



**Connecticut Department of
Energy & Environmental Protection**
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

Instructions for Completing the Permit Application for Wastewater Discharges from Manufacturing, Commercial, or Other Activities

Use these instructions to complete the permit application form DEEP-WPED-APP-100; 2) prepare supporting documents and publish the applicant's notice of permit application if applicable. 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

This permit program, administered by the Water Permitting and Enforcement Division (WPED) of the Department of Energy and Environmental Protection (DEEP), regulates discharges to the waters of the state, including surface water, ground water and Publicly Owned Treatment Works (POTW) (which includes sanitary sewers) to prevent pollution of the waters of the state and to prevent adverse impacts upon the operation of POTWs.

The subject application must be completed and submitted for wastewater discharges from Manufacturing, Commercial, Mining, or Silvicultural Activities, Landfills, and Concentrated Aquatic Animal Production Facilities. Use different, specific applications for Wastewater Discharges from Agricultural Activities, Subsurface Sewage Treatment and Disposal Systems (includes septic systems), Domestic Sewage Treatment Works (includes discharges from POTWs and privately owned domestic sewage treatment facilities). Refer to www.ct.gov/deep/waterdischargepermitapps for the specific wastewater discharge applications.

DEEP uses both individual and general permits

to regulate discharges. Individual permits are issued directly to an applicant. General permits are issued to authorize similar minor discharges by one or more applicants. Authorization and registration requirements under a general permit are specified by each general permit. Since the general permit process is quicker, hence less costly, be sure to check the [List of General Permits](#) (DEEP-FS-004) in order to determine whether any of your discharges may be eligible for authorization under a general permit before applying for an individual permit. The permit application form (DEEP-WPED-APP-100) and these instructions must be used to apply for individual permits. Other short processes such as emergency and temporary authorizations may apply to your proposed discharge. Consult the *Short Permit Process Fact Sheet* (DEEP-FS-003) or call WPED at 860-424-3018 for more information.

DEEP issues individual discharge permits in three major categories depending on where the wastewaters are discharged; permits for discharges to surface water, permits for discharges to ground water, and permits for discharges to a POTW. DEEP will issue up to three permits for a single site, one for each type of receiving water utilized. A single permit

application form (DEEP-WPED-APP-100) may be used to apply for up to three permits for all discharges originating from the same site. DEEP will include all discharges to a common type of receiving water (e.g., surface waters) in a single permit.

- **The Surface Water Discharge Permit Program**, also known as the National Pollutant Discharge Elimination System (NPDES) under Federal Law, regulates discharges into surface waters, directly or through municipal *storm* sewer drainage systems or through other drainage systems such as wetlands or swales.
- **The Ground Water Discharge Permit Program** regulates discharges to ground water from any source, including but not limited to large septic systems, agricultural waste management systems and all waste landfills. Use separate applications for Wastewater Discharges from Agricultural Activities or Subsurface Sewage Treatment and Disposal Systems (includes septic systems).
- **The Pre-treatment Permit Program** regulates discharges to a POTW, through municipal sanitary sewer drainage systems or through *combined storm and sanitary* sewer systems. All wastewaters, (excluding domestic sewage), hauled directly to a POTW will require either a pre-treatment permit or will be regulated under the POTW's permit. The Connecticut Department of Public Health and Addiction Services regulates domestic sewage hauled directly to a POTW.

Who Needs a Permit?

Any person or municipality that discharges water, substance or material into the waters of the state, which includes surface waters, storm drains, ground waters, and POTWs, is required to obtain a permit from DEEP prior to initiating the discharge.

Any person or municipality who proposes to

initiate, create, originate or maintain a *new* discharge must submit a completed permit application to DEEP and obtain a permit from DEEP prior to discharging.

Any person proposing to continue a previously permitted discharge, must apply for renewal of the existing permit by submitting a sufficient permit application at least one hundred eighty (180) days prior to the expiration date of the existing permit. If your application is or may be untimely, (i.e. submitted less than 180 days before the expiration date), please refer to section 22a-6j of the Connecticut General Statutes (CGS). If a renewal application is not submitted prior to the expiration date of the existing permit, then the existing permit is deemed to have expired.

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. In some cases, permit modifications may require submittal of parts of or up to an entire individual permit application. For further information concerning license transfers please contact the Permit Assistance Office at 860-424-3003. For further information concerning modifications, please contact WPED at 860-424-3018.

Notice of Permit Application

Section 22a-6g of the Connecticut General Statutes imposes public notification requirements on applicants for certain permits 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 the WPED at 860-424-3018.

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 EFFECT]**

Notice is hereby given that **[INSERT NAME OF APPLICANT HERE]** (the "applicant") of **[INSERT ADDRESS OF APPLICANT HERE]** will submit to the Department of Energy and Environmental Protection an application under section 22a-430 of the Connecticut General Statutes for a permit to initiate, create, originate or maintain a discharge of water, substance or material to 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 at **[INSERT THE STREET ADDRESS OR IF NOT AT A STREET ADDRESS GIVE THE SPECIFIC LOCATION OF THE PROPOSED ACTIVITY WITH REFERENCE TO FIXED LANDMARKS E.G., ROADWAY INTERSECTIONS, BRIDGES, OR OTHER STRUCTURES]**. The proposed activity will potentially affect: **[INSERT ANY NATURAL RESOURCES POTENTIALLY AFFECTED BY SUCH ACTIVITY (I.E., WETLANDS; WATERCOURSES, BY NAME; GROUND WATERS; AIR; LAND; TIDAL WETLANDS)]**.

Interested persons may obtain copies of the application from **[INSERT 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, Bureau of Materials Management and Compliance Assurance, Water Permitting & Enforcement Division, 79 Elm Street, Hartford, CT 06106-5127 860-424-3018 from 8:30 to 4:30 Monday through Friday. Please call in advance to schedule review of the application.

How To Apply

Your permit application must include the following:

- *A Permit Application for Wastewater Discharges from Manufacturing, Commercial, or Other Activities* (DEEP-WPED-APP-100) and all supporting documents;
- Submit one copy of the application package per permits you are applying for. For example, if you are applying for permits to discharge to three types of receiving water (i.e., surface water, ground water, or POTW) submit one original and three copies of the application package;
- The applicable initial fee, paid by check or money order, made payable to the "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 package to:

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

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

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 permit 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 permit application form, along with the corresponding part number and question number indicated on the permit application form. You should retain a copy of all documents for your files.

Permit Application Instructions (DEEP-WPED-APP-100)

Please read the application form and instructions carefully. They have been designed to obtain specific information and any information that is missing or unclear will cause delays in the review process. If any questions are not applicable to your specific activity, please enter "N/A" in the space provided. 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.

Check the "Available Resources" section at the end of these instructions for assistance in obtaining guidelines, maps, etc. which are referenced in these instructions.

Part I: Application Type and Description

In the "Type of Receiving Water" column, identify the type of receiving water for the discharge (i.e., surface water, POTW, and/or ground water) by checking the appropriate box. In the row corresponding to the type of receiving water, identify the "Application Type by placing an "N", if you are applying for a new permit, an "R", if you are applying for a renewal of an existing permit, and an "M", if you are applying

for a modification of an existing permit. 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 in the space provided.

If you are applying for a new individual permit for an activity formerly authorized by a general permit or an authorization, identify the general permit or authorization numbers in the space provided.

Under 'Types of Discharge(s)', indicate the type of discharge(s) going to the indicated receiving water. The types of discharges which can be included in the subject application are wastewater discharges from Manufacturing, Commercial, Mining, Silvicultural Activities, Landfills and Concentrated Aquatic Animal Production Facilities. Be specific in describing your type of discharge, for example, state 'metal finishing' vs. 'manufacturing'.

- Discharges from Manufacturing, Commercial, Mining, or Silvicultural Activities include wastewater which comes into direct contact with, or results from the production, use or handling of any process, raw material or intermediate or final product, by-product or waste product (process wastewater). Process wastewater does not include non-contact cooling water, domestic sewage, blowdown from heating and cooling equipment, stormwater, or wastewater from agricultural activities. These should be listed separately under Part V: Facility Information, item #3 on the application. Please note that these types of discharges may be eligible to be authorized by applicable general permits. Be sure to check the [List of General Permits](#) (DEEP-FS-004) in order to determine whether any of your discharges may be eligible for authorization under a general permit before applying for an individual permit. [section 22a-430-3(a) of the Regulations of Connecticut State Agencies (RCSA)]
- Discharges from *Solid Waste Disposal Areas or Landfills* require a ground water

discharge permit, in addition to any surface water or POTW discharge permits, if applicable. A landfill must also obtain an individual permit for its stormwater discharge(s) or, if eligible, register for the stormwater general permit. "Solid waste disposal area" means "any location, including a landfill or other land disposal site, used for the disposal of more than ten cubic yards of solid waste." [CGS section 22a-207]

- Discharges from *Concentrated Aquatic Animal Production Facilities* are "Fish Hatchery and Farm Wastewaters" which means "wastewaters generated by the breeding and/or raising of fish or other aquatic organisms". [RCSA section 22a-430-6(b)]

Use different specific applications for Wastewater Discharges from Agricultural Activities, Subsurface Sewage Treatment and Disposal Systems (includes septic systems), Domestic Sewage Treatment Works (includes discharges from POTWs and privately owned domestic sewage treatment facilities). Refer to www.ct.gov/deep/waterdischargepermitapps for the specific wastewater discharge applications.

Part II: Fee and Public Notice Information

1. *Fee Information* - An initial fee of \$1,300.00 for new or renewal permit applications or \$940.00 for permit modification applications, must be included with your application package for each permit that you are applying for, in order for the application to be processed. If you are applying for permits to discharge to more than one type of receiving water (i.e., surface water, ground water, or POTW), remember that DEEP will be issuing a separate permit for each type of receiving water, therefore please submit a \$1,300.00 initial fee (or \$940 modification fee) for *each* permit with your application package. The information contained in Part I will be used by DEEP to determine subsequent fees, if any, for your

application. The remaining balance for each permit application fee will be invoiced at a later date. Although application fees can vary widely depending on the flow and category of discharge, typical permit application fees for significant industrial users range from \$7,600.00 to \$14,950.00.

The initial fee as shown on the application form must be submitted with the application. If the applicant is a municipality, the 50 percent fee discount applies.

DEEP will not process an application and will deem such application to be incomplete until the required initial fees have been paid.

2. *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 the Secretary of State's website:

www.concord-sots.ct.gov/CONCORD/index.jsp). 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 town/city/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.

1. *Applicant* - Complete the information concerning the applicant.
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. *Facility Operator* - List the entity responsible for *managing* the facility operation. The operator may be different than the owner. Examples of separate owner and operator are a lessee of the land or buildings on which the facility is located, or a person under contract specifically to conduct the day-to-day business of the facility.
6. *Facility Owner* - Please list the owner of the facility at which the activity generating the discharge is to be conducted.
7. *Property Owner* - Please list the owner of the site at which the activity generating the discharge is to be conducted.
8. *Engineers or Consultants* - Please list engineers or consultants employed or retained to assist in preparing the application or to design or construct the activity, which will generate the proposed discharge(s).

Part IV: Site Information

1. Site Name and Location

The site name, if applicable, should be the name by which the site is commonly known and/or uniquely identified.

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 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 River Street, approximately 1000 feet north of its intersection with Bear Swamp Road.”

2. *Indian Lands*

Check the appropriate box to specify if the site is or will be located on federally recognized Indian lands.

DEEP strongly encourages all applicants to conduct a review of the following Coastal, Natural Diversity Data Base and Aquifer Protection 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.

3. *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	Westport
Groton (City and Town of)	Norwich	
	Old Lyme	

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 E.

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.

4. *Natural Diversity Data Base (NDDB) - Endangered And Threatened Species*
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.

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 or is located less than ½ mile upstream or downstream of such an area. If applicable, prior to submitting the subject application, you must submit a *Request for NDDB State Listed Species Review*” form (DEEP-APP-007) to NDDB. Please note that NDDB review generally takes 4 to 6 weeks. You must then submit a 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 F.

5. *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.

6. *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 G. The municipality where the site is located may have information concerning such restrictions.

Part V: Facility or Activity Information

1. List the principal raw materials used, products produced and/or services provided at this facility. [RCSA section 22a-430-4(c)(4)]
2. List up to four SIC codes applicable to the facility or type of business conducted by the applicant. The first code given should be the primary SIC code, i.e., the code which identifies the type of activity the facility engages in at least 50% of the time.

SIC codes can be determined from the *Standard Industrial Classification Manual* produced by the Executive Office of the President, Office of Management and Budget and sold by the National Technical Information Service. A copy of this book is available at most local public libraries.

3. Identify in the table, for all wastes, the type, quantity, method of disposal and the name of the facility or hauler used for disposal, and/or the name of the license if authorized by a different license. The types of waste include wastewaters which are not included as discharges that are the subject of this permit application (e.g., wastewaters hauled away or authorized by a different permit). For process wastes include screenings, sludge, solvents and other chemicals. Identify the amount of waste produced with the length of time associated with such production (e.g., 20 gallons per day). Identify the method of disposal (i.e., incineration, waste hauler, authorization

under a different permit). In the far right column identify, the name of the facility or waste hauler used for disposal, and/or the name of the license if authorized by a different permit (e.g., Industrial Stormwater General Permit or Non contact Cooling and Heat Pump Water General Permit, etc.) [RCSA section 22a-430-4(c)(12)]

4. Itemize in the table, by name and maximum quantity, the toxic or hazardous substances, including oil and petroleum liquids, stored on site or expected to be used or present in a raw material, intermediate or final product or byproduct, or used as a chemical additive or treatment substance, in quantities greater than five gallons. See Appendix B and D of RCSA section 22a-430-4, and Title 40 of the Code of Federal Regulations (40 CFR) Part 261 Appendix VIII and 40 CFR Part 116.4 for a listing of toxic and hazardous substances. For substances stored in quantities of five gallons or less, a general description by category (i.e., acids, bases, cyanides, organic chemicals and heavy metals) with an estimated total by category should be provided. [RCSA section 22a-430-4(c)(9)]

The storage locations for the substances listed must also be shown on the Site and Floor Plans that must be submitted with this application as Attachment F. [RCSA section 22a-430-4(c)(5)]

Also, identify whether the substance is listed in the Toxic Chemical Release Inventory (TRI) rule under Section 313 of the Emergency Planning and Community Right-to-Know Act by checking the box in the TRI column. For an updated list of toxic chemicals call the U.S. Environmental Protection Agency's RCRA, Superfund & ECRA Hotline at 1-800-424-9346 or visit their webpage www.epa.gov (TRI Chemical List).

5. If you are subject to requirements or compliance schedules from a federal, state or local authority which affect the discharges

which are the subject of your permit application, or for construction, upgrading or operation of the wastewater treatment system, please identify on the table the requirement or schedule and describe the project or process change(s). Also, list the required and projected final compliance dates. [RCSA section 22a-430-4(c)(19)]

Part VI: Supporting Documents

All permit applications must include Attachments AA through X, 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

All permit applications must include, on the form provided by DEEP, a completed *Executive Summary* (DEEP-WPED-APP-101) as Attachment A.

Attachment B: Applicant Background Information

A completed *Applicant Background Information Form* (DEEP-APP-008) must be submitted as Attachment B for all permit applications.

Attachment C: Applicant Compliance Information Form

Section 22a-6m of the Connecticut General

Statutes 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 C.

Attachment D: United States Geological Survey (USGS) Map

Submit as Attachment D an 8 1/2" x 11" copy of the relevant portion or an 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. See Figure A, at the end of these instructions, for an example of how a USGS Map must be labeled when submitted.

For surface water discharges only: In addition to indicating the exact location of the project site and the proposed activities, please provide the latitude and longitude to the nearest fifteen seconds of each point at which the discharge enters the surface waterbody(ies) and show, as labeled dots on the topographic map, each numbered discharge point. If the discharge enters a storm drain indicate on the map the point of discharge to the storm drain and to the surface water, but provide latitude and longitude at the surface water entry only. You must also complete the separate form, provided by DEEP, *Latitude and Longitude* (DEEP-APP-003) giving the latitude and longitude of each

numbered discharge point and submit it with the USGS Map as Attachment D.

Attachment E: 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 3, to determine if this requirement pertains to you.

Attachment F: 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 F, as explained in Part IV, item 4 of these instructions.

Attachment G: 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 G.

Pollution Prevention Plans Attachments I through L

For discharges previously licensed by DEEP for which Pollution Prevention Plans (Attachments I-1 through L and N) were submitted to DEEP, such documents may be incorporated by reference into an application provided a certification is attached (see Attachment X) indicating that such documents accurately represent the facility and its operations as of the date the application is submitted. For all other discharges, submit up to date plans or plan

checklists and certifications as Attachment I-1 through L, and N, as applicable.

Attachment I-1: Site Plan and Floor Plans

For discharges previously licensed by DEEP for which a Site Plan and Floor Plan were submitted to DEEP, such plans may be incorporated by reference into an application provided a certification is attached (see Attachment X) indicating that such plans accurately represent the facility and its operations as of the date the application is submitted. For all other discharges, submit up to date plans as Attachment I-1.

Site Plan:

Submit as Attachment I-1 a site plan consisting of a legible drawing of the site where the discharge(s) will occur. The site plan must show, at a minimum, a north meridian arrow and the relative locations of all features indicated below:

- the boundaries of the site, and all buildings;
- all intake and discharge locations, including all wells where fluids are injected underground;
- water bodies adjacent to the site and their names;
- roads adjacent to the site and their names;
- catch basins and storm drains on the site and indicate where each basin and drain discharges to;
- monitoring and/or supply wells on site;
- the location of discharges included in this application and for discharges previously authorized by DEEP, all monitoring points;
- all outdoor areas, above and below ground, where virgin and waste liquids (chemicals, oils, solvents, sludges, process wastewaters, etc.) and toxic or hazardous substances are used, stored or handled including loading and unloading areas. [RCSA section 22a-430-4(c)(5)].

Floor Plan:

Include in Attachment I-1 a floor plan consisting of a legible drawing of each building on the site in which production or waste treatment occurs or in which toxic or hazardous substances or oil or petroleum liquids are used stored or handled. The floor plan must show at a minimum, a north meridian arrow and the relative locations of all features indicated below:

- actual and potential sources of discharge including floor drains, doorways, sumps, wells, and indicate where each source discharges to;
- all spill control and containment measures (berms, trenches, sumps, inclined door sills, etc.);
- all indoor fixed treatment areas;
- all indoor areas, above and below ground, where virgin and waste liquids (chemicals, oils, solvents, sludges, process wastewaters, etc.) and toxic or hazardous substances are used, stored or handled including loading and unloading areas.

Attachment I: Operation and Maintenance of Collection and Treatment Systems - Description, Plan Checklist and Certification

Please complete the form provided by DEEP, *Operation and Maintenance of Collection and Treatment Systems: General Description, Plan Checklist, and Certification* (DEEP-WPED-APP-103) and submit it as Attachment I.

Use the following instructions to complete Attachment I

If you are applying for more than one permit and the collection and treatment systems are different for each permit, reproduce and complete the entire form for each permit you are applying for.

Check the appropriate box to identify the type of receiving water for which you are completing the form *Operation and Maintenance of Collection and Treatment Systems: General Description, Plan Checklist, and Certification* (DEEP-WPED-APP-103).

Part A: Please provide a general description of the methods and provisions for the operation and maintenance of the wastewater collection, storage and treatment and control systems [RCSA section 22a-430-4(c)(17)]. Include in the description, at a minimum, a discussion of the items listed as plan elements No. 1, 6, and 9 of the Plan Checklist (DEEP-WPED-APP-103).

Part B: Prepare an Operation and Maintenance Plan for the wastewater collection, storage, treatment and control systems. The plan should consider effective performance of the collection and treatment systems, adequate funding, operator training, laboratory and process controls and quality assurance procedures. Based on the Operation and Maintenance Plan prepared for your application, complete the Operation and Maintenance Plan Checklist. Do not submit the Operation and Maintenance Plan itself; instead submit the completed Operation and Maintenance Plan Checklist and the signed certification certifying that the Operation and Maintenance Plan contains all applicable items listed on the checklist. Include on the certification form, the name and qualifications of the preparer of the Operation and Maintenance Plan. DEEP suggests that the Operation and Maintenance Plan be prepared by the same person who designed the treatment system. Remember that you must keep the Operation and Maintenance Plan on site once the discharge(s) begin. DEEP will notify you if a copy of the Operation and Maintenance Plan must be submitted to review your application.

Attachment J: Solvent Management Plan

Only applications for permits to discharge from Metal Finishing, Electroplating and Electric & Electronic Components operations, where an exemption from TTO monitoring is desired, need to include Attachment J.

The effluent limitation guidelines contained in 40 CFR Part 433, 413 and 469 require that permits for discharges from Metal Finishing, Electroplating and Electric and Electronic Components operations contain a provision requiring Total Toxic Organic (TTO)

monitoring. Permittees from such operations are exempt from TTO monitoring if they have prepared a Solvent Management Plan and that plan has been approved by DEEP. If you wish to apply for an exemption from TTO monitoring, please prepare a Solvent Management Plan and complete the form provided by DEEP, *Solvent Management Plan Checklist and Certification* (DEEP-WPED-APP-104) and submit the plan and the form as Attachment J.

The Solvent Management Plan must demonstrate that the applicant will manage its toxic organic compound containing wastes in a manner which:

1. Minimizes or eliminates the discharge of these compounds to the waters of the state;
2. Does not have any adverse impact on the waters of the state; and
3. Does not result in violations of the appropriate categorical TTO compound specific limits.

Note: If the applicant does not use, generate or introduce any toxic organic compounds into their wastewaters, then the applicant needs only to certify to this fact by checking the appropriate box on the certification form.

Note: Permits for other categories of discharges may include a requirement to monitor for TTO, particularly permits to discharge from Metal Molding and Casting (40 CFR Part 464), Coil Coating (40 CFR Part 465), Aluminum Forming (40 CFR Part 467), and Copper Forming (40 CFR Part 468).

Attachment K: Spill Prevention and Control Plan, Plan Checklist and Certification

Please complete the form provided by DEEP, *Spill Prevention and Control Plan Checklist and Certification* (DEEP-WPED-APP-105) and submit it as Attachment K.

All applications for permits to discharge *process* wastewater as defined in RCSA section 22-430-

3(a) **must** include a copy of the Spill Prevention and Control Plan with Attachment K.

Use the following instructions to complete Attachment K:

Prepare a Spill Prevention and Control Plan. The Spill Control Plan must describe all measures taken to prevent and control unplanned releases during the storage, collection, transfer, transport, treatment, loading and unloading of all toxic or hazardous substances, oils, process wastewaters, solvents, and any other chemicals. [RCSA section 22a-430-4(c)(10)]

Based on the Spill Prevention and Control Plan prepared for your application, complete the Spill Prevention and Control Plan Checklist. Submit the completed Spill Prevention and Control Plan Checklist and the signed certification certifying that the Spill Prevention and Control Plan contains all applicable items listed on the checklist. Include on the certification form, the name and qualifications of the preparer of the Spill Prevention and Control Plan.

Note: If any plan element in the checklist has not been addressed in your Spill Prevention and Control Plan at the time you submit your application, in the space provided next to each element provide: 1) a brief explanation for why it has not yet been addressed and 2) if applicable, a proposed time schedule for when the element will be addressed in your Spill Prevention and Control Plan.

For applications for permits to discharge process wastewaters, remember to submit the plan itself with the checklist and the certification.

Remember that you must keep the Spill Prevention and Control Plan on site once the discharge(s) begin. For applications for permits to discharge wastewaters other than process wastewaters, DEEP will notify you if a copy of the Plan must be submitted to review your application.

Attachment L: Resource Conservation Strategies

Please complete the form provided by DEEP, *Resource Conservation Strategies* (DEEP-WPED-APP-106) and submit it as Attachment L. Complete the form by providing a comprehensive description of the resource conservation practices and measures that will be taken which, to the maximum extent practicable, result in the minimum amount of wastewater discharged. [RCSA section 22a-430-4(c)(11)]

Examples of resource conservation strategies include:

1. Water conservation (e.g., flow restrictors, conductivity controllers, spray and countercurrent rinsing);
2. Resource recovery (e.g., acid recovery via crystallization, spent process bath metals recovery via ion exchange);
3. Waste recycling (e.g., food processing residuals for agricultural feed, using heat exchangers and cooling towers for water reuse and energy recovery);
4. Wastewater reuse (e.g., reuse of treatment effluent or cooling water for rinsing or tumbling); and an evaluation of eliminating the discharge through recycling or reuse.
5. Material or product substitution (e.g., the use of non-cyanide plating solutions, trivalent chromium instead of hexavalent chromium solutions, the use of titanium anodes instead of lead anodes for anodizing operations, propylene glycol instead of ethylene glycol, aqueous cleaning instead of solvent cleaning/degreasing).

For further information or technical assistance on pollution prevention, recycling or source reduction, please call the Office of Pollution Prevention at 860-424-3297.

Attachment M: Line Drawing and Process Flow Diagram

Part A: Line Drawing

Include a line drawing of the water flow through the facility, as Attachment M. The line drawing must show:

- the intake source (e.g. well, city water, river);
- all points of chemical addition into any treatment units;
- sampling and flow meter locations;
- all separate production operations with intake and discharge points of each operation;
- treatment units with intake and discharge points of each unit;
- a water balance that indicates approximate average and maximum flows at intake and discharge points of all separate production operations, treatment units and between processes.

Line drawings may vary with complexity provided all the information requested above is included. [RCSA section 22a-430-4(c)(15)]

Part B: Process Flow Diagram

Applications for permits to discharge from activities listed as primary industry categories in Appendix A of RCSA section 22a-430-4 must include, with Attachment M, a flow diagram showing those processes generating wastewater. The process flow diagram should identify each process step or tank, its work flow position, size, contents, ultimate disposal location and the discharge rate of its contents. Tank size is mandatory for batch discharges only. Include in the process flow diagram any treatment units integrated with a process. Indicate in the diagram if countercurrent rinsing is applied and indicate the direction of the countercurrent rinsing. A representative example of a process flow diagram for a copper, nickel, chrome plating line is provided as Figure B, at the end of these instructions. Other diagram formats are

acceptable provided all the information requested above is included.

Attachment N: Description and Plans and Specifications of Collection, Treatment and Disposal Systems

For discharges previously licensed by DEEP for which Collection, Treatment and Disposal System plans were submitted and approved by DEEP, such plans may be incorporated by reference into an application provided a certification is attached (see Attachment X) indicating that such plans accurately represent the facility and its operations as of the date the application is submitted. For all other discharges, submit up to date plans as Attachment N with your application and, if applicable, note any modifications. For discharges from the Primary Industry Categories listed in Appendix A of RCSA section 22a-430-4, the up to date plans must be prepared by a professional engineer licensed to practice in Connecticut.

Submit as Attachment N: 1) a complete description of all collection, treatment and disposal systems proposed or installed to collect, treat and dispose of the wastewaters which are the subject of this application and 2) preliminary plans and specifications of such systems. [RCSA section 22a-430-4(c)(16)]

If this application is to discharge to more than one type of receiving water, and different collection, treatment and disposal systems are to be used, please identify on each document submitted in this attachment the type of receiving water (surface water, POTW, ground water).

The submission of plans and specifications of collection, treatment and disposal systems are required as follows:

Preliminary Plans and Specifications:
Provide a detailed schematic, describing the proposed means of collecting, treating and disposing of the wastewaters, which are the subject of this application. For discharges from the Primary Industry Categories listed in

Appendix A of RCSA section 22a-430-4, it is recommended that a professional engineer licensed to practice in Connecticut prepare preliminary plans.

Final Plans and Specifications:

In general, if the final decision on an application is to issue the requested permit, final plans and specifications for the collection, treatment and disposal systems must be submitted for approval prior to permit issuance, unless DEEP notifies you that this requirement has been waived pursuant to CGS section 22a-430(j) or regulations adopted thereunder. For applications that are exempt from the public notice requirement under RCSA section 22a-430-2, final plans and specifications for the collection, treatment and disposal systems should be submitted immediately following issuance of the tentative determination to issue the requested permit. For such applications, DEEP will issue an approval of the plans and specifications simultaneously with a final decision to issue the requested permit. For discharges from the Primary Industry Categories listed in Appendix A of RCSA section 22a-430-4, final plans and specifications must be prepared by a professional engineer licensed to practice in Connecticut.

Attachment O: Discharge Information

Please complete and submit Part A and Part B, Tables 1 through 4 of the form provided by DEEP, *Discharge Information* (DEEP-WPED-APP-107) for **each** discharge that is the subject of this application, as Attachment O. Photocopy these pages as necessary. For applications for renewals of existing permits, please provide your existing permit number in the space provided. Check to ensure that all discharges have been identified with discharge serial numbers as described below and that separate copies of Part A and Part B, Tables 1 through 4 have been completed for **each** discharge. Table 5 of Part B must be reproduced and completed, if applicable, for each permit that you are applying for. Table 6 of Part B applies only to discharges to surface water. Table 7 of Part B need only be completed once for all the

discharges, which are the subject of this application.

Discharge Information:

Part A: General Discharge Information

Discharge Serial Number: Please number each discharge consecutively starting with discharge serial number 101, for discharges to a surface water; 201 for discharges to a POTW; and 301 for discharges to ground water and identify each page of Attachment O with the appropriate serial number in the space provided. For discharges previously authorized by DEEP, use the same serial number assigned in the previous permit for each discharge.

Question 1 is to be completed for discharges to surface water only.

- 1a. Check the appropriate box to identify whether the discharge enters the surface waterbody directly or through a municipal storm sewer or through other drainage systems such as swales, etc. (Please specify the drainage system in the space provided.)
- 1b & c. The name and surface water classification of the surface waterbody the discharge first enters into may be identified on the "Water Quality Classification Map of Connecticut" produced in 1987 by DEEP. The map may be purchased from DEEP Maps and Publications (860-424-3555) and is also available for review at the DEEP File Room located on the store level at 79 Elm Street, Hartford. [RCSA section 22a-430-4(c)(24)]

Question 2 is to be completed for discharges to a POTW only.

2. Please call the local sewer authority for the name and facility ID number of the POTW to which the discharge is/or will be connected and for information about any local approval from the POTW for the discharge. Their telephone number can be found in the blue pages of the telephone directory. [RCSA section 22a-430-4(c)(24)]

If the discharge contains a substance, which, in the absence of a wastewater discharge permit issued by the DEEP, would be a hazardous waste under 40 CFR Part 261, the permittee must satisfy the notification requirements under 40 CFR Part 403.12 (p) and (j). These notification requirements do not apply to pollutants already reported under the self-monitoring requirements in your permit. For a copy of these notification requirements, please call WPED at 860-424-3018.

Question 3 is to be completed for discharges to ground water only.

- 3a. The ground water classification of the site or of the location of the discharge outlet, if it is not located on site, may be identified on the "Water Quality Classification Map of Connecticut" produced in 1987 by DEEP. The map may be purchased from DEEP Maps and Publications (860-424-3555) and is also available for review at the DEEP File Room located on the store level at 79 Elm Street, Hartford.
- 3b. The name and surface water classification of the surface waterbody where the ground water of the site or of the area where the discharge outlet is located, immediately enters into. The watershed area where the discharge outlet is located may be identified on the "Water Quality Classification Map of Connecticut".
4. In the spaces provided enter:
 - the average daily flow. The average daily flow means an average of all total daily flows measured during any calendar month. [RCSA section 22a-430-4(c)(6) - (7)] The total daily flow means the total flow of wastewater over an operating day.
 - the maximum daily flow. The maximum daily flow means the greatest volume of wastewater to be discharged over an operating day, not to exceed the design flow rate.

- the date the discharge began or will begin.
5. Check yes or no to indicate whether the discharge is continuous. A continuous discharge means a discharge, which occurs without interruption throughout the operating day, except for infrequent stoppages for maintenance, process changes, or other similar activities. If the discharge is continuous enter in the space provided:
 - the average number of hours per day the wastewater is discharged.
 - the maximum number of hours per day the wastewater is discharged.
 6. For other than a continuous discharge (batch, intermittent or seasonal discharges), enter in the space provided:
 - the average number of hours per event the wastewater is discharged.
 - the maximum number of hours per event the wastewater is discharged.
 - the amount of wastewater discharged during a specified time period, its flow rate and frequency of occurrence. [RCSA section 22a-430-4(c)(8)]
 7. Describe each process or activity, which contributes to the discharge and all the wastes which result from each process or activity. If the discharge is comprised of wastewater from more than one process or activity, please describe each individual process or activity and its associated wastes. [RCSA section 22a-430-4(c)(6)]
 8. Process and/or Treatment Substances: In the table provided, please list the trade or common name of the substances used in generating this wastewater, identify any toxic or hazardous substances contained in each substance listed and list results of any aquatic toxicity tests conducted on the substance. Refer to Material Safety Data Sheets (MSDS) provided by the vendor of the substances and the vendors themselves

to determine the presence of toxic and hazardous substances, their concentration and whether they are used in the manufacture of the substance. Please do not submit the MSDS sheets unless requested. You should not rely solely on the MSDS information to determine whether a substance used in generating the wastewater contains toxic or hazardous substances. See Appendix B and D of RCSA section 22a-430-4, and 40 CFR Part 261 Appendix VIII and 40 CFR Part 116.4 for a listing of toxic and hazardous substances.

- 9a. Determine whether the discharge is described by any discharge categories listed in Appendix A, "Primary Industry Categories" of RCSA section 22a-430-4.
- 9b. Determine whether any treatment requirement established in RCSA section 22a-430-4(s) applies to the discharge.

If you answer yes to question 9a, fill out the table in the form by listing the name of the category in the left column. If you answer yes to question 9b, cite the section of the regulations (e.g., "RCSA section 22a-430(s)") in the left column, with the name of the category. In the right column, cite the specific subsection of the regulations.

- 10a. Determine whether there is an effluent limitation, standard, guideline, or categorical pretreatment standard established in 40 CFR Parts 400-471 or elsewhere pursuant to 301, 306, 307, 318, 405 of the Clean Water Act, applicable to the discharge.

If you answer yes to question 10a, fill out the table in the form by listing the name of the applicable category and citing the section in the code of federal regulations (CFR) that is applicable in the left column. In the right column, cite the appropriate subpart of 40 CFR.

- 10b. If effluent limitations have been established in the applicable discharge category and are expressed in terms of production, complete

the table by listing the name of the discharge category, the name and quantity of product produced per day, a description of the process or operation which produces the product, including all materials used, and the total number of cycles in which the product passes through the process. For existing discharges, list the quantity which represents an actual measurement of your average or maximum level of production; base the average daily rate of production on a reasonable measure of actual production at the facility not on the design production capacity. For new discharges, list the quantity, which represents the projected average or maximum level of production. (Indicate in the table whether the production figures given are average or maximum levels.) Express the production in the terms and units used in the applicable discharge limitation.

For specific guidance on how to determine the production rate, consult the applicable federal effluent guidelines and standards (40 CFR Parts 400-471) as well as the Technical Development Documents for industrial discharge categories with production-based limitations. Production-based limitations have been adopted for the following categories: Aluminum Forming; Battery Manufacturing; Coil Coating (including Can Making); Copper Forming; Iron and Steel Manufacturing; Nonferrous Metals Manufacturing; Ferroalloy Manufacturing; and Metal Molding and Casting (Foundries).

Part B: Discharge Analysis Tables 1 – 4

All applicants (for new permits and renewals of existing permits) must complete Tables 1 through 4 for each discharge. An applicant must analyze the discharge for all substances listed in Schedule A of these instructions, according to the applicable discharge category. All applicants must include the results of *all* analytical data obtained during the previous two years on discharge samples which were collected and analyzed using methods specified under 40 CFR Part 136.

New Discharges:

Permit applicants for new discharges must complete Tables 1 through 4 using scientific calculations to project expected discharge characteristics, or using information from similar discharges. Refer to Schedule A of these instructions for a listing of the substances that your discharge *must* be analyzed for depending on the discharge category.

Previously Licensed or Existing Discharges:

Permit applicants for renewal of existing discharges or for previously licensed discharges must complete Tables 1 through 4 using analytical data based on actual discharge quality. Refer to Schedule A of these instructions for a listing of the substances that your discharge *must* be analyzed for depending on the discharge category. For substances that were monitored in the existing permit, indicate in the "Daily Composite or Grab Sample Results" column, "PP" for Permit Parameter. For such substances, you need not repeat the analytical results in Tables 1 through 4, as long as such results are provided in Attachment W of this application.

Table 1: All applicants must complete Table 1. For discharges of non-contact cooling water, heat pump wastewater and blowdown from heating and cooling equipment provide analysis for substances 3, 5, 6, and 11 through 16 only. Complete Table 1 by using the instructions below for the following columns; "Daily Composite or Grab Sample Results", "Number of Analyses", and "EPA Method".

Tables 2 through 4: Refer to Schedule A of these instructions to determine whether the discharge results from any of the industrial categories or types of facilities listed. The discharge must be analyzed for all substances and categories of substances listed as applicable to the discharge in Schedule A. In addition, the discharge must be analyzed for all substances listed in Tables 2 through 4 which the applicant knows or has reason to believe or can reasonably ascertain are or will be present in the discharge. All sampling and analyses must be performed, as specified below, in accordance with RCSA section 22a-430-4(c)(20) and for discharges to surface waters, in accordance with

any applicable EPA standard analytical method listed in 40 CFR Part 136.

In addition, to complete Table 4, you must analyze the discharge and provide the results of discharge analyses for the substances listed as items 7 through 27 using "EPA Method 1613: Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS" if:

1. your facility uses or manufactures one of the substances listed as items 1-6 in Table 4, or knows or has reason to believe or can reasonably ascertain that one of these substances may be present in the discharge; or
2. your facility has a discharge resulting from a process regulated under 40 CFR Part 430 - Pulp, Paper, and Paperboard Point Source Category; or
3. you know or have reason to believe or can reasonably ascertain that 2,3,7,8 - Tetrachlorodibenzo-p-dioxin (TCDD) may be present in the discharge.

Complete Tables 1 - 4 by providing the following information for each respective column.

Analysis Required by Schedule A:

If the discharge is required to be analyzed for a substance according to Schedule A, place an "X" in this column by that substance.

Known or Suspected Present:

If the applicant knows or has reason to believe or can reasonably ascertain that a substance is or will be present in the discharge, place an "X" in this column by that substance and provide analytical data for that substance in the appropriate column.

Believed Absent:

If the applicant knows or has reason to believe or can reasonably ascertain that a substance is **not** or will **not** be present in the discharge, place an "X" in this column by that substance.

Note: Be sure to review your inventory of toxic or hazardous substances, raw materials used and treatment substances used, prepared for this application, when completing the "Known or Suspected to be Present" column or the "Believed Absent" column.

Daily Composite or Grab Sample Results:

When quantitative data and chemical analyses are required, RCSA section 22a-430-4(c)(20) requires that:

- grab sample averages must be used for hexavalent chromium, cyanides, total phenols, oil and grease, sulfide and fecal coliform bacteria;
- grab samples must be used for volatile organics;
- for pH, temperature and total residual chlorine, the range during the composite sample must be reported;
- for the remaining substances, a representative daily composite sample of the effluent must be collected and analyzed;
- the maximum concentration for hexavalent chromium, cyanides and total phenols must be reported.

When providing analytical results for a substance that was not detected by the analytical method used, indicate that it was not detected and the minimum detection level of the method used by employing the following format: "ND< X ppb", where "X" is the minimum detection level of the method used.

All samples collected for testing purposes must be taken at the proper location - after the last treatment unit and before mixing and dilution with other waste streams.

All samples must be collected, handled and analyzed in accordance with methods listed or approved under 40 CFR Part 136.

Number of Analyses:

Provide the number of analyses performed for the particular substance in this column.

EPA Method:

For discharges to surface water, analytical methods listed or approved by EPA under 40 CFR Part 136 may be used for substances which are present in the sample in sufficient concentration to allow quantifiable results to be achieved using the method chosen. If analytical results by the method chosen are reported as not detected, or if the applicant has reason to believe that the substances present in the sample are of insufficient concentration to allow quantifiable results to be achieved, the EPA Method listed below must be used for the corresponding substance. Please specify the number of the EPA Analytical Method used in this column.

<i>Parameters</i>	<i>EPA Method</i>
Acid and Base Neutral Compounds ...	625
Aluminum (total)	202.2
Antimony (total).....	204.2
Arsenic (total)	206.2
Barium (total).....	208.2
Beryllium (total).....	210.2
Cadmium (total).....	213.2
Chromium (total)	218.2
Chromium, Hexavalent	218.4
Cobalt (total)	219.2
Copper (total)	220.2
Cyanide (total).....	335.2
Iron (total)	236.2
Lead (total).....	239.2
Manganese (total).....	243.2
Molybdenum (total)	246.2
Nickel (total)	249.2
Pesticides.....	608
Selenium (total).....	270.2
Silver (total)	272.1
Tin (total)	282.2
Thallium (total).....	279.2
Total Residual Chlorine	330.1
Volatile Compounds	624
Zinc (total)	289.1

Schedule A

Testing Requirements for All Discharges

<p>If a discharge results from any of the industrial categories or types of facilities listed in a left block, analytical results must be provided in Attachment O, Part B, Tables 1 through 4 for the substances and categories of substances listed in the right block:</p>	
Primary Industry Categories	Testing Requirements [RCSA section 22a-430-4(c)(20)]
<p>Auto & Other Laundries Coal Mining Electric & Electronic Components Nonferrous Metals Manufacturing Organic Chemicals, Plastic & Synthetic Materials Pesticides Printing and Publishing Pulp & Paper Mills Timber Products Processing</p>	<ul style="list-style-type: none"> • All substances in Table 1; <i>and</i> • The following categories of substances in Table 2: <ul style="list-style-type: none"> • Toxic Metals, Cyanides & Phenols • Volatiles • Acids • Base/Neutrals • Pesticides; <i>and</i> • Any of the substances in Tables 3 and 4 which are known or suspected or can reasonably be ascertained to be present in the discharge
<p>Adhesives & Sealants Aluminum Forming Coil Coating Copper Forming Metal Finishing Electroplating Foundries Inorganic Chemicals Manufacturing Iron & Steel Manufacturing Leather Tanning & Finishing Mechanical Products Manufacturing Paint & Ink Formulation Pharmaceutical Preparations Photographic Equipment & Sales Rubber Processing Soap & Detergent Manufacturing (and Cosmetics) Textile Mills - Except Griage Mills</p>	<ul style="list-style-type: none"> • All substances in Table 1; <i>and</i> • The following categories of substances in Table 2: <ul style="list-style-type: none"> • Toxic Metals, Cyanides & Phenols • Volatiles • Acids • Base/Neutrals; <i>and</i> • Any of the substances in Table 2: Pesticides and Tables 3 and 4 which are known or suspected or can reasonably be ascertained to be present in the discharge
<p>Explosives Manufacturing</p>	<ul style="list-style-type: none"> • All substances in Table 1; <i>and</i> • The following categories of substances in Table 2: <ul style="list-style-type: none"> • Toxic Metals, Cyanides & Phenols • Acids • Base/Neutrals; <i>and</i> • Any of the substances in Table 2: Volatiles and Pesticides and Tables 3 and 4 which are known or suspected or can reasonably be ascertained to be present in the discharge

Schedule A (Continued)

Primary Industry Categories (continued)	Testing Requirements [RCSA section 22a-430-4(c)(20)]
Steam Electric Power Plants	<ul style="list-style-type: none"> • All substances in Table 1; <i>and</i> • The following categories of substances in Table 2: <ul style="list-style-type: none"> • Toxic Metals, Cyanides & Phenols • Volatiles • Acids; <i>and</i> • Any of the substances in Table 2: Volatiles, Base/Neutrals and Pesticides and Tables 3 and 4 which are known or suspected or can reasonably be ascertained to be present in the discharge
Petroleum Refining Plastic Processing	<ul style="list-style-type: none"> • All substances in Table 1; <i>and</i> • The following categories of substances in Table 2: <ul style="list-style-type: none"> • Toxic Metals, Cyanides & Phenols • Volatiles; <i>and</i> • Any of the substances in Table 2: Acids, Base/Neutrals, and Pesticides and Tables 3 and 4 which are known or suspected or can reasonably be ascertained to be present in the discharge
Battery Manufacturing Gum and Wood Chemicals Porcelain Enameling	<ul style="list-style-type: none"> • All substances in Table 1; <i>and</i> • The following categories of substances in Table 2: <ul style="list-style-type: none"> • Toxic Metals, Cyanides & Phenols; <i>and</i> • Any of the substances in Table 2: Volatiles, Acids, Base/Neutrals, and Pesticides and Tables 3 and 4 which are known or suspected or can reasonably be ascertained to be present in the discharge
Discharges of non-contact cooling water, heat pump wastewaters and blowdown from heating and cooling equipment	<ul style="list-style-type: none"> • Substances numbered 3, 5, 6, and 11 through 16 in Table 1; <i>and</i> • Any of the substances in Table 2: Toxic Metals, Cyanides and Phenols, Volatiles, Acids, Base Neutrals and Pesticides and Tables 3 and 4 which are known or suspected or can reasonably be ascertained to be present in the discharge
Other Discharge Categories	<ul style="list-style-type: none"> • All substances in Table 1; <i>and</i> • Any of the substances in Table 2: Toxic Metals, Cyanides and Phenols, Volatiles, Acids, Base Neutrals and Pesticides and Tables 3 and 4 which are known or suspected or can reasonably be ascertained to be present in the discharge

Table 5: Biological Toxicity Testing Data

Complete Table 5 if any biological toxicity testing has been performed, within the last three years or for discharges previously licensed by DEEP since the issuance of such license, on either the discharge(s) which are the subject of this application or on any water(s) receiving the discharge(s). Please provide the existing permit number in the space provided, if applicable.

List in Table 5 the results of individual whole effluent toxicity tests grouped by discharge serial numbers. For each discharge serial number, arrange the test results from the oldest to most recent test results.

Complete the table by providing the following information for each respective column:

Date:

Enter the date on which the sample was collected.

Test Method:

Indicate in this column what type of test method was used to analyze the discharge.

Place a "D" in this column for tests in which an LC50 value was determined. **LC50** is defined as the concentration (%) which kills 50% of the test organisms in an aquatic toxicity test.

Place a "C" in this column for tests in which survival in one effluent concentration was determined.

Species:

Indicate in this column what types of species of organisms were used in the test. List the abbreviations indicated below for each species.

Invertebrates

<i>Abbreviation</i>	<i>Species</i>
DP	Daphnia pulex
PG	Palaemonetes pugio
MB	Mysidopsis bahia

Vertebrates

<i>Abbreviation</i>	<i>Species</i>
CV	Cyprinodon variegatus
PP	Pimephales
promelas	
MM	Menidia menidia
FH	Fundulus heteroclitus

Results:

Enter the results of the test performed in this column. If you indicated that the test method was "D", i.e., an LC50 value was determined, provide both the LC50 value and the NOAEL value. **NOAEL** or "No observable acute effect level" means the highest test concentration (%) in which 90% of the test organisms survive. Label the results as LC50 and NOAEL, respectively. If you indicated that the test method was "C", i.e., survival in one effluent concentration was determined, provide both the % survival and the effluent concentration used

in the test expressed as a percentage. Label the results as concentration and % survival, respectively.

Comparison to Limit:

For discharges previously licensed by DEEP, compare the results of the tests performed to any toxicity limits listed in such previous authorizations. Indicate whether the test results when compared to any toxicity limits listed in the previous authorization would have constituted a result of "Pass", in which case enter a "P" in this column, or "Fail", in which case enter an "F" in this column. If the test results cannot be compared to any toxicity limits listed in the previous authorization or no limit existed on the previous authorization then enter "NA" for not applicable in this column.

Table 6: Discharge Toxicity Evaluation (DTE)

1. Except as provided below, all applicants for permits to discharge to a surface waterbody (i.e., for new and existing discharges) must perform a Discharge Toxicity Evaluation (DTE) in accordance with RCSA section 22a-430-4(c)(21)(B) and submit the results of the DTE as Attachment O, Table 6.
2. Exceptions: A DTE need not be performed or submitted with this application *if*:
 - a. this application for a permit is to discharge sewage from a POTW; or
 - b. a DTE covering all discharges to surface waters at the site has been previously approved by DEEP; or
 - c. the applicant has been specifically exempted from submission of a DTE for the discharge(s), in writing by DEEP, in accordance with RCSA section 22a-430-4(c)(21)(C), prior to submittal of this application.

However, applicants not required to submit a DTE as a result of the exceptions listed in item 2a, b, or c above, must include the

following information as Attachment O, Table 6:

- a. a brief written explanation of the reason a DTE is not being submitted, including the date of submittal and approval of any prior Discharge Toxicity Evaluation for discharges at the site or the date of any written notification from DEEP that a Discharge Toxicity Evaluation is not required.
- b. a copy of a map of the site at a scale of no greater than 1"=100' showing the approximate dilution concentration contours and dimensions of the area of receiving water required to provide total and complete mixing of the discharge with the receiving water under 7Q10 low flow conditions or equivalent for discharges to tidal waters. For information on 7Q10 low flow conditions of a particular surface water body, please call WPED at 860-424-3018.
- c. a brief narrative summary of the results of any approved Discharge Toxicity Evaluation for discharges at the site.
- d. a brief narrative summary describing the results of any Toxicity Identification or Elimination Studies or other investigations conducted to reduce or eliminate the toxicity of the discharge such as implementation of pollution prevention or water conservation plans.
- e. a brief narrative summary of any dye studies or other investigations conducted by the applicant, which further define the mixing characteristics of the discharge in the receiving stream. If the results of any such investigations were provided to DEEP, include the date such results were submitted to DEEP.

Note: The phrase "brief narrative summary" is intended to mean a summary of approximately

500 words or less which provides a basic overview of the information requested.

For permit applications to discharge to a POTW, a DTE may be required depending on the nature of the discharge. In this case, you will be notified by DEEP after submitting your application.

Table 7: Laboratory Identification

Identify any contract laboratory or consulting firm, which performed analyses for substances listed in Tables 1 - 6. Be sure to keep copies of all lab results in case they are required for review at a later date.

Attachment W: Renewal of an Existing Permit or Other Discharges Previously Licensed by DEEP

All applications for renewal of an existing permit or for discharges previously licensed by DEEP must complete the form provided by DEEP, *Renewal of an Existing Permit or Other Discharges Previously Licensed by DEEP* (DEEP-WPED-APP-102) and submit it as Attachment W.

Reproduce and complete the form (DEEP-WPED-APP-102) for each permit that you are proposing to renew. Provide your existing permit number on each page of the form in the space provided.

1. To complete the table "Summary of Discharge Analyses" on page 1 of the form DEEP-WPED-APP-102:

Label each discharge with the same discharge serial number as indicated on your previous permit. Reproduce and complete page 1 of the form for each discharge serial number listed on your previous permit.

Use the results of all individual chemical measurements conducted during the previous two years on discharge samples which were collected and analyzed using methods specified under 40 CFR Part 136. A grab sample average for one monitoring

event constitutes an individual chemical measurement. Do not use other average values, such as average monthly concentration, in preparing the table.

Provide the following information for each respective column:

Name of Permit Parameter:

Enter in the table the chemical name or common name of each parameter monitored.

Average Concentration:

For each parameter monitored, sum the concentrations measured during each monitoring event during the two-year period.

Divide the sum by the number of monitoring events and enter this number in the table. For the purpose of completing this table, assume that any values which were reported by the laboratory as less than the Method Detection Limit are equivalent to such Method Detection Limit.

Maximum Concentration:

For each parameter monitored, enter in the table the highest concentration measured during any sampling event. If the maximum concentration is less than the Method Detection Limit, list such concentration as "< "x" ", where "x" is the Method Detection Limit.

Number of Analyses:

For each parameter monitored, enter in the table the number of monitoring events for such parameter.

Number of Exceedances:

For each parameter monitored, enter in the table the number of times each permit parameter exceeded its permit limit.

Coefficient of Variance, (CV):

To be completed for surface water discharges only.

The coefficient of variance is a statistical measure of variation in a sample set. It is calculated by dividing the sample standard

deviation by the mean, or average concentration as calculated above. The coefficient of variance will be used to determine your water quality based limits for each parameter. By calculating your coefficient of variance, your water quality based limits will be determined on a more accurate representation of your discharge.

$$CV = s/\text{mean}$$

$$\text{where: } s = 3((\sum x^2 - ((\sum x)^2/n))/(n-1))$$

x = individual sample result

x = mean (i.e., average concentration)

n = number of analyses

2. Provide a brief narrative describing any changes in the processes or activities generating or treating the discharge(s), which are proposed and/or have occurred since the date of the last permit application. For example, such information should include the addition, substitution, or elimination of processes, modifications of treatment systems or chemicals added to treat the discharge, pollution prevention measures; and any other changes which may affect the quality or quantity of the discharge(s).
3. If any permit parameter monitored exceeded its permit limit by more than twice the permit limit or more than three times, describe the steps taken to correct the problem.

Attachment X: Certification Regarding Submittal of Previously Approved Documents

1. If your application concerns a discharge previously licensed by DEEP, you may incorporate the documents indicated below by reference into your application by completing the form provided by DEEP, *Certification Regarding Submittal of Previously Approved Documents* (DEEP-WPED-APP-102A) and submit it as Attachment X. Reproduce and complete this

form for each permit that you are applying for.

To incorporate a document by reference, the document must have been submitted to DEEP previously and you must certify that such documents accurately represent the facility and its operations as of the date the application is submitted. You are not required to resubmit such documents unless requested by DEEP. The documents that you may incorporate by reference include the following: Site Plan; Floor Plan; Pollution Prevention Plans which include Operation and Maintenance Plan, Solvent Management Plan, Resource Conservation Plan; and Collection, Treatment and Disposal System Plans and Specifications. Check the appropriate box(es) to indicate which documents you are incorporating by reference and provide the document's final revision date as well as the associated permit number.

2. Provide a general description of all collection and treatment systems of the discharge(s) which are the subject of this application and for which plans and specifications have been previously approved by DEEP.

Part VII: Applicant Certification

After the application has been completed it must be reviewed and signed by both the applicant(s) 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.

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 the WPED at 860-424-3018.

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

www.ct.gov/deep/waterdischargepermitapps

- 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 Resource Maps: Town Hall and/or DEEP Maps and Publications 860-424-3555
- 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
- Ground Water Classification of Connecticut mapping: www.ct.gov/deep/gis (GIS data) or for purchase on CD through DEEP Maps and Publications (860-424-3555)
- Pollution Prevention: A variety of pollution prevention publications are available from DEEP's Office of Pollution Prevention 860-424-3297
- DEEP's Environmental Equity Policy and Environmental Justice Program: 860-424-3044 www.ct.gov/deep/environmentaljustice
- 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) <http://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
- Coastal Policies and Use Guidelines (Planning Report 30): DEEP OLISP 860-424-3034
- Wetlands of Connecticut: DEEP Maps and Publications 860-424-3555
- National Wetland Inventory Maps: DEEP Maps and Publications 860-424-3555
- [Connecticut Guidelines for Stormwater Quality Management](http://www.ct.gov/deep/stormwater), DEEP website: www.ct.gov/deep/stormwater
- [2002 Connecticut Guidelines for Soil Erosion and Sediment Control](http://www.ct.gov/deep/soil)
- 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/lco/statutes-index.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 B: Example of a Process Flow Diagram

Process Name: Copper, Nickel, and Chrome Plating Line

Process Step or # Tank	Work Flow	Contents	Volume	Flow (gallons per minute)	Discharge Location	Comments
1	1	NaOH (Sodium Hydroxide)	50 gal.	-	Dump once/week	To alkaline holding tank - bled in neutralization system @ .25 gpm
2a, 2b	2a-2b	Cold water rinses (CWR)	50 gal.	2.0 gpm	To neutralization tank	Counter current rinsing (CCR)
3	3	Hydrochloric acid (HCL)	50 gal.	-	Dump once/week	To acid holding tank - bled in neutralization system @ .25 gpm
4a, 4b	4a-4b	Hot water rinses (HWR)	50 gal.	1.0 gpm	To neutralization tank	Counter current rinsing (CCR)
5a, 5b identical tanks	either 5a or 5b	Copper plating solution	100 gals each 5a, 5b	-	Never dumped	Spent solution is disposed of by a licensed hauler
6a, b, c	6a-c	Cold water rinses (CWR)	50 gal/each (150 gal. total)	2.0 gpm	To neutralization tank	Counter current rinsing (CCR)
7a, 7b	7a-7b	Nickel plating solution	100 gal.	-	Never dumped	Spent solution is disposed of by a licensed hauler
8a, b, c	8a-c	Cold water rinses	100 gal.	1.5 gpm	To neutralization tank	Counter current rinsing (CCR)
9, 10, 11	All have identical contents	Chromium plating solution	200 gals. per tank	-	Never dumped	Spent solution is disposed of by a licensed hauler
12a, b, c	12a-b-c	Cold water rinses	200 gals. total	2.0 gpm	To chrome hold tank	Batch treated in chrome hexavalent treatment then to neutralization tank

Process Flow

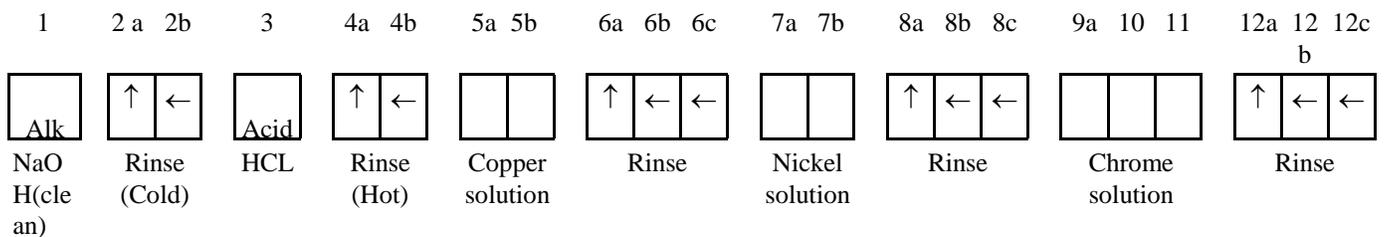


Figure A

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

Sample map indicating how to label the USGS map

* Please include Latitude and Longitude for these locations in your application.

