

Narragansett Bay Commission

Identifying Significant/Categorical Users and Zero Discharge Facilities

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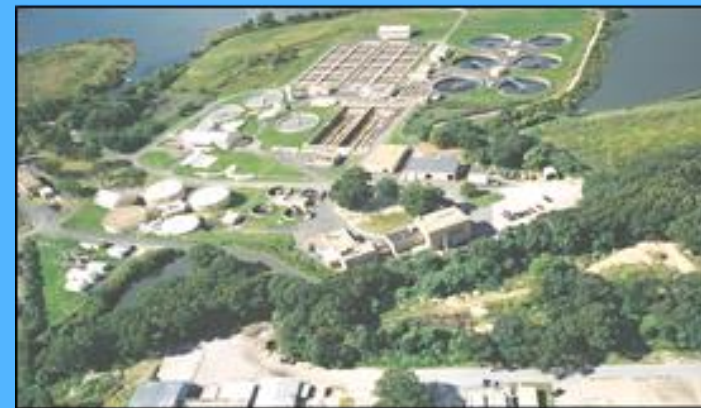
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Narragansett Bay Commission

- Own and operate the two largest POTWs in RI
 - Field's Point – acquired in early 1980s
 - Bucklin Point – acquired in early 1990s
- Service 10 cities and towns
- 1,877 permitted industrial and commercial facilities



Field's Point ~45 MGD



Bucklin Point ~20 MGD

Industrial User Classifications

NBC User Classification System Industrial User Categories

- Category 1:** Industries subject to Federal EPA Categorical Standards.
10. Other Categorical Users
 11. Electroplaters, Metal Finishers
 12. Metal Molding and Casting
 13. Organic/Inorganic Chemical Manufacturers
 14. Pharmaceutical Manufacturers
 15. Metal Formers
 16. Steam Electric Power Generators
 17. For Future Use
 18. Centralized Waste Treatment Facilities
 19. Transportation Equipment Cleaning
- Category 2:** Industries discharging toxic and/or prohibited pollutants, but who are not subject to Federal EPA Categorical Standards.
20. For Future Use
 21. Tubbing/Vibratory/Mass Finishing
 22. Chemical Transporters, Refiners, Recyclers, Manufacturers
 23. Textile Firms
 24. Printers
 25. Industrial Laundries
 26. Machine Shops/Machinery Rebuilding
 27. Other Facilities Discharging Toxic and/or Prohibited Pollutants
 28. Facilities Discharging Toxic and/or Prohibited Pollutants with High Conventional Pollutant Loads.
 29. Non-Textile Operations Using Pigments & Dyes
- Category 3:** Industries discharging or having the potential to discharge conventional pollutant (BOD, TSS, pH, oil and grease, fecal coliforms) loads in sufficient quantities to cause violation of RIPDES permit or local discharge limitations.
30. For Future Use
 31. Landfill Operations
 32. Aerogel Manufacturing with High Conventional Pollutant Loads
 33. Wholesale Food Processing Operations with High Conventional Pollutants Loads
 34. Manufacturers with High Conventional Pollutant Loads and Low Flows
 35. Other Facilities Discharging Conventional Pollutants
 36. Brewing & Distilling Operations
 37. Automotive Maintenance/Service Facilities
 38. Anaerobic Digestion Facilities with High Concentrations of Conventional Pollutants
 39. For Future Use

- Category 4:** Industries with sanitary or non-toxic discharges using solvents, toxic and/or hazardous chemicals that could potentially be discharged to the sewer.
40. Groundwater Remediation/Excavation Projects
 41. Recycled or Disconnected Electroplating or Chemical Processes
 42. Other Process Operations that are Disconnected or Recycled
 43. Recycle Electroplating or Chemical Processes with Non-contact Cooling Water or Boiler Discharges
 44. Other Recycled or Disconnected Processes with Cooling Water, Boiler, or other Discharges
 45. For Future Use
 46. Cooling Water Discharges with Solvents, Toxic and/or Hazardous Chemicals on site
 47. For Future Use
 48. For Future Use
 49. Other Discharges with Solvents, Toxic and/or Hazardous Chemicals on site
- Category 5:** Industries discharging only sanitary wastes and/or non-toxic discharges.
50. For Future Use
 51. Cooling Water
 52. Boiler Blowdown/Condensate Discharges
 53. Cooling Tower Discharges
 54. For Future Use
 55. For Future Use
 56. For Future Use
 57. For Future Use
 58. For Future Use
 59. Other Non-Toxic Industrial Discharges
- Category 6:** Dry industries with no wastewater discharges to the sewer using solvents, toxics and/or hazardous chemicals.
60. All users

(Continued) NBC User Classification System Commercial User Categories

- Category 7:** Industries with no waste discharges to the sewer.
70. Septic System Discharger
 71. Out of Business
 72. Moved out of the District
 73. Permit Expired/Not Renewed or Reissued
 74. Proposed Discharges - Permit Not Issued
 75. Accidental Discharges/Spills/Non-Permitted Discharge
- Category 8:** Commercial Users with the potential to discharge conventional pollutants (BOD, TSS, pH, oil and grease, fecal coliforms) loads in sufficient quantities to cause violation of RIPDES permit or local discharge limits.
80. Septage Haulers/Dischargers
 81. Food/Fish/Meat Produce Processing (Wholesale)
 82. Supermarkets (Retail Food Processing)
 83. Parking Garages/Lots
 84. Cooling Water/Groundwater/Boiler Discharges
 85. Restaurants/Food Preparation Facilities
 86. Commercial Buildings with Cafeteria and/or Laundry Operations
 87. For Future Use
 88. For Future Use
 89. Other Commercial Facilities with Potential to Discharge Conventional Pollutants
- Category 9:** Commercial Users with the potential to discharge toxic substances, prohibited pollutants and/or conventional pollutants.
90. Hospitals
 91. Cooling Water/Groundwater/Boiler Discharges
 92. Laundromats/Dry Cleaners
 93. Photo Processing
 94. X-Ray Processing
 95. Clinical, Medical, and Analytical Laboratories
 96. Funeral Homes/Embalming
 97. Motor Vehicle Service/Washing
 98. For Future Use
 99. Other Commercial Users with Potential to Discharge Toxic, Prohibited and/or Conventional Pollutants.

NBC Significant Industrial User Definition

- Firm is subject to Federal EPA categorical standards
- Firm discharges an average of 5,000 or more gallons per day of process wastewater
- Firm contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the NBC's Treatment Plant
- Firm is designated as significant by the NBC on the basis that the user has reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement

Determining SIU Status

- Subject to Federal Categorical Standards
 - Currently have 39 CIUs (metal finishers, pharmaceuticals, non-ferrous precious metal formers)
 - Permit applications
 - Process Plans
 - Inspections
- Discharge greater than 5,000 gpd
 - Currently have 23 SIUs
 - Permit applications
 - Meter readings during inspections
- 5% or more of the average dry weather hydraulic or organic capacity of the POTW
- Can adversely impact the POTW operations
 - Currently have 2
 - Based on process operations

Zero Discharge Facilities

- Recycled or disconnected categorical operations or chemical manufacturing operations - 10
- Other process operations that are disconnected or recycled – 37
 - Mass finishing, machine shops, automotive operations
- Recycled or disconnected categorical operations or chemical manufacturing operations with non-contact cooling water or boiler discharges - 8
- Other process operations that are disconnected or recycled with non-contact cooling water or boiler discharges - 7

Zero Discharge Facilities

- Wastewater discharges from process operations must be recycled or evaporated
- All sewer connections in the process area must be permanently sealed
- Only sanitary discharges for categories 41 & 42
- Boiler and non-contact cooling water can be discharged to the sewer. Wastewater Discharge Permit are issued to these companies
- Review permit applications, process and pretreatment system plans
- Verified during inspections
- Manhole sampling conducted up and down stream





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City of Somersworth, NH

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City of Somersworth, NH

- Somersworth is a City with a population of 12,027 (2020 census) and a WWTF designed to treat 2.4 MGD.
- The City employs six people to operate and maintain the treatment facility and four pump stations.
- The City of Somersworth has had an approved IPP since 1984.
- There are currently six permitted SIUs and two dozen businesses permitted in a Commercial Program.

Somersworth receives info about new users via wastewater survey questionnaires

- The questionnaires give us enough information to know whether a business can be categorized as “no permit required” or if we need more information.
- The following slides show some examples

Somersworth example 1

- Narrative description: “design and manufacture of elastomeric hoses and plastic assemblies” ...huh?
- Next step – what’s the SIC/NAICS codes?
- 3052/326220
- “This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins.”

Could this be categorical?

- Research 40 CFR 428 and ended up with 40 CFR 428 subpart F...
- Medium size general molded, extruded, and fabricated rubber plants

Somersworth example 2

- Survey shows a business with the word “millwork” and floor drains and grease trap are checked off....

Next step was a quick look at their web-site and floor drains and grease trap don't make sense.

A site visit to clear things up

- There was no grease trap. Owners didn't know what a grease trap was.
- There were no floor drains.

The conclusion was that this business didn't need a permit

Somersworth example 3

- There is a closed/capped landfill that has not been producing leachate in over a decade...turns out that there were clogged pipes and there is in fact leachate that needs to be discharged.
- The City asked for some analytical analysis and began to research

Is this categorical?

- 40 CFR part 445 – Landfills Point Source Category
- After reading through, it didn't seem to apply....
- The City reached out to EPA/DES for an opinion and it was agreed that it didn't apply



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