

DOCKET NO. D-2008-9 CP-1

DELAWARE RIVER BASIN COMMISSION

**Philadelphia Water Department
Venice Island Storage Tank
Philadelphia, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Hill Environmental Group, Inc. on behalf of the Philadelphia Water Department (PWD) on February 28, 2008 (Application), for review of the Venice Island Storage Tank Project.

The Application was reviewed for inclusion of the project in the Comprehensive Plan, approval under Section 3.8 of the *Delaware River Basin Compact* and conformance with Article 6-4 Commission's Flood Plain Regulations (FPR). The Philadelphia City Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on July 16, 2008.

A. DESCRIPTION

- 1. Purpose.** The purpose of this project is to approve the construction of PWD's Venice Island underground Storage Project, a performing arts center and associated appurtenances (Storage Project).
- 2. Location.** The proposed Storage Project is located on Venice Island, between the Cotton Street and Lock Street bridges. The Storage Project is to be constructed on Venice Island, which is located in the flood fringe portion of the flood hazard area. The proposed Storage Project is located on Venice Island adjacent to the Schuylkill River, a Warm Water/Migrating Fishery (WWF/MF) stream that flows to the Delaware River.

The project is located in the Schuylkill River Watershed as follows:

PROJECT	LATITUDE (N)	LONGITUDE (W)
Venice Island Storage	40° 01' 22.4"	75° 13' 15"

- 3. Area Served.** The storage tank will receive sewer overflows diverted from the City of Philadelphia's intercepting sewer during peak rain events and will later be returned to the intercepting sewer for subsequent treatment at PWD's Southwest WWTP.

For the purpose of defining the Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. Physical features.

a. Design criteria. The docket holder proposes to construct a 3 million gallon concrete storage tank, head house building, and a performing arts center on Venice Island.

b. Facilities. The storage tank will accommodate sanitary sewer/combined sewer overflow (SSO/CSO) that currently averages approximately 10 million gallons of untreated wastewater each year and will return it to PWD's Southwest WWTP, which was approved by Docket No. D-1970-53 CP. Additionally, several recreation areas, a new performing arts center, and a head house building (with appropriate parking) are being constructed to provide public space in the Manayunk region of Philadelphia.

The project facilities are within the 100-year flood zone. The development is to be constructed on Venice Island, which is located in a flood hazard area. A flood hazard area is defined by DRBC Flood Plain Regulations as the area inundated by a regulatory flood.

c. Water withdrawals. The potable water supply in the project service area is supplied by PWD's Queen Lake Water Filtration Plant. On July 25, 1962, the Commission adopted Resolution No. 62-14, amending the Comprehensive Plan by the addition of a new Section VII – Pre-Existing Projects. PWD's Baxter (formerly Torresdale), Queen Lane and Belmont Water Filtration Plants were among those listed in Resolution No. 62-14.

d. Cost. The overall cost of this project is estimated to be \$30,000,000.

e. Relationship to the Comprehensive Plan. The Venice Island Storage Project is added to the Comprehensive Plan by issuance of this docket.

B. FINDINGS

Every year an estimated 10 million gallons of untreated wastewater is discharged into the Schuylkill River from a permitted outfall by the PWD during wet-weather events. The wet-weather discharge is due primarily to a lack of conveyance, storage and treatment capacity within PWD's existing sanitary sewage collection system. The proposed 3 million gallon tank on Venice Island will alleviate this issue as the SSO/CSO will be stored temporarily and be routed back to PWD's Southwest WWTP for treatment prior to stream discharge.

The Storage Project is to be constructed on Venice Island, which is located in the flood fringe portion of the flood hazard area. A flood hazard area is defined by DRBC FPR as the area inundated by a regulatory flood (100-year floodplain). The Federal Emergency Management Agency (FEMA) issued a Letter of Map Revision (LOMR) to Firm Map No. 4207570086G, dated June 9, 2008 which removed the project site from the “floodway” portion of the 100-year floodplain. Using the FEMA determination, DRBC finds that the project site is located in the flood fringe.

Under Section 6.2.2 of DRBC’s FPR, the Venice Island Storage Project is considered as a Class II project. Class II projects are subject to review in accordance with Article 6-4 of the FPR. Class II projects include any development of land –whether residential or non-residential – within a flood hazard area located in a non-tidal area of the basin, which contains more than 25 dwelling units, or includes one or more structures covering a total land area of more than 50,000 square feet. The Venice Island Storage Project consists of structures covering a land area greater than 50,000 square feet.

Sections 6.3.2.B and 6.3.4.B. of the FPR allow for this project to be constructed in the flood fringe by issuance of a “Special Permit”. This docket is the “Special Permit”.

Section 6.4.2. of the FPR allow the issuance of a “Special Permit” provided certain conditions are met.

The project has demonstrated a clear public interest (FPR 6.4.2.A) for several reasons. The facility should provide important open space for the community at large in the form of a public park and recreation areas that may not be possible elsewhere due to urban congestion. Sediment transport and water temperature should be unaffected by this project as no structure is being erected within the natural stream bed and the site is being retrofitted with stormwater best management practices to reduce both water quantity and improve water quality. There has been no evidence of archaeological or historical sites and structures, endangered or rare species of animal or plant, or high quality wildlife habitat within the project area that would be degraded or destroyed by this project. The proposed project may improve and promote natural scenic and aesthetic qualities of the immediate area.

This project does not present a danger to human life as residences will not be constructed as apart of it. The majority of the work proposed is recreational and/or parking related and therefore a flood event would leave the bulk of the project unharmed. Based upon FEMA’s LOMR determination, the project is not expected to significantly obstruct flow and carrying capacity of the waters of the Schuylkill. The project does not have a high susceptibility of flotation due to the shear weight of the concrete involved. Furthermore the project helps protect the immediate environ of the Schuylkill River by preventing an estimated 10 million gallons per year of untreated wastewater from entering the River. Both of PWD’s drinking water intakes are

located downstream of the storage tank and related outfall, and the reduction of sanitary wastes to the Schuylkill River is beneficial to source water quality. Additionally, the immediate river area is heavily used for recreational purposes.

The storage tank will be located underground and is designed to be protected from flood waters. Additionally all mechanical equipment will be located above the 100 year flood elevation to ensure the continued operation of the Head House during a flood event.

However, the Commission is concerned over the impact that site flooding may have on vehicles in the parking areas and the potential impact the flood prone vehicles may have on the environment. Therefore, the Commission has included conditions “m. thru q.” in the Decision section. While Commission staff believes that these conditions add some degree of protection, these conditions should not be considered being fully protective.

The docket holder has advised the Commission of the following:

1. The PWD is the responsible party for operating and maintaining the CSO Storage Tank and the Head House that contains it.
2. The City of Philadelphia Recreation Department is the responsible party for operating and maintaining the Performing Arts Center, athletic courts, the playgrounds, and all walkways and stormwater systems that service those areas.
3. The Manayunk Development Corporation is the responsible party for operating and maintaining the parking lot and its associated facilities (including but not limited to the adjoining sidewalk, and the site lighting, sidewalk, and stormwater system associated with the parking lot).

The docket holder also requested that the DRBC indicate that the above mentioned entities will be responsible for all flood damage to their respective facilities. Conditions “o. and p.” in the Decision section lays out criteria and requires that signed documentation must be submitted to the Executive Director of the DRBC from each of these three entities prior to completion of construction of the project, verifying and accepting the transfer of responsibility.

Condition “p.” in the Decision section requires that within 6 months of the issuance of this docket, the docket holder shall submit a flood warning system to the DRBC for review and approval. The Executive Director is authorized to review and approve the flood warning system. The flood warning system shall also be submitted to the Philadelphia emergency management authorities for review and comment. All comments provided by the Philadelphia emergency management authorities shall be provided by the docket holder to the DRBC. The flood warning system shall describe the conditions that would likely result in the flooding of the project site and

the extent to which flooding is likely to occur. The parking area shall be posted advising users of the conditions that may subject the parking area to flooding and that vehicles should be moved when warnings are issued by the docket holder.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

I. Effective on the approval date for Docket No. D-2008-9 CP-1 below, the project and appurtenant facilities as described in the Section A “Physical features” of this docket are approved pursuant to Section 3.8 of the *Compact* and shall be added to the Comprehensive Plan, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the *Water Quality Regulations* of the DRBC.

d. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

e. Sound practices of excavation, backfill and reseeded shall be followed to minimize erosion and deposition of sediment in streams.

f. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date.

g. Upon completion of construction of the approved project, the docket holder shall submit a statement to the DRBC, signed by the docket holder's engineer or other responsible agent, advising the Commission that the construction has been completed in compliance with the approved plans, giving the final construction cost of the approved project and the date the project is placed into operation.

h. The area served by this project is limited to the service area as described above. Any expansion beyond this area is subject to review in accordance with Section 3.8 of the *Compact*.

i. This docket approval shall expire three years from date below unless prior thereto the docket holder has commenced operation of the subject project or has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval.

j. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

k. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

l. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

m. The issuance of this approval shall not assure any degree of flood protection. The docket holder shall assume all responsibility for any claims arising from the proposed construction and shall indemnify and hold harmless the Commission against and from any and all claims made by or on behalf of any party arising from the construction or use of this project.

n. All public and private flood plain users shall bear the full direct and indirect costs attributable to their use and actions. Furthermore, during construction when fill is used, the finish fill elevation shall be no lower than the Flood Protection Elevation for the particular area and shall extend at least 15 feet beyond the limits of any structure or building erected thereon. The basement and/or first floor elevation(s) also has to be above the Flood Protection Elevation.

o. The docket holder is responsible for all flood damage related to the project as described in the "Physical Features" section of this docket unless and until transferred in accordance with subsection p. and is therefore legally and monetarily held liable for said damages.

p. Prior to the transfer of any of the facilities described in the "Physical Features" section of this docket, the docket holder shall advise the accepting party in writing of Conditions I.m., n., o., p., and q. of this docket. The docket holder shall obtain written

acceptance of these responsibilities from the accepting party/parties. All signed documentation shall be submitted to the DRBC.

q. Within 6 months of the issuance of this docket, the docket holder shall submit a flood warning system to the DRBC for review and approval. The Executive Director is authorized to review and approve the flood warning system. The flood warning system shall also be submitted to the Philadelphia emergency management authorities for review and comment. All comments shall be provided by the docket holder to the DRBC. The flood warning system shall describe the conditions that would likely result in the flooding of the project site and the extent to which flooding is likely to occur. It shall also provide for the methods of alerting potential users of the facilities when a flooding event is likely to occur and the actions that the users should take to protect life and property, especially vehicles that are parked on the premises. A copy of the flood warning system shall be posted on a community bulletin board. The parking area shall be posted advising users of the conditions that may subject the parking area to flooding and that vehicles should be moved when warnings are issued by the docket holder.

r. The docket holder and any other person aggrieved by a reviewable action or decision taken by the Executive Director or Commission pursuant to this docket may seek an administrative hearing pursuant to Articles 5 and 6 of the Commission's *Rules of Practice and Procedure*, and after exhausting all administrative remedies may seek judicial review pursuant to Article 6, section 2.6.10 of the *Rules of Practice and Procedure* and section 15.1(p) of the Commission's *Compact*.

BY THE COMMISSION

DATE APPROVED: July 16, 2008