

### **III.12 Utilities**

#### Comment No. 12-1

*No comments. Please refer to the comment regarding the wells under "Groundwater."  
(B-1, AKRF)*

#### Response No. 12-1

Comment noted. Please refer to the responses in the Groundwater section of this FEIS.

#### Comment No. 12-2

*I'm going to run some numbers by you from NFPA, which is the National Fire Protection Association. It's a governing body for fire departments of the United States.*

*Just on Building Number 1, which is 261,000 square feet at a height of 52 feet (indiscernible) - - class and the construction - - construction classification of that building, if it were to ever catch fire and got out of control to a hundred percent volume of a fire, you'd need approximately 300 - - 3.2 million gallons of water to put that fire out. Think about the water sources in that area. Where are you going to efficiently get 3.2 million gallons of water up Pugsley Road? At most, your tankers that your fire departments have carry 2,000 gallons of water. 2,000 gallons. On top of that, that calculation is proportional. So even if the fire was small, let's say a 16th of the building, you would still need 200,000 gallons of water or approximately 100 trucks tanking water in down Pugsley Road. Not to mention, you're talking a warehouse facility that's going to house plastics and other materials.*

*If there's fire and a light breeze, we're all being evacuated, and we're not going to know for how long, let alone what's going to happen to our properties. Now, you have this plastic, which is cancerous, and all this other stuff that is just generally not healthy.*

*(B-3, PH #2, Mr. Lubra)*

*What if there is a fire at this facility? Will I have to evacuate my home due to the closeness of this facility to my home?*

*(B-84, Rita LaBella)*

*If a fire ever occurred it could travel down that mountain and be tough to fight a fire of this size--*

*(B-85, Christine Capuano)*

*And where will they get enough water to fight a fire of this size or operate their air conditioning systems for over one million sq feet.?*

*(B-85, Christine Capuano)*

*Along with dangers to lives and property in case of a major fire.*

*(B-88, Eugene J. Duffy, Jr.)*

*Lastly, there will be minimal demand for municipal services. At the very end of the second public hearing a fireman say that there is a serious fire hazard posed by these types of buildings based on his experience in Fishkill. He said we don't have enough water to handle such a fire in Southeast.*

*(B-89, Challen Armstrong)*

*If this application is not outright rejected, we implore the Planning Board to ensure the best interests of those communities most directly impacted.*

*(B-107, Twin Brooks Homeowners Association, Inc.)*

*These include, but are not limited to: setting higher standards to ensure fire safety / ability to deal with plastics fire.*

*(B-107, Twin Brooks Homeowners Association, Inc.)*

*The added stress of the dept. & police if there should be fire the fire dept would not be able to handle it and all that debris in the air will end up in our backyard let alone the pollution it would cause.*

*(B-128, Patricia G.)*

*We live in a residential area not an industrial town. In the event of a fire at the warehouses, can our volunteers handle a fire of this industrial sized capacity let alone if we can produce the amount of water that would be needed to contain it? If the warehouses contain hazardous materials, many families would need to evacuate to avoid noxious fumes.*

*(B-134, Jon Scalzitti)*

*Increased danger from fire and/plastics or other hazards burning.*

*(B-135, Alison Yara)*

*I would like to hear from the Fire Department directly at the next meeting as from what I read, there isn't enough water to fight a fire of this size. Think the Gap warehouses in Fishkill which are not even near a residential area.*

*(B-140, Christine Capuano)*

*The four logistic centers are roughly 1,300 feet from Carmel's only middle school: George Fischer Middle School where children attend from grades 5 to 8. If all four logistics centers were to have a fire, similar to the length the one at the GAP facilities in Fishkill had, the children at the school would be in immediate danger. The surrounding fire departments do not have the amount of water or resources needed to put out a fire of that size and as far as I know, it's prohibited to take water from the reservoir. I am not sure if there would be enough water in the reservoir to extinguish (not including how flammable the material is in the warehouses).*

*(B-156, Patricia Ann Yara)*

*There were additional concerns from volunteer fire fighters who claim that 269,000 gallons of water would not be sufficient for a development of this size. Please confirm if that statement is true.*

*(B-158, Eric Larca)*

*Our very existence will be threatened if there is ever a fire at this Logistics Center or even a small portion of it due to the manpower and amount of water needed to extinguish this fire.*

*(B-83, Carol Yannarell-Duffy)*

### Response No. 12-2

There is ample water to address a fire on the site with a proposed 303,700 gallon water storage tank, as discussed below.

Each building under the Preferred Alternative Plan will include a specialized sprinkler system, which is specifically designed for high piled storage occupancies, and which will substantially reduce the amount of water needed in the event of a fire in any building. This sprinkler system, Early Suppression Fast Response (ESFR) sprinklers, are the state-of-the-art and are widely used for warehouse/distribution facilities because they are quick responding, high volume systems that provide exceptional protection for high piled storage occupancies.

Instead of merely controlling a fire until the original fuel source is depleted, ESFR systems are designed to suppress the fire by discharging a large volume of water directly to the fire to reduce the heat release rate. These systems, installed at the ceiling, use large volumes of water delivering large water droplets at a high velocity to knock down the fire plume and provide enhanced protection.

Pursuant to standards established by the National Fire Protection Association (NFPA), substantially less water will be required to handle a fire at the warehouse/distribution facility because the buildings will be outfitted with ESFR sprinklers. To quantify the

fire suppression requirements for the buildings, NFPA-13 (Standard for the Installation of Sprinkler Systems) 2013 edition was utilized, which is the current reference standard recognized by the New York State Building and Fire Codes. The proposed water tank contains 303,700 gallons, which, according to NFPA standards, is sufficient to protect "Extra Hazard" materials storage such as for the protection of rubber tires up to 30 feet as well as Group A plastics as defined by NFPA 13. The storage tank must be sized to provide enough water for the duration (hours) as specified in NFPA for the particular hazard rating. Thus, the proposed storage tank has enough storage for the purposes of fire control for the buildings. The emergency water storage consists of 240,000 gallons for the sprinkler system requirements, and 60,000 gallons for standpipe/hydrant use. The site hydrant outlets will each be sized for 250 gallons per minute (gpm) at 100 pounds per square inch (psi). The tank will be insulated and heated.

In addition, official NFPA guidance, set forth in NFPA 1 and NFPA 1142, provide conservative fire flow calculations based on building dimensions and construction classifications. Within these standards, the required fire flow may be reduced by seventy-five percent (75%) when a building is protected throughout by an approved automatic sprinkler system, such as ESFR, in accordance with NFPA-13, as discussed above.

The on-site water storage tank and automatic sprinkler system are designed to suppress a fire in the time it takes the fire department to arrive and then to provide supplemental water for the fire department to use to control and put out a fire. The water for the fire department will be provided by fire hydrants surrounding each building. Subject to final design calculations, the hydrants are to be connected by a 6" line from the water tank via the fire pump, which will supply water to the system. Distribution volume and pressure will be obtained via a fire pump in the range of 2,500 to 3,000 gpm, which will be verified according to NFPA standards when the system design is completed. Due to the building spacing and robust fire suppression systems, it is extremely unlikely that both buildings would have a fire at the same time. Given

the fact that the proposed buildings are separated from the nearest residential areas by a distance of approximately a quarter mile, it is highly unlikely that a fire at the proposed project would require an evacuation of any residential homes.

Comment No. 12-3

*And I remember very clearly about two years ago, right over in East Fishkill, the Gap warehouse. That burned for hours, and they had sufficient water supply, and the building had 10 sprinklers.*

*(B-3, PH #2, Mr. Lubra)*

Response No. 12-3

It is not known what fire suppression system the Gap had in place at the time. The Gap was constructed in 2000.

See Response 12-2, which explains that the facility will have ample water to address a fire on the site using a state-of-the-art NFPA approved fire suppression system.

Comment No. 12-4

*What is this going to do to our **antiquated** infrastructure?*

*Every time the wind blows the wrong way we lose power. What is this massive proposed project going to do to our less than perfect electric grid?*

*(B-8, Amanda DeHaan)*

*Drain on electricity, we do not need power outages.*

*(B-9, James Scomillio)*

*Where will the facility get their electricity from? Will they have their own grid designated just for them or will they be on Hunters Glen's grid?*

*(B-164, Dalia Valdajevaite)*

Response No. 12-4

Appendix I-2 of the DEIS contains "will serve" letters from New York State Electric and Gas (NYSEG) to supply both gas and electricity to the site, which means they have or are able to procure sufficient electricity and gas to serve the project.

In discussions, NYSEG representatives indicated that new overhead electrical utility distribution lines may be required to bring power from Route 312 to Pugsley Road and the site. NYSEG indicated that the total estimated length of new overhead distribution is approximately 5,500 feet. The Hunter's Glen and the Twin Brook Manor grids will therefore not be connected to the proposed warehouse/distribution facility.

In addition, according to discussions with NYSEG, currently there is not a gas main in Pugsley Road. NYSEG is exploring the most efficient way to provide a gas main extension, which will serve the site.

The project will use LED lighting to conserve energy and lower energy costs.

Comment No. 12-5

*We also believe that consideration should be given to increasing the emergency water supply in the event of a large scale fire.*

*(B-98, Snyder & Snyder)*

Response No. 12-5

See Response 12-2, which explains that the facility will have ample water to address a fire on the site and a state-of-the-art fire suppression system.

Comment No. 12-6

*Page III.J-5 of the DEIS indicates that each building septic absorption field will have a capacity of 5,000 gpd; however, on the drawings, the septic areas are depicted with design flows of between 2,700 and 3,200 gpd. Given the marginal soil conditions, the applicant must ascertain that adequate space exists to accommodate these proposed subsurface systems at the expected flow rates. This review should be performed and presented during the SEQRA review process.*

*(B-137, NYCDEP)*

Response No. 12-6

The septic design flows for the Proposed Alternative Plan are 5,900 gallons per day (gpd) for Building A, and 10,170 gpd for Building B, for a total of 16,070 gpd. The water demand (utilizing low flow plumbing fixtures, as anticipated) for Building A is 4,054 gpd, and 8,426 gpd for Building B, for a total of 12,480 gpd.

Each individual septic system is sized for the anticipated loading requirements for each building based on the March 2014 New York State Design Standards for Intermediate Sized Wastewater Treatment Systems prepared by the NYSDEC Division of Water. The water usage multiplier for a Distribution Warehouse in Section B.6.b, Table B-3, as discussed in Section III.9 “Groundwater” in Response No. 8-1, is 15 gpd per employee per shift. This rate does not take into account that hydraulic loading may be reduced by 20% for specified uses equipped with water saving plumbing features, yielding a water demand of approximately 12,480 gpd as noted above. The Putnam County Department of Health has witnessed the testing for each septic area

subsequent to the preparation of the DEIS and the systems have been sized accordingly.

Comment No. 12-7

**STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) -  
SANITARY**

*The proposed project would utilize subsurface disposal systems (SSDS) for sanitary sewage disposal. One SSDS would be proposed for each of the four buildings, with estimated design flows of 17,000 gallons per day per tank. Sewage effluent discharges of 1,000 gallons per day or greater to groundwater are regulated under Article 17 of the Environmental Conservation Law and a SPDES permit would be required for these disposal systems.*

*(B-144, NYSDEC)*

Response No. 12-7

Comment noted. The Preferred Alternative Plan proposes two subsurface disposal systems (SSDS) for each of the two (2) buildings, with estimated septic design flows totaling 5,900 gpd for Building A and 10,170 gpd for Building B.

Comment No. 12-8

*Please note that any other potential discharges associated with the project which require coverage under a SPDES permit (such as that described in the below Water Withdrawal section, regarding possible water withdrawal-related industrial discharges) and that, pursuant to 6 NYCRR Section 750-1.6(f), a permit for a system serving more than one separately owned property can only be issued to a government agency, municipality, or sewage works corporation formed pursuant to Article 10 of the Transportation Corporations Law.*

*(B-144, NYSDEC)*

Response No. 12-8

Comment noted. The Campus at Field Corners Sewage Works Corporation, New York State Department of State I.D. No. 3287060, which was duly created pursuant to Article 10 of the New York State Transportation Corporations Law, is authorized to accept any required SPDES permit.

Comment No. 12-9

*The project area, as noted in the DEIS, is the location of the former development proposal of the "Campus at Field Corners." A SPDES permit (SPDES ID# NY0259314, DEC ID# 3-3730-00155/00003) was issued to Putnam Seabury Partners LP for this former proposal, and is currently active until December 31, 2020. Since Campus at Field Corners will not be constructed, and the newly proposed logistics center requires its own SPDES permits, this permit should be discontinued. By copy of this letter, Putnam Seabury Partners LP is advised to submit a letter requesting discontinuance of the SPDES permit NY0259314. This letter should be sent to the Regional Permit Administrator, 21 South Putt Corners Road, New Paltz NY 12561. Please note that if this permit is not discontinued by December 31, SPDES permit fees will continue to be assessed for the following calendar year.*

*(B-144, NYSDEC)*

Response No. 12-9

Comment noted. The Applicant will abandon that permit when the Commercial Campus at Fields Corner project is approved.

Comment No. 12-10

*The DEIS indicates that existing wells would be utilized to supply the logistics center with potable water. The potable water demand for the proposed project is estimated to be 78,000 gallons per day. Please note, water withdrawal systems with the pump capacity to withdraw*

*100,000 gallons per day or more of water are regulated under 6 NYCRR Part 601. The Groundwater section states that the total demonstrated yield of the wells, which is typically less than the pump capacity, is 288 gallons per minute or 414,720 gallons per day, and therefore a Water Withdrawal permit from DEC is required. For more information, the project sponsor can visit the DEC website at <http://www.dec.ny.gov/lands/55509.html>.  
(B-144, NYSDEC)*

Response No. 12-10

The project's water demand requirement utilizing low flow plumbing fixtures, as anticipated, is 15,600 gallons per day (gpd) or approximately 10.8 gpm. Two wells are proposed for use as supply wells, OW-3 and NW-4. One well will be used as the primary water-supply well and the other well as a back-up well per the request of the Putnam County Department of Health (PCDH). Each well will be equipped with a pump with a capacity of 30 gpm or less for a combined maximum pumping capacity of 60 gpm or less (86,400 gpd). The combined pump capacity is below the NYSDEC threshold of 100,000 gpd that would require a water withdrawal permit.

Comment No. 12-11

*Please note that the Utilities section states that the applicant will be requesting that DEC rescind the Water Supply permit issued to the former project sponsor. The former Water Supply permit, now a Water Withdrawal Public permit, expired in 2015. So no action would be required as it is no longer an active permit.  
(B-144, NYSDEC)*

Response No. 12-11

Comment noted. The groundwater withdrawal for the proposed project (15,600 gpd, or 12,480 gpd using low flow plumbing fixtures, as anticipated) is far below the NYSDEC water withdrawal threshold of 100,000 gpd that would require a permit.

Comment No. 12-12

*The plan sheet C302, UTILITIES PLAN B, shows a proposed water treatment building, but there does not appear to be any discussion of it in the Utilities section of the DEIS. Please note that if chlorine treatment is proposed, the site will likely need a Hazardous Material Bulk Storage registration for the storage tank. In addition, any filter backwash contaminated with chlorine could be considered an industrial pollutant. If discharged, either directly or through one of the proposed sanitary systems, an industrial SPDES permit may be required. The EIS must identify the means of treatment and address these additional potential environmental impacts, if applicable.*

*(B-144, NYSDEC)*

Response No. 12-12

In 2005 a water supply and treatment system was designed to serve multiple residential buildings for the project known as Campus at Field Corners. This design provided for domestic and fire protection potable water and was approved and permitted by the New York State Department of Health. At that time the water supply was to come from wells OW-1 and NW-4 with a third well OW-3 to be capped and held in reserve. This project was never implemented.

The design requirements for domestic and fire protection potable water for the presently proposed project have changed significantly. The revised design has been done in accordance with the current adopted editions of The State of New York Building Codes (International Building and Plumbing Code), Fire Safety Code, Department of Health Regulations, National Electrical Code, and applicable standards of NFPA 13 for the installation of Sprinkler Systems, and NFPA 72 National Fire Alarm Code.

The water demand is 15,600 gpd for domestic use associated with the total of 1,040 employees on the three shifts, or 12,480 gpd if low flow plumbing fixtures are used,

as anticipated. An estimated 12,000 gpd demand for onsite irrigation will be supplied from cisterns capturing runoff from the roofs of the proposed buildings. A 303,700 gallon fire water storage tank is proposed, which is separate from the domestic potable water system. Storage capacity for domestic use will be one day of projected potable water consumption of approximately 15,000 gallons with [backup/emergency power provided for the well supplies and for the water pumping and treatment facility](#). The potable water will be supplied to the warehouse buildings via a booster pump system drawing from the potable water storage tank via a six inch (6”) diameter water force main to serve each warehouse building.

The domestic well water supply from wells OW-3 and NW-4 will be chlorinated in accordance with New York State Drinking Water standards. In consideration of the well water analysis, see Appendix 8-1, no other treatment is required, i.e., no filtration is needed or incorporated in the design. Thus, there is no backwash water requiring special handling or treatment.

Comment No. 12-12 expresses some concern on bulk storage of chlorine as a hazardous material. Sodium Hypochlorite at 12.5%, a liquid, will be used to chlorinate the well water. A conservative calculated estimate of demand for this chemical is less than two gallons per day. Likely, the chemical product will be delivered to the treatment building in five-gallon containers loaded on a pallet of 32 containers. Five gallon containers are easy and safe for an Operator to handle. These containers will be stored on a containment pad which will hold any spillage or leakage should it occur. The containment will comply with New York State Chemical Bulk Storage requirements. The chemical feed system and storage will be located in a ventilated room and isolated from the remainder of the treatment building. Therefore, as noted above, there is no filtration nor filter backwash. An eyewash and safety shower will be provided in accordance with American National Standards Institute (ANSI) and NYS Ten States Standards.

Comment No. 12-13

**AIR RESOURCES**

*The Utilities section states that the buildings will be heated by natural gas. If the project includes installation of boilers with total capacity greater than ten million British Thermal Units per hour or addition of boilers such that the total exceeds that threshold, then an air facility registration or permit may be required.*

*(B-144, NYSDEC)*

Response No. 12-13

Based upon the size and use of the four (4) buildings contemplated for the project proposed in the DEIS, the estimated size of the direct-fired rooftop mounted gas heaters was as follows:

- Building 1 – 27 MBTUs/hr
- Building 2 – 17 MBTUs/hr
- Building 3 – 35 MBTUs/hr
- Building 4 – 40 MBTUs/hr
- Total - 119 MBTUs/hr

In the downsized two (2) building Preferred Alternative Plan now proposed in the FEIS, the estimated size of the direct-fired rooftop mounted gas heaters will be as follows:

- Building A – 32 MBTUs/hr
- Building B – 66 MBTUs/hr
- Total - 98 MBTUs/hr

This represents an 18% reduction from the project as proposed in the DEIS.

Once NYSDEC determines if an air facility registration or permit is required, it can be added as a condition of approval of any site plan that may be approved. The

Applicant will comply with what the NYSDEC directs with regard to an air facility registration or permit.

Comment No. 12-14

*The DEIS calls for a 269,000 gallon water tank to be used in case of a fire. A simple google search shows that the dimensions of a 250,000 gallon water storage tank is ~33' x 48'. Will you be using a similar model? What will be the dimensions? Will you require a variance from the Zoning Board?*

*(B-158, Eric Larca)*

Response No. 12-14

The water tank that is proposed to be used has an actual capacity of 303,700 gallons. The tank is approximately 42 feet in diameter, and 30.36 feet in height. With a 5 to 6 foot dome on top, the height is approximately 36 feet, and with a 42 inch handrail, the total height is approximately 40 feet. This is below the 45 foot maximum height permitted in the OP-3 district. Therefore, there is no need for a variance.