Instructions for Completing the Facility and Wastewater Treatment System Modification Notification and Request for Approval Form

Use these instructions to complete the 3(i) notification and request for approval form and prepare the necessary supporting documents. These instructions are not a substitute for the requirements of the relevant statutes or regulations. You should review all applicable laws prior to completing your request. Remember that it is your responsibility to comply with all applicable laws.

Introduction

Pursuant to section 22a-430-3(i) of the Regulations of Connecticut State Agencies (RCSA), a permittee must notify the Department of Energy and Environmental Protection (DEEP) of any facility expansion or process change that may result in an increased or new discharge or constitute a new source, and of any expansion or significant changes made to a wastewater collection or treatment system or its method of operation. Unless necessary to correct or avoid an imminent permit violation, the permittee may not undertake the proposed change(s) until DEEP provides written notification that either a permit modification is unnecessary or the permittee must obtain a modification of its permit in accordance with subsection (p) of section 22a-430-4 RCSA.

Upon receipt of DEEP’s written approval of the proposed change(s), the permittee may initiate the approved change(s) in compliance with the terms and conditions of its existing permit.

What Activities Require 3(i) Approval?

Any activity that will result in at least one of the following:

- Discharge of new water, substance, or material
- A new source
- Correction or avoidance of a permit violation
- Expansion or modification of an existing wastewater collection or treatment system or its method of operation

How to File a Request

Complete the Facility and Wastewater Treatment System Modification Notification and Request for Approval form, including all applicable supporting documentation and submit it to:

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

The Facility and Wastewater Treatment System Modification Notification and Request for Approval does not constitute the application required for permit issuance or renewal, transfer, or modification, and must be filed by the permittee prior to initiating a proposed change, unless such change is necessary to correct or avoid an imminent permit violation. In such case, the permittee shall notify DEEP within two hours of making the change or at the
start of the next business day, if the change is made outside normal business hours, the permittee shall submit a completed Notification and Request for Approval within thirty (30) days of the change being made.

DEEP approval of the request does not relieve the permittee of the obligation to obtain any other authorizations that may be required by federal, state or local laws or regulations and does not stay any permit term or condition.

Any questions you may have regarding the 3(i) approval process should be directed to a permit engineer/analyst at (860) 424-3018.

When submitting your request, label your supporting documents as directed on the form and include the facility’s name and permit number on each document. If additional space is necessary to answer a question, please insert additional sheets by the appropriate question. Label each sheet with the facility’s name and corresponding question number.

Part I: Application Type and Description
Check the appropriate box(es) to identify the type of request that is being made. Check only one type of receiving water per application. You may request 1) a facility or process modification, or 2) a wastewater treatment system modification or 3) both types of modifications per application. Provide the existing permit or authorization number and the corresponding expiration date.

Part II: Fee Information
There is no fee for this application.

Part III: Applicant Information
When completing this part, please use the following standards:

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

- Phone - Unless otherwise indicated, the phone number provided should be the number where the corresponding individual can be contacted during daytime business hours.

- Contact Person - Provide the name of the specific individual within the company whom DEEP may contact.

- E-Mail – Applicants must provide an accurate e-mail address when completing their application form. The e-mail address may be used for future correspondence from DEEP to your business.

Part IV: Site Information
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.

Part V: Facility Contact Information
Complete the facility name, address, mailing address and contact information.

For Parts VI and VII, provide the information requested for each discharge associated with the proposed modification(s). Reproduce these parts as necessary for each discharge.

Part VI: Discharge Information
1. Discharge Serial Number – Identify each discharge using the serial numbers assigned in the permit.
2. **Permitted Average Daily Flow (gpd)** – Indicate the average permitted daily flow for the discharge. The average daily flow is the average of all total daily flows measured during any calendar month. The total daily flow means the total flow of wastewater discharged over an operating day.

3. **Permitted Maximum Daily Flow (gpd)** – Indicate the maximum permitted daily flow for the discharge. The maximum daily flow means the greatest volume of wastewater discharged over an operating day.

4. **Design Flow (gpd)** – Indicate the maximum flow allowable for the discharge by design of existing wastewater collection or treatment systems.

5. **Actual Average Daily Flow (gpd)** – Indicate the actual average flow for past 3 months.

6. **Maximum Daily Flow during the previous 12 months (gpd)** – Indicate the maximum daily flow for previous 12 months.

7. **Anticipated Average Flow from new process (gpd)** – Indicate the anticipated average daily flow as a result of the proposed change(s).

8. **Anticipated Maximum Flow from new process (gpd)** – Indicate the anticipated maximum daily flow as a result of the proposed change(s).

**Part VII: Description of Proposed Modification**

Describe each process or activity generating the permitted discharge as it relates to the proposed change(s), the nature of the proposed change(s), and how those changes are expected to affect the discharge. Include a timeline for implementation and expected completion of the proposed process or treatment changes.

1. Provide a brief description of the proposed change(s). Indicate a timeline for the completion and implementation of the proposed change(s).

2. Provide a detailed explanation of any changes made to or proposed for the existing wastewater collection or treatment system or its method of operation for this discharge. Explain the need for implementing each change and the anticipated effects the changes will have on the final discharge.

3. For material substitutions or addition of new chemicals or new sources to the discharge, identify all Appendix B and D substances and all other substances that have the ability to break down into an Appendix B or D substance that can be expected to be present in the discharge as a result of the change(s). A list of Appendix B and D substances is included at the end of these instructions. Analyze the discharge or provide projected concentration data for those substances identified. If actual discharge data is not available, use scientific calculations to project the expected discharge characteristics or use information obtained from similar discharges. All samples collected for testing purposes must be taken at the monitoring location specified in the permit. All samples must be collected, handled and analyzed in accordance with methods listed or approved under 40 CFR Part 136 unless otherwise approved by DEEP. 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 (e.g., “ND<X ppm”, where X is the minimum detection level of the method used).

4. If projected worst-case concentrations of any substance, including any Appendix B or D listed substances or any other substance expected to be present in the discharge, resulting from the proposed change(s) can be expected to cause any of the following, then, the substance is not authorized to be discharged and an alternative to the proposed change(s) must be investigated:
   - Interference with or adverse effect upon the operation of the wastewater collection
and treatment facility or receiving POTW;

- Interference with or adverse effect upon the ability of the treatment system or receiving POTW to handle, use or dispose of sludge;

- The treatment facility or receiving POTW to exceed its influent design loading;

- The discharge to violate any condition of your facility’s permit;

- Pass through of any substance into the receiving waters which may cause or threaten pollution;

- Non-compliance with any of the requirements of section 22a-430-4(t)(2) of RCSA concerning prohibited discharges;

- Inconsistency with the Connecticut Water Quality Standards.

Therefore, provide a demonstration or detailed discussion with supporting documentation that clearly shows that the projected worst-case concentration of any substance addition resulting from the modification will not cause any of the issues listed above.

Provide results of any bench scale studies or additional sampling which may have been performed to support your analysis as Attachment F.

5. This item must only be completed for discharges to a POTW. If the discharge is expected to contain 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, you must provide written notification to the receiving POTW by completing and submitting the POTW Notification Form (DEEP-WPED-APP-002A) to the receiving POTW and attach a copy of the completed POTW notification form as Attachment G.

6. This item must only be completed for discharges to a POTW. If the proposed modification will substantially change the volume or character of pollutants in the discharge, you must provide written notification to the receiving POTW by completing and submitting the POTW Notification Form (DEEP-WPED-APP-002A) to the receiving POTW and attach a copy of the completed POTW notification form as Attachment G.

Part VIII: Summary Discharge Analyses

Provide the following information for each discharge affected by the proposed change(s). Copy the required table as necessary. To complete the table “Summary of Discharge Analyses”, use the results of all individual chemical measurements conducted during the previous two years on discharge samples which were collected to satisfy the self-monitoring reporting requirements of your existing permit.

- **Permit Parameter**: Enter in the table the chemical name or common name of each parameter monitored, as given in your existing permit.

- **Average Concentration**: For each parameter monitored, sum the average monthly concentrations reported during the two-year period. Divide the sum by the number of reporting events and enter this number in the table.

- **Maximum Concentration**: For each parameter monitored, enter in the table the highest concentration reported during the two-year period.

- **Number of Analyses**: For each parameter monitored, enter in the table the number of individual monitoring events for such parameters.

- **Number of Exceedances**: For each parameter monitored, enter in the table the number of times each permit parameter exceeded its permit limit.
If any permit parameter monitored exceeded its permit limit by more than twice the permit limit or on more than three occasions, describe the steps taken to correct the problem.

**Part IX: Supporting Documents**

Check in the appropriate box by each attachment as verification that all attachments have been submitted. When submitting your notification and request form, label your supporting documents as directed on the form and include the facility name and permit number on each document. You should retain a copy of all documents for your permit file.

**Attachment A: Plans and Specifications for Proposed Process/Collection/Treatment Equipment**

Submit Attachment A only if the proposed change requires the alteration of existing or addition of new process, collection system, or treatment system equipment not otherwise identified in the application for your existing permit. Provide detailed engineering schematics describing the proposed process equipment or proposed means of collecting, treating, or disposing of wastewaters subject to your permit.

**Attachment B: Site Plan/Floor Plan**

Submit Attachment B for changes effecting site layout, chemical handling or storage areas, and conveyance system and/or equipment addition or relocation.

**Site Plan:** Submission of the site plan is required only if the change(s) proposed at your facility will affect:

- site boundaries and buildings;
- intake and discharge locations;
- outdoor areas 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.

Clearly label the proposed change(s) on the site plan.

**Floor Plan:** Submission of the floor plan is required only if the change(s) proposed at your facility will affect:

- actual and potential sources of discharge including floor drains, doorways, sumps, wells and the discharge location of each source;
- spill control and containment measures (berms, trenches, sumps, inclined door sills, etc.);
- indoor fixed treatment systems;
- indoor areas 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.

Clearly label the proposed change(s) on the floor plan.

**Attachment C: Line Drawings of Existing and proposed Process/Collection/Treatment Operations**

Include a line drawing of the water flow through the facility before and after all proposed changes are made. Highlight the proposed changes to make them easily identifiable on the drawing. Each line drawing must show the water intake source, 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, and 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.

**Attachment D: Process Flow Diagram of Existing and proposed Process / Collection / Treatment Operations**

Provide a process flow diagram showing those processes generating wastewater before and after all proposed change(s) are made.
Highlight the proposed change(s) to make them easily identifiable on the diagram. Each 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.

**Attachment E: Materials Safety Data Sheets**

Include a copy of the Material Safety Data Sheet for each chemical substance identified in your request. Material Safety Data Sheets need not be provided for Appendix B and D substances, but must be provided for all trade-named compounds.

**Attachment F: Supporting Analysis**

Provide, as Attachment F, results of any bench scale studies or additional sampling which may have been performed to support your analysis as described in Part VII, item 4 of this application.

**Attachment G: Copy of POTW Notification (for pretreatment discharges only)**

Pretreatment dischargers must notify the receiving POTW in advance of any substantial change in the volume or character of pollutants in their discharge to satisfy the general requirements of 40 CFR Part 403.12(j). If the proposed change is expected to elevate the discharge volume above its typical average, present a new substance to the waste stream, or cause the waste stream to be identified as a hazardous waste under 40 CFR Part 261 in the absence of a discharge permit, the Pretreatment discharger must notify the local POTW by completing and submitting the POTW Notification Form (DEEP-WPED-INST-002A) to the receiving POTW and attaching a copy of the completed form as Attachment G.

**Part X: Certification**

After the request form has been completed, it must be reviewed and signed by the permittee and any individual(s) who actually prepared the registration. By their signature, they certify that, to the best of their knowledge and belief, the information contained in the request and the associated attachments, is accurate and complete. Please refer to section 22a-430-3(b)(2) of RCSA for detailed information regarding signatory requirements.

**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 requirements of the Americans with Disabilities Act. Any person with a disability who may need information in an alternative format may contact the agency's ADA Coordinator at 860-424-3194, or at deep.hrmed@ct.gov. Any person with limited proficiency in English, who may need information in another language, may contact the agency's Title VI Coordinator at (860) 424-3035, or at deep.aaoffice@ct.gov. Any person with a hearing impairment may call the State of Connecticut relay number - 711. Discrimination complaints may be filed with DEEP's Title VI Coordinator. Requests for accommodations must be made at least two weeks prior to any agency hearing, program or event.
Appendix B
Table II – Organic Toxic Substances in Each of Four Fractions in Analysis by Gas chromatography/Mass Spectroscopy (GS/MS)

**Volatiles**

1. acrolein 15.8
2. acrylonitrile
3. benzene
4. bromoform
5. carbon tetrachloride
6. chlorobenzene
7. chlorodibromomethane
8. chloroethane
9. 2-chloroethylvinyl ether
10. chloroform
11. dichlorobromomethane
12. 1,1-dichloroethane
13. 1,2-dichloroethane
14. 1,1-dichloroethylene
15. 1,2-dichloropropylene
16. ethylbenzene
17. methylbromide
18. methylchloride
19. methylene chloride
20. 1,1,2,2-tetrachloroethane
21. tetrachloroethylene
22. toluene
23. 1,2-trans-dichloroethylene
24. 1,1,1-trichloroethane
25. 1,1,2-trichloroethane
26. trichloroethylene
27. vinyl chloride
28. 1,2-dichloroethane

**Acid Compounds**

1. 2-chlorophenol
2. 2,4-dichlorophenol
3. 2,4-dimethylphenol
4. 4,6-dinitro-o-cresol
5. 2,4-dinitrophenol
6. 2-nitrophenol
7. 4-nitrophenol
8. p-chloro-m-cresol
9. pentachlorophenol
10. phenol
11. 2,4,6-trichlorophenol
12. 2,4,6-trinitrotoluene

**Base/Neutral**

1. acenaphthene
2. acenaphthylene
3. anthracene
4. benzidine
5. benzo(a)anthracene
6. benzo(a)pyrene
7. 3,4-benzofluoranthene
8. benzo(ghi)perylene
9. benzo(k)fluoranthene
10. bis(2-chloroethoxy)methane
11. bis(2-chloroethyl)ether
12. bis(2-chloroisopropyl)ether
13. bis(2-ethylhexyl)phthalate
14. 4-bromophenylphenyl ether
15. butylbenzyl phthalate
16. 2-chloronaphthalene
17. 1,2-diphenylhydrazine (as azobenzene)
18. diethyl phthalate
19. dimethyl phthalate
20. di-n-butyl phthalate
21. 2,4-dinitrotoluene
22. 2,6-dinitrotoluene
23. di-n-octyl phthalate
24. hexachlorobenzene
25. hexachlorobutadiene
26. hexachlorocyclopentadiene
27. hexachloroethane
28. indeno(1,2,3-cd)pyrene
29. isophorone
30. napthalene
### Table II – Organic Toxic Substances in Each of Four Fractions in Analysis by Gas Chromatography/Mass Spectroscopy (GS/MS) – Continued

**Base/Neutral**

17. 4-chlorophenyl phenyl ether
18. chrysene
19. dibenzo(a,H)anthracene
20. 1,2-dichlorobenzene
21. 1,3-dichlorobenzene
22. 1,4-dichlorobenzene
23. 3,3-dichlorobenzidine

17. 4-chlorophenyl phenyl ether
18. nitrobenzene
19. N-nitrosodimethylamine
20. N-nitrosodi-n-propylamine
21. N-nitrosodiphenylamine
22. phenanthrene
23. pyrene

**Pesticides**

1. aldrin
2. alpha-BHC
3. beta-BHC
4. gamma-BHC
5. delta-BHC
6. chlordane
7. 4,4-DDT
8. 4,4-DDE
9. 4,4-DDD
10. dieldrin
11. alpha-endosulfan
12. beta-endosulfan
13. endosulfan sulfate

1. endrin
2. endrin aldehyde
3. heptachlor
4. heptachlor epoxide
5. PCB-1242
6. PCB-1254
7. PCB-1221
8. PCB-1232
9. PCB-1248
10. PCB-1016
11. toxaphene

### Table III – Other Toxic Substances: Metals, Cyanide, and Total Phenols

1. Antimony, Total
2. Arsenic, Total
3. Beryllium, Total
4. Cadmium, Total
5. Chromium, Total
6. Chromium, Hexavalent
7. Copper, Total
8. Lead, Total
9. Mercury, Total
10. Nickel, Total
11. Selenium, Total
12. Silver, Total
13. Thallium, Total
14. Zinc, Total
15. Cyanide, Total
16. Cyanide, Amenable
17. Phenols, Total

### Table IV – Other Substances

1. Bromide
2. Chlorine, Total Residual
3. Color
4. Fecal Coliform
5. Fluoride
6. Nitrate-Nitrite
7. Nitrogen, Total Organic
8. Radioactivity
9. Sulfate
10. Sulfide
11. Sulfite
12. Surfactants
13. Aluminum, Total
14. Barium, Total
15. Boron, Total
16. Cobalt, Total
17. Iron, Total
18. Magnesium, Total
19. Molybdenum, Total
20. Manganese, Total
21. Tin, Total
22. Titanium, Total
Table V – Other Toxic Substances and Hazardous Substances

**Toxic Substances**
1. Asbestos

**Hazardous Substances**

1. Acetaldehyde
2. Allyl alcohol
3. Allyl chloride
4. Amyl acetate
5. Aniline
6. Benzonitrile
7. Benzyl chloride
8. Benzyl chloride
9. Butyl acetate
10. Butylamine
11. Captan
12. Carbaryl
13. Carbofuran
14. Carbon disulfide
15. Chlorpyrifos
16. Coumaphos
17. Cresol
18. Crotonaldehyde
19. Cyclohexane
20. 2,4-Dichlorophenoxy (acetic acid)
21. Diazinon
22. Dicamba
23. Dichlobenil
24. Dichlorone
25. 2,2-Dichloropropionic acid
26. Dichlorvos
27. Diethyl amine
28. Dimethyl amine
29. Dintrobenezene
30. Diquat
31. Disulfoton
32. Diuron
33. Epichlorohydrin
34. Ethanolamine
35. Ethion
36. Ethylene diamine
37. Ethylene dibromide
38. Formaldehyde
39. Furfural
40. Guthion
41. Isoprene
42. Isopropanolamine
43. Keltthane
44. Kepone
45. Malathion
46. Mercaptodimethur
47. Methoxychlor
48. Methyl mercaptan
49. Methyl methacrylate
50. Methyl parathion
51. Mevinphos
52. Mexacarbate
53. Monoethyl amine
54. Monomethyl amine
55. Naled
56. Napthenic acid
57. Nitrotoluene
58. Parathion
59. Phenolsulfanate
60. Phosgene
61. Propargite
62. Propylene oxide
63. Pyrethrins
64. Quinoline
65. Resorcinol
66. Strontium
67. Strychnine
68. Styrene
69. 2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)
70. TDE (Tetrachlorodiphenylethane)
71. 2,4,5-TP
72. Trichlorofan
73. Triethylamine
74. Trimethylamine
75. Uranium
76. Vanadium
77. Vinyl acetate
78. Xylene
79. Xylenol
80. Zirconium
Appendix D

Other Toxic Substances

1. Acenaphthene
2. Acrolein
3. Acrylonitrile
4. Aldrin/Dieldrin
5. Antimony and compounds*
6. Arsenic and compounds
7. Asbestos
8. Benzene
9. Benzidine
10. Beryllium and compounds
11. Cadmium and compounds
12. Carbon tetrachloride
13. Chlordane (technical mixture and metabolites)
14. Chlorinated benzenes (other than dichlorobenzenes)
15. Chlorinated ethanes (including 1,2-dichloroethane, 1,1,1-trichloroethane, and hexachloroethane)
16. Chloroalkyl ethers (chloromethyl, chloroethyl, and mixed ethers)
17. Chlorinated naphthalene
18. Chlorinated phenols (other than those listed elsewhere; includes trichlorophenols and chlorinated cresols)
19. Chloroform
20. 2-chlorophenol
21. Chromium and compounds
22. Copper and compounds
23. Cyanides
24. DDT and metabolites
25. Dichlorobenzenes (1,2-1,3-, and 1,4-dichlorobenzenes)
26. Dichlorobenzidine
27. Dichloroethylenes (1,1-and 1,2-dichloroethylene)
28. 2,4-dichlorophenol
29. Dichloropropane and dichloropropene
30. 2,4-dimethylphenol
31. Dinitrotoluene
32. Diphenylhydrazine
33. Endosulfan and metabolites
34. Endrin and metabolites
35. Ethylbenzene
36. Fluoranthene
37. Haloethers (other than those listed elsewhere; includes chlorophenylphenyl ethers, bromophenylphenyl ether, bis(dichloroisopropyl) ether, bis-(chloroethoxy) methane and polychlorinated diphenyl ethers)
38. Halomethanes (other than those listed elsewhere; includes methylene chloride, methylchloride, methylbromide, bromoform, dichlorobromomethane, trichlorofluoromethane, dichlorodifluoromethane)
39. Heptachlor and metabolites
40. Hexachlorobutadiene
41. Hexachlorocyclohexane (all isomers)
42. Hexachlorocyclopentadiene
43. Isophorone
Other Toxic Substance (continued)

44. Lead and compounds
45. Mercury and compounds
46. Naphthalene
47. Nickel and compounds
48. Nitrobenzene
49. Nitrophenols (Including 2,4-dinitrophenol, dinitrocresol)
50. Nitrosamines
51. Pentachlorophenol
52. Phenol
53. Phthalate esters
54. Polychlorinated biphenyls (PCBs)
55. Polynuclear aromatic hydrocarbons (including benzanthracenes, benzopyrenes, benzofluoranthene, chrysenes, dibenzanthracenes, and indenopyrenes)
56. Selenium and compounds
57. Silver and compounds
58. 2,3,7,8 - Tetrachlorodibenzo-p-dioxin (TCDD)
59. Tetrachloroethylene
60. Thallium and compounds
61. Toluene
62. Toxaphene
63. Trichloroethylene
64. Vinyl chloride
65. Zinc and compounds

*The term "compounds" shall include organic and inorganic compounds.
   (Effective July 13, 1993)