## Sewage Treatment Plant (STP) Design Modifications Update

Brookhaven National Laboratory
Community Advisory Council

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a passion for discovery



## **Background - Refresher**

- December 2010: BNL received approval of Quantification & Removal Study Report from NYSDEC
  - Modification of SPDES Permit will be required
  - Suitability of soils for discharge will need to be confirmed
  - Submittal of engineering report, plans, and specifications to NYSDEC and SCDHS in accordance with schedule
- January 2011: BNL initiated NEPA Environmental Assessment and Procurement of Architect/Engineering (A/E) Services for Design/Construction
- April 2011: BNL presented the NEPA Environmental Assessment to CAC
- June 2011: The DOE issued a Finding of No Significant Impact (FONSI)
- July 2011: P.W. Grosser Consulting and Gannett Fleming Engineers, PC were awarded the contract to prepare Title I and II Design Packages
- July 2011: Soil investigations completed
  - The hydraulic conditions of the former WWI recharge area are suitable for use of as future groundwater discharge area of the STP
- November 2011: Title I Preliminary Design Report submitted to regulators



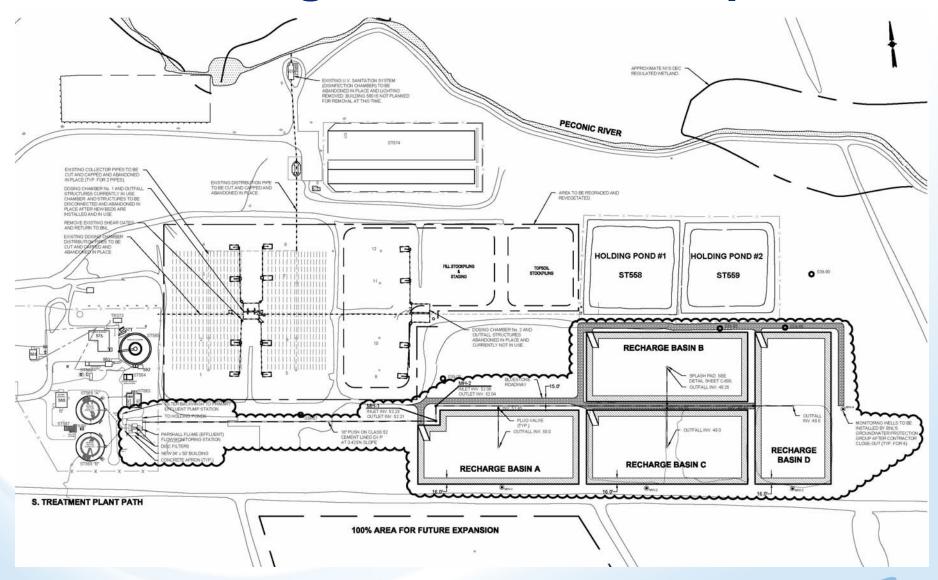
#### **Approved Schedule:**

Activity	Start	<u>Finish</u>		
NYSDEC Approval of Q&R Study		30-Dec-10		
Complete NEPA EA	03-Jan-11	30-Jun-11	_	
Procure A/E Services	03 Jan-11	<u>20</u> Jun-11		Design
Complete Soil Studies	<b>△</b> r-11 =	⇒Sep-11		Phase
Preliminary Design	<b>€</b> 6-J <b>♣ ■ ■</b>	Nov-11		More details
Submit Preliminary for Reg. Review	01-Dec-11	06-Jan-12		on next slides
Regulator Comment Resolution	09-Jan-12	03-Feb-12		
Final Design and NYSDEC Approval	06-Feb-12	13-Jul-12		
Procurement	16-Jul-12	19-Oct-12		
Construction Bid	22-Oct-12	30-Nov-12		
Award Construction Contract	03-Dec-12	14-Dec-12		Construction
HASP/Notice to Proceed	17-Dec-12	01-Feb-13		Phase
Mobilization	04-Feb-13	28-Feb-13		
Construction	01-Mar-13	31-Jul-14		
SPDES Permit Modification	01-Mar-13	28-Feb-14		Project
Project Completion	01-Aug-14	30-Sep-14		Closeout

#### **Recent Actions:**

- March 2012 BNL submitted responses to comments received by NYSDEC and SCDHS on the Title I Design Report
  - Ensure that tertiary filters are designed to handle the full SPDES Permit Flow (2.3 MGD) with one unit out of service
  - Clarification on amount and location of groundwater monitoring wells
  - Confirming that appropriate permitting (Scenic River and Wetlands) will be completed prior to start of construction and wetlands are clearly delineated in design plans
- March/April 2012 SPDES Permit Modification process initiated
  - Includes description of new treatment process and will recognize discharge to groundwater





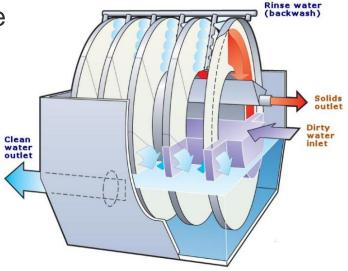


**Tertiary Filtration System** 

**Disc Cloth Filters** 



Each filter unit will be approx. 13' long, 8' wide, and 8.5' high



Installed in 34' x 50' pre-engineered building



### What's Next?

- Complete SPDES Permit Modification (April 2012)
- Continue to work on Final Design (July 2012)
- Initiate Construction Procurement Process
- Begin Field Preparation Activities (Summer 2012)
  - Clearing, grading for filter building and recharge basins

### **QUESTIONS?**

