



SUSQUEHANNA RIVER BASIN COMMISSION

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Into-Basin Diversion Application Summary

Source Name: Lanchester Landfill

SRBC Pending No.: 2024-115

This summary is only a portion of the application materials and is meant to provide general information about the proposed project.

1.0 General

This section requests pertinent information related to the consumptive use, and if applicable, out-of-basin diversion application(s) that are being requested.

1.1 Project Sponsor

Company Name: Chester County Solid Waste Authority

Mailing Address Line 1: Lanchester Landfill

Mailing Address Line 2: 7224 Division Highway

City: Narvon

State: PA

ZIP Code: 17555

Contact Person:

First Name: Gary

Last Name: Laird

Title: Water Operations Manager

Telephone: (610) 273-3771

Fax: (717) 355-5345

Mobile: (610) 750-1903

E-mail: glaird@chesterccswa.org

1.4.1 Projected Design Year:

2040

1.4.2 Existing Into-Basin Diversion Quantity

☒ 0.05(mgd) Peak-day ☐ 30-day average

1.4.3 Requested Into-Basin Diversion Quantity

0.05(mgd) ☐ Peak-day ☒ 30-day average

2.4 Facility Location

Please enter the address of the parcel where the Project Facility is located.

2.4.1 Facility Address

Street Address: 7224 Division Highway

State: PA

County: Chester

Municipality: Atglen Borough

Zip Code: 17555

Section 2.1 – Project Facility Description
Lancaster Landfill – Docket 20100602 Renewal
Chester County Solid Waste Authority
Caernarvon, Salisbury, and Honey Brook Townships, Chester County, PA

This application requests renewal of SRBC Docket 20100602 (the Lancaster Landfill Docket) by Chester County Solid Waste Authority (CCSWA), for the continued consumptive use (CU), and diversion of water into the Susquehanna River Basin to support landfill operations. The existing SRBC Docket No. 20100602 authorizes a combined groundwater withdrawal (30-day average) of 0.075 MGD, consumptive water use of up to 0.075 million gallons per day (MGD) (peak day), and total Into-Basin Diversion (IBD) of up to 0.050 MGD (peak day) from the Delaware River Basin for landfill operations. This application pertains to the renewal of the existing docket (Docket No. 20100602), with a requested increase in CU quantity to 0.099 MGD. While no changes to the IBD quantity are sought, this application also requests a transition from CCSWA's limits of CU and IBD quantities from the current peak-day basis to a 30-day average basis. The site is a permitted Municipal Landfill facility (Permit No. 100944 Sub-Facility ID 241852) under the PADEP Municipal Waste Program. Ongoing facility modifications, including landfill cell construction and closure, are anticipated over the term of the presently requested SRBC approval (i.e. the next 15 years).

The site is located to the north of US 322 (Division Highway) and is situated in portions of Salisbury and Caernarvon Townships in Lancaster County and Honeybrook Townships in Chester County. The site is divided between the Susquehanna River Basin (SRB) and the Delaware River Basin (DRB), with the northwestern portion of the site existing within the SRB and the Conestoga River watershed and the southeastern portion of the site located within the DRB. A Facility Location Map is included as part of this SRBC docket renewal and is referred to as Figure 1.

CCSWA acquired the property in September 1984 and began operating as the Lancaster Sanitary Landfill. From 1984 until 1991, the Municipal Site Landfill (MSL) was the operating waste disposal area the site. Construction of the Area B landfill expansion began in 1991; construction of the Area C landfill (Municipal Site Overfill Landfill) began in 1997; construction of the Area D landfill began in 2005; and construction of the Area E landfill began in 2015. The site is a permitted Municipal Landfill facility (Permit No. 100944 Sub-Facility ID 241852) under the PADEP Municipal Waste Program.

Groundwater withdrawal sources within the DRB portion of the site include two (2) groundwater supply wells (MW-24 and MW-10), as well as four (4) shallow groundwater collection sumps (MW-7A Collection Sump, Railroad Cut Collection Sump, and Small Load Collection Sump). Leachate collection locations within the DRB portion of the site include all of the Area B landfill collection sumps (Cells B-2, B-3, and B-4), the Area D Cell D-3 collection sump, and the Area E Cell E-3 landfill sump.

Groundwater withdrawal sources in the SRB portion of the site include one groundwater supply well (MW-81) and one shallow groundwater collection sump (Containment Area Underdrain collection sump). Leachate collection locations within the SRB portion of the site include all of the Area C Cell sumps (C-1 and C-2 landfill collection sumps), two Area D Cell sumps (D-1 and D-2 landfill collection sumps), all of the Area E sumps (Cells E-1 and E-2 collection sumps), the Municipal Site Landfill (MSL) collection sump, and the Mountain Top Landfill collection sump.

The consumptive water uses at the Lanchester Landfill facility include:

1. Leachate that is transported to a wastewater treatment plant within the DRB (DELCORA, located in the City of Chester, Delaware County PA), for treatment required by the PADEP
2. Concentrate generated from the onsite leachate treatment facility that is hauled offsite for treatment at DELCORA
3. PADEP-regulated operational use of water at the site (i.e. dust suppression) sourced from a groundwater storage pond on the SRB portion of the site.

Because the site straddles the SRB / DRB basin divide, the existing SRBC docket (Docket No. 20100602) also includes an into-basin diversion of up to 0.050 MGD for the intra-site transfer of leachate from the DRB portion of the site, through the leachate collection and distribution system, to the SRB portion of the site. Similarly, shallow groundwater is withdrawn from several collection sumps within the DRB portion of the site is pumped to a groundwater storage pond located on the SRB portion of the site.

Leachate withdrawn from the leachate collection sumps within the DRB portion of the site is pumped into the SRB and combined with SRB-generated leachate. Total combined SRB and DRB collected leachate is then temporarily stored within two sealed 850,000-gallon steel leachate storage tanks. Some of the collected leachate is recirculated within the existing landfill areas under a PADEP-approved major permit modification issued in October 2000. A portion of the leachate is treated on-site at Lanchester's leachate treatment plant and discharged to the Conestoga River via Outfall 001 under CCSWA's NPDES permit. The remainder of the collected leachate is currently hauled off-site to the DELCORA wastewater treatment plant.

Water withdrawn from the shallow groundwater collection sumps located in both the DRB and SRB is pumped directly into an on-site groundwater storage pond located within the SRB. A portion of the water that is pumped to the groundwater storage pond is occasionally used for dust suppression at the site, and the remainder is discharged to the Conestoga River via Outfall 001. A flow diagram illustrating the movement of groundwater and leachate at the Lanchester Landfill is included as part of this SRBC docket renewal and referred to as Chart 1.

