used for changes in owners and operators of the licensed activity; if other changes are proposed to the facility, the site, and/or to facility operations, the proposed transferee must also request a permit

modification. For further information concerning license transfers, please contact OPPD at 860-424-3003.

Notice of Permit Application

Section 22a-6g of the Connecticut General Statutes imposes public notification requirements on applicants for Section 401 Water Quality Certificates issued by DEEP.

In order to comply with these requirements, you must:

1. Publish notice of the permit application in a [newspaper of general circulation](#) in the area potentially affected by the activity that is the subject of your permit application. This notice *must follow the format* specified at the end of these notice instructions and must be published *before* you submit your application to the DEEP. The format contains instructions in brackets. You must insert the appropriate information to replace the instructions in the brackets. Be sure to *delete* all instructions that are specified in brackets, in bold and in uppercase type. When a choice is specified in brackets, do not include any of the words in brackets unless they specifically apply to the activity you intend to conduct. Refer to the following list,

www.ct.gov/deep/lib/deep/permits_and_licenses/newspapers.pdf) for newspapers of general circulation in Connecticut.

2. Send a copy of the published notice, to the chief elected official of the municipality in which the regulated activity is proposed. The chief elected official is generally the mayor, 1st selectman, town manager or the chairman or president of the town council, depending on the form of government of the municipality. Specific information for each municipality is listed in The State Register and Manual (often referred to as the Blue Book), which is available on the Secretary of the State's website (www.ct.gov/sots), and is also usually available at town clerk's offices, the State Library and public libraries. The Secretary of the State's website also has a list of mayors and first selectmen available (www.ct.gov/sots/LIB/sots/ElectionServices/lists/List_of_Mayors.pdf) If you have questions, you can call the Secretary of the State's office at 860-509-6190 or the town clerk of the appropriate municipality.

3. Include a copy of the published notice of permit application and a completed [Certification of Notice Form - Notice of Application](#) (DEEP-APP-005A) as Attachment AA to the permit application.

The copy of the published notice of permit application must be a photocopy of the page of the newspaper where the notice was published that displays the notice, the name of the newspaper and the date of publication.

The [Certification of Notice Form - Notice of Application](#) asks you to:

- a) specify the date and newspaper in which the notice was published;
- b) certify that a copy of the notice was provided to the chief elected municipal official; and
- c) identify the municipal official(s) to whom the notice was provided.

If you have any questions about these notice requirements contact OPPDD at 860-424-3003.

Your application will not be processed **until** DEEP receives the copy of the notice as described above and a completed Certification of Notice Form - Notice of Application.

In addition, DEEP may notify you that other forms of notice are required, including the posting of a sign in accordance with CGS section 22a-6l.

Also, when the application review is complete and DEEP has made a final decision on your permit application, DEEP will publish a Notice of Tentative Determination in the newspaper. Please note that you will receive an invoice for the public notice fee and you will be responsible for payment.

The following format must be used when publishing notice of an application:

Notice of Permit Application

Town(s): **[LIST ALL TOWNS IN WHICH THE REGULATED ACTIVITY IS LOCATED OR WILL HAVE AN AFFECT]**

Notice is hereby given that **[INSERT NAME OF APPLICANT]** (the “applicant”) of **[INSERT ADDRESS OF APPLICANT HERE]** will submit to the Department of Energy and Environmental Protection an application under section 401 of the federal Clean Water Act, 33 U.S.C. sec. 1341 (WATER QUALITY CERTIFICATION); for a permit to discharge into the waters of the state.

Specifically, the applicant proposes to **[INSERT A BRIEF DESCRIPTION OF THE PROPOSED ACTIVITY AND ITS PURPOSE]**. The proposed activity will take place **[INSERT THE STREET ADDRESS; IF THE ADDRESS DOES NOT HAVE A STREET NUMBER, GIVE THE SPECIFIC LOCATION OF THE PROPOSED ACTIVITY WITH REFERENCE TO A FIXED LANDMARK E.G., A ROADWAY INTERSECTION, BRIDGE OR OTHER STRUCTURE]**. The proposed activity will potentially affect: **[INSERT ANY NATURAL RESOURCES POTENTIALLY AFFECTED BY SUCH ACTIVITY (E.G., WETLANDS, WATERCOURSES BY NAME, GROUND WATERS, AIR, FOREST LAND, TIDAL WETLANDS)]**

Interested persons may obtain copies of the application from **[INSERT THE NAME, MAILING ADDRESS AND TELEPHONE NUMBER OF THE APPLICANT’S REPRESENTATIVE]**.

The application will be available for inspection at the Department of Energy and Environmental Protection, Office of Planning and Program Development, 79 Elm Street, Hartford, CT 06106-5127, telephone 860-424-3003, from 8:30am to 4:30pm Monday through Friday. Please call in advance to schedule review of the application.

How to Apply

Your permit application must include all of the following items:

- *Permit Application for a Section 401 Water Quality Certificate-FERC Hydropower Projects* (DEEP-OPPD-APP-100) and all supporting documents
- The required initial fee (check or money order payable to “Department of Energy and Environmental Protection”)
- A copy of the published notice of permit application, as described in these instructions with a completed Certification of Notice form (DEEP-APP-005A).

You must submit the above materials together as a complete package to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

When submitting your permit application, label your supporting documents as directed on your application form and always include, on each document, the applicant's name as indicated on the *Application Form*. Be sure to list these supporting documents in your table of contents in the Executive Summary. When additional space is necessary to answer a question stated in the application, please insert additional sheets by the appropriate question. Label each sheet with the applicant's name as indicated on the *Application Form*, along with the corresponding part number and question number. You should retain a copy of all documents for your files.

Permit Application Instructions

Please read the application form and instructions carefully. They have been designed to obtain specific information and anything that is missing or unclear will cause delays in the review process. If you believe that the information requested does not apply to your specific project, explain, in the space provided, why you believe that is the case. Do not respond with

“NA” (“not available” or “not applicable”); an “NA” response will deem your application insufficient and may cause your application to be returned. If a question or supporting document is only required for specific activities it will be noted on the application form and in the instructions.

Please be advised that these instructions are not a substitute for any state or federal statutes or regulations. Be sure to refer to the applicable statutes and regulations while completing your application.

Refer to the Available Resources Section at the end of these instructions to obtain all required documents and guidance related to the subject permit application.

Part I: Application Type

Please indicate whether you are applying for a new permit, or for a renewal of an existing permit, or for a modification of an existing permit, by checking the appropriate box. A permit is deemed to be “existing” only if it has not yet expired on the date you file your application. Please provide the existing permit number and expiration date for renewals and modifications.

Part II: Permit Type and Fee Information

Check the applicable box for each permit requested in the submission, total the application fees and enclose a check for the required amount. If the applicant is a municipality, the 50% fee discount applies. DEEP will not process an application unless the required fees have been paid. The payment should be in the form of a check or money order made payable to “Department of Energy and Environmental Protection”

Public Notice Information

The public notice of application must be published **prior** to submitting an application, as required in CGS section 22a-6g. A copy of the published notice of application, as described in these instructions, and the completed Certification of Notice Form must be included as Attachment AA to this application. Your application will **not** be processed if Attachment AA is not included. Indicate the public notice date of publication.

Part III: Applicant Information

If there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the [Request to Change Company/Individual Information](#) to the address indicated on the form. If there is a change in name of the entity holding a DEEP license or a change in ownership, contact the Office of Planning and Program Development (OPPD) at 860-424-3003. For any other changes you must contact the specific program from which you hold a current DEEP license.

When completing this part, please use the following standards:

- *Name* - Provide the full, legal *company/firm* name. (If identifying an entity registered with the Secretary of the State, fill in the name exactly as it is shown on the registration. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at [CONCORD](#)). If identifying an *individual*, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.). If the applicant is a governmental body, identify the city or town of such body followed by the relevant department, board or division.
- *Phone* - Unless otherwise indicated, the phone number provided should be the number where the corresponding individual

can be contacted during daytime business hours.

- *Contact Person* - Provide the name of the specific individual within the company whom DEEP may contact.
 - *E-Mail* – Applicants must provide an accurate e-mail address when completing their application form. The e-mail address may be used for future correspondence from DEEP to your business.
1. *Applicant* - Complete the information concerning the applicant. The applicant for the Section 401 Water Quality Certificate must also be the applicant for the FERC license of a hydropower project.
 2. *Billing Contact* – Complete the information concerning the applicant’s billing contact, if different than the applicant.
 3. *Primary Contact* - If you have authorized a consultant, engineer, attorney or other individual to act for *you* during the processing of the permit application, complete this section. DEEP will direct copies of all correspondence and inquiries to this primary contact. Please be aware that for legal reasons there will be circumstances when DEEP will notify the applicant instead of the primary contact.
 4. *Attorney* - It is not required that an applicant be represented by an *attorney* or any other agent. If you do have an attorney, complete this section.
 5. *Site Owner* - If the applicant is not the owner of the affected site, complete this section.
 6. *Engineers or Consultants* - List engineers or consultants employed or retained to assist in preparing the application or to design or construct the proposed activity.

Part IV: Site Information

- 1a. Site Name and Address** - The site or project name or number identified should be the name by which the site or project is commonly known and/or may be uniquely identified. If the site or project has not been given a name, describe the proposed activity (e.g., proposed dam or proposed subdivision, etc.). The information given as the location address should be the address of the property at which the proposed activity will take place. Include the street address and the municipality. If the property does not have a street number, describe the location in terms of the distance and direction from an obvious landmark such as an intersection with another roadway, a bridge, or a river. For example, “. . . on the east side of River Street, approximately 1000 feet north of its intersection with Bear Swamp Road.”
- b. *Tax Assessor's Reference* - Provide the Tax Assessor's Map, Block and Lot Number of the site. These numbers may be found on the most recent tax bill for the property or obtained from the tax assessor's office in the town in which the property is located.
- c. Provide the latitude and longitude, in degrees, minutes and seconds, of the approximate center of the facility or site of the proposed work. In addition, please indicate the method used to determine the latitude and longitude coordinates. There are a variety of methods of deriving latitude and longitude coordinates with the Global Positioning System (GPS) being the most accurate.
- d. Indicate the drainage basin number(s) for the basin(s) wherein the proposed activity will take place. Drainage basin numbers are delineated on a map compiled by the Connecticut Geological Natural History Survey and entitled “Natural Drainage Basins of Connecticut, 1981”, as amended. See “Available Resources” section at the end of these instructions for assistance in obtaining this map.

- e. Indicate the flood insurance map panel number wherein the proposed activity will take place and include the date of the map(s) referenced. See “Available Resources” section at the end of these instructions for assistance in obtaining flood insurance maps.

DEEP strongly encourages all applicants to conduct a review of the following information as soon as possible and to resolve any outstanding issues, where feasible, before submitting their permit application to DEEP to ensure a more timely and efficient review of their permit application.

2. Coastal Management Act Consistency

If the application is for a new permit or a modification of an existing permit where the physical footprint of the subject activity is modified you must further evaluate your activity as detailed below.

Activities within the state's coastal area must be consistent with the Connecticut Coastal Management Act (CGS sections 22a-90 through 22a-112). You may be required to complete a Coastal Consistency Review Form (DEEP-APP-004) to demonstrate that the activity is consistent with the standards and policies of the Connecticut Coastal Management Act. To determine whether this requirement pertains to you, you must first decide if your activity is, or is proposed to be, located in either the coastal area or the coastal boundary.

The coastal area, as defined in CGS section 22a-94(a), includes the land and water within the following towns:

Branford	Guilford	Old Saybrook
Bridgeport	Hamden	Orange
Chester	Ledyard	Preston
Clinton	Lyme	Shelton
Darien	Madison	Stamford
Deep River	Milford	Stonington (Borough and Town of)
East Haven	Montville	Stratford
East Lyme	New London	Waterford
Essex	New Haven	West Haven
Fairfield	North Haven	Westbrook
Greenwich	Norwalk	

The *coastal boundary*, as defined in CGS section 22a-94(b), is a designated region within the coastal area. It is delineated on DEEP-approved coastal boundary maps which are available for review at the DEEP Office of Long Island Sound Programs (OLISP), the DEEP File Room, and municipal offices of towns located in the coastal area. Copies of these maps may also be purchased from DEEP Maps and Publications. The map can also be viewed at: www.cteco.uconn.edu/map_catalog.asp (Select the town and then select coastal boundary. If the town is not within the coastal boundary you will not be able to select the coastal boundary map.)

Activities within the coastal boundary:

If your activity is, or is proposed to be, located in the coastal boundary, and you are applying for a new permit or a modification of an existing permit where the physical footprint of the subject activity changes, you must complete a [Coastal Consistency Review Form](#) (DEEP-APP-004) and submit it with your application as Attachment I.

For renewals or other modifications of existing permits for activities located within the coastal boundary, you are not required to submit a Coastal Consistency Review Form with your initial application materials. However, DEEP may notify you that submission of this form is required to process your application depending upon the specific activities to be conducted and their potential impact on coastal resources.

Activities outside the coastal boundary but within the coastal area:

For permit applications (new permits, modifications, or renewals) for activities located outside of the coastal boundary, but within a town in the coastal area, you are not required to submit a Coastal Consistency Review Form with your initial application

materials. However, DEEP may notify you that submission of this form is required to process your application depending upon the specific activities to be conducted and their potential impact on coastal resources.

For assistance in completing the form, or if you have questions on this process, call OLISP at 860-424-3034.

3. *Natural Diversity Data Base-Endangered and Threatened Species*

Section 26-310 (a) of the Connecticut General Statutes states that each state agency, in consultation with the DEEP commissioner, shall conserve endangered and threatened species and their essential habitats, and shall ensure that any activity authorized, funded or performed by such agency does not threaten the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat designated as essential to such species.

Please refer to “*Requests for Natural Diversity Data Base State Listed Species Reviews*” located on the DEEP website at: www.ct.gov/deep/nddbrequest to determine if your activity is located within an area identified as a habitat for endangered, threatened or special concern species. If applicable, prior to submitting the subject application, you must submit a *Request for NDDB State Listed Species Review*” form (DEEP-APP-007) to the NDDB program. Please note that NDDB review generally takes 4 to 6 weeks. You must then submit the CT NDDB response and copies of any other correspondence to and from the NDDB, including a copy of the completed *Request for NDDB State Listed Species Review*” form (DEEP-APP-007) with your application as Attachment J.

4. *Aquifer Protection Areas*

Aquifer protection areas are defined in CGS section 22a-354a through 22a-354bb and are the areas that contribute water to public water supply wells. Many towns within the state are required to establish Aquifer Protection Areas. Level A areas are final, regulated areas under the aquifer protection program. Level B areas are preliminary approximations of aquifer protection areas that have not yet been mapped to final standards, so the shape of the area may change when final mapping is completed. Level B maps provide an approximation of the Aquifer Protection Areas.

Review the [Aquifer Protection Area](#) maps to determine if your site is located in a Level A or Level B mapped aquifer protection area and check the appropriate box.

If your site is within a Level A aquifer protection area and your business is registered with either the local aquifer protection agency or DEEP, then no action is required.

If your site is within a Level A aquifer protection area and your business is not already registered, check the [Table of Regulated Land Uses](#) to determine if your activity is required to be registered under the Aquifer Protection Area Program. If you determine your activity is required to be registered, then contact the [local aquifer protection agent](#) or DEEP to take appropriate actions.

If your site is within a Level B aquifer protection area, then no action is required at this time. However, you may be required to register under the Aquifer Protection Area Program in the future when the area is delineated as Level A.

For more information on the Aquifer Protection Area Program visit the DEEP website at www.ct.gov/deep/aquiferprotection or contact the program at 860-424-3020.

5. *Conservation or Preservation Restriction*

If the subject site has a conservation or preservation restriction, proof of written notice of this application to the holder of such restriction or a letter from the holder of such restriction verifying that this application is in compliance with the terms of the restriction, must be submitted as Attachment K. The municipality where the site is located may have information concerning such restrictions.

6. *Consultations* – Recommendations and a plan of action for fish passage and water quality monitoring for pre and post construction work, must be submitted as described in Attachment C. [DEEP Inland Fisheries](#), [DEEP Water Planning & Standards](#), [U.S. Fish and Wildlife Service](#), and other consultants must be contacted in advance to include their recommendations in the application submittal.

7. *Other Permits* – List all local, state and federal permits or certificates that have already been issued for construction activity at the property on which the activity is proposed. Include municipal permits for subdivision of land and any zoning approvals.

Part V: Supporting Documents

All permit applications must include Attachments AA through R, unless otherwise noted in these instructions. Check the appropriate box by each attachment being submitted as verification that all required attachments have been submitted. Please label all attachments as referenced in the permit application form and in these instructions, being sure to include the name of the applicant as indicated on the application form.

Professional Certification and Seals as required per CGS section 20-306a - All surveys, plans and reports prepared for the purpose of documenting property or ownership boundaries

of land must be prepared by a Connecticut-registered land surveyor and must bear his or her certification and seal. For projects where public welfare or the safeguarding of life, health or property is involved or where design criteria need to be incorporated, surveys, plans and reports must be prepared by an engineer, land surveyor or architect registered in Connecticut and bear his or her certification and seal.

Part VI: Application Certification

After the application has been completed it must be reviewed and signed by both the applicant and the individual(s) who actually prepared the application and any part thereof required by the application. This includes: consultants, professional engineers, surveyors, soil scientists, etc. By their signature, they certify that to the best of their knowledge and belief, the information contained in the application, including all attachments, is true, accurate and complete.

The certification of the application package must be signed as follows:

1. For an individual(s) or sole proprietorship: by the individual(s) or proprietor, respectively;
2. For a corporation: by a principal executive officer of at least the level of vice president;
3. For a limited liability company (LLC): a manager, if management of the LLC is vested in a manager(s) in accordance with the company's "Articles of Organization", or a member of the LLC if no authority is vested in a manager(s);
4. For a partnership: by a general partner;
5. For a municipal, state, or federal agency or department: by either a principal executive officer, a ranking elected official, or by other representatives of such applicant authorized by law.

An application will be considered insufficient

unless all required signatures are provided.

Instructions for Attachments

All permit applications must include Attachments AA through K, unless otherwise noted in these instructions. Check the appropriate box by each attachment being submitted as verification that all applicable attachments have been submitted. Please label all attachments as referenced in the permit application form and these instructions and be sure to include the name of the applicant as indicated on the *permit application form*.

Attachment AA: Notice of Permit Application

Submit as Attachment AA, a copy of the published notice of permit application, and a completed [Certification of Notice Form - Notice of Application](#) (DEEP-APP-005A).

The copy of the published notice of permit application must be a photocopy of the page of the newspaper where the notice was published, that displays the notice, the name of the newspaper and the date of publication.

Attachment A: Executive Summary

Submit as Attachment A, an executive summary which includes:

1. a brief description of the proposed activity;
2. a synopsis of the documentation included in the application including the environmental and engineering analyses conducted and the results of such analyses;
3. in the case of a permit renewal application, a description of any change, if any, in proposed regulated activities;
4. the anticipated time frame for initiation and completion of the proposed activities; and
5. any other information the applicant deems relevant to an understanding of the proposed activity.

Attachment B: United States Geological Survey (USGS) Topographic Quadrangle Map

Submit as Attachment B, an 8-1/2" x 11" copy or original of a USGS topographic quadrangle map, at a scale of 1:24,000 indicating the exact location of the project site and the proposed activities. DEEP will use this map to enter your project location into its Geographic Information System (GIS). It is important that you accurately locate the project site and proposed activities, because the GIS generates natural resource information relevant to your site. An inaccurate description of the project location will delay processing of your application.

The quadrangle name should be noted on the copy of the map submitted. The location of the project site and regulated activities should be indicated on the quadrangle map as follows: outline the parcel(s) of land upon which the proposed project will be located and pinpoint or circle the precise areas where activities are proposed. Where there are multiple areas of proposed activities, each area should be pinpointed or circled and numbered for reference purposes. If the size of the parcel is so small that outlining its boundaries and pinpointing regulated activities on the quadrangle map is impractical, simply pinpoint the approximate center of the parcel. In the case of a well or well field, the location of the proposed wells, in addition to any existing wells, should be identified. In the case of highway transportation projects, the taking line need not be depicted on this map; rather, only the areas within which activities are proposed should be circled. See Figure A, at the end of these instructions for examples of how a USGS map must be labeled when submitted.

Attachment C: Documentation Form for a Section 401 Water Quality Certification-FERC Hydropower Projects (DEEP-OPPD-APP-101)

1. *Name of Applicant* - Fill in the name exactly as it appears on the main application form.
2. *Name and location of watercourse(s)* - Indicate the name and location of the watercourses involved with or potentially affected by the proposed project. Include additional information on wetlands within or in close proximity to the named watercourse. Many wetlands and most watercourses are named on USGS topographic quadrangle maps. Please use the "official" names for wetlands and watercourses as given on the USGS maps. If the wetland or watercourse is known locally by some other name, provide that name as well. For example, if Round Lake is used on the USGS map for a waterbody ("also known as") a.k.a. Smith's Pond, write the name as follows: Round Lake a.k.a. Smith's Pond. In cases where the wetland or watercourse or waterbody is not named on the USGS map, indicate the name of the watercourse immediately downstream and indicate that the wetland or watercourse involved in the application is a tributary to that watercourse. For example, in the case of wetlands, "unnamed wetlands tributary to Smith's Pond;" and, in the case of an unnamed watercourse, "unnamed tributary to Smith's Pond". See "Available Resources" section at the end of these instructions for assistance in obtaining USGS.
3. Describe the purpose and need for the *proposed project* - This narrative should describe the basic objective(s) of the applicant in pursuing the project and any public benefits to be derived therefrom.
4. *Description of the Regulated Activity*
 - a. Provide the extent of disturbance, in acres and in cubic yards.
 - b. Describe all proposed activities in and

affecting wetlands, watercourses and floodplains. At a minimum, include in this narrative a description of any land clearing, grubbing, excavation, deposition or removal of materials and any interruptions or alterations of water flows. Quantify the proposed activity in terms of acres of wetlands and watercourses or upland altered and cubic yards of material placed or excavated. In situations where loss of flood storage is a significant concern, proposed fill or other obstructions to flood flows should be balanced by excavation. Describe any floodproofing or other flood mitigation measures proposed, any proposed mitigation for unavoidable adverse impacts and any temporary and permanent obstruction, constriction, alteration or pollution of wetlands, watercourses, or floodplains that will result, directly or indirectly, from the proposed project, on or off-site. Include all stormwater management systems and discharges of stormwaters that would result from construction or operation of the proposed project. Reference specific plans, drawings, or portions of the reports in your application which fully described the elements of the regulated activity.

5. *Description of Site* - Describe all natural and manmade features of the property at which the regulated activity is proposed, including at a minimum, wetlands, watercourses, floodplains, and existing development. Also describe any development planned by others that is related to the applicant's proposed activities.
6. *Disposal of excess material* - If the project will generate demolition debris or excess excavated material, a disposal plan is required. The disposal plan should include a location map of the disposal site and describe the expected quantity and nature of such materials or debris. This plan should also describe whether any municipal, state,

or federal permits are required for such disposal. If excess material from the project will be disposed of away from the subject property and such off-site disposed area is not identified in this application, DEEP may deem the application insufficient or, as a condition of permit approval, require the permittee to submit a disposal plan to DEEP prior to the commencement of regulated activities. The disposal plan, if applicable, should be included as Attachment C6.

7. In order to obtain a Section 401 Water Quality Certification for a hydropower project from DEEP, you must have applied for a license from the Federal Energy Regulatory Commission (FERC) for an activity which may result in a discharge into the waters of the United States, including wetlands.

A complete copy of the FERC application, including all supporting documents, must be submitted as Attachment C7.

Provide the date that an application for a FERC license was submitted to FERC.

8. Is this project defined as a run-of-the-river hydropower facility?

A run-of-the-river hydropower facility is defined as a facility that generates hydroelectric power whereby little or no water storage is provided. Run-of-the-river facilities may either have no storage at all, or a limited amount of storage. Run-of-river projects also need to be built on a river with a consistent and steady flow (mostly natural). By definition, a run-of-the-river plant can only have storage for no more than 48 hours of water supply. The main structure of a run-of-river plant is simply to redirect water flow from a weir (a small headpond) towards the penstock (delivery pipe), which feeds the water downhill to the power station. The natural force of gravity generates the energy used to spin the turbines located in the power station which

converts the energy from the water to generate electricity. After this process, the water is redirected back to the natural flow of the river.

9. **Fisheries Consultation:** Submit as Attachment C9, a summary of fisheries consultations, including consultations with [DEEP Inland Fisheries](#) and [the U.S. Fish and Wildlife Service](#), and their recommendations for fish passage and environmental concerns. As a result of these recommendations, include the plan of action for fish passage and other identified environmental concerns. Include drawings and plans, even if conceptual.
10. **Plan for water quality monitoring pre and post construction/work:** Submit as Attachment C10, a summary of water quality monitoring consultations, including consultations with [DEEP Water Planning & Standards](#), and their recommendations for water quality monitoring for pre and post construction/work. As a result of these recommendations, include the plan of action for water quality monitoring for pre and post construction/work.
11. *Summary of documents submitted with Attachment C* - Check the applicable box by each document being submitted under Attachment C as verification that all applicable documents have been submitted.

Attachment D: Plan Sheets and Drawings

Plan Sheets and drawings do not need to be submitted if included in the copy of the FERC application submitted with Attachment C. Please specify in the space provided on the application, their location within the FERC application. (e.g., section A, p. 2 of 3)

Submit as Attachment D, plans and drawings showing existing and proposed conditions at the subject property and any other regulated areas. All such plans and drawings should be clearly labeled and be sufficiently detailed to fully

describe what is being proposed, where, and by whom. Note: detailed final structural design plans are required for dams, dikes, flood control structures, retaining walls, and structurally floodproofed structures. Clear, well-drawn plans are an important tool to help DEEP staff understand the potential effects of the proposed activity and to assess the adequacy of its design.

Plans and drawings should be of an appropriate scale and show the following:

1. all plan sheets and drawings should contain a map key and a title block showing at least its title, number, original date and revision dates, the name of the applicant, the name of the individual and the firm that prepared the plan, plan scale and bear all appropriate professional certifications and seals. The first sheet of a set of plans or drawings should contain a location key (e.g., USGS topographic map).
2. the boundaries of the subject property, the location of properties abutting the subject property, and the names of the owners of record of such abutting properties;
3. existing and proposed topography and all proposed excavation, filling, and structures (Contour intervals should be no greater than two (2) feet; cross sections may also be useful to clarify grade changes.);
4. the location at the subject property of the top of the affected watercourse or river bank and the location of the existing and proposed ordinary high water line (for tidal waters, the local high tide line);
5. a North arrow, the direction of water flow, and the topographic datum;
6. the location of the floodplain and floodway and the elevation contour of the base flood based on information provided by the National Flood Insurance Program (NFIP); NFIP information may be obtained through the municipal engineering or the Town Clerk's offices, or from the Flood

Management Section of DEEP's IWRD 860-424-3706;

7. the location of wetlands, watercourses and other waterbodies potentially affected by the proposed activity and the description of the type of any wetlands and wetland soils at the subject property and reference to the soil scientist's or biologist's report (title, author and date) wherein the delineation of such wetlands is described;

Wetlands and watercourses should be delineated in accordance with the current federal delineation method - *Corps of Engineers Wetlands Delineation Manual*, Environmental Laboratory, Department of the Army Waterway Experiment Station, Vicksburg, Mississippi, 1987. Technical Report Y-87-1;

8. in the case of a permit application involving any regrading, excavation, filling, dewatering or other land or water disturbance activity that could result in the detachment of soil or rock fragments by water, wind or ice, an erosion and sediment control plan prepared in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, DEEP Bulletin 34 (the "Guidelines"). See requirements described under Attachment H: *Soil Erosion and Sediment Control Plan*.
9. details of any proposed measures (best management practices) for minimizing adverse impacts during construction;
10. if the project site is subject to flooding, the details of warning notices or signs to that effect, including the location and language of such notices or signs. Such notices or signs shall be large enough to be read by persons using the subject property and should contain the following words: "flood hazard area...this area subject to flooding..." and depict the actual level flood waters would reach during a flood of the magnitude

of the base flood at the location of such notice or sign.

Attachment E: Environmental Report

An Environmental Report does not need to be submitted if included in the copy of the FERC application submitted with Attachment C. Please specify in the space provided on the application, the location within the FERC application. (e.g., section A, p. 2 of 3)

Submit as Attachment E, a report and supporting documentation evaluating, as applicable, the effects of the proposed activity on wetlands (functions and values), fish and wildlife resources (habitats and populations), state and federal endangered and threatened species and state species of special concern, stream flows, state water quality standards and designated uses of waters of the state, public water supplies, wastewater treatment needs, the capacity of waters to assimilate wastes, ground water recharge/dischage, ground water availability, private and public water supply wells, agriculture, and water-based recreation.

The evaluation of project effects by the applicant should be based upon but not limited to, the following as applicable:

- instream flow studies;
- vegetation surveys;
- wetland and soil delineations;
- wetland function and value assessments;
- systematic habitat and biological field sampling;
- habitat mapping and habitat evaluations;
- fish and wildlife surveys and population census;
- natural resource inventories, which include natural resource value and impact assessments;
- field surveys for the presence of state and federal species listed as endangered or threatened and for species listed by the state as species of special concern;

- water quality modeling and analyses;
- waste load allocation modeling and analyses;
- water quality testing and evaluations.

All data collection and studies must be performed in accordance with valid and accepted scientific methods, and should identify the following:

- the existing biological, ecological and geological characteristics of all potentially affected areas;
- the nature and extent of any short-term and long-term effects of the proposed activity on such characteristics; and
- the nature and extent of any cumulative effects of the proposed activity on such characteristics.

“Cumulative effects” means the effects of the proposed activity in conjunction with the effects of previous activities and any known future activities proposed in the area by the applicant or by others of record.

Attachment F: Mitigation Report

A Mitigation Report does not need to be submitted if included in the copy of the FERC application submitted with Attachment C. Please specify in the space provided on the application, the location within the FERC application. (e.g., section A, p. 2 of 3)

Submit as Attachment F, a mitigation report describing any design elements of the proposed activity which have been incorporated into the plans intended to mitigate wetland, wildlife and fish habitat impacts resulting from the construction and/or operation of the proposed activity. Details of these design elements, including any plans, drawings, and reports, should be included in this attachment.

Regulated activities should be designed to avoid environmental impacts. Environmental impacts that are unavoidable should be minimized. Where unavoidable environmental impacts

occur from the construction and/or operation of the proposed activity, mitigation or compensation for adverse impacts to wildlife and fish habitat, wetlands, watercourses, waterbodies and other natural resources should be incorporated into project plans.

Attachment G: Applicant Compliance Information Form

CGS section 22a-6m provides for DEEP review of an applicant's record of compliance with the environmental laws of Connecticut, any other state and the federal government. Under the law, DEEP may consider the applicant's environmental compliance record, as well as the record of the applicant's principals and any parent companies or subsidiaries, when reviewing a permit application. All permit applications for activities not previously permitted by DEEP must include a completed *Applicant Compliance Information Form* (DEEP-APP-002) as Attachment G.

Attachment H: Applicant Background Information

All permit applications must include as Attachment H, a completed *Applicant Background Information Form* (DEEP-APP-008).

Attachment I: Coastal Consistency Review Form

Activities within the state's coastal area must be consistent with the Connecticut Coastal Management Act (CGS sections 22a-90 through 22a-112). You may be required to complete a *Coastal Consistency Review Form* (DEEP-APP-004) to demonstrate that the activity is consistent with the standards and policies of the Connecticut Coastal Management Act. Please refer to the instructions in Part IV, item 2, to determine if this requirement pertains to you.

Attachment J: CT NDDB Information

Submit copies of any correspondence provided to or received from the CT NDDB program, including a copy of a completed *Request for*

NDDB State Listed Species Review” form (DEEP-APP-007) as Attachment J, as explained in Part IV, item 3 of these instructions.

Attachment K: Conservation or Preservation Restriction

If the property is subject to a conservation or preservation restriction, submit proof of written notice of this application to the holder of such restriction or a letter from the holder of such restriction verifying that this application is in compliance with the terms of the restriction, as Attachment K.

Available Resources

Below is a list of possible resources for specific information required for this application. Be sure to also check the DEEP website, www.ct.gov/deep and your local town hall or library for maps and other reference materials.

Both the DEEP Maps and Publications 860-424-3555 and the DEEP File Room 860-424-4180 are located on the store level at 79 Elm Street, Hartford, CT. Please call the appropriate office in advance for hours of operation.

For general assistance regarding the subject permit application contact OPPD at 860-424-3003.

For the subject permit application form, instructions and other required documents visit the DEEP website at:

www.ct.gov/deep/inlandwaterpermitapps

- Coastal Boundary Areas: Town Hall and/or DEEP Maps and Publications; "Coastal Boundary Map". Additional information: Office of Long Island Sound Programs: 860-424-3034
 - www.cteco.uconn.edu/map_catalog.asp
 - magic.lib.uconn.edu/connecticut_data.html#water
- [Coastal Consistency Review Form](#)

- Coastal Resource Maps: Town Hall and/or DEEP Maps and Publications 860-424-3555
- USGS Topographic Quadrangle Map: [\(USGS\) Topographic Quadrangle Map: \(www.ct.gov/deep/gis\)](#); DEEP Maps and Publications, 860-424-3555, or USGS Office, 303-202-4700, or US Geological Survey, Western Distribution Branch, Box 25286, Denver Federal Center, Denver, CO 80225 (sells USGS maps and publications) www.usgs.gov
- Endangered or Threatened Species Areas: DEEP File Room; "State and Federal Listed Species and Natural Communities"; www.ct.gov/deep/endangeredspecies
- Aquifer Protection Area Maps: www.ct.gov/deep/aquiferprotection, DEEP Maps and Publications
- DEEP Water Planning and Standards: Susan.Peterson@ct.gov 860-424-3854
- DEEP Inland Fisheries: Steve.Gephard@ct.gov 860-447-4316
- U.S. Fish and Wildlife Service: Melissa Grader
Fish and Wildlife Biologist
US FWS/New England Field Office
c/o CT River Coordinator's Office
103 East Plumtree Road
Sunderland, MA 01375
413-548-8002, x124
413-548-9622 (FAX)
melissa_grader@fws.gov
www.fws.gov/newengland
- [Water Quality Standards and Classifications](#)
- [Integrated Water Quality Report to Congress](#)

- DEEP's Environmental Equity Policy, Environmental Justice Program, Environmental Justice Public Participation Guidelines: 860-424-3044
www.ct.gov/deep/environmentaljustice
- Pollution Prevention: A variety of pollution prevention publications are available from DEEP's Office of Pollution Prevention 860-424-3297.
- Dams: DEEP Bulletin No. 36 "Guidelines for Inspection and Maintenance of Dams": DEEP's IWRD Office, 860-424-3019
- "DEEP Guidelines for Emergency Operation Plans": DEEP's IWRD Office, 860-424-3019
- Drinking Water Supply Wells and Reservoirs: Town Hall and/or DEEP Maps and Publications; "Community Water Systems Map" (private wells not shown)
- Soil Series Description and Delineation: County Soil and Water Conservation District Offices and the United States Department of Agriculture Conservation Service Office
- Connecticut Guidelines for Stormwater Quality Management, DEEP website
www.ct.gov/deep/stormwater
- Flood Insurance Rate Maps: Town Hall
- National Flood Insurance Program (NFIP) information: municipal engineering or Town Clerk offices, from the FEMA Map Distribution Center (800-358-9616), or from the FEMA Flood Map Store at
www.fema.gov/fhm/
- **Drainage:**
- Drainage Basins: DEEP Maps and Publications, "Natural Drainage Basins in Connecticut", 1988; www.ct.gov/deep/gis

Connecticut Department of Transportation
Drainage Manual 2000: CT website;
www.CT.gov

Nosal, T. 1997. Gazetteer of Drainage Areas of Connecticut. Water Resources Bulletin No. 45. Connecticut Department of Energy and Environmental Protection, Natural Resources Center, Geographic Information Center.

- **Streamflow:** The following list of bulletins are available at DEEP Maps and Publications;

Cervione, M. A., R. L. Melvin and K. A. Cyr. 1982. A Method for Estimating the 7-Day, 10-Year Low Flow of Streams in Connecticut. Connecticut Water Resources Bulletin No. 34. Prepared by U.S. Geological Survey in Cooperation with Connecticut Department of Energy and Environmental Protection.

Weiss, L. A. 1983. Evaluation and design of a Streamflow-Data Network for Connecticut. Connecticut Water Resources Bulletin No. 36. Prepared by U.S. Geological Survey in Cooperation with Connecticut Department of Energy and Environmental Protection.

Cervione, M. A. 1982. Streamflow Information for Connecticut with Applications to Land-Use Planning. Connecticut Water Resources Bulletin No. 35. Prepared by U.S. Geological Survey in cooperation with Connecticut Department of Energy and Environmental Protection.

- Additional Water Resources Information, Data, Publications, etc. is available through the following web addresses:
USGS Water Resources of the United States
water.usgs.gov/
USGS Water Resources Division – Connecticut ct.water.usgs.gov/

USGS Techniques of Water-Resources Investigations Reports may be obtained from water.usgs.gov/pubs/twri/

- Aerial Photographs: DEEP OLISP 860-424-3034
 - CTECO internet site maintained by the University of Connecticut [www.cteco.uconn.edu]
- Historic Aerial Photographs:
 - ◆ State Library: 860-566-4301
 - ◆ Connecticut Historical Aerial Photography (Map & Geographic Information Center at UCONN) magic.lib.uconn.edu/
 - ◆ CTECO internet site maintained by the University of Connecticut [www.cteco.uconn.edu]
- Tidal Wetland Boundary Maps: DEEP Maps and Publications 860-424-3555
- Wetlands of Connecticut: DEEP Maps and Publications 860-424-3555
- National Wetland Inventory Maps: DEEP Maps and Publications 860-424-3555
- 2002 Connecticut Guidelines for Soil Erosion and Sediment Control www.ct.gov/deep/soilerosionsedimentcontrol
- Drainage Basins: DEEP Maps and Publications, "Natural Drainage Basins in Connecticut", 1988; www.ct.gov/deep/gis
- Archeological or Historical Landmarks: Town Hall or Connecticut Historical Commission
- Land Conservation Areas: Town Hall and/or DEEP Maps and Publications; "Open Space Map"
- Soil Series Description and Delineation:

County Soil and Water Conservation District Offices and the United States Department of Agriculture Conservation Service Office

- US Army Corps of Engineers
 - ◆ Regulatory Program www.usace.army.mil/inet/functions/cw/ecwo/reg/
 - ◆ New England District, Regulatory Office
696 Virginia Road
Waltham, MA 02254
Concord, MA 01742-2751
www.usace.army.mil
800-343-4789; 978-318-8335; 978-318-8338
 - ◆ Wetlands Regulatory Assistance Program el.erdc.usace.army.mil/wrap/wrap.html
- Copies of the Structures, Dredging and Fill Statutes, CGS sections 22a-359 through 22a-363f; the Tidal Wetlands Act, CGS sections 22a-28 through 22a-35a; and the Connecticut Coastal Management Act, CGS sections 22a-90 through 22a-112: DEEP OLISP 860-424-3034
- State and federal statutes and regulations are available for review at various locations:
 - On the web:
 - State Statutes: www.cga.ct.gov/asp/menu/Statutes.asp
 - DEEP website for Statutes and Regulations: www.ct.gov/deep/laws-regs
 - US EPA website for Federal Laws, Regulations (Code of Federal Regulations; CFR), Policy, Guidance and Legislation: www.epa.gov/lawsregs
 - Book Format:
 - State Library (Hartford)
 - University Law Schools (UCONN-Hartford, Yale)

- Superior Courthouse Libraries (located throughout the state)
- Town Halls and Libraries (statutes)

Affirmative Action, Equal Employment Opportunity and Americans with Disabilities

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). Please contact us at (860) 418-5910 or deep.accommodations@ct.gov if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint.

Figure A: Section 401 Water Quality Example

USGS Quadrangle Map: Clinton
Map Scale: 1:24,000 (1"=2,000')

- Boundary of site
- Areas of regulated activities on site
- Proposed well field (with site boundary)
- Proposed well (site boundary too small to show)
- Project
- Multiple project areas

