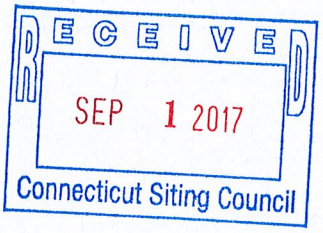
ORIGINAL

PSEG Power Connecticut LLC
Bridgeport Harbor Station, 1 Atlantic Street, Bridgeport, CT 06604-5513

PSEG
Power Connecticut LLC

August 30, 2017

VIA ELECTRONIC MAIL AND OVERNIGHT MAIL



Melanie A. Bachman
Executive Director
State of Connecticut
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Petition No. 1218 – PSEG Power Connecticut LLC
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Monthly Progress Report No. 8 – August 2017

Dear Ms. Bachman:

This is the August 2017 monthly progress report submittal to the Connecticut Siting Council (CSC) for the new combined cycle generating station designated by PSEG Power Connecticut LLC (PSEG) as the PSEG Bridgeport Harbor Station Unit 5 Combined Cycle Project (BHS 5, the Project or the Facility). This monthly progress report documents compliance with the CSC's conditions as set forth in the CSC Decision and Order, as well as the Development and Management Plan (D&MP) approvals.

A complete and updated CSC Condition Compliance Matrix is included in this report as **Exhibit 1** and will continue to be included in future progress reports to track the CSC's requirements.

Construction Status Summary

The project continues on schedule. During August, foundation activities and installation of site fill continued. The barge delivery of fill materials was completed in August and the equipment has been demobilized. All of the rigid inclusions have been installed and approximately 65% of the steel pipe piles have been completed. Underground utility construction, including the stormwater conveyance system, continued. Construction of the stormwater outfall is scheduled to begin in early September. Soil Erosion and Sediment Control installation is complete and is being maintained.

Remediation Status Summary

The second phase of remediation at the site is continuing. As noted in prior monthly submittals, the remaining remediation scope includes the placement of an orange geotextile warning fabric over the soils remaining onsite. To date, approximately 85% of the orange warning fabric has been installed. Additionally, the material that will be placed under permanent structures (water and fuel oil tanks), in order to remain inaccessible, is stockpiled on-site and will be placed in its final locations later this year as construction progresses.

The remediation schedule for the tank farm area has been optimized to reflect actual installation dates for the tank foundations, which serve to physically make the soil inaccessible, and are currently scheduled for construction in January 2018.

The formal documentation addressing all tank farm remediation is scheduled for submittal to the Connecticut Department of Energy and Environmental Protection (CT DEEP) in the first quarter of 2018, after completion of the tank foundations. It should be noted that this work is tracked in both the prior CSC Exempt Modification (EM-PSEG-015-160205) and in Condition 1(f) of this Petition. At the time of closeout, PSEG will assure both of these CSC actions are appropriately addressed. The date for resolution of Condition 1(f) in Exhibit 1 has been revised accordingly.

Engineering and Regulatory Status Summary

SNC-Lavalin (SNCL) is continuing with the detailed design for the Project, and major construction and equipment supply contracting remains on schedule. Engineering design and City of Bridgeport Building Permitting activities supporting ongoing site field work are continuing on schedule.

Permit applications for the southern and eastern roll-off unloading (CT DEEP General Permit for Coastal Maintenance and the related United States Army Corps of Engineers (USACE) General Permit for Maintenance Activities) were filed on July 17. On August 18, the USACE approved the General Permit for Maintenance Activities; the CT DEEP approval is pending.

On August 18, an update to PSEG's Individual Permit Application for Wastewater Discharges from Manufacturing, Commercial and Other Activities (i.e. Industrial Wastewater) was provided to the CT DEEP and City of Bridgeport Water Pollution Control Authority. The update included a revised water balance diagram and other minor changes identified during detailed design and water treatment vendor selection. A copy of the update is included as **Exhibit 2**.

Offsite Fabrication and Barge Delivery of Equipment / Fill

Delivery of the Heat Recovery Steam Generator (HRSG) and the stack sections to the site remains scheduled for May 2018. The offloading plans have been reviewed with the CT DEEP, USACE, United States Coast Guard, and the City of Bridgeport Harbor Commission / Harbormaster. As referenced above, the USACE General Permit for Maintenance Activities was received this month and the CT DEEP permit to support these activities is anticipated by the end of 2017.

Fill deliveries by barge commenced in early June 2017 at the previously identified eastern location on the site. Approximately 150,000 tons of clean fill were delivered via barge. As noted above, this delivery process was completed during August.

The delivery / off-loading schedule for other large equipment from barges, including the Combustion Turbine, the Steam Turbine, other ancillary power island equipment, and the Air Cooled Condenser components remains on track. The plans call for these deliveries to also use the previously identified eastern locations. Delivery schedules vary by component and are expected to start in late 2017.

Deliveries to the PSEG site through the adjoining Remington property continued. PSEG remains in discussions with the City of Bridgeport to lease additional City-owned storage and laydown areas in the vicinity of the plant and Bridgeport Harbor.

Construction Schedule Update

Other than the commencement of initial equipment deliveries to the site this month, there have been no significant changes in the schedule for major activities from the prior reporting period. Equipment deliveries to the site have started.

1.	Forward Capacity Auction No. 10	February 10, 2016 (A)
2.	Completion of City of Bridgeport Land Use Permitting	November 1, 2016 (A)
3.	Completion of Non-Air CT DEEP Permitting	February 2017 (A)
4.	Initial City of Bridgeport Building Permit Submittals	February 2017 (A)
5.	Receipt of CT DEEP Final Air Permit	April 11, 2017 (A)
6.	Initiation of Field Construction Activities	April 12, 2017 (A)
	a. Temporary Construction Facilities	November 2016 (A)
	b. Site Work	April 12, 2017 (A)
	c. Foundations	June 2017 (A)
	d. Initial Equipment Deliveries	August 2017 (A)
	e. Major Equipment Delivery (Turbines, etc.)	November 2017
	f. GIS and Transformer Foundation Installation	June 2017 (A)
	g. Gas Turbine Generator (GTG) Installation	December 2017
	h. HRSG Delivery	May 2018
	i. Start-up Testing and Commissioning	September 2018
7.	Operational Testing (first GTG operations)	November 2018
8.	Balance of Plant Initial Start-up	September 2018
9.	Performance and Reliability Testing	March 2019
10.	Target Completion	April 2019
11.	Commercial Operations	June 2019

Note: "(A)" refers to ACTUAL

Status of CSC Conditions

The following changes or updates are provided in the full listing of CSC conditions included as Exhibit 1.

1. The closure date for Condition 1(f) (Remediation) has been revised from October 2017 to March 2018 to reflect the documentation submittal date target for the final remediation reporting to CT DEEP.

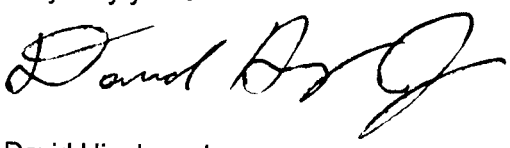
2. The status of Condition 1(i) was revised for administrative clarity to include a reference to previously approved D&MP Update No. 1.

3. PSEG will provide information to address Conditions 6(i) through 8(iii) by December 31, 2017 based on the current planning in process to address these conditions appropriately.

4. PSEG has not determined the specifics of the fuel oil dock repair at this time. As a result, the target date for submittal of information required by Condition 1(d) (which is tracked in Exhibit 1 as Condition 12/23/16-05) has been revised from September 2017 to June 30, 2018.

If you have any questions or require clarification, please contact me at 973-856-0066 or the Project Senior Technical Director / Regulatory Lead, Jeff Pantazes at 856-359-7645.

Very truly yours



David Hinchey, Jr.

Manager Environmental - Major Permits & Technical Services
PSEG Power LLC
Fossil Environment, Health, and Safety

Enclosures - Exhibits:

1. **Updated CSC Condition Compliance Matrix**
2. **Update to CT DEEP of previously submitted Individual Permit for Wastewater Discharges from Manufacturing, Commercial and Other Activities application dated August 18, 2017**

C Michael Perrone
Harold Blinderman, Esq
Franca L. DeRosa, Esq.
Leilani M. Holgado, Esq.
Karl Wintermeyer
Scott Matheson
Jeffrey Pantazes
James R. Morrissey, Esq.

Exhibit 1 – Updated CSC Condition Compliance Matrix

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
1(a)	Final site plan showing roads, structures, and other improvements on the site	Partial: construction execution planning process summary included as Exhibit 1. A general update on Project Scope and Design is included as Exhibit 15.	Final structures and other improvements, including buildings, stack, power block, and balance of plant (Exhibits 1 and 2)	Completed; D&MP Update No. 1 was filed in June 2017 and approved in July 2017.
1(b)	Consideration of waste heat as supply for thermal loop or nearby industrial user	N/A	Included (Exhibit 9)	Completed; see CSC Requirement Number 12/23/16-04 below for follow-up requirements.
1(c)	Lighting plan and details to minimize impact on off-site properties	Partial: construction lighting only – Exhibit 9	Final lighting plans (Exhibits 1 and 2)	Completed
1(d)	Final fuel dock rehabilitation plan	Update on status included as Exhibit 7	Status unchanged since D&MP Phase 1 – PSEG will provide an update of this portion of the project by September 30, 2017 after design is completed. See Exhibit 10.	Completed; see CSC Requirement Number 12/23/16-05 below for follow-up actions.
1(e)	Water and sewer connection routes	Partial: temporary construction sewer line connection and other utilities included in Exhibit 9. Note that the status of the UI Exempt Modification request is included as Exhibit 11.	Permanent utility routing included (Exhibits 1 and 2)	Completed
1(f)	Status of site remediation in existing fuel tank area and remaining remediation work - Which areas of contamination will be inaccessible? - Layer showing contaminated soil locations	Remedial Action Plan Addendum included as Exhibit 6. Status of remediation implementation included as Exhibit 5. Unit 3 tank and unloader status included as Exhibit 4.	Status for remaining work will be included to document final soil placement locations. (Exhibits 7 and 8)	Open – PSEG will submit final remediation status to the CT DEEP and CSC with a target of March 31, 2018.
1(g)	Natural gas interconnection plan and gas compressor building design and location	N/A	Included (Exhibit 2)	Completed
1(h)	Final Erosion and Sediment Control Plans	Soil Erosion and Sediment Control Plans included in Exhibit 9 as noted in Exhibit 14. The USACE Jurisdictional Determination is included as Exhibit 13.	SESC plans included in Exhibit 2; they were previously provided in D&MP Phase 1 as well.	Completed

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
1(i)	Final stormwater design	N/A	Included (Exhibit 2)	Completed. D&MP Update No. 1 was filed in June 2017 and approved in July 2017 that included stormwater design revisions.
1(j)	Stormwater Pollution Protection Plan	N/A	Included (Exhibit 15)	Completed
1(k)	Flood Mitigation Plan	N/A	Included (Exhibit 3)	Completed
1(l)	Final plans to demonstrate compliance with CT DEEP noise standards	N/A	Final Noise Study Report Included (Exhibit 14)	Completed
1(m)	Fuel storage and handling plan, including containment and spill protection measures	N/A	Spill Prevention Control and Countermeasures Plan included (Exhibit 18)	Completed
1(n)	Containment measures for step-up transformer dielectric fluids and ULSD storage tank	N/A	Included (Exhibit 3)	Completed
1(o)	Containment and/or protective measures for delivery and storage of hydrogen and aqueous ammonia	N/A	Included (Exhibits 3 and 20)	Completed
1(p)	Backup generator design and containment measures for fuel, oil, and coolant	N/A	Included (Exhibit 3)	Completed: Vendor data included in Exhibit 4 of the May 2017 Monthly Progress Report No. 5
1(q)	Dewatering plan to address groundwater issues during construction	N/A	Stormwater Pollution Control Plan for construction stormwater and dewatering included. (Exhibits 15 and 16)	Completed
1(r)	Detailed project schedules for all work activities and proposed typical construction days and hours	Partial: Schedule update Included as Exhibit 2 and permitting status included as Exhibit 3.	Work hours and schedule update included in Exhibits 3 and 6 respectively.	Completed
1(s)	Construction laydown area locations	Included in Exhibits 8 and 10 including access routings for high trucks. In addition, the plans for barge delivery of equipment and unloading are included as Exhibit 12.	See Exhibit 3 for an update regarding a lease agreement for an adjoining property	Complete: Submitted information in D&MP Phases 1 and 2 was updated in May 2017 Monthly Progress Report No. 5.
1(t)	Site security measures	Partial: site security for construction discussed in Exhibit 1.	Partial: Site security measures (Exhibit 3)	Completed

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
1(u)	Final FAA lighting design for the stack and any FAA crane determinations	N/A	Included (Exhibit 3)	Completed
1(v)	Decommissioning Plan as contingency plan, including infrastructure removal and site restoration plans	N/A	Included (Exhibit 19)	Completed
2	Submit FAA Determinations for temporary structures (cranes) and stack	N/A	N/A	Completed April 11, 2017 via memorandum to the CSC.
3	Submit local permits relative to the discharge of wastewater	N/A	N/A	Completed April 11, 2017 via memorandum to the CSC.
4	Submit final CT DEEP air emissions and water discharge permits	N/A	N/A	Completed April 11, 2017 via memorandum to the CSC.
5	The use of natural gas as a fuel pipeline / system cleaning medium for construction or any future facility modification shall be prohibited.	N/A	N/A	PSEG notes this condition and will retain it as "Open". The provisions of CSC Requirement Number 6 (below) address the specifics of compliance.
6	Submit the information included below in CSC requirement Numbers 6(i) to 6(viii) at least 15 days prior to fuel pipeline / system cleaning medium for construction or any future facility modification.*	N/A	N/A	Open – an update response to all of the Condition 6 (i) to (viii) through 8(iii) will be provided by December 31, 2017
6(i)*	Identification of cleaning media to be used	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(ii)*	Identification of any known hazards through use of selected cleaning media	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(iii)*	Description of how known hazards will be mitigated, including applicable state or federal regulations	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(iv)*	Identification and description of accepted industry practices or relevant regulations concerning proper use of such media	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
6(v)*	Detailed narratives/drawings showing location and procedures to be used during pipe cleaning process, including worker safety exclusion zones	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(vi)*	Identification of contractor or personnel performing work, including description of past project experience and level of training/qualifications necessary for work	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(vii)*	Contact information for special inspector (CT registered engineer with knowledge or experience with electric generating facilities) with written approval by local fire marshal and building inspector	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
6(viii)*	Certification of notice regarding pipe cleaning operations (Submitted to all state agencies listed in CGS §16-50j(g), Dept of Consumer Protection, Dept of Labor, Dept of Emergency Services and Public Protection, Dept of Construction Services, Dept of Emergency Management and Homeland Security, and local fire marshal)	N/A	Not currently available. An update will be provided one month prior to the start date for pipe cleaning.	Open - An update will be provided by December 31, 2017 regarding the anticipated schedule.
7	Compliance with specific codes and standards for any fuel pipeline / system cleaning operations related to construction or any future facility modification, as applicable. (Note: the Codes and Standards are listed in the Decision and Order)	N/A	N/A	PSEG notes this condition and will retain it as "Open". The provisions of CSC Requirement Number 6 (above) address the specifics of compliance.
8(i)†	Description of results of simulated emergency response activities	N/A	Not currently available.	Open - a status to all of the Condition 6 (i) through 8(iii) will be provided by December 31, 2017

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
8(ii)†	Details of any facility site access system that accounts for all personnel entering and leaving the facility	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
8(iii)†	Establishment of emergency responder/local community notification system for onsite emergencies and planned construction-related activities	N/A	Not currently available.	Open - An update will be provided by December 31, 2017.
9	Unless otherwise approved by the Council, the facility must be constructed within five years of July 22, 2016 (by July 21, 2021) or re-approval by the Council is required.	N/A	N/A	Open: PSEG anticipates completion of BHS 5 by June 1, 2019.
10	Notify the Council within 45 days of the completion of construction.	N/A	N/A	Open
11	Maintain the facility in a reasonable physical and operational condition consistent with the Decision and Order and the approved D&MPs.	N/A	N/A	Noted
12	Provide the Council with a minimum of 30 days written notice when the facility will cease operations.	N/A	N/A	Noted
13	Remit timely payments associated with annual assessments and invoices submitted by the Council.	N/A	N/A	Noted
14	Notify the Council of any change in ownership or contact information within 30 days of the sale and / or transfer.	N/A	N/A	Noted
15	Submit any request for extension as noted in CSC Requirement Number 9 (above) not later than 60 days prior to the expiration, including notice to specific parties and the service list.	N/A	N/A	Noted

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
16	The Declaratory Ruling may be transferred subject to being current with payments and an agreement to continue payments as required.	N/A	N/A	Noted
17	Retain a Special Inspector to assist the Fire Marshall to assure compliance with CGS §16-50ii	N/A	N/A	Noted. This will be addressed in the response to CSC Requirement Number 6(vii). An update will be provided by December 31, 2017.
18	Deposit a fee into the Code Training Fund in accordance with CGS § 29-251c.	N/A	N/A	Open. PSEG will work with the City of Bridgeport to establish the timing and amount of the subject fee. This will be addressed in a future Monthly Progress Report prior to the completion of the project.
	D&MP Phase 1 Conditions			
10/31/16-01	Use of off-road construction equipment that meet the latest EPA or California Air Resources Board standards, or in the alternative, equipment with the best available controls on diesel emissions, including but not limited to retrofitting with diesel oxidation catalysts, particulate filters and use of ultra-low sulfur fuel.			Completed: February 2017 Monthly Progress Report.
10/31/16-02	Compliance with the provisions of Section 22a-174-18(b)(3)(C) of the RCSA that limit the idling of mobile sources to 3 minutes.			Completed: February 2017 Monthly Progress Report.
10/31/16-03	The petitioner shall submit the specifications of the fill to the Council			Completed; December 2, 2016 response to Interrogatory CSC D&M-05.
	D&MP Phase 2 Conditions			
12/23/16-01	Same as 10/31/16-01 above			Completed: February 2017 Monthly Progress Report.

Connecticut Siting Council
Bridgeport Harbor Station Unit 5 – Bridgeport, Connecticut
Monthly Progress Report No. 8 – August 2017

CSC Requirement Number	CSC Requirement	D&M Plan Phase 1 Construction Support Facilities	D&M Plan Phase 2 BHS 5 Design	Subsequent Filing Report and Date Closure Status
12/23/16-02	Same as 10/31/2016-02 above			Completed: February 2017 Monthly Progress Report.
12/23/16-03	Compliance with the reporting requirements under Section 16-50j-62 of the RCSA			Ongoing Reporting to continue
12/23/16-04	The final modifications of the plant to accommodate the use of waste heat, if applicable, shall be submitted to the Council for review and approval.			PSEG will provide an update by January 31, 2018.
12/23/16-05	The final fuel dock rehabilitation plan shall be submitted to the Council for review and approval.			PSEG will provide an update by June 30, 2018.
12/23/16-06	The containment measures for the backup generator engine oil and coolant shall be submitted to the Council.			Completed: Vendor data included in Exhibit 4 of the May 2017 Monthly Progress Report No. 5
12/23/16-07	Prior to testing of start-up of the plant, the Certificate Holder shall submit to the council its final plans to comply with the recommendation and conditions relative to Council Docket No. NT-2010 and conditions (6i through 8iii) Council's Decision and Order for Petition No. 1218 relative to plant safety.			PSEG will provide an update by December 31, 2017 as noted in CSC Requirement Numbers 6(i) to 8(iii) above.
12/23/16-undesignated	The Council recommends that PSEG consult with Council staff regarding dust control measures for materials delivered by barge.			Completed: June 2017 Monthly Progress Report.
* 15 days prior to fuel pipeline/system cleaning operations related to construction or any future facility modifications † Submittal of Emergency Response/Safety Plan developed in cooperation with all local public safety officials, DESPP, and other emergency response officials				

Exhibit 2 - Update to CT DEEP of previously submitted Individual Permit for Wastewater Discharges from Manufacturing, Commercial and Other Activities application dated August 18, 2017

AKRF

Environmental, Planning, and Engineering Consultants
307 Fellowship Road
Suite 214
Mt. Laurel, NJ 08054
tel: 856 797-9930
fax: 856 797-9932
www.akrf.com

Memorandum

To:	Peter Ploch / Mariana Miller (via email and hardcopy) CT DEEP
From:	Jeffrey Pantazes
Date:	August 18, 2017
Re:	**Individual Sewer Discharge Permit Application Update** **PSEG Power Connecticut LLC - Bridgeport Harbor Station Unit 5** **1 Atlantic Street, Bridgeport, Connecticut** **Application No. 201614170**
cc:	Ravi Keerthy (WPCA), Scott Matheson (PSEG), David Hinchey (PSEG), Mark Woloski (PSEG), Karl Wintermeyer (PSEG), David Schafer (AKRF)

On behalf of PSEG Power Connecticut LLC (PSEG), AKRF is providing the attached update to the Individual Permit Application for Wastewater Discharges from Manufacturing, Commercial, and Other Activities originally submitted to the Connecticut Department of Energy and Environmental Protection (CT DEEP) on October 28, 2017 for PSEGs proposed discharge of sanitary and process wastewater from the Bridgeport Harbor Station Unit 5. The plant is currently under construction.

This update primarily addresses minor refinements to the Project's water balance diagrams developed during final design. Additionally, minor revisions to facility equipment (such as oil/water separator sizing) and changes in chemicals due to vendor selection are included.

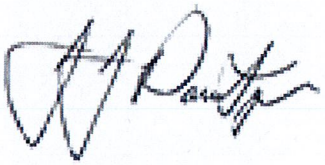
The following updated sections/pages of the application are included for your review:

- Updated Application Form sheet (Part III) identifying the current Project Design Engineer's Contact Information;
- Updated Application Form sheet (Part V), Project Description, Appendix 1 to address the updated water balance for the Facility;
- Appendix 2 was updated to include Safety Data Sheets (SDS) associated with selection of an alternative chemical vendor (Note the SDS documentation is provided in hardcopy only due to file size.);
- Updated Attachment A, Executive Summary Form; and,

- Updated Attachments
    - Attachment I (oil/water separator sizing);
    - Attachment M (water balances);
    - Attachment N (oil/water separator sizing); and.
    - Attachment O final water tank volumes, treatment chemicals, and water balance information.

This update package is consistent with the Instructions for Completing the Permit Application for Wastewater Discharges from Manufacturing, Commercial, or Other Activities (DEEP-WPED-INST-100). Should you have any questions concerning facility wastewater discharge needs, please feel free to contact me (609-440-0236 / jpantazes@akrf.com) or Dave Schafer (978-758-1554 / dschafer@akrf.com).

We appreciate your review of the enclosed documents. We will be in touch over the next few weeks to schedule a phone or in person discussion to address any questions you may have.



Jeffrey Pantazes

Senior Technical Director / Senior Consultant

Attachment – Updated application sections

Hard Copy to follow

Permit Application for Wastewater Discharges from Manufacturing, Commercial, and Other Activities

Bridgeport Harbor Station Unit 5 Combined Cycle Project
1 Atlantic Street
City of Bridgeport, Fairfield County, Connecticut

Submitted to:

Connecticut Department of Energy and Environmental Protection

Prepared for:

PSEG Power Connecticut LLC
1 Atlantic Street
Bridgeport, CT 06604

Prepared by:

AKRF Inc.
307 Fellowship Road, Suite 214
Mount Laurel, NJ 08054

Updated August 2017

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LIST OF FIGURES

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APPENDICIES

ATTACHMENTS

Part V: Facility or Activity Information (continued)

4. Inventory of toxic and hazardous substances and oil or petroleum liquids (please see instructions)

☐ Check here if additional sheets are necessary. If so, please reproduce this sheet and attach copies to this sheet.

Name of toxic or hazardous substance or oil	Use of toxic or hazardous substance and maximum quantity used per day	If stored on-site, indicate maximum quantity of stored substance	TRI pollutant yes or no
Lube Oil/Hydraulic Fluid	NA	7,400 gal	Yes
Sodium Hypochlorite	1.43 gal/hr	1,600 gal	Yes
Sulfuric Acid	0.1 gal/hr	1,600 gal	Yes
Corrosion Inhibitor	0.13 gal/hr	1,600 gal	Yes
Antiscalant	0.09 gal/hr	1,600 gal	Yes
Aqueous Ammonia	3.25 gal/hr	1,200 gal	Yes
Filming Amine	3.25 gal/hr	1,200 gal	Yes
Trisodium Phosphate	3.4 gal/hr	1,200 gal	Yes
Sodium Bisulfite	0.25 gal/hr	1,200 gal	Yes
Antiscalant	0.5 gal/hr	1,200 gal	Yes
Sodium Hydroxide	0.5 gal/hr	1,200 gal	Yes
Polyphosphoric Acid	0.36 gal/hr	800 gal	Yes
Aqueous Ammonia	0.12 gal/hr	400 gal	Yes
Aqueous Ammonia	174 gal/hr	20,000 gal	Yes

Item 8. List any engineer(s) or other consultant(s) employed or retained to assist in preparing the application or in designing or constructing the facility (Continued)

Name: SNC-Lavalin

Mailing Address: 19015 North Creek Parkway, Suite 300

City/Town: Bothell **State:** WA **Zip Code:** 98011

Business Phone: 425-489-8000 **ext:**

Contact Person: Ms. Wendy Wong **Phone:** 425-489-7610

E-mail: Wendy.Wong@snclavalin.com

Service Provided: Water Supply/Wastewater Discharge Engineering Design Support Services

1.0 PROJECT DESCRIPTION

1.1 PROJECT OVERVIEW

PSEG Power Connecticut LLC (PSEG) is developing a nominal 485 megawatt (MW) gas turbine combined cycle electric generating facility, known as Bridgeport Harbor Station Unit 5 (BHS Unit 5), at PSEG's Bridgeport Harbor Station located in the City of Bridgeport, Fairfield County, Connecticut. The site is located at 1 Atlantic Street as shown on the site location map included as Figure 1. The general station boundaries, existing site conditions, and adjacent developments are shown in greater detail in the site aerial included as Figure 2.

1.2 FACILITY DESCRIPTION

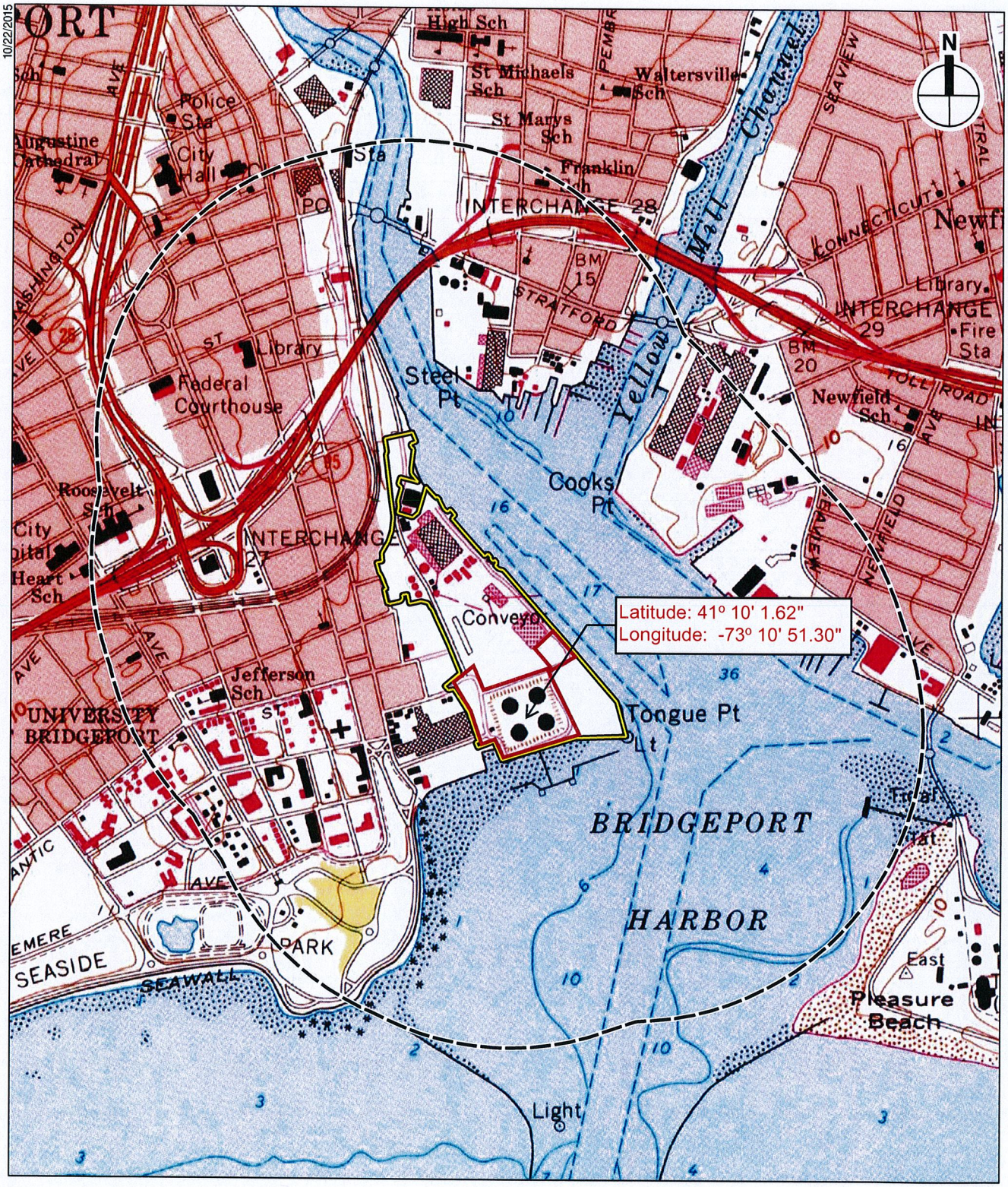
Bridgeport Harbor Station is owned and operated by PSEG. It has been in operation as an electric generating station since August 1957. The station was previously owned by Wisvest-Connecticut, LLC from April 16, 1999 through December 5, 2002, and the United Illuminating Company prior to 1999. The Station encompasses approximately 59.8 acres of land along the western shoreline of Bridgeport Harbor in Bridgeport, Connecticut.

Currently, electricity is generated in an approximately 400 megawatt (MW) (summer rating) coal / oil fired unit (Unit 3) and a 20 MW combustion turbine (Unit 4). Additionally, there is an 84.7 MW oil-fired unit (Unit 1) and a 170 MW oil-fired unit (Unit 2), which are now retired.

The new combined cycle facility (BHS Unit 5) will be located at the southern end of the site encompassing the existing fuel oil tank farm area. A general arrangement plan for BHS Unit 5 is shown in Figure 3. The new power block will consist of one combustion turbine generator set, a heat recovery steam generator ("HRSG") and a steam turbine generator set. Ancillary equipment at the facility will include an air cooled condenser ("ACC") for steam cycle cooling, a process makeup water demineralization system, a small mechanical draft cooling tower for ancillary cooling (i.e., an auxiliary cooling tower), a 950,000 gallon service/fire water storage tank, a 1,000,000 gallon demineralized water storage tank, a 5.5 million gallon ultra-low sulfur distillate (ULSD) fuel oil storage tank, and an auxiliary boiler.

The combined cycle facility will primarily use natural gas as the fuel. However, to enhance electric system reliability, BHS Unit 5 is designed as a dual fuel facility that can also use ULSD as a backup fuel. Other than for periodic testing, PSEG anticipates that ULSD primarily would be used during unusually

10/22/2015



Approximate Area of Development

Project Site Property Boundary

1/2-Mile Study Area

USGS 7.5 Minute Topographic Map
Bridgeport Quad

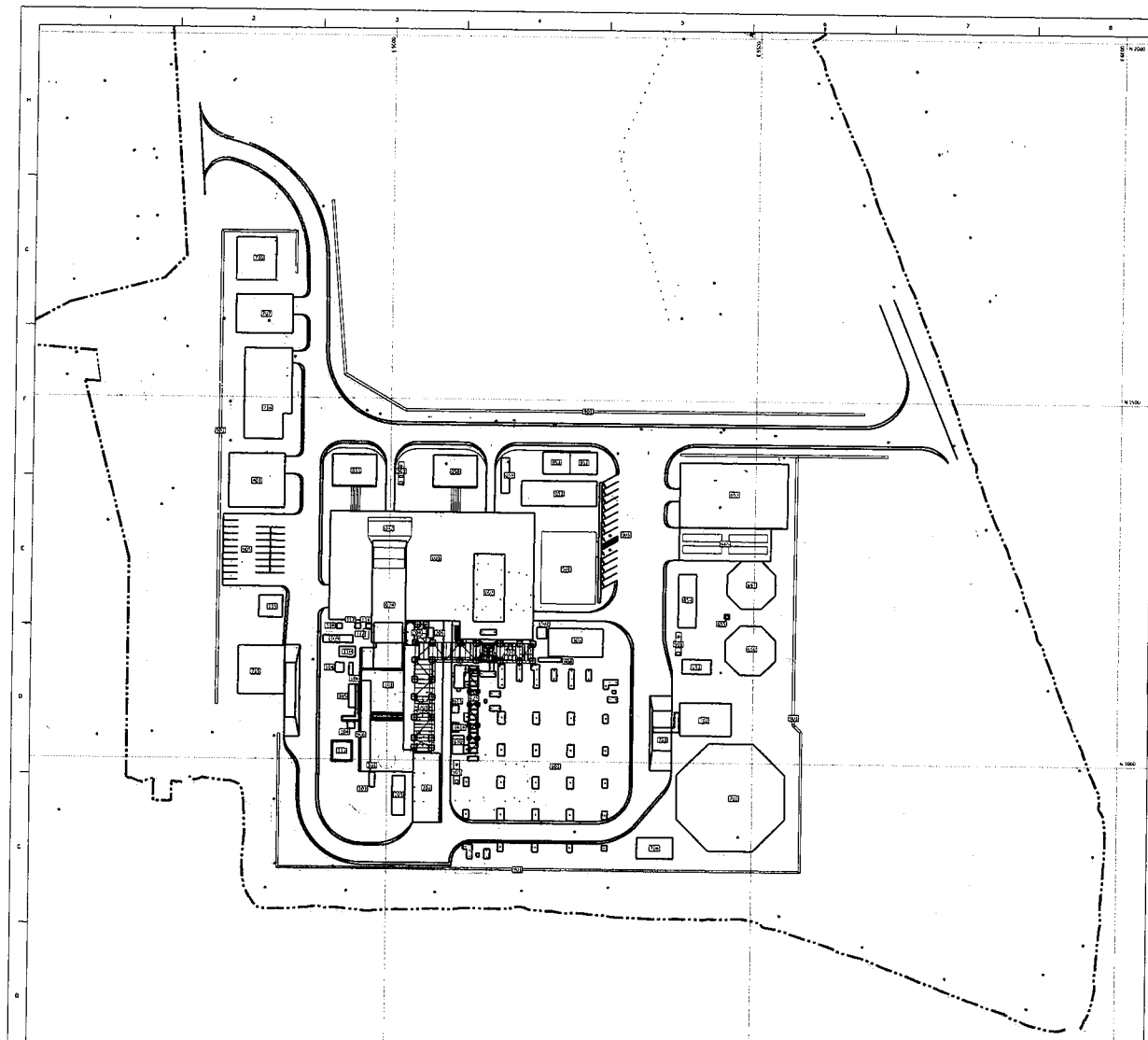
BRIDGEPORT HARBOR STATION - Combined Cycle Project

Figure 1

10/23/2015

BRIDGEPORT HARBOR STATION - Combined Cycle Project

Site Location Aerial
Figure 2



FACILITIES LEGEND

ID	FACILITY	ARRANGEMENT	BRIDGMAN LOCATION NORTH	BRIDGMAN LOCATION EAST	REMARKS
001	TURBINE/GENERATOR ENCLOSURE (PEMB)	-	1342.78	4818.83	COLUMN ROW TBA - TB1
002	STEAM TURBINE GENERATOR	-	-	-	
024	GAS TURBINE GENERATOR	-	-	-	
042	GTG AIR INLET FILTER	-	-	-	
006	STG GSU TRANSFORMER	-	-	-	
051	GTG GSU TRANSFORMER	-	-	-	
052	MV ELECTRICAL PDC ENCLOSURE	-	-	-	
053	UNIT AUX TRANSFORMERS	-	-	-	
055	STANDBY DIESEL GENERATOR	-	-	-	
101	HCA1 RECOVERY STEAM GENERATOR	-	-	-	
102	HCA1 RECOVERY STEAM GENERATOR STACK		1000.00	5000.00	CL STACK
103	DEMS EQUIPMENT MODULE	-	-	-	
104	HRSG BLOWDOWN TANK	-	-	-	
105	HRSG AMMONIA FLOW CONTROL SKID	-	-	-	
106	HRSG BURNER FUEL SKID	-	-	-	
108	FUEL GAS ABSOLUTE SEPARATOR	-	-	-	
109	FUEL GAS PERFORMANCE HEATER	-	-	-	
110	STARTUP GAS HEATER	-	-	-	
112	WATER WASH/FALSE START DRAINS TANK (UC)	-	-	-	
113	HRSG BLOWDOWN SUMP	-	1012.00	4934.00	CL SUMP
115	BULK HYDROGEN SYSTEM	-	-	-	
116	FALSE START DRAINS TANK	-	-	-	
117	WATER WASH DRAINS TANK	-	-	-	
118	FUEL DRAINS TANK	-	-	-	
201	HRSG UTILITY RACK	-	-	-	
202	BOILER FEEDWATER PUMP ENCLOSURE (PEMB)	-	914.87	5386.83	COLUMN ROW BA-B1
203	HRSG ELECTRICAL PDC ENCLOSURE	-	-	-	
204	CT LUBE OIL RESERVOIR	-	-	-	
205	CT LIQUID FUEL FILTER SKID	-	-	-	
301	AUX BOILER ENCLOSURE (PEMB)	-	1143.00	5219.23	COLUMN ROW AA-X1
302	AUX BOILER STACK	-	1178.28	5209.95	CL STACK
401	WAREHOUSE/MAINTENANCE BUILDING (PEMB)	-	1353.50	4778.00	COLUMN ROW WA-W1
501	ADMIN/CONTROL/AUX ELECT BUILDING (PEMB)	-	1318.75	5307.50	COLUMN ROW CA-C1
601	AIR COOLED CONDENSER (ACC)	-	-	-	
608	CT GLYCOL PUMP & HEATER SKID	-	-	-	
610	WASTE WATER COLLECTION SUMP	-	1022.15	5097.32	CL SUMP
613	RESIN RECOVERY TANK	-	-	-	
614	SPENT SLURRY SUMP	-	1045.00	5093.18	CL SUMP
625	CONDENSATE UTILITY RACK	-	-	-	
630	SERVICE/FIRE WATER STORAGE TANK	-	-	-	
631	DEMIN WATER TANK	-	-	-	
632	FIRE PUMP HOUSE	-	-	-	
633	GENERAL SERVICES ENCLOSURE (PEMB)	-	1295.73	5384.30	CL COLUMN ROW CA-D1
634	AUX COOLING TOWER	-	-	-	
635	GENERAL SERVICES ENCLOSURE SUMP	-	742.50	4802.50	CL SUMP
655	DEMIN WATER TRAILERS/CYCLE MAKEUP TREATMENT	-	-	-	
701	ULSD TANK (ULTRA LOW SULFUR DIESEL)	-	-	-	
702	FUEL OIL FORWARDING PUMP ENCLOSURE (PEMB)	-	1037.83	5388.63	CL COLUMN ROW FA-F1
703	FUEL OIL TRUCK UNLOADING AREA	-	-	-	
707	FUEL GAS PROCESSING ENCLOSURE (PEMB)	-	-	-	
708	MANUFACTURED TREATMENT DEVICE	-	-	-	
710	FUEL GAS METERING STATION	-	-	-	
715	AQUEOUS AMMONIA STORAGE & UNLOADING AREA	-	-	-	
716	GIS ENCLOSURE	-	-	-	
801	RETAINING WALL	-	-	-	
803	OIL/WATER SEPARATOR (UNDERGROUND)	-	-	-	
805	PARKING/SIDEWALK	-	-	-	
906	HRSG ACOUSTIC SHROUD	-	-	-	

DESIGN NOTES:

1. NOTES APPLICABLE TO 5GAU-G1000 & G1001.
2. THIS DRAWING IS THE BASIS FOR THE SITE ARRANGEMENT AND IS SUBJECT TO REVISIONS AS A RESULT OF DETAILED DESIGN AND/OR TO VARIATIONS IN SUPPLIERS OF MAJOR EQUIPMENT.
3. THE PROJECT PLANT GRID SYSTEM IS BASED ON THE CONNECTICUT STATE PLANE COORDINATE SYSTEM (NAD83 (2011)) EPOCH 2010.00) FEET TO CONVERT THE PLANT GRID TO STATE PLANE, ROTATE THE SITE CLOCKWISE ABOUT THE CENTERLINE OF THE HRSG STACKS BY 77°, THEN ADD 600,773.13 TO THE NORTHING AND 4,080,879.94 TO THE EASTING. PLANT GRID SYSTEM AND NOTED CONVERSION IS ONLY APPLICABLE TO THE LIMITS ON THIS DRAWING.
4. ESTABLISHMENT FROM MEASURE TO THE CITY OF BRIDGEPORT DATUM, APPLIED A TO NAVD88 ELEVATION TO YIELD BRIDGEPORT DATUM.

OPEN
01/01/1900

ISSUED FOR PERMITTING
THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY ENCLARITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

NO	DATE	ACCT	DESCRIPTION	DWN	CKD	EXD	REV	APD
B	08/25/18	C81908	PERMIT ISSUE	RJL	TEB	LWJ	LWJ	MED

REVISION

BRIDGEPORT HARBOR UNIT 5
PLANT LAYOUT
GENERAL YARD
OVERALL SITE ARRANGEMENT

ARRANGEMENT — DESIGN - CIVIL GENER

PROJECT ENGINEERING DIVISION

PSEG
Power Connecticut LLC

Project Location:
Fairfield County, CT

BLACK & VEATCH
Building a world of difference.
Corporate Headquarters:
11401 Lamar Ave., Overland Park, KS 66211

DRAWN (I&A'D)	CHECKED (I&A'D)	EXAMINED (I&A'D)
RICK LANCE	TERRY BROWN	
REVIEWED (I&A'D)	REVIEWED (I&A'D)	APPROVED (I&A'D)
	WEY-JEN LEE	

VENDOR NO.
191547-5GAU-G1001

DWG SCALE: 1" = 50'

SEAL:

I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF CONNECTICUT.

NAME & VEATCH
DATE EXPIRES

TECHNICAL TABLES/SPECIFICATIONS:

REVISION NOTES:

B ISSUED FOR PERMITTING

ANSI E SIZE

CONT. MECH. WORK
ELEC. CIVIL OTHER

SPONSOR: T. MURPHY

VERSION: 0

cold winter operating conditions, if necessary. ULSD is permitted for use for up to 720 hours at full load per year.

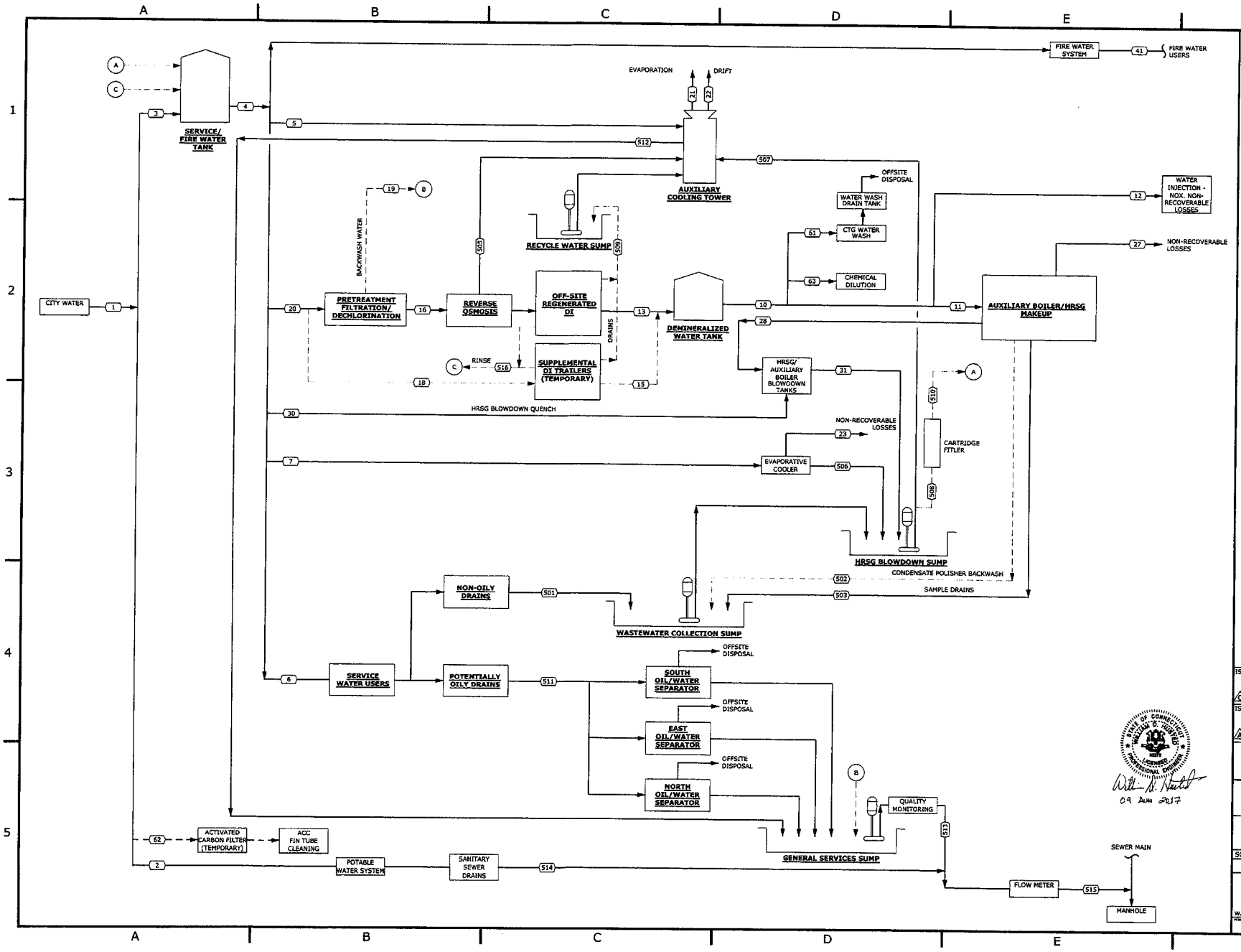
BHS Unit 5 will ultimately replace the electric generating capabilities of the Station's Unit 3, which is expected to be retired on July 1, 2021. As indicated above, the Station's former Units 1 and 2 have previously been retired. Because BHS Unit 5 will utilize an air cooled condenser for steam cycle cooling rather than rely on once-through or evaporative cooling technologies, following retirement of Unit 3 the Station will no longer require operation of a once-through condenser cooling water system.

2.0 PROCESS AND POTABLE WATER MAKEUP REQUIREMENTS

Water is required for several functions associated with the clean and efficient operation of BHS Unit 5. Process water is needed for steam cycle makeup (i.e., heat recovery steam generator or HRSG makeup), auxiliary cooling tower makeup, plant maintenance, inlet air-cooling, compressor cleaning, and air pollution control (i.e., NOx injection water when firing ULSD). It is also required to meet the facility's potable water needs. Potable and process makeup needs will be satisfied through withdrawals from the municipal distribution system, which is owned and operated by Aquarion Water Company (Aquarion). Aquarion has provided a "Will Serve" letter to the Project, confirming its ability to satisfy facility water demands.

A facility water balance diagram is provided in Figure 4 with corresponding flows for various operating conditions listed in Table 1. Figure 4 illustrates, in schematic form, the principal water supply and wastewater discharge pathways through the facility. Process flows listed in Table 1, shown in units of gallons per minute (gpm), reflect facility operation under various operating conditions when firing natural gas as well as when the facility would use the backup fuel, ULSD. Figure 4 also illustrates how internal recycle and reuse of process wastewater is incorporated throughout the facility to improve overall water efficiency and reduce process wastewater discharge requirements.

When using natural gas as the fuel, projected average daily water supply needs for BHS Unit 5 are expected to range from approximately 120 gallons per minute (gpm) to 170 gpm. This estimate assumes that the facility is operating at 100% capacity (i.e., under full load conditions). When ULSD is used, water needs are expected to total approximately 620 gpm at full load, as additional water is required for air pollution control purposes (i.e., water injection for controlling nitrous oxide [NO_x] emissions). PSEG anticipates that ULSD will primarily be used during extreme winter operating conditions when natural gas supplies are prioritized to satisfy winter heating demands (i.e., during natural gas curtailments). Historically, natural gas curtailments have occurred in the Northeast during unusually cold winter conditions, such as when average daily temperatures remain below 15° F for several days.



GENERAL NOTES:

1. THE INTENT OF THIS DIAGRAM IS TO SHOW THE MAJOR WATER AND WASTEWATER FLOWS.
2. REFER TO 644911-FD002-S002 FOR STREAM FLOW DATA.
3. DASHED LINES REPRESENT INTERMITTENT FLOWS.

Figure 4

ISSUED FOR CONSTRUCTION

ISSUED FOR APPROVAL

REVISION	DATE	BY	CHECKED	APPROVED	PROJ. TECH.	DIR. TECH.	PROJ. MGR.
0	05/17/17	WW	WDH	WDH	LA	SF	SEO

PROJECT ENGINEERING DIVISION

PSEG Power Connecticut LLC

SNC • LAVALIN CONSTRUCTORS INC.

SCALE:

BRIDGEPORT 05

PROCESS FLOW DIAGRAM
WATER SYSTEM
FLOW DIAGRAM
SHT. 1 OF 5

WATER BALANCE — MECHANICAL-PIPING

644911-FD002-S001

09 JUN 2017

Table 1: Bridgeport Unit 5 Water Balance

Stream no.	Description	Units	Low Ambient Case	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	Remarks
			USLD, EC off, DF ON, 100% GT load	NG, EC off, DF Off, 100% GT load	NG, EC ON, DF ON, 100% GT load	USLD, EC off, DF Off, 100% GT load	NG, EC ON, DF ON, 100% GT load	NG, EC ON, DF ON, 100% GT load	USLD, EC OFF DF ON, 100% GT load	
	Ambient temperature		0 F	59 F / 60% RH	90 F / 70% RH	35 F / 50% RH	90 F / 70% RH	59 F / 60% RH	35 F / 50% RH	
	HRSG & Heat balance Case no.		56 & CCA20146	Case 1 (HRSG) & Heat balance CCA20095	Case 2 (HRSG performance) & Heat balance CCA20081	Case 3 (HRSG) & Heat balance CCA20139	Case 4 (HRSG) & Heat balance CCA20081	Case 5 (HRSG) & Heat balance CCA20004	Case 6 (HRSG) & Heat balance CCA20138	
1	City water supply	gpm	586	120	169	619	169	143	624	
2	Potable water network	gpm	2	2	2	2	2	2	2	
3	Supply to Service/Fire water tank	gpm	584	118	167	617	167	141	622	
4	service water demand	gpm	619	118	167	648	167	141	658	
5	Service water makeup to CT makeup	gpm	8	64	79	31	79	59	32	
6	Service water for misc uses	gpm	10	10	10	10	10	10	10	
7	Supply to CTG evap cooler	gpm	0	0	23	0	23	20	0	
	Total steam rate	lb/h	1,072,600	821,700	1,032,100	812,500	1,028,000	993,100	1,002,500	
11	Boiler makeup	gpm	38	29	36	28	36	35	35	
12	Nox Water	gpm	493	0	0	509	0	0	509	
10	Total demin water	gpm	531	29	36	537	36	35	544	
13	Leased RO/DI trailers, permeate	gpm	300	29	36	300	36	35	300	
15	Supplement DI trailer, min flow	gpm	231	0	0	237	0	0	244	
16	Leased RO/DI trailers, feed	gpm	353	34	42	353	42	41	353	
18	Supplement DI trailer, feed	gpm	237	0	0	244	0	0	251	
19	Water pretreatment backwash	gpm	1	1	1	1	1	1	1	
20	Total supply to water treatment	gpm	591	35	43	598	43	42	605	
21	CT evaporation	gpm	46	86	105	68	105	86	66	
	CT Cycles of concentration	-	3.5	8.5	7	4.5	7	7	4.3	
22	CT Drift	gpm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
23	CTG evap cooler evaporation	gpm	0	0	19	0	19	17	0	
27	Misc loses from w/s cycle	gpm	11.8	8	11.2	7.9	11.1	10.6	10.7	
28	HRSG blowdown	gpm	21	16	21	16	21	20	20	1% Blowdown
	Blowdown, after flashing	gpm	13	10	12	10	12	12	12	
30	Quench water, gpm	gpm	10	9	11	9	11	11	11	
31	To blowdown sump	gpm	23	19	24	19	24	23	23	NOTE 2
41	Fire water system	gpm	0	0	0	0	0	0	0	
61	Demin water to CTG water wash	gpm	0	0	0	0	0	0	0	
62	City water to ACC fin tube cleaning	gpm	0	0	0	0	0	0	0	
63	Demin water to chemical dilution	gpm	0	0	0	0	0	0	0	
501	Non oily wastewater	gpm	5	5	5	5	5	5	5	
502	Condensate polisher backwash	gpm	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
503	sample panel drains	gpm	4	4	4	4	4	4	4	
505	RO reject	gpm	53	5	6	53	6	6	53	NOTE 3
506	Evaporative cooler blowdown	gpm	0	0	4	0	4	3	0	NOTE 4
507	Recycle to CT basin from BD sump	gpm	0	28	37	0	37	35	0	
508	To cartridge filters	gpm	32	0	0	28	0	0	32	
509	Recycle water sump	gpm	4	0	0	4	0	0	4	
510	Recycle to S/F water tank	gpm	32	0	0	28	0	0	32	
511	Oily wastewater	gpm	5	5	5	5	5	5	5	
512	CT blowdown	gpm	18	11	18	19	18	14	21	
513	CT blowdown, oily ww and filter backwa	gpm	24	17	24	25	24	20	27	
514	Sanitary wastewater	gpm	2	2	2	2	2	2	2	
515	Total wastewater	gpm	26.4	19.5	25.5	27.4	25.5	22.3	28.6	
516	Rinse water recyle to service/fire water t	gpm	2.9	0	0	2.9	0	0	2.9	

NOTE 1 Indicated flow rates may not balance due to rounding.
NOTE 2 Quenched blowdown temperature equal or less than 140 degree F.
NOTE 3 Assumes 85% RO recovery.
NOTE 4 Based on 6 cycles of concentration.

3.0 WASTEWATER GENERATION

The low volume waste streams generated by the facility include:

- Sanitary wastewater;
- On-site water treatment wastewater;
- Evaporative cooler blowdown;
- Off-line compressor wash water;
- Plant maintenance water collected in facility floor drains;
- HRSG blowdown;
- Auxiliary boiler blowdown; and,
- Auxiliary cooling tower blowdown.

As shown on the water balance diagram, most of the process waste streams generated at the facility will be reused as auxiliary cooling tower makeup. Discharge of process wastewater to the sanitary collection system will consist primarily of cooling tower blowdown and treated effluent from oil/water separators (i.e., Outfall DSN 201). Sanitary wastewater from BHS Unit 5 will be collected and combined with process wastewater and discharged into the City of Bridgeport's collection system near the intersection of Railroad Avenue and Main Street through a new force main. The new force main extends in a northerly direction through the BHS property to Ferry Access Road, then westerly along Ferry Access Road to the intersection of Railroad Avenue and Main Street. At the discharge point, the collection system consists of a 60-inch gravity main, which conveys wastewater to the City's West Side Water Pollution Control Facility (WPCF).

The water conditioning program for various pieces of equipment is summarized in Section 4. Section 5 addresses compliance with applicable effluent guidelines, limitations and monitoring requirements.

3.1 SANITARY WASTEWATER

Sanitary wastewater will be collected and conveyed to one of two packaged wastewater pumping stations via gravity flow. It will discharge with process wastewater into the City's collection system. The facility is anticipated to employ approximately 25 people over three shifts. The average daily sanitary wastewater generation rate is expected to be approximately 2 gpm or 2880 gallons per day (gpd).

3.2 ON-SITE WATER TREATMENT (DEMINERALIZATION SYSTEM) WASTEWATER

High purity demineralized water is required for HRSG makeup (i.e., boiler makeup), auxiliary boiler makeup, periodic combustion turbine washes and to control air emissions when firing ULSD. A demineralization system will be used to purify water from the municipal distribution system. When firing natural gas as the fuel, demineralization will be accomplished using reverse osmosis (RO) followed by ion exchange. A sand filter will be installed ahead of the RO system to remove suspended sediment. Backwash water from the sand filter will be directed to the General Services Sump. Residual chlorine, which can degrade RO membranes, will be removed using sodium bisulfite addition. Makeup water to the RO system will typically range from 35 gpm to 50 gpm when firing natural gas under full load conditions. When firing ULSD as the fuel, demineralization will be accomplished using RO and supplemented through use of leased ion exchange trailers. Demineralized water makeup requirements will be approximately 590 gpm when firing ULSD. The leased trailer mounted ion exchange resins will be regenerated off-site by the selected vendor.

Wastewater from the RO system (RO reject water) is expected to range from 5 to 10 gpm when firing natural gas as the fuel and up to approximately 55 gpm when firing ULSD. RO reject water will be reused as auxiliary cooling tower makeup. The constituents in RO reject water, which will consist of the naturally occurring dissolved salts and minerals contained in the municipal distribution system, will have a concentration approximately seven (7)times the municipal water concentration.

As indicated above, the ion exchange resins will be regenerated off-site by the selected vendor. Initial rinse water (i.e., when new ion exchange resin beds arrive on-site) will be recycled to the service/fire water tank. Drain down water (i.e., when emptying the beds prior to off-site transport) will be reused as auxiliary cooling tower makeup. (Initial rinse water and drain down water is not anticipated to meet the stringent demineralized process water makeup requirements for use in the HRSG or combustion turbine.)

3.3 COMBUSTION TURBINE (CT) INLET AIR COOLER

The CT will be equipped with an inlet air cooler (i.e., evaporative cooler) to cool the inlet air stream, thereby increasing inlet air density and CT output. The inlet air cooler can be used at an ambient air temperature above 40° F, but is most effective when ambient air temperature is greater than approximately 60° F. Makeup water to the inlet air cooler will be from the service/fire water storage tank. When on, makeup requirements are estimated to range from approximately 20 gpm to 25 gpm under peak summer operating conditions (i.e., when ambient air temperature approaches or exceeds 90° F).

Blowdown from the inlet air cooler will be routed to the HRSG blowdown sump to offset cooling tower makeup requirements. Evaporative cooler blowdown also contains the naturally occurring dissolved salts and minerals contained in the municipal water, but at a concentration roughly 6 times the municipal water concentration (i.e., the concentration in the municipal distribution system) due to evaporative water loss.

3.4 OFF-LINE COMPRESSOR WASH WATER

The compressor serving the CT requires periodic cleaning to maintain operating efficiency and prevent excessive wear and tear on internal components. Compressor cleaning can be performed when the CT is on-line or off-line. Off-line washes are generally performed on a monthly or quarterly basis. An off-line compressor wash consists of injecting a demineralized water/detergent mixture into the compressor when the combustion turbine is off-line. The mixture is used to remove accumulated dust, dirt or other contaminants that cannot be removed during an on-line wash. In general, the cleaning solution will consist of approximately 25 percent detergent and 75 percent demineralized water. The resultant wastewater will be collected in the false start drain tank and trucked for off-site processing at an appropriately licensed facility.

On-line washes do not generate wastewater, as demineralized water injected into the CT during an on-line wash is lost to the atmosphere through evaporation.

3.5 FLOOR DRAINS (EQUIPMENT DRAINS/PLANT MAINTENANCE WASTEWATER)

Floor drains located in potentially oily areas of the facility will be routed through oil/water separators. Water processed through the oil water separators will be discharged to the General Services Sump. Accumulated oil and sediment will be periodically trucked offsite and properly disposed at an appropriately licensed facility. Equipment drains from non-oily areas will be routed to the wastewater collection sump for reuse as auxiliary cooling tower makeup, as needed.

3.6 HRSG AND AUXILIARY BOILER BLOWDOWN

HRSG and auxiliary boiler blowdown will be quenched (i.e., cooled) and reused in the auxiliary cooling tower to offset cooling tower makeup requirements or recycled as process makeup water to the service/fire water storage tank. Quenched blowdown will be collected in the HRSG blowdown sump prior to reuse. When firing ULSD, quenched HRSG blowdown will be routed to a cartridge filter and returned to the service/fire water storage tank for reuse as process makeup water.

Sample drains, which are used to monitor steam cycle chemistry, and condensate polisher backwash water will discharge to the wastewater collection sump for reuse as auxiliary cooling tower makeup, as needed.

3.7 AUXILIARY COOLING TOWER BLOWDOWN

When operating on natural gas, auxiliary cooling tower blowdown represents the primary waste stream requiring offsite disposal. The blowdown rate will vary depending on the allowable cycles of concentration required to control scale formation and prevent excessive corrosion. Review of water quality data from the municipal distribution system (i.e., operated by Aquarion Water Co.) and projected water quality characteristics from internal reuse streams indicates that the auxiliary cooling tower would typically operate at from seven (7) to nine (9) cycles of concentration when firing natural gas and at approximately 4.5 cycles of concentration when firing ULSD. The resulting blowdown will consist primarily of the naturally occurring dissolved salts and minerals present in the municipal water supply, but at concentrations approximately seven (7) to nine (9) times those of constituents in the auxiliary cooling tower makeup water due to evaporative water loss. Blowdown rates are anticipated to range from approximately 10 gpm to 20 gpm under routine operating conditions.

During periodic maintenance outages requiring draining of the auxiliary cooling tower, drain down water from the auxiliary cooling tower and circulating water system will be directed to the General Service Sump for discharge to the sewer. When this occurs, the maximum instantaneous discharge rate to the sewer will be approximately 150 gpm over a two hour period. The total volume of the auxiliary cooling tower and circulating water system ranges between 9,000 and 13,500 gallons. Note that the auxiliary cooling tower and circulating water system can only be drained when the facility is offline (i.e., during a plant maintenance outage).

4.0 WATER CONDITIONING PROGRAM

Maintaining proper water chemistry is critical to proper functioning and long term maintenance of the steam cycle, auxiliary cooling tower, circulating water system (i.e., piping and heat exchangers), and the RO treatment train. Table 2 identifies the types of chemicals, dosing rates and storage containers that are routinely used at combined cycle generating facilities for this purpose. Representative Safety Data Sheets for the proposed water conditioning program are included in Appendix 2.

Note that there are several potential water treatment/chemical vendors that can be selected to satisfy the water conditioning needs for the facility. As such, adjustments to the water conditioning program may occur during final design or when a water treatment/chemical vendor is selected prior to facility startup. Although different vendors offer their own blends of conditioners, the overall water conditioning program will be consistent with the types of chemicals listed in Table 2. A brief description of the water conditioning program for various pieces of equipment follows:

4.1 RO TREATMENT TRAIN

Water conditioning chemicals will be added ahead of the RO system to prevent premature fouling of the RO membranes. Based on preliminary design, this will consist of sodium bisulfite to remove residual chlorine, an antiscalant to limit the potential for scale formation, sulfuric acid for pH control, and a caustic to remove carbon dioxide. Projected dosing rates (in ppm) are listed in Table 2.

4.2 HEAT RECOVERY STEAM GENERATOR (HRSG)

Consistent with the feedwater treatment program employed in the industry BHS Unit 5 steam cycle chemistry will be controlled by injecting aqueous ammonia and a filming amine into the Condensate/feedwater systems combined with trisodium phosphate injection in the high pressure (HP) and intermediate pressure (IP) drums, as further described below.

4.2.1 Condensate/Feedwater

An aqueous ammonia solution will be used to maintain the HRSG condensate/feedwater pH between 9.4 and 9.6. A filming amine will be used to provide a protective film on internal surfaces within the HRSG and steam cycle to reduce corrosion. The ammonia and amine feed rates will be automatically adjusted

TABLE 2: WATER CONDITIONING PROGRAM

V 5

AUXILIARY COOLING TOWER

Chemicals	Chemical Supplier	Name, Concentration	Density (lb/gal)	Dose (ppm)	Flow (gph)	Flow (lb/hr)	Continuous / Intermediate	Purpose	Tank/Tote & Quantity	Site Storage	ASME Category M Fluid	Comments
Sodium Hypochlorite	ChemTreat	Sodium Hypochlorite, 12.5%	10.09	0.2	1.43	14.43	Continuous	Oxidant - Biofilm control	Tote, 400 gal	Estimate one to two spare totes	No	Feed skid equipped with 1" female cam-lock
Acid	Univar	Sulfuric Acid, 77-100%	15.28	11	0.1	1.53	Continuous	pH and Scale control	Tote, 400 gal	Estimate one to two spare totes	No	Acid will be diluted to 3% before feeding to tower. Feed skid equipped with 1" female cam-lock.
Antiscalant	ChemTreat	Polymer Dispersant, ChemTreat CL4704	9.61	30	0.09	0.86	Continuous	Scale control	Tote, 400 gal	Estimate one to two spare totes	No	Feed skid equipped with 1" female cam-lock
Corrosion Inhibitor	ChemTreat	Flexpro, ChemTreat CL5644	10.78	30	0.13	1.40	Continuous	Corrosion Inhibition	Tote, 400 gal	Estimate one to two spare totes	No	Feed skid equipped with 1" female cam-lock

Total = 18.2

CYCLE FEEDWATER / CONDENSATE / HRSG DRUM / AUXILIARY BOILER

Chemicals	Chemical Supplier	Name, Concentration	Density (lb/gal)	Dose (ppm)	Flow (gph)	Flow (lb/hr)	Continuous / Intermediate	Purpose	Tank/Tote & Quantity	Site Storage	ASME Category M Fluid	Comments
Condensate Ammonia	ChemTreat	ChemTreat BL153, 10-30%	7.71	1-2	3.25	25.1	Continuous	pH Control	Tote, 250 gal	Total ammonia based products are limited to 500 gallons total.	No	Feed skid equipped with 1" female cam-lock.
Aux. Boiler Ammonia			7.71	1-4	0.12	0.9	Intermediate (Startup/Shutdown Only)					Feed skid equipped with 1" female cam-lock.
Condensate Filming Amine	ChemTreat	ChemTreat BL8100, 10-30%	8.35	1-2	3.25	27.1	Continuous	pH Control	Tote, 250 gal		No	Feed skid equipped with 1" female cam-lock.
Trisodium Phosphate	ChemTreat	ChemTreat BL1794, 1-5%	8.67	1-5	3.4	29.5	Intermediate	pH buffer and hardness/scale	Removal totes Tote, 400 gal	Estimate one to two spare	No	HP and IP boiler drum feed. Feed skid equipped with 1" female cam-lock. One HP and one IP phosphate tote.

Total = 82.6

HRSG / SCR

Chemicals	Chemical Supplier	Name, Concentration	Density (lb/gal)	Dose (ppm)	Flow (gph)	Flow (lb/hr)	Continuous / Intermediate	Purpose	Tank/Tote & Quantity	Site Storage	ASME Category M Fluid	Comments
Ammonia	ChemTreat / Tanner Industries	Ammonia Hydroxide, 19%	7.71	--	173.89	1340.7	Continuous	SCR Catalyst Reagent	Tank, 20,000 gals	The amount of storage allowed in the tank.	No	Two (2) 2" Female Cam-lock connections on unloading skid for tank fill and vent.

Total = 1340.7

SERVICE/FIRE WATER STORAGE TANK

Chemicals	Chemical Supplier	Name, Concentration	Density (lb/gal)	Dose (ppm)	Flow (gph)	Flow (lb/hr)	Continuous / Intermediate	Purpose	Tank/Tote & Quantity	Site Storage	ASME Category M Fluid	Comments
Polyphosphoric Acid	GE Water	Flogard MS6202, 20 – 40%	11.16	1-1.4	0.36	3-4	Continuous	Antiscalant	Tote, 250 gal. or Drum	Estimate one spare	No	

DEMINERALIZED WATER

Chemicals	Chemical Supplier	Name, Concentration	Density (lb/gal)	Dose (ppm)	Flow (gph)	Flow (lb/hr)	Continuous / Intermediate	Purpose	Tank/Tote & Quantity	Site Storage	ASME Category M Fluid	Comments
Sodium Bisulfite	Evoqua	Sodium Bisulfite, 50%	10.84	--	0.25	2.7	Continuous	Dechlorination	Tote, 80 gals	Estimate one to two spare totes	No	Contained all within Evoqua container
Antiscalant	Evoqua, Avista Technologies	VITEC 3000 NSF, or equivalent	9.42	--	0.5	4.7	Continuous	Solubility and Scale Control	Tote, 80 gals	Estimate one to two spare totes	No	Contained all within Evoqua container
Caustic	Evoqua, Gehring-Montgomery	Caustic Liquid Soda, 50% or equivalent	12.8	--	0.5	6.4	Continuous	CO2 removal	Tote, 80 gals	Estimate one to two spare totes	No	Contained all within Evoqua container

Total = 13.8

TURBINE GENERATOR

Chemicals	Chemical Supplier	Name, Concentration	Density (lb/gal)	Dose (ppm)	Flow (gph)	Flow (lb/hr)	Continuous / Intermediate	Purpose	Tank/Tote & Quantity	Site Storage	ASME Category M Fluid	Comments
Hydrogen	Air Products	H2, 100%	0.0056	--	--	17	Continuous		Generator Cooling No Trailer/bottle storage. 347 lbs	The amount of storage allowed in the trailer.		Connections for trailer hookup will be with chemical supplier
Carbon Dioxide	Air Products	CO2, 100%	0.12346	--	--	890	Continuous	Generator Hydrogen Cooling Purge	36 Bottles Total, 465 ft3 per Bottle	The amount of storage allowed in the trailer.	No	Connections for trailer hookup will be with chemical supplier

1. Density is Design Basis. Total = 907

NOTE: All Chemicals listed above and on previous page are proposed based on the design of the respective systems. Chemical brand, SDS and feed rates are subject to change based on final commissioning and operation.

by the main plant distributed control system (DCS) based on the specific conductance of the condensate. Estimated dosing rates (in ppm) for ammonia and amine are listed in Table 2.

4.2.2 Boiler Water

A trisodium phosphate solution will be used in the HP and IP drums to maintain the boiler water pH and prevent scale formation on boiler tube surfaces. The phosphate combines with hardness in the boiler feedwater to form a non-adhering precipitate that can be easily blown down from the boiler. The estimated phosphate dosing rate (in ppm) is listed in Table 2.

4.3 SELECTIVE CATALYTIC REDUCTION (SCR)

A 19% aqueous ammonia solution will be used as a catalyst reagent in the SCR process for air pollution control purposes. The SCR system does not generate process wastewater. Aqueous ammonia for the SCR will be stored in a 20,000 aboveground storage tank.

4.4 AUXILIARY BOILER

A 19% aqueous ammonia solution will be used in the auxiliary boiler to maintain pH within the range of 9.5 to 10.2 standard units. Ammonia is fed to the auxiliary boiler deaerator to raise the pH to minimize corrosion. The estimated dosing rate (in ppm) is listed in Table 2. Auxiliary boiler blowdown will be routed to one of the Facility's wastewater sumps for reuse as auxiliary cooling tower makeup.

4.5 AUXILIARY COOLING TOWER

Makeup water for the auxiliary cooling tower will consist primarily of recycled process wastewater collected in the wastewater collection sump, HRSG blowdown sump and RO reject. This will be supplemented, as required, with water from the service water/fire water storage tank. The water conditioning program for the auxiliary cooling tower will consist of acid addition for alkalinity control, sodium hypochlorite addition to limit biofouling potential, and use of corrosion and scale inhibitors. The program will not use chemical additives containing the 126 priority pollutants, as required under 40 CFR 423.17. Sulfuric acid will be fed to the cooling tower to reduce total alkalinity. Reducing total alkalinity allows the cycles of concentration in the tower to be increased, while controlling the scaling potential of the water. Scale and corrosion inhibitors are added to the auxiliary cooling tower as sequestering agents

to inhibit scale build-up and to reduce corrosion potential. Sodium hypochlorite is fed to the auxiliary cooling tower to minimize biofouling of heat exchange surfaces within the circulating water system and to minimize biological growth on tower fill and circulating water piping. Estimated dosing rates are listed in Table 2.

5.0 COMPLIANCE WITH EFFLUENT LIMITATIONS

Process wastewater discharged directly to the sewer for treatment at the West Side Water Pollution Control Facility (WPCF) will comply with the Effluent Guidelines and Standards for the Steam Electric Power Generating Point Source Category listed at 40 CFR 423.17 entitled "Pretreatment Standards for New Sources (PSNS)." In addition, under normal operating conditions constituent concentrations in the discharge would be less than those allowed under the CT DEEP's General Permit for Miscellaneous Discharges of Sewer Compatible (MISC) Wastewater.

Stormwater runoff from the site will be managed in accordance with the CT DEEP's Stormwater Management Regulations and will discharge directly to receiving waters (i.e., Bridgeport Harbor) in accordance with the CT DEEP's General Permit for the Discharge of Stormwater Associated with Industrial Activity. No stormwater is discharged to the WPCF.

5.1 METERING AND COMPLIANCE MONITORING

PSEG will establish, as required, a wastewater metering and representative sampling/monitoring point to verify compliance with applicable effluent limits and monitoring requirements. Sample collection will be performed in accordance with permit conditions. Sample analysis will be performed by a State of Connecticut certified laboratory using approved analytical methods (40 CFR Part 136).

5.2 COMPLIANCE WITH PRETREATMENT STANDARDS FOR NEW SOURCES (PSNS)

As a steam electric generating facility, BHS Unit 5 is subject to federal effluent limitation guidelines contained in 40 CFR 423 for the Steam Electric Generating Point Source Category. The subsections below demonstrate how the facility will comply with the pretreatment standards for new sources (PSNS criteria) contained in 40 CFR 423.17.

5.2.1 PCBs

In accordance with 40 CFR 423.17, there shall be no discharge of polychlorinated biphenyl compounds such as those used for transformer fluid.

None of the equipment at BHS Unit 5, including transformers, will contain polychlorinated biphenyl compounds. As such, the facility will comply with this restriction.

5.2.2 Chemical Metal Cleaning Wastes

The pollutants discharged in chemical metal cleaning wastes shall not exceed the concentration listed in the Table 3.

Table 3: PSNS Criteria for Chemical Metal Cleaning Wastes

Pollutant or Pollutant Property	PSNS Maximum for any time (mg/l)
Copper, total	1.0

The facility will comply with this restriction, as process wastewater associated with chemical metal cleaning will not be discharged to the sewer. Wastewater/rinse water generated during acid cleaning of the HRSG, if required during a maintenance outage, will be trucked for off-site disposal at an appropriately licensed facility. Similarly, offline compressor wash water will also be trucked for off-site disposal at an appropriately licensed facility.

5.2.3 Auxiliary Cooling Tower Blowdown

Process wastewater discharged to the City's wastewater collection system will consist primarily of auxiliary cooling tower blowdown and discharges from oil/water separators. Due to evaporative loss in the auxiliary cooling tower, the wastewater (blowdown) will consist primarily of the naturally occurring dissolved salts and minerals (i.e., those present in the recycle streams and the municipal water supply distribution system) which have been concentrated through evaporation. The blowdown volume will vary depending on the allowable cycles of concentration required to control scale formation and prevent excessive corrosion.

The engineering review of water quality data indicates the auxiliary cooling tower will typically operate at from 7 to 9 cycles of concentration when firing natural gas and at up to 4.5 cycles of concentration when firing ULSD. Projected auxiliary cooling tower blowdown characteristics are listed in Tables 4 and 5. Projected blowdown concentrations reflect reuse of low volume waste streams, such as HRSG blowdown and RO reject water, as well as the facility's water conditioning program. Applicable effluent limits under 40 CFR 423.17 and, for comparative purposes, allowable effluent limits under the CT DEEP's General Permit for Miscellaneous Discharges of Sewer Compatible Wastewater are listed below.

Table 4: Discharge Point: DSN 201 - Conventional Constituents

Parameter	Projected Effluent Concentration – NG Firing*	Projected Effluent Concentration – ULSD Firing*	MISC Wastewater Effluent Limit	Units
Biochemical Oxygen Demand	<50	<50	600	mg/l
Chemical Oxygen Demand	<100	<100	-	mg/l
Total Organic Carbon	<100	<100	-	mg/l
Total Suspended Solids	<100	<100	600	mg/l
Total Dissolved Solids	<1500	<3000	-	mg/l
Ammonia (as N)	<20	<20	50	mg/l
pH (in standard units)	5.0 < pH < 12.0	5.0 < pH < 12.0	5.0 < pH < 12.0	SU
Oil & Grease	<25	<25	100	mg/l
Total Petroleum Hydrocarbons	<25	<25	100	mg/l
Calcium	<150	<300	-	mg/l
Chloride	<300	<1000	-	mg/l
Sodium	<300	<300	-	mg/l
Potassium	<10	<25	-	mg/l
Chlorine, Total Residual	<1.0	<1.0	-	mg/l
Sulfate *(as SO_4)*	<200	<500	-	mg/l
Surfactants	<5	<5	-	mg/l
Aluminum, Total	<0.5	<0.75	-	mg/l
Barium, Total	<0.5	<0.5	-	mg/l
Boron, Total	<0.5	<0.5	-	mg/l
Iron, Total	<1	<2.0	-	mg/l
Magnesium, Total	<100	<100	-	mg/l
Manganese, Total	<0.1	<0.1	-	mg/l
Nitrogen, Total Organic (as N)	<20	<40	-	mg/l
Nitrate (as N)	<5	<10	50	mg/l
Total Phosphorus (as P)	<15	<25	-	mg/l

* Effluent concentrations are conservatively estimated based on the auxiliary cooling tower cycles of concentration.

Table 5: Discharge Point: DSN201 - Heavy Metals[1]

Parameter	Projected Effluent Concentration – NG Firing	Projected Effluent Concentration – ULSD Firing	MISC Wastewater Effluent Limit	Units
Antimony Total 7440-36-0	<0.1	<0.05	4	mg/l
Arsenic Total 7440-38-2	<0.05	<0.05	-	mg/l
Beryllium Total 7440-41-7	<0.05	<0.05	2	mg/l
Cadmium Total 7440-43-9	<0.05	<0.05	0.5	mg/l
Chromium Total 7440-47-3	<0.20	<0.20	2	mg/l
Copper, Total 7550-50-8	<0.25	<0.25	2	mg/l
Lead, Total 7439-92-1	<0.25	<0.25	0.5	mg/l
Mercury Total 7439-97-6	<0.0002	<0.0002	0.0002	mg/l
Nickel Total 7440-02-0	<0.25	<0.25	2	mg/l
Selenium Total 7782-49-2	<0.25	<0.25	0.5	mg/l
Silver, Total 7440-22-4	<0.05	<0.05	0.5	mg/l
Thallium, Total 7440-28-0	<0.25	<0.5	2	mg/l
Zinc, Total 7440-66-6	<1.0	<2.0	2	mg/l

1) Heavy metals are projected to be present in auxiliary cooling tower blowdown primarily due to their presence in the municipal distribution system (i.e., presence in the makeup water).

In accordance with 40 CFR 423.17, the quantity of pollutants discharged in cooling tower blowdown cannot exceed the concentration based limits listed in Table 6.

Table 6: PSNS Criteria for Cooling Tower Blowdown

Pollutant or Pollutant Property	PSNS Maximum for any time (mg/l)
The 126 priority pollutants (Appendix A) contained in chemicals added for cooling tower maintenance, except:	([1])
Chromium, total	0.2
Zinc, total	1.0

[1]No detectable amount.

Also in accordance with 40 CFR 423.17, at the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the standards for the 126 priority pollutants in Table 6, above, may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136.

The limitations listed in Table 6 apply to priority pollutants which are contained in cooling tower additives/conditioning chemicals. They do not apply to constituents, such as chromium or zinc, which are present in cooling tower makeup water. At BHS Unit 5 neither chromium nor zinc based additives will be used in the auxiliary cooling tower or for treatment or conditioning of any low volume waste streams discharged to the auxiliary cooling tower. In addition, PSEG will not use cooling tower additives containing any of the other 124 priority pollutants. Compliance will be demonstrated through engineering calculations and certification that priority pollutants are not contained in the facility's water conditioning program. As such, the facility will comply with these limits.

The thermal component of the discharge will vary as a function of ambient wet bulb temperature. The temperature of auxiliary cooling tower blowdown during the spring, summer, and fall seasons can be estimated assuming a 10° F to 15° F increase above ambient wet bulb temperature, and will generally be less than 100° F. During the winter, discharge temperatures are expected to range between 55° F and 60° F, but can approach 70° F. As such, the facility would comply with the temperature limitation contained in the General Permit for Miscellaneous Discharges of Sewer Compatible (MISC) Wastewater.

5.2.4 Fly Ash Transport Water

There shall be no discharge of wastewater pollutants from fly ash transport water.

BHS Unit 5 will not generate fly ash transport water. As such, the facility will comply with this restriction.

5.2.5 FGD Wastewater

BHS Unit 5 will not generate flue gas desulfurization (FGD) wastewater. As such, effluent limits applicable to FGD wastewater do not apply.

5.2.6 Flue Gas Mercury Control Wastewater

There shall be no discharge of pollutants in flue gas mercury control wastewater.

BHS Unit 5 will not generate flue gas mercury control wastewater. As such, the facility will comply with this restriction.

5.2.7 Bottom Ash Transport Water

There shall be no discharge of pollutants in bottom ash transport water.

BHS Unit 5 will not generate bottom ash transport water. As such, the facility will comply with this restriction.

5.2.8 Gasification Wastewater

BHS Unit 5 will not generate gasification wastewater. As such, effluent limits applicable to gasification wastewater do not apply.

5.2.9 Combustion Residuals Leachate

BHS Unit 5 will not generate combustion residuals leachate. As such, effluent limits applicable to combustion residuals leachate do not apply.

5.3 SUMMARY

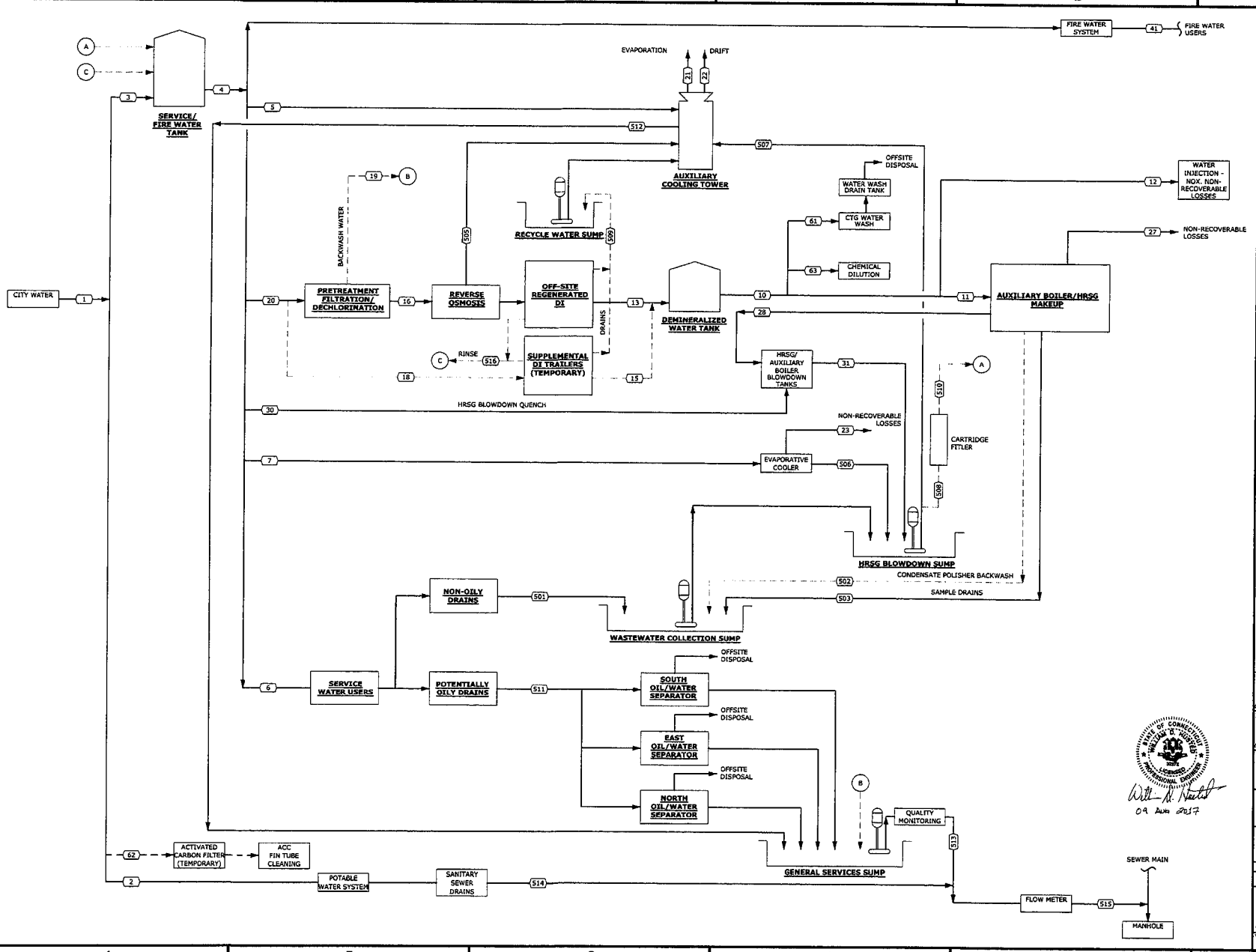
The average daily discharge flow to the sewer will be less than or equal to 50,000 gallons per day (34.7 gpm). This includes both process and sanitary wastewater. The maximum instantaneous discharge rate to the sewer will be 150 gpm, lasting for a two hour period. This will occur during a scheduled maintenance outage once or twice per year when the auxiliary cooling tower and circulating water system are drained for maintenance. When this occurs, the total daily flow to the sewer will remain below 50,000 gallons per day as the Facility will be offline (i.e., when the auxiliary cooling system is drained, the plant must be shut down).

In the unlikely event of an equipment failure or unexpected plant shutdown, the maximum daily flow to the sewer would not exceed 75,000 gallons per day. PSEG does not anticipate this would occur more than 5 days per year.

As indicated above, the process wastewater discharged to the sewer will meet the Federal Categorical Pre-treatment Standards (40 CFR423 et. seq.). For comparative purposes, projected discharge concentrations would also be less than the effluent limitations contained in CT DEEP's General Permit for Miscellaneous Discharges of Sewer Compatible (MISC) Wastewater when firing natural gas. Sanitary wastewater at the facility will be collected separately from process wastewater, but discharged to the sewer through the newly constructed General Services Sump pump station and force main.

APPENDIX 1

Water Balance Diagrams



GENERAL NOTES:

1. THE INTENT OF THIS DIAGRAM IS TO SHOW THE MAJOR WATER AND WASTEWATER FLOWS.
2. REFER TO 644911-FD002-S002 FOR STREAM FLOW DATA.
3. DASHED LINES REPRESENT INTERMITTENT FLOWS.

Figure 4

ISSUED FOR CONSTRUCTION

ISSUED FOR APPROVAL

REVISION	DATE	BY	CHECKED	APPROVED
0	4/10/17	WW	WDH	WDH
A	05/17/17	WW	WDH	WDH

PROJECT ENGINEERING DIVISION

PSEG Power Connecticut LLC

SNC•LAVALIN CONSTRUCTORS INC.

SCALE:

BRIDGEPORT 05

PROCESS FLOW DIAGRAM
WATER SYSTEM
FLOW DIAGRAM
SHT. 1 OF 5

WATER BALANCE — MECHANICAL-PIPING

644911-FD002-S001

Table 1: Bridgeport Unit 5 Water Balance

Stream no.	Description	Units	Low Ambient Case	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	Remarks
	Ambient temperature		USLD, EC off, DF ON, 100% GT load	NG, EC off, DF Off, 100% GT load	NG, EC ON, DF ON, 100% GT load	USLD, EC off, DF Off, 100% GT load	NG, EC ON, DF ON, 100% GT load	NG, EC ON, DF ON, 100% GT load	USLD, EC OFF DF ON, 100% GT load	
	HRSG & Heat balance Case no.		0 F	59 F / 60% RH	90 F / 70% RH	35 F / 50% RH	90 F / 70% RH	59 F / 60% RH	35 F / 50% RH	
1	City water supply	gpm	56 & CCA20146	Case 1 (HRSG) & Heat balance CCA20095	Case 2 (HRSG performance) & Heat balance CCA20081	Case 3 (HRSG) & Heat balance CCA20139	Case 4 (HRSG) & Heat balance CCA20081	Case 5 (HRSG) & Heat balance CCA20004	Case 6 (HRSG) & Heat balance CCA20138	
2	Potable water network	gpm	586	120	169	619	169	143	624	
3	Supply to Service/Fire water tank	gpm	2	2	2	2	2	2	2	
4	service water demand	gpm	584	118	167	617	167	141	622	
5	Service water makeup to CT makeup	gpm	619	118	167	648	167	141	658	
6	Service water for misc uses	gpm	8	64	79	31	79	59	32	
7	Supply to CTG evap cooler	gpm	10	10	10	10	10	10	10	
	Total steam rate	lb/h	0	0	23	0	23	20	0	
11	Boiler makeup	gpm	1,072,600	821,700	1,032,100	812,500	1,028,000	993,100	1,002,500	
12	Nox Water	gpm	38	29	36	28	36	35	35	
10	Total demin water	gpm	493	0	0	509	0	0	509	
13	Leased RO/DI trailers, permeate	gpm	531	29	36	537	36	35	544	
15	Supplement DI trailer, min flow	gpm	300	29	36	300	36	35	300	
16	Leased RO/DI trailers, feed	gpm	231	0	0	237	0	0	244	
18	Supplement DI trailer, feed	gpm	353	34	42	353	42	41	353	
19	Water pretreatment backwash	gpm	237	0	0	244	0	0	251	
20	Total supply to water treatment	gpm	1	1	1	1	1	1	1	
21	CT evaporation	gpm	591	35	43	598	43	42	605	
	CT Cycles of concentration	-	46	86	105	68	105	86	68	
22	CT Drift	gpm	3.5	8.5	7	4.5	7	7	4.3	
23	CTG evap cooler evaporation	gpm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
27	Misc loses from w/s cycle	gpm	0	0	19	0	19	17	0	
28	HRSG blowdown	gpm	11.8	8	11.2	7.9	11.1	10.6	10.7	
	Blowdown, after flashing	gpm	21	16	21	16	21	20	20	1% Blowdown
30	Quench water, gpm	gpm	13	10	12	10	12	12	12	
31	To blowdown sump	gpm	10	9	11	9	11	11	11	
41	Fire water system	gpm	23	19	24	19	24	23	23	NOTE 2
61	Demin water to CTG water wash	gpm	0	0	0	0	0	0	0	
62	City water to ACC fin tube cleaning	gpm	0	0	0	0	0	0	0	
63	Demin water to chemical dilution	gpm	0	0	0	0	0	0	0	
501	Non oily wastewater	gpm	0	0	0	0	0	0	0	
502	Condensate polisher backwash	gpm	5	5	5	5	5	5	5	
503	sample panel drains	gpm	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
505	RO reject	gpm	4	4	4	4	4	4	4	
506	Evaporative cooler blowdown	gpm	53	5	6	53	6	6	53	NOTE 3
507	Recycle to CT basin from BD sump	gpm	0	0	4	0	4	3	0	NOTE 4
508	To cartridge filters	gpm	0	28	37	0	37	35	0	
509	Recycle water sump	gpm	32	0	0	28	0	0	32	
510	Recycle to S/F water tank	gpm	4	0	0	4	0	0	4	
511	Oily wastewater	gpm	32	0	0	28	0	0	32	
512	CT blowdown	gpm	5	5	5	5	5	5	5	
513	CT blowdown, oily ww and filter backwa	gpm	18	11	18	19	18	14	21	
514	Sanitary wastewater	gpm	24	17	24	25	24	20	27	
515	Total wastewater	gpm	2	2	2	2	2	2	2	
516	Rinse water recyle to service/fire water t	gpm	26.4	19.5	25.5	27.4	25.5	22.3	28.6	
			2.9	0	0	2.9	0	0	2.9	

NOTE 1 Indicated flow rates may not balance due to rounding.
NOTE 2 Quenched blowdown temperature equal or less than 140 degree F.
NOTE 3 Assumes 85% RO recovery.
NOTE 4 Based on 6 cycles of concentration.

APPENDIX 2

Safety Data Sheets

Attachment A

Executive Summary

Attachment A: Executive Summary

Applicant Name: **PSEG Power Connecticut LLC**
(as indicated on the *Application Form*)

Location of Facility or Activity:

1 Atlantic Street, Bridgeport, CT

Contact Person: **David Hinchey Jr.** Phone: **973-856-0066**

For renewals or modifications of an existing permit, provide the Facility I.D. No.:

In the table below list *each* discharge that is the subject of this application. For renewals of existing permits, label each discharge by the same discharge serial number stated in the previous permit and provide the existing permit number. For new permits, label each discharge to a surface water consecutively starting with serial number 101; for discharges to a POTW label each discharge consecutively starting with 201; and for discharges to ground water label each discharge consecutively starting with 301.

Discharge Serial Number/ Permit Number	Maximum Flow (gallons per day)	Category of Discharge Source	Name of discharge location (Name of POTW; Name of surface water; For groundwater, name of surface watershed area)	Geographical description of location of discharge point (e.g., 20 feet north from Bear Bridge)
DSN 201	**75,000**	**Cooling Tower Blowdown, Oil/Water Sep.**	**West Side WPCP**	**Railroad Avenue and Main Street**

Attachment A: Executive Summary (continued)

Provide a brief general description of the nature of the business or activity and of each existing or proposed activity or process generating each discharge. For new discharges, provide a timeline for initiation of the discharges as well as a brief summary of the environmental impact of the proposed discharges.

PSEG Power Connecticut LLC is proposing to construct, own and operate a new 485 MW combined cycle generating facility (BHS Unit 5) at Bridgeport Harbor Station located at 1 Atlantic Street in Bridgeport Connecticut. This application addresses sanitary and process wastewater discharges from the facility to the City of Bridgeport collection system for treatment at the West Side Water Pollution Control Plant (WPCP). Sanitary wastewater is estimated to total 2880 gallons per day (gpd). Process wastewater is anticipated to total less than 50,000 gpd on an average daily basis (max day 75,000 gal.) and consist primarily of auxiliary cooling tower blowdown and treated effluent from oil/water separators.

The new combined cycle facility (BHS Unit 5) will be located at the southern end of the site encompassing the existing fuel oil tank farm area. The new power block will consist of one combustion turbine generator set, a heat recovery steam generator ("HRSG") and a steam turbine generator set. Ancillary equipment at the facility will include an air cooled condenser ("ACC") for steam cycle cooling, a process makeup water demineralization system, a small mechanical draft cooling tower for ancillary cooling (i.e., an auxiliary cooling tower), a 950,000 gallon service water/fire water storage tank, a 1,000,000 gallon demineralized water storage tank, a 5.5 million gallon ultra-low sulfur distillate (ULSD) fuel oil storage tank, and an auxiliary boiler.

BHS Unit 5 will represent one of the most water efficient steam electric generating facilities located in Connecticut. To minimize process makeup and process wastewater discharge needs, internal recycle and reuse will be used to the maximum extent practicable. Water needs for BHS Unit 5 will be satisfied by withdrawals from the municipal distribution system. BHS Unit 5 will not require operation of a cooling water intake structure. As such, potential environmental impacts will be avoided or minimized.

Provisional acceptance and commercial operation are targeted for June 2019.
A more detailed description of proposed discharges is attached following the Executive Summary.

☒ Check here if additional sheets are necessary, and label and attach them to this sheet.

Provide a table of contents of the application which includes the permit application form, and a list of titles of all plans, drawings, reports, studies, or other supporting documentation which are attached as part of the application, along with the corresponding attachment label and the number of pages (i.e., Executive Summary - Attachment A - 4 pages).

Attachment I

Operation and Maintenance of Collection and Treatment Systems

- Description
- Plan Checklist
- Certification

Part A: Wastewater Treatment Units – BHS 5

Oil/water separators will be located to capture and retain oil from potentially oily areas of the facility (i.e., building floor drains) as well as to provide secondary containment for selected oil filled equipment and/or storage tanks. Oil collected in oil/water separators will be removed using a Vac truck and transported for offsite recycling or disposal at an appropriately licensed facility. Three oil/water separators will be located at the facility as shown on Drawing Numbers 191547-DS-10044A and 191547-DS-1044B included in Attachment N. Highland Tank is the recommended vendor for the oil/water separators at Bridgeport Unit 5. An informational brochure for Highland Tank oil/water separators is attached.

Oil Water Separators

The following lists the models for Highland Tank Oil/Water Separators for Bridgeport Unit 5. The previously submitted preliminary sizes were based on flow and oil volume information taken from a similar project currently under construction (i.e., Sewaren Unit 7). This section has been updated to reflect the detailed design of BHS 5. Design plans and specifications are included in Attachment N. The units are designed to achieve an effluent limit of 10 mg/l for total petroleum hydrocarbons (TPH).

There are three separators in the design: North (between the STG and CTG GSU transformers), South (just east of the HRSG Electrical PDC Enclosure), and Southeast (just south of the Fuel Oil Forwarding Pump Enclosure).

The North OWS is a Highland HT-12,000. Its size is controlled by the volume of oil in the ST Lube Oil Reservoir.

The South OWS is an HT-550. It is sized based on flows from the HRSG Electrical PDC Enclosure.

The East OWS is an HT-3,000. It is sized based on the floor drains that drain to it from the Fuel Oil Forwarding Pump Enclosure, the Fuel Oil Truck Unloading Area, and the Fire Pump House.

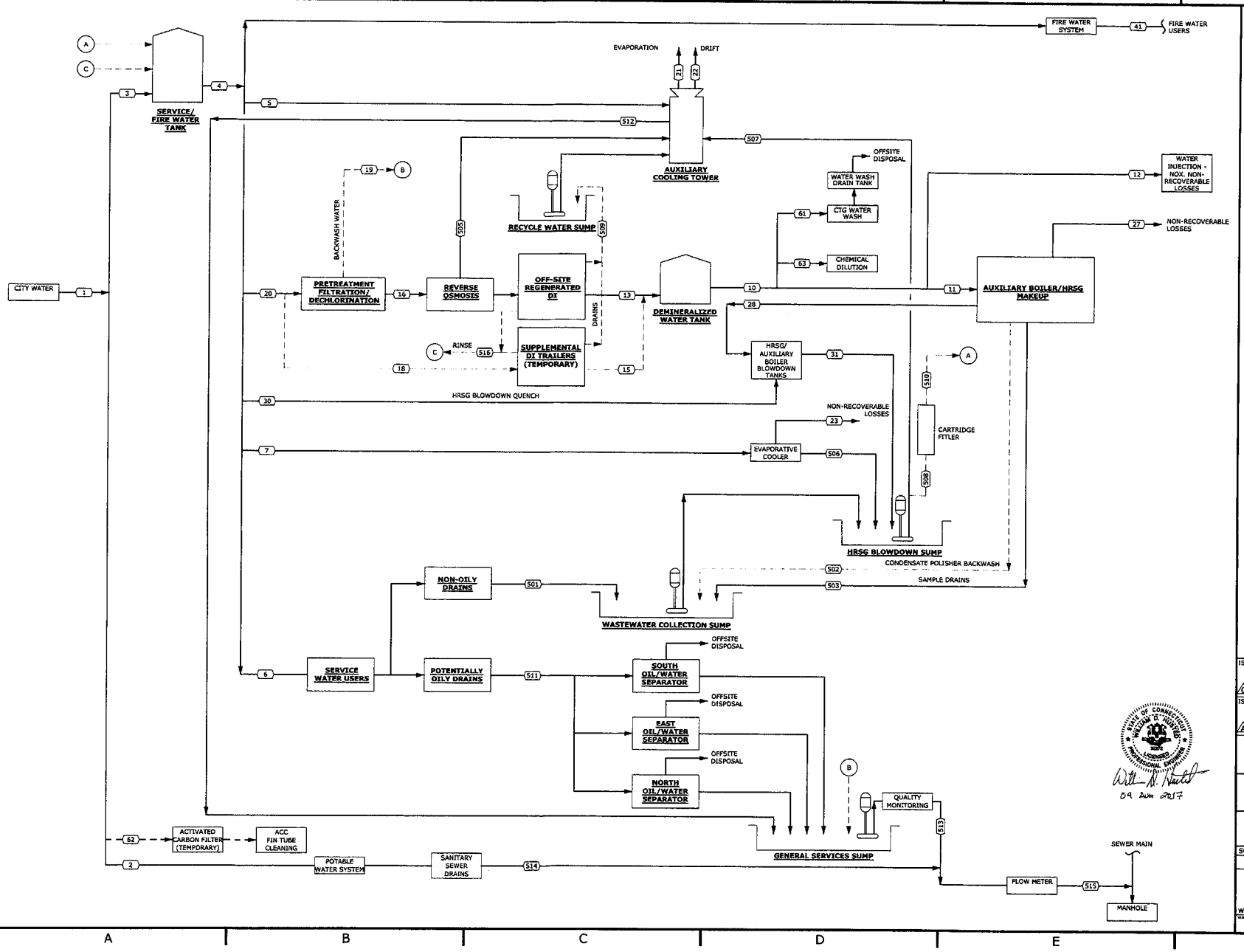
Plans and Specifications

Plans and specifications for Highland Tank's Oil/Water Separators are included in Attachment N. Backup calculations for unit sizing are also included in Attachment N.

Part B: Operation and Maintenance

PSEG Power Connecticut LLC (PSEG) will be responsible for operation and maintenance of the oil/water separators located onsite. Manufactures recommended installation, startup, operation and maintenance procedures are described in detail in Highland Tank's Oil/Water Separator's User's Manual included in Attachment N. A copy of the Highland Tank Oil/Water Separators User's Manual will be maintained onsite for easy reference.

Attachment M
Line Drawing and Process Flow Diagram



GENERAL NOTES:

1. THE INTENT OF THIS DIAGRAM IS TO SHOW THE MAJOR WATER AND WASTEWATER FLOWS.
2. REFER TO 644911-FD002-S002 FOR STREAM FLOW DATA.
3. DASHED LINES REPRESENT INTERMITTENT FLOWS.

Figure 4

ISSUED FOR CONSTRUCTION

ISSUED FOR APPROVAL

REVISION	DATE	BY	CHECKED	APPROVED	PROJ. TECH	DIR. TECH	PROJ. MGR.
1	05/17/17	WW	WDH	WDH	LA	SF	SEO

PROJECT ENGINEERING DIVISION
PSEG Power Connecticut LLC

SNC•LAVALIN CONSTRUCTORS INC.

SCALE:

BRIDGEPORT 05

PROCESS FLOW DIAGRAM
WATER SYSTEM
FLOW DIAGRAM
SHT. 1 OF 5

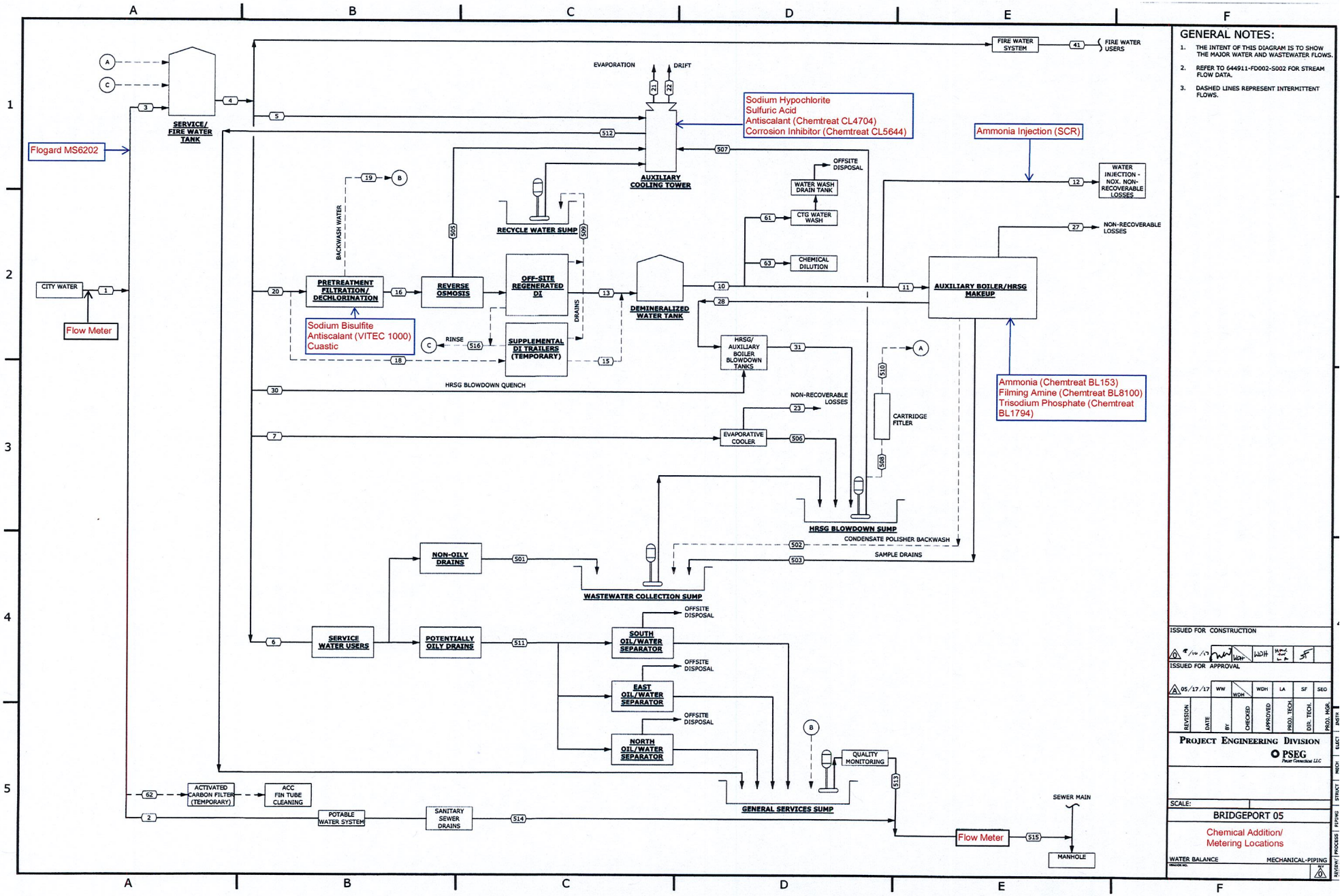
WATER BALANCE — MECHANICAL-PIPING

644911-FD002-S001

Table 1: Bridgeport Unit 5 Water Balance

Stream no.	Description	Units	Low Ambient Case	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	Remarks
	Ambient temperature		USLD, EC off, DF ON, 100% GT load	NG, EC off, DF Off, 100% GT load	NG, EC ON, DF ON, 100% GT load	USLD, EC off, DF Off, 100% GT load	NG, EC ON, DF ON, 100% GT load	NG, EC ON, DF ON, 100% GT load	USLD, EC OFF DF ON, 100% GT load	
	HRSG & Heat balance Case no.		0 F	59 F / 60% RH	90 F / 70% RH	35 F / 50% RH	90 F / 70% RH	59 F / 60% RH	35 F / 50% RH	
1	City water supply	gpm	56 & CCA20146	Case 1 (HRSG) & Heat balance CCA20095	Case 2 (HRSG performance) & Heat balance CCA20081	Case 3 (HRSG) & Heat balance CCA20139	Case 4 (HRSG) & Heat balance CCA20081	Case 5 (HRSG) & Heat balance CCA20004	Case 6 (HRSG) & Heat balance CCA20138	
2	Potable water network	gpm	586	120	169	619	169	143	624	
3	Supply to Service/Fire water tank	gpm	2	2	2	2	2	2	2	
4	service water demand	gpm	584	118	167	617	167	141	622	
5	Service water makeup to CT makeup	gpm	619	118	167	648	167	141	658	
6	Service water for misc uses	gpm	8	64	79	31	79	59	32	
7	Supply to CTG evap cooler	gpm	10	10	10	10	10	10	10	
	Total steam rate	lb/h	0	0	23	0	23	20	0	
11	Boiler makeup	gpm	1,072,600	821,700	1,032,100	812,500	1,028,000	993,100	1,002,500	
12	Nox Water	gpm	38	29	36	28	36	35	35	
10	Total demin water	gpm	493	0	0	509	0	0	509	
13	Leased RO/DI trailers, permeate	gpm	531	29	36	537	36	35	544	
15	Supplement DI trailer, min flow	gpm	300	29	36	300	36	35	300	
16	Leased RO/DI trailers, feed	gpm	231	0	0	237	0	0	244	
18	Supplement DI trailer, feed	gpm	353	34	42	353	42	41	353	
19	Water pretreatment backwash	gpm	237	0	0	244	0	0	251	
20	Total supply to water treatment	gpm	1	1	1	1	1	1	1	
21	CT evaporation	gpm	591	35	43	598	43	42	605	
	CT Cycles of concentration	-	46	86	105	68	105	86	58	
22	CT Drift	gpm	3.5	8.5	7	4.5	7	7	4.3	
23	CTG evap cooler evaporation	gpm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
27	Misc loses from w/s cycle	gpm	0	0	19	0	19	17	0	
28	HRSG blowdown	gpm	11.8	8	11.2	7.9	11.1	10.6	10.7	
	Blowdown, after flashing	gpm	21	16	21	16	21	20	20	1% Blowdown
30	Quench water, gpm	gpm	13	10	12	10	12	12	12	
31	To blowdown sump	gpm	10	9	11	9	11	11	11	
41	Fire water system	gpm	23	19	24	19	24	23	23	NOTE 2
61	Demin water to CTG water wash	gpm	0	0	0	0	0	0	0	
62	City water to ACC fin tube cleaning	gpm	0	0	0	0	0	0	0	
63	Demin water to chemical dilution	gpm	0	0	0	0	0	0	0	
501	Non oily wastewater	gpm	0	0	0	0	0	0	0	
502	Condensate polisher backwash	gpm	5	5	5	5	5	5	5	
503	sample panel drains	gpm	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
505	RO reject	gpm	4	4	4	4	4	4	4	
506	Evaporative cooler blowdown	gpm	53	5	6	53	6	6	53	NOTE 3
507	Recycle to CT basin from BD sump	gpm	0	0	4	0	4	3	0	NOTE 4
508	To cartridge filters	gpm	0	28	37	0	37	35	0	
509	Recycle water sump	gpm	32	0	0	28	0	0	32	
510	Recycle to S/F water tank	gpm	4	0	0	4	0	0	4	
511	Oily wastewater	gpm	32	0	0	28	0	0	32	
512	CT blowdown	gpm	5	5	5	5	5	5	5	
513	CT blowdown, oily ww and filter backwa	gpm	18	11	18	19	18	14	21	
514	Sanitary wastewater	gpm	24	17	24	25	24	20	27	
515	Total wastewater	gpm	2	2	2	2	2	2	2	
516	Rinse water recyle to service/fire water t	gpm	26.4	19.5	25.5	27.4	25.5	22.3	28.6	
			2.9	0	0	2.9	0	0	2.9	

NOTE 1 Indicated flow rates may not balance due to rounding.
NOTE 2 Quenched blowdown temperature equal or less than 140 degree F.
NOTE 3 Assumes 85% RO recovery.
NOTE 4 Based on 6 cycles of concentration.



GENERAL NOTES:

1. THE INTENT OF THIS DIAGRAM IS TO SHOW THE MAJOR WATER AND WASTEWATER FLOWS.
2. REFER TO 644911-FD002-S002 FOR STREAM FLOW DATA.
3. DASHED LINES REPRESENT INTERMITTENT FLOWS.

ISSUED FOR CONSTRUCTION

ISSUED FOR APPROVAL

REVISION	DATE	BY	CHECKED	APPROVED	PROJ. TECH.	DIR. TECH.	PROJ. MGR.
0	05/17/17	WW	WDH	WDH	LA	SF	SEO

PROJECT ENGINEERING DIVISION

PSEG Power Connecticut LLC

SCALE:

BRIDGEPORT 05

Chemical Addition/ Metering Locations

WATER BALANCE — MECHANICAL-PIPING

DRAWING NO. 0

ELECT | MECH | STRUCT | PIPING | PROCESS | SYSTEM | INSTR

Attachment N

Description and Plans and Specifications of the Collection, Treatment and Disposal Systems

Attachment N

Oil/water separators will be located to capture and retain oil from potentially oily areas of the facility (i.e., building floor drains) as well as to provide secondary containment for selected oil filled equipment and/or storage tanks. Oil collected in oil/water separators will be removed using a Vac truck and transported for offsite recycling or disposal at an appropriately licensed facility. Three oil/water separators will be located at the facility as shown on Drawing Numbers 191547-DS-10044A and 191547-DS-1044B, attached. Highland Tank is the recommended vendor for the oil/water separators at Bridgeport Unit 5. An informational brochure for Highland Tank oil/water separators is included in Attachment I.

Oil Water Separators

The following lists the models for Highland Tank Oil/Water Separators for Bridgeport Unit 5. These preliminary sizes were based on flow and oil volume information taken from a similar project currently under construction (i.e., Sewaren Unit 7). The final BHS 5 detailed design is now included and design plans and specifications are attached. The units are designed to achieve an effluent limit of 10 mg/l for total petroleum hydrocarbons (TPH).

There are three separators: North (between the STG and CTG GSU transformers), South (just east of the HRSG Electrical PDC Enclosure), and Southeast (just south of the Fuel Oil Forwarding Pump Enclosure).

The North OWS is a Highland HT-12,000. Its size is controlled by the volume of oil in the ST Lube Oil Reservoir.

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The East OWS is an HT-3,000. It is sized based on the floor drains that drain to it from the Fuel Oil Forwarding Pump Enclosure, the Fuel Oil Truck Unloading Area, and the Fire Pump House.

Plans and Specifications

Plans and specifications for Highland Tank's Oil/Water Separators are attached. In addition, backup calculations for unit sizing are attached.

Operation and Maintenance

PSEG Power Connecticut LLC (PSEG) will be responsible for operation and maintenance of the oil/water separators located onsite. Manufactures recommended installation, startup, operation and maintenance procedures are described in detail in Highland Tank's Oil/Water Separator's User's Manual, attached. A copy of the Highland Tank Oil/Water Separators User's Manual will be maintained onsite for easy reference.

Attachment O
Discharge Information

Attachment O: Discharge Information

(must be completed and submitted for each discharge)

Applicant Name: **PSEG Power Connecticut LLC**
(as indicated on the permit application form)

Existing Permit Number (if applicable):

Complete this attachment for *each* discharge and label each discharge consecutively starting with serial number 101 for discharges to a surface water, 201 for discharges to a POTW, and 301 for discharges to ground water.

Part A: General Discharge Information

Discharge Serial Number: DSN 201

1. For discharges to a surface water only:
   a. The discharge enters the surface water (check one):
      ☐ directly
      ☐ through a municipal storm sewer
      ☐ through other drainage systems (e.g., swale) Please specify below:

   b. Name of surface water body the discharge first enters:
   c. Surface water classification of the above listed water body:
      Present: Future:

2. For discharges to a POTW only:
   a. The discharge enters the POTW (check one):
      ☐ directly hauled
      ☒ through a sanitary sewer or a combined sewer
   b. Name of POTW the discharge first enters: **Bridgeport - West Side Water Pollution Control Facility**
   c. Facility I.D. or location address of POTW: **205 Bostwick Avenue, Bridgeport CT**
   d. Does the discharge contain a substance, which, in the absence of a wastewater discharge permit, would be a hazardous waste under 40 CFR Part 261? ☐ Yes ☒ No

3. For discharges to ground water only:
   a. Groundwater classification of the site:
      Present: Future:
   b. Name of surface water body in watershed area:
      Surface water classification of the above listed water body:
      Present: Future:

Part A: General Discharge Information (continued)

Discharge Serial Number: DSN 201

4. Average Daily Flow (gpd): **50,000** Maximum Daily Flow (gpd): **< 75,000**

   Design Flow (gpd): **TBD**

   Date discharge began or will begin: **January 2019**

5. Is the discharge continuous? ☒ Yes ☐ No
   If yes, indicate:

   Average number of hours per day of the discharge: **24**

   Maximum number of hours per day of the discharge: **24**

6. For other than a continuous discharge (e.g., batch, intermittent, or seasonal discharges), indicate:

   Average number of hours per event of the discharge:

   Maximum number of hours per event of the discharge:

   The duration and frequency of the discharge:

7. Description of each specific activity or each process generating the discharge and identification of all types of waste generated by each process.

PSEG Power Connecticut LLC is proposing to construct, own and operate a new 485 MW combined cycle generating facility (BHS Unit 5) at Bridgeport Harbor Station located at 1 Atlantic Street in Bridgeport Connecticut. This application addresses sanitary and process wastewater discharges from the facility to the City of Bridgeport collection system. Sanitary wastewater is estimated to total 2880 gallons per day (gpd). Process wastewater is anticipated to total less than 50,000 gpd on an average daily basis (max day 75,000 gal.) and consist primarily of auxiliary cooling tower blowdown and treated effluent from oil water separators.

The new combined cycle facility (BHS Unit 5) will be located at the southern end of the site encompassing the existing fuel oil tank farm area. The new power block will consist of one combustion turbine generator set, a heat recovery steam generator ("HRSG") and a steam turbine generator set. Ancillary equipment at the facility will include an air cooled condenser ("ACC") for steam cycle cooling, a process makeup water demineralization system, a small mechanical draft cooling tower for ancillary cooling (i.e., an auxiliary cooling tower), a 950,000 gallon service water/fire water storage tank, a 1,000,000 gallon demineralized water storage tank, a 5.5 million gallon ultra-low sulfur distillate (ULSD) fuel oil storage tank, and an auxiliary boiler.

BHS Unit 5 will represent one of the most water efficient steam electric generating facilities in Connecticut. To minimize process makeup and process wastewater discharge needs, internal recycle and reuse will be used to the maximum extent practible. Water needs for BHS Unit 5 will be satisfied by withdrawals from the municipal distribution system. BHS Unit 5 will not require operation of a cooling water intake structure. As such, potential environmental impacts will be avoided or minimized.

A more detailed description of the proposed discharge is included in Attachment A, Executive Summary.

☒ Check here if additional sheets are necessary, please label and attach them to this sheet.

Part A: General Discharge Information (continued)

8. Process and/or Treatment Substances		Discharge Serial Number: DSN 201
Name of substances used in generating the wastewater	**List of toxic or hazardous substances contained in process and/or treatment substance**	**List any available aquatic toxicity test results for process and/or treatment substance**
Sodium Hypochlorite	NaOCl	LC50 Bluegill Sunfish 0.6 mg/l LC50 Ceriodaphnia d. 1.23 mg/l LC50 Fathead Minnow 1.19 mg/l
Sulfuric Acid	Sulfuric acid (77-100%)	NA
Caustic liquid soda (50%)	Sodium hydroxide, Sodium chloride	LC50 Brook Trout 24 hr. 25 mg/l
Antiscalant Chemtreat CL4704	2-Butenedioic Acid (Z), homopolymer and 2-Butenedioic Acid	NA
Corrosion Inhibitor Chemtreat CL5644	Citric Acid	Ceriodaphnia d. LC50 1504 mg/l 48 hour Fathead Minnow LC50 2549 mg/l 96 hour
Chemtreat BL153 and Tanner Industries Ammonium Hydroxide	Ammonium Hydroxide	Fish LC50 0.09-3.51 mg/l 96 hour Fish NOEC 0.025-1.2 mg/l (Based on Tanner Ind.)
Chemtreat BL8100	Cyclohexylamine, Ethanolamine, (z)-N-9-octadecenylpropane-1,3-diamine	Fathead Minnow LC50 96 hour 2.54 mg/l Ceriodapania d. LC50 48 hour 6.94 mg/l
Chemtreat BL1794	Sodium Phosphate, tribasic	Rainbow Trout LC50 1463 mg/l 96 hour Daphnia magna EC50 2158 mg/l 50 hour
Sodium bisulfite	Sodium bisulfite 50%	NA
Flogard MS6202	Phosphoric Acids, Sodium Salts	Daphnia magna 0% mort. 500 mg/l
Vitec 3000	Alkyl phosphonate salt, Phosphonic acid derivative compound, Alkline salt	NOEC Daphnia manga 48 hour 125 mg/l NOEC Rainbow Trout 96 hours 180 mg/l

Part A: General Discharge Information (continued)

Effluent Limitations and Conditions

Discharge Serial Number: DSN 201

9a. Is this discharge described by any discharge categories listed in Appendix A, "Primary Industry Categories" of RCSA sections 22a-430-3 and 4?

☒ Yes ☐ No

9b. Are there any treatment requirements established in RCSA section 22a-430-4(s)?

☐ Yes ☒ No

10a. Is there an effluent limitation, standard, guideline, or categorical pretreatment standard established for this type of discharge in 40 CFR Parts 400-471 or elsewhere pursuant to 301, 306, 307, 318, 405 of the Clean Water Act?

☒ Yes ☐ No

If you answered yes to question 10a, or 10b, or 11a, please complete the following table by providing the name of the discharge category and the specific citation to the regulation, if applicable, that establishes the limitation or condition.

Name of discharge category and appropriate citation from state and/or federal regulations.	**Effluent limitation or condition: yes or no**	**Name of subpart and appropriate subpart citation**
Example: Iron and Steel Manufacturing; 40 CFR Part 420, RCSA section 22a-430-4(s)	yes	Acid Pickling; 40 CFR Part 420: subpart I
Steam Electric Power Generation; 40 CFR 423	**yes**	**Pretreatment Standards for New Sources; 40 CFR 423.17**

Part A: General Discharge Information (continued)

Effluent Limitations and Conditions (continued) **Discharge Serial Number: DSN 201**

10b. Are any of the effluent limitations applicable to the discharge expressed in terms of production?

☐ Yes ☒ No

If yes, complete the following table. For existing discharge, list an actual measurement of your average or maximum level of daily production. For new discharges, list an average or maximum projected daily production. (Indicate in the table whether the production figures given are average or maximum level.) Express the production in the terms and units used in the applicable discharge limitation. Attach additional sheets if necessary.

Name of Category and Subpart	Name and Quantity of Product per Day with Units of Measure	Description of Process	No. of Cycles through Process
***Example*:** **Iron and Steel Manufacturing; Hydrochloric Acid Pickling**	**27,000 lbs of Stainless steel strips (average)**	**Stainless steel strips are passed through solder flux baths in #1 Tinner**	**2**

Attachment O: Discharge Information (continued)

Part B: Discharge Analysis

All applicants must complete Part B, Tables 1 through 4 for each discharge. Be sure to review the instructions; specifically, "Testing Requirements for All Discharge Categories", Schedule A in the instructions under Attachment O before completing this part. In addition, please note that for existing discharges previously licensed by DEEP, identify the substances that were monitored in the existing permit by placing "PP" in the " Daily Composite or Grab Sample Results" column by the substance. 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 the application.

Please indicate whether the discharge analysis was based on (check one):

☒ Projection ☐ Actual wastewater ☐ Wastewater from other similar discharge

All applicants must provide analysis results in column 1 for *all* the substances listed in Table 1 and other information needed to complete columns 2 and 3, for each discharge except the following: For discharges of non-contact cooling water, heat pump wastewaters and blowdown from heating and cooling equipment, provide analysis results for substances numbered in Table 1 as 3, 5, 6, and 11 through 16 only.

Table 1

Date Sampled: **Discharge Serial Number: DSN 201**

GENERAL	1 Daily Composite or Grab Sample* Results	2 Number of Analyses	3 EPA** Method
1. Biochemical Oxygen Demand (5Day)	<50 ppm	NA	
2. Chemical Oxygen Demand	<100 ppm	NA	
3. Oil and Grease, Total*	< 25 ppm	NA	
4. Oil and Grease, Hydrocarbon Fraction*	< 25 ppm	NA	
5. Total Suspended Solids	< 100 ppm	NA	
6. Ammonia (as Nitrogen)	< 20 ppm	NA	
7. Phosphorus (Total)	< 25 ppm	NA	
8. Nitrate	< 10 ppm	NA	
9. Nitrite	< 0.1 ppm	NA	
10. Total Kjeldahl Nitrogen	< 25 ppm	NA	
11. Total Residual Chlorine*	< 1 ppm	NA	
12. Temperature (Winter and Summer)*	< 80 F < 110 F	NA	
13. pH (minimum and maximum)*	5.0 < pH < 12.0	NA	
14. Copper, Total	< 0.25 ppm	NA	
15. Lead, Total	< 0.1 ppm	NA	
16. Zinc, Total	< 2.0 ppm	NA	

* Check the instructions under this part for the required method of sample collection.

** For surface water discharges only, check the instructions for *required* EPA methods of analyses.

Part B: Discharge Analysis (continued)

All applicants must complete Table 2 for each discharge by placing an "X" in column 1, if applicable *and* by placing an "X" in column 2 or 3. If column 1 or 2 is marked for any substance, you *must* provide analysis results in column 4 for that substance and other information needed to complete columns 5 and 6 for that substance.

Table 2

Date Sampled: **Discharge Serial Number: DSN 201**

TOXIC METALS, CYANIDES, PHENOLS	1 Analysis Required by Schedule A - see Instructions	2 Known or Suspected Present	3 Believed Absent	4 Daily Composite or Grab Sample Results*	5 Number of Analyses	6 EPA** Method
1. Antimony, Total		X		< 0.1 mg/l		
2. Arsenic, Total		X		< 0.05 mg/l		
3. Beryllium, Total		X		< 0.05 mg/l		
4. Cadmium, Total		X		< 0.05 mg/l		
5. Chromium, Total		X		< 0.2 mg/l		
6. Chromium,			X			
7. Mercury, Total			X			
8. Nickel, Total		X		< 0.1 mg/l		
9. Selenium, Total		X		< 0.1 mg/l		
10. Silver, Total		X		< 0.05 mg/l		
11. Thallium, Total		X		< 0.1 mg/l		
12. Cyanide, Total*			X			
13. Cyanide,			X			
14. Phenols, Total*			X			

Part B: Discharge Analysis (continued)

Table 2 (continued)

Date Sampled: Discharge Serial Number: DSN 201

VOLATILES*	1 Analysis Required by Schedule A - see Instructions	2 Known or Suspected Present	3 Believed Absent	4 Daily Composite or Grab Sample Results*	5 Number of Analyses	6 EPA** Method
1. Acrolein			X			
2. Acrylonitrile			X			
3. Benzene			X			
4. Bromoform			X			
5. Carbon Tetrachloride			X			
6. Chlorobenzene			X			
7. Chlorodibromomethane			X			
8. Chloroethane			X			
9. 2-Chloroethylvinyl Ether			X			
10. Chloroform		X		< 0.02 mg/l		
11. Dichlorobromomethane			X			
12. 1, 1-Dichloroethane			X			
13. 1, 2-Dichloroethane			X			
14. 1, 1-Dichloroethylene			X			
15. 1, 2-Dichloropropane			X			
16. 1, 3-Dichloropropylene			X			
17. Ethylbenzene			X			
18. Methylbromide			X			
19. Methylchloride			X			
20. Methylene Chloride			X			
21. 1, 1, 2, 2,-Tetrachloroethane			X			
22. Tetrachloroethylene			X			
23. Toluene			X			
24. 1, 2-Trans-Dichloroethylene			X			

Part B: Discharge Analysis (continued)

Table 2 (continued)

Date Sampled: Discharge Serial Number: DSN 201

VOLATILES*	1 Analysis Required by Schedule A - see Instructions	2 Known or Suspected Present	3 Believed Absent	4 Daily Composite or Grab Sample Results*	5 Number of Analyses	6 EPA** Method
25. 1, 1, 1-Trichloroethane			X			
26. 1, 1, 2- Trichloroethane			X			
27. Trichloroethylene			X			
28. Vinyl Chloride			X			
GC/MS FRACTION ACID COMPOUNDS						
1. 2-Chlorophenol			X			
2. 2, 4-Dichlorophenol			X			
3. 2, 4-Dimethylphenol			X			
4. 4, 6-Dinitro-O-Cresol			X			
5. 2, 4-Dinitrophenol			X			
6. 2-Nitrophenol			X			
7. 4-Nitrophenol			X			
8. P-Chloro-M-Cresol			X			
9. Pentachlorophenol			X			
10. Phenol			X			
11. 2, 4, 6- Trichlorophenol			X			
BASE NEUTRAL COMPOUNDS						
1. Acenaphthene			X			
2. Acenaphthylene			X			
3. Anthracene			X			
4. Benzidine			X			
5. Benzo(a)anthracene			X			
6. Benzo(a)pyrene			X			
7. 3, 4-Benzo-fluoranthene			X			

Part B: Discharge Analysis (continued)

Table 2 (continued)

Date Sampled: Discharge Serial Number: DSN 201

BASE NEUTRAL COMPOUNDS	1 Analysis Required by Schedule A - see Instructions	2 Known or Suspected Present	3 Believed Absent	4 Daily Composite or Grab Sample Results*	5 Number of Analyses	6 EPA** Method
8. Benzo(ghi)perylene			X			
9. Benzo(k) fluoranthene			X			
10. Bis(2-Chloroethoxy) Methane			X			
11. Bis(2-Chloroethyl) Ether			X			
12. Bis(2-Chloroisopropyl) Ether			X			
13. Bis(2-Ethylhexyl) Phthalate			X			
14. 4-Bromophenylphenyl Ether			X			
15. Butylbenzyl Phthalate			X			
16. 2-Chloronaphthalene			X			
17. 4-Cholorophenylphenyl Ether			X			
18. Chrysene			X			
19. Dibenzo(a, H)anthracene			X			
20. 1, 2-Dichlorobenzene			X			
21. 1, 3-Dichlorobenzene			X			
22. 1, 4-Dichlorobenzene			X			
23. 3, 3-Dichlorobenzidine			X			
24. Diethyl phthalate			X			
25. Dimethyl phthalate			X			
26. Di-n-butyl phthalate			X			
27. 2, 4-Dinitrotoluene			X			
28. 2, 6-Dinitrotoluene			X			
29. Di-n-octyl phthalate			X			
30. 1, 2-Diphenylhydrazine (as Azobenzene)			X			
31. Fluoranthene			X			

Part B: Discharge Analysis (continued)

Table 2 (continued)

Date Sampled: Discharge Serial Number: DSN 201

BASE NEUTRAL COMPOUNDS	1 Analysis Required by Schedule A - see Instructions	2 Known or Suspected Present	3 Believed Absent	4 Daily Composite or Grab Sample Results*	5 Number of Analyses	6 EPA** Method
32. Fluorene			X			
33. Hexachlorobenzene			X			
34. Hexachlorobutadiene			X			
35. Hexachlorocyclopentadiene			X			
36. Hexachloroethane			X			
37. Indeno(1,2,3-cd) Pyrene			X			
38. Isophorone			X			
39. Naphthalene			X			
40. Nitrobenzene			X			
41. N-nitroso dimethylamine			X			
42. N-Nitrosodi-n-Propylamine			X			
43. N-Nitrosodiphenylamine			X			
44. Phenanthrene			X			
45. Pyrene			X			
46. 1, 24-Trichlorobenzene			X			
PESTICIDES						
1. Aldrin			X			
2. Alpha - BHC			X			
3. Beta - BHC			X			
4. Gamma-BHC			X			
5. Delta-BHC			X			
6. Chlordane			X			
7. 4, 4-DDT			X			
8. 4, 4-DDE			X			

Part B: Discharge Analysis (continued)

Table 2 (continued)

Date Sampled: Discharge Serial Number: DSN 201

PESTICIDES	1 Analysis Required by Schedule A - see Instructions	2 Known or Suspected Present	3 Believed Absent	4 Daily Composite or Grab Sample Results*	5 Number of Analyses	6 EPA** Method
9. 4, 4-DDD			X			
10. Dieldrin			X			
11. Alpha-Endosulfan			X			
12. Beta-Endosulfan			X			
13. Endosulfan Sulfate			X			
14. Endrin			X			
15. Endrin Aldehyde			X			
16. Heptachlor			X			
17. Heptachlor Epoxide			X			
18. PCB-1242			X			
19. PCB-1254			X			
20. PCB-1221			X			
21. PCB-1232			X			
22. PCB-1248			X			
23. PCB-1260			X			
24. PCB-1016			X			
25. Toxaphene			X			

Part B: Discharge Analysis (continued)

All applicants must complete Table 3 for each discharge by placing an "X" in either column 1 or 2. If column 1 is marked for any substance, you *must* provide analysis results for that substance in column 3 and other information needed to complete columns 4 and 5 for that substance.

Table 3

Date Sampled: **Discharge Serial Number: DSN 201**

OTHER SUBSTANCES	1 Known or Suspected Present	2 Believed Absent	3 Daily Composite or Grab Sample Results*	4 Number of Analyses	5 EPA** Method
1. Bromide		X			
2. Color	X		< 40 C.U.		
3. Fecal Coliform*		X			
4. Fluoride	X		< 25 mg/l		
5. Nitrogen, Total Organic	X		< 25 mg/l		
6. Radioactivity		X			
a. Alpha, Total		X			
b. Beta, Total		X			
c. Radium, Total		X			
d. Radium, 226 Total		X			
7. Sulfate	X		< 500 mg/l		
8. Sulfide*		X			
9. Sulfite		X			
10. Surfactants		X			
11. Aluminum, Total	X		< 0.75 mg/l		
12. Barium, Total	X		< 0.5 mg./		
13. Boron, Total	X		< 0.5 mg/l		
14. Cobalt, Total		X			
15. Iron, Total	X		< 2.0 mg/l		
16. Magnesium, Total	X		< 100 mg/l		

Part B: Discharge Analysis (continued)

Table 3 (continued)

Date Sampled: Discharge Serial Number: DSN 201

OTHER SUBSTANCES	1 Known or Suspected Present	2 Believed Absent	3 Daily Composite or Grab Sample Results*	4 Number of Analyses	5 EPA** Method
17. Molybdenum, Total		X			
18. Manganese, Total	X		< 0.2 mg/l		
19. Tin, Total		X			
20. Titanium, Total		X			
OTHER TOXIC AND HAZARDOUS SUBSTANCES					
1. Asbestos		X			
2. Acetaldehyde		X			
3. Allyl alcohol		X			
4. Allyl chloride		X			
5. Amyl acetate		X			
6. Aniline		X			
7. Benzonitrile		X			
8. Benzyl chloride		X			
9. Butyl acetate		X			
10. Butylamine		X			
11. Captan		X			
12. Carbaryl		X			
13. Carbofuran		X			
14. Carbon disulfide		X			
15. Chlorpyrifos		X			
16. Coumaphos		X			
17. Cresol		X			
18. Crotonaldehyde		X			
19. Cyclohexane		X			

Part B: Discharge Analysis (continued)

Table 3 (continued)

Date Sampled: Discharge Serial Number: DSN 201

OTHER TOXIC AND HAZARDOUS SUBSTANCES	1 Known or Suspected Present	2 Believed Absent	3 Daily Composite or Grab Sample Results*	4 Number of Analyses	5 EPA** Method
20. 2,4-Dichlorophenoxy (acetic acid)		X			
21. Diazinon		X			
22. Dicamba		X			
23. Dichlobenil		X			
24. Dichlone		X			
25. 2,2-Dichloro-propionic acid		X			
26. Dichlorvos		X			
27. Diethyl amine		X			
28. Dimethyl amine		X			
29. Dinitrobenzene		X			
30. Diquat		X			
31. Disulfoton		X			
32. Diuron		X			
33. Epichlorohydrin		X			
34. Ethanolamine		X			
35. Ethion		X			
36. Ethylene diamine		X			
37. Ethylene dibromide		X			
38. Formaldehyde		X			
39. Furfural		X			
40. Guthion		X			
41. Isoprene		X			
42. Isopropanolamine		X			
43. Kelthane		X			

Part B: Discharge Analysis (continued)

Table 3 (continued)

Date Sampled: Discharge Serial Number: DSN 201

OTHER TOXIC AND HAZARDOUS SUBSTANCES	1 Known or Suspected Present	2 Believed Absent	3 Daily Composite or Grab Sample Results*	4 Number of Analyses	5 EPA** Method
44. Kepone		X			
45. Malathion		X			
46. Mercaptodimethur		X			
47. Methoxychlor		X			
48. Methyl mercaptan		X			
49. Methyl methacrylate		X			
50. Methyl parathion		X			
51. Mevinphos		X			
52. Mexacarbate		X			
53. Monoethyl amine		X			
54. Monomethyl amine		X			
55. Naled		X			
56. Napthenic acid		X			
57. Nitrotoluene		X			
58. Parathion		X			
59. Phenolsulfanate		X			
60. Phosgene		X			
61. Propargite		X			
62. Propylene oxide		X			
63. Pyrethrins		X			
64. Quinoline		X			
65. Resorcinol		X			
66. Strontium		X			
67. Strychnine		X			

Part B: Discharge Analysis (continued)

Table 3 (continued)

Date Sampled: Discharge Serial Number: DSN 201

OTHER TOXIC AND HAZARDOUS SUBSTANCES	1 Known or Suspected Present	2 Believed Absent	3 Daily Composite or Grab Sample Results*	4 Number of Analyses	5 EPA** Method
68. Styrene		X			
69. 2, 4, 5-T (2, 4, 5-Trichlorophenoxy acetic acid)		X			
70. TDE (Tetrachloro-diphenylethane)		X			
71. 2, 4, 5-TP[2-(2, 4,5-Trichlorophenoxy) propanoic acid]		X			
72. Trichlorofan		X			
73. Triethylamine		X			
74. Trimethylamine		X			
75. Uranium		X			
76. Vanadium		X			
77. Vinyl acetate		X			
78. Xylene		X			
79. Xylenol		X			
80. Zirconium		X			

Part B: Discharge Analysis (continued)

All applicants must complete Table 4 for each discharge, by placing an "X" in either column 1 or 2 for the substances numbered 1-6. If column 1 is marked for any substance, you *must* provide analysis results for that substance and any other information needed to complete columns 3 through 5 for that substance.

Table 4

Date Sampled: **Discharge Serial Number: DSN 201**

SUBSTANCES	1 Known or Suspected Present	2 Believed Absent	3 Daily Composite or Grab Sample Results*	4 Daily Number of Analyses	5 EPA** Method
1. 2, 4,5-trichlorophenoxy acetic acid (2, 4, 5,-T)		X			
2. 2-(2, 4, 5-trichlorophenoxy) propanoic acid (Silvex, 2, 4, 5,-TP)		X			
3. 2-(2, 4 ,5-trichlorophenoxy) ethyl, 2, 2-dichloropropionate (Erbon)		X			
4. 0, 0-dimethyl-0-(2, 4, 5-trichlorophenyl) phosphorothioate (Ronnel)		X			
5. 2, 4, 5-trichlorophenol (TCP)		X			
6. hexachlorophene (HCP)		X			

In addition, *if*:

1) your facility uses or manufactures one of the substances listed above as items 1-6 or knows or has reason to believe or can reasonably ascertain that one of those 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;

you must also provide the analysis results for the dioxin and furan substances numbered 7 through 27, on the following page, using "EPA Method 1613: Tetra- through Octa- Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS".

Part B: Discharge Analysis (continued)

Table 4 (continued)

Date Sampled: Discharge Serial Number: Not Applicable

SUBSTANCES	1 Daily Composite Sample Results*	2 Number of Analyses	3 EPA** Method
7. 2,3,7,8-TCDD (Tetrachlorodibenzo-p-dioxin)			
8. Total - TCDD			
9. 2,3,7,8-TCDF (Tetrachlorodibenzofuran)			
10. Total - TCDF			
11. 1,2,3,7,8-PeCDD (Pentachlorodibenzo-p-dioxin)			
12. Total - PeCDD			
13. 1,2,3,7,8-PeCDF (Pentachlorodibenzofuran)			
14. 2,3,4,7,8-PeCDF			
15. Total - PeCDF			
16. 1,2,3,4,7,8-HxCDD (Hexachlorodibenzo-p-dioxin)			
17. 1,2,3,6,7,8-HxCDD			
18. 1,2,3,7,8,9-HxCDD			
19. Total - HxCDD			
20. 1,2,3,6,7,8-HxCDF (Hexachlorodibenzofuran)			
21. 1,2,3,7,8,9-HxCDF			
22. Total - HxCDF			
23. 1,2,3,4,6,7,8-HpCDF (Heptachlorodibenzofuran)			
24. 1,2,3,4,7,8,9-HpCDF			
25. Total - HpCDF			
26. OCDD (Optachlorodibenzo-p-dioxin)			
27. OCDF (Hexachlorodibenzofuran)			

Part B: Discharge Analysis (continued)

If you know or have reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on any water receiving the discharge within the last three years, or for discharges previously licensed by DEEP, since the issuance of such license, complete Table 5. Reproduce and complete Table 5 for each permit that you are applying for. (see Instructions)

Table 5: Biological Toxicity Testing Data **Existing Permit Number: Not Applicable**

Discharge Serial #	Date	Test Method	Species 1	Results	Comparison to Limit	Species 2	Results	Comparison to Limit

Part B: Discharge Analysis (continued)

Table 6: Discharge Toxicity Evaluation — **All Discharges**

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. (see instructions)
3. For discharges 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.

If any of the analyses reported in Tables 1 through 6 of this application were performed by a contract laboratory or consulting firm, list the name, address and telephone number of the laboratory or firm and the type of analyses performed.

Table 7: Contract Laboratory Identification — **All Discharges**

Name	Address	Telephone (Area Code & No.)	Substances Analyzed (List)
Not Applicable			