

STAFF REPORT  
DEWATERING

In the matter of TRANSCO EXPANSION PROJECT – COMPRESSOR STATION 203

Water Allocation Application No. 1322D, to temporarily divert water from a dewatering trench sump pump system in the following Municipalities and County:

Chesterfield Twp. and Bordentown      Burlington County  
Twp.

In compliance with the provisions of N.J.S.A. 58:1A-1 et seq., TRANSCO EXPANSION PROJECT, 2800 Post Oak Blvd, Houston, Texas, 77056, filed an application with the Department of Environmental Protection on December 8, 2015 and an amended application on February 16, 2016 for approval of plans to divert a maximum of 7 million gallons of water during any month (mgm) at a maximum rate of 6,830 gallons per minute (gpm) from a series of approximately 34 trenches; 2 feet to 13 feet deep. The trenches are mainly located in Chesterfield Twp. with a small portion in Bordentown Twp., Burlington County.

Diversion is for the purpose of temporary dewatering for the construction of Compressor Station – 203 and Chesterfield Meter Station and associated tie-in piping, electrical conduit, and other appurtenances.

Diversion is in the Delaware River Basin.

Public notice was required as this is an application for a new diversion.

A public hearing was held on April 26, 2016 at 5:00P.M. at the Chesterfield Elementary School, 30 Saddle Way, Chesterfield, New Jersey 08515 to afford the public an opportunity to be heard on this application.

A Notice of Application and Public Hearing was published on April 10, 2016, in the Burlington County Times.

Background/Findings of Fact

1. This permit is required as dewatering will continue for approximately 10 months. It is anticipated that dewatering will begin on the effective date of the permit or later and continue for approximately 10 months.
2. The diversion includes a series of approximately 34 trenches 2 feet to 13 feet deep.
3. According to the applicant's Engineering Report, ground water is encountered at the site

from 1 foot to 10 feet below grade.

4. The ground surface elevations at the site vary from 73 feet to 83 feet above sea level.
5. Excavation at the site will vary from 2 feet to 13 feet below grade. Dewatering is expected to occur to a depth of 13 feet below grade.
6. The anticipated total length of the project is 7,659 linear feet consisting of perimeter trenching (foundations), box excavation (foundations/stormwater), and line trenching (piping/duct bank). The maximum length of open trench will be minimized by method of sequential trenching and backfilling operations. The average diversion in gallons of water per foot length of open trench is estimated to be 914 gallons/foot.
7. The applicant's estimate of the quantity of water to be diverted monthly is based upon their engineer's calculations.
8. Other sub-surface diversions within a one-quarter mile radius include 8 private domestic/domestic replacement wells. Records indicate that the wells range in depth from 55 feet to 200 feet. These wells include:

Well Address	Well Permit No.	Depth (feet)	Aquifer	Capacity (gpm)	Distance (feet)
Daniel Avenue	2800004031	152	Magothy	8	500
Unknown	2800008506	150	Magothy	10	625
Hogback Road	2800029216	180	Magothy	0	1,125
Unknown	2800010639	200	Magothy	10	650
Unknown	2800011790	110	Magothy	10	1,175
Unknown	2800014681	200	Magothy	10	350
Unknown	2800009832	55	Magothy	10	775
Unknown	2800002486	125	Magothy	10	1,100

9. There are no public water supply wells within a one-mile radius of the project.
10. According to the applicant there are 4 potential pollution sites located within a one-quarter mile radius of the dewatering activity. These include:

Address of Source	Distance (feet)	Aquifer Affected	Status
24 Bordentown-Chesterfield Road *	370	Pensauken Formation	Unknown
31 Bordentown-Chesterfield Road *	454	Pensauken Formation	Closed
35 Bordentown-Chesterfield Road *	649	Pensauken Formation	Unknown

Address of Source	Distance (feet)	Aquifer Affected	Status
35 Bordentown-Chesterfield Road *	686	Pensauken Formation	Closed
*Note: None of these sites are part of the NJDEP Known Contaminated Sites List			

11. Water will be discharged utilizing one or more of the following methods; settling tanks, filter bags, and hay bale structures then discharged onto vegetated upland portions of the site. The discharge will be measured by totalizing flow meters. This discharge may require a NJPDES permit.
12. The applicant indicated that there are freshwater wetlands within the radius of influence of the diversion. The Bureau of Freshwater Wetlands has been notified of the proposed diversion. Applications have been submitted for NJFW Wetlands Permit – Individual and NJFW Wetlands Permit GP 12 on July 24, 2015 and September 8, 2015, respectively.
13. The FERC Certificate for the Chesterfield Compressor Station 203 was issued on April 7, 2016.

#### Staff Analysis

1. The monthly allocation was based upon estimates contained in the application and accompanying Engineer's Report.
2. Issuance of this permit at the recommended diversion rates will allow for construction of the Transco Expansion Project – Compressor Station 203 and Chesterfield Meter Station and associated tie-in piping, electrical conduit, and other appurtenances. Historically the Department has viewed governmental approvals for a project signifies that it is the public interest. Therefore, upon receipt of all necessary Federal, State, County, and local approvals, the proposed diversion would be considered to be in the public interest in accordance with N.J.A.C. 7:19-2.3(g)1.
3. Based upon the expected maximum withdrawal rate, the characteristics for an unconfined aquifer, and the limits of dewatering, the zone of influence is expected to be less than 14 feet deep and extend less than 400 feet from the dewatering activity.

Given this and the fact that the diversion is temporary in nature, adjacent wells are screened at depths greater than this, and the applicant is required to have a contingency plan in place should anyone be adversely impacted, the diversion is just and equitable to other water users in accordance with N.J.A.C. 7:19-2.3(g)2.

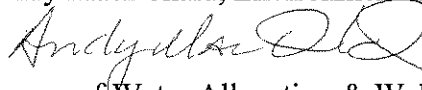
4. As the diversion is temporary in nature, it is not expected to exceed the long term natural replenishment of ground water in the area, or adversely affect any river or stream in accordance with N.J.A.C. 7:19-2.3(g)3.
5. The diversion is not expected to contribute to the spread of groundwater pollution due to there being no identified known contaminated sites within one-quarter mile radius of the dewatering activity according to the NJDEP Known Contaminated Sites List.

Recommendations

Issuance of the permit is recommended with an expiration date of March 31, 2018 subject to the attached specific permit requirements:

Date: March 16, 2017

Andy MacDonald, Environmental Specialist 3



Bureau of Water Allocation & Well Permitting

*JEM*  
3/16/17  
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