

ERA	PERIOD	EPOCH	SITE STRATIGRAPHIC UNIT	LITHOLOGIES	HYDROGEOLOGIC PROPERTIES	
CENOZOIC	QUATERNARY	HOLOCENE (RECENT)	ARTIFICIAL & HYDRAULIC FILL	AF - clays, silts, and sands of various proportions along with clayey and silty gravels.	Leaky confining units	
				HF - soft clayey silts, sandy silts, and organic clays.		
		UNCONFORMITY				
		PLEISTOCENE	ALLUVIUM	Fine to coarse sand and gravel; peat and organic rich soils; silt and clay near base.	Upper portion is a water-bearing zone; lower silts and clays, when present, act as a leaky confining unit	
		UNCONFORMITY				
	NEOGENE	MIOCENE	KIRKWOOD FORMATION	Upper - greenish-gray, silty, fine sand, fine sand and greenish-gray to brown organic clay with organic material and shell fragments.	Leaky confining unit	
				Lower - fine to coarse sand and gravel with variable amounts of silt and clay.	Water-bearing zone, part of the Vincentown aquifer	
		UNCONFORMITY				
	PALEOGENE	PALEOCENE	VINCENTOWN FORMATION	Greenish-gray, fine to medium grained silty sand with some zones of clayey sand; variably glauconitic; cemented zones.	Water-bearing zone	
			HORNERSTOWN FORMATION	Greenish-gray to dark green, silty and clayey quartz and glauconitic sand with indurated zones.	Upper portion is a water-bearing zone and part of the Vincentown Aquifer. Lower portion, along with the Navesink Formation act as a leaky confining unit.	
MESOZOIC	CRETACEOUS	UPPER CRETACEOUS	NAVESINK FORMATION	Fossiliferous, dark green to greenish-black, glauconitic sand; pelecypod fragments.	Leaky confining unit	
			MOUNT LAUREL FORMATION	Brownish gray to dark green, fine to coarse grained sand; variable amounts of silt and clay; coarsening upward sequence.	Water-bearing zone, with the Wenonah Formation comprise the Wenonah-Mt. Laurel Aquifer	
			WENONAH FORMATION	Sandy clay with clayey sand.	Water-bearing-zone	
			MARSHALLTOWN FORMATION	Glauconitic, silty and clayey fine sand.	Confining unit	
			ENGLISHTOWN FORMATION	Dark gray to black, sandy clay to clayey sand with shell fragments. Grades to black silt with trace amounts of mica and glauconite.	Water-bearing zone	
			WOODBURY FORMATION	Black, micaceous clay.	Confining unit	
			MERCHANTVILLE FORMATION	Dark greenish-black, glauconitic silts and clays with variable amounts of sand.	Confining unit	
			MAGOTHY FORMATION	Interbeds of gray to dark gray, locally mottled silts and clays that are interbedded with sands; trace amounts of lignite and carbonaceous material.	Water-bearing zone	
			UNCONFORMITY			
			LOWER CRETACEOUS	POTOMAC FORMATION	Red, gray, and white mottled clay.	Confining unit

PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Hydrostratigraphic Classification
for the PSEG Site

FIGURE 2.4.12-1

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