

Application Type Renewal  
 Facility Type Non-Municipal  
 Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0203700  
 APS ID 824653  
 Authorization ID 1267917

**Applicant and Facility Information**

Applicant Name	<u>Church Comm PA Inc.</u>	Facility Name	<u>Spring Valley STP</u>
Applicant Address	<u>PO Box 260</u> <u>Farmington, PA 15437-0260</u>	Facility Address	<u>Spring Valley Road Route 381 North</u> <u>Farmington, PA 15437-0260</u>
Applicant Contact	<u>Emmett Wiser</u>	Facility Contact	<u>Edgar Harris</u>
Applicant Phone	<u>(724) 329-1100</u>	Facility Phone	<u>724-966-2278</u>
Client ID	<u>191338</u>	Site ID	<u>256183</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Wharton Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Fayette</u>
Date Application Received	<u>April 3, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>April 5, 2019</u>	If No, Reason	<u></u>
Purpose of Application	<u>See below.</u>		

**Summary of Review**

The permittee has applied for a renewal of NPDES Permit No. PA0203700.

The previous NPDES permit was issued to Bruderhof Communities in PA, Inc. on October 1, 2014. That permit expired on September 30, 2019. The NPDES permit application and General Information Form (GIF) for this renewal permit list the applicant/organization name consistent with the previous permit. The application and GIF were received by DEP on April 3, 2019.

On April 5, 2019, DEP performed a business search using the link <https://www.corporations.pa.gov/search/corpsearch.aspx>. It was discovered, according to that link, that the organization is now known as Church Communities PA Inc. Also, the check submitted to DEP to process the renewal application is from Church Communities PA Inc. It appears listing the incorrect organization on the permit application and GIF was an oversight by the person preparing those forms. Unless instructed otherwise, the final NPDES permit will be renewed/transferred to Church Communities PA Inc. The permittee was asked to submit a transfer application to request transfer of the Water Quality Management Permit to the new permittee. The name of the treatment facility will remain Spring Valley STP.

The following excerpt was taken from the above link:

**Business Name History**

BRUDERHOF COMMUNITIES IN PA, INC.  
 Church Communities PA Inc.  
 SOCIETY OF BROTHERS IN PENNSYLVANIA  
 HUTTERIAN BRETHERN IN PENNSYLVANIA, INC.  
 HUTTERIAN SOCIETY OF BROTHERS IN PE

**Name Type**

Prior Name  
 Current Name  
 Prior Name  
 Prior Name  
 Prior Name

This draft permit is approved during the Coronavirus pandemic requiring DEP employees to telework. Electronic signatures are considered appropriate for the draft permit documents. An electronic copy of the communication that transmitted approval of the draft permit documents has been saved and is included with the file.

By way of the draft permit cover letter and email transmission of the draft documents, the permittee was asked to send a response to DEP confirming they have no objection to the final permit documents being sent electronically should the office remain closed.

## Summary of Review

### Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
x		<i>David R. Ponchione</i> David R. Ponchione / Project Manager	June 26, 2020
x		<i>Christopher Kriley</i> Christopher Kriley, P.E. / Program Manager for Donald J. Leone, P.E. / Environmental Engineer Manager	June 29, 2020

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.042
Latitude	39° 48' 43"	Longitude	-79° 33' 14"
Quad Name	Fort Necessity	Quad Code	2009
Wastewater Description: Sewage Effluent			
Receiving Waters	Deadman Run (HQ-CWF)	Stream Code	38513
NHD Com ID	69922685	RMI	0.41
Drainage Area	4.75	Yield (cfs/mi <sup>2</sup> )	0.043
Q <sub>7-10</sub> Flow (cfs)	0.0204	Q <sub>7-10</sub> Basis	Georges Creek at Smithfield, PA (Bulletin 12, page 386)
Watershed No.	19-E	Chapter 93 Class.	HQ-CWF
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Siltation		
Source(s) of Impairment	On site treatment systems (septic systems and similar decentralized systems)		
TMDL Status	Pending		
Nearest Downstream Public Water Supply Intake		North Fayette County MA on the Youghiogheny River	

Changes Since Last Permit Issuance: None

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Spring Valley STP				
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary With Ammonia Reduction	Extended Aeration	Ultraviolet	0.021 (year 2019)
Hydraulic Capacity (MGD)	Organic Capacity (lbs./day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.042	70.1	Not Overloaded	Dewatering	Land Application

Changes Since Last Permit Issuance: None

Other Comments: The existing treatment process consists of a comminutor/bar screen, four equalization tanks, eight aeration tanks, two settling tanks, one mixing flocculation tank, four pyra-deck filters, one sludge holding tank, and an ultraviolet disinfection system.

**Compliance History**

**DMR Data for Outfall 001 (from May 1, 2019 to April 30, 2020)**

<b>Parameter</b>	<b>APR-20</b>	<b>MAR-20</b>	<b>FEB-20</b>	<b>JAN-20</b>	<b>DEC-19</b>	<b>NOV-19</b>	<b>OCT-19</b>	<b>SEP-19</b>	<b>AUG-19</b>	<b>JUL-19</b>	<b>JUN-19</b>	<b>MAY-19</b>
Flow (MGD) Average Monthly	0.0204	0.0185	0.0207	0.019	0.0193	0.0165	0.0166	0.0165	0.0187	0.0202	0.0194	0.0192
pH (S.U.) Minimum	7.0	7.0	7.0	7.5	7.5	7.0	7.5	7.5	7.5	7.25	7.5	7.5
pH (S.U.) Maximum	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	7.5	8.7
DO (mg/L) Minimum	9.07	9.64	9.6	8.2	7.60	9.08	7.52	7.09	7.17	7.1	7.5	7.7
CBOD5 (mg/L) Average Monthly	3.3	2.0	2.0	2.0	2.0	2.0	2.15	2.0	2.0	3.05	2.9	2.0
CBOD5 (mg/L) Instantaneous Maximum	4.5	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	3.1	3.4	2.0
TSS (mg/L) Average Monthly	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
TSS (mg/L) Instantaneous Maximum	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Fecal Coliform (CFU/100 ml) Geometric Mean	1.0	7	1.0	58	6.0	1.0	1.0	2.0	2.5	19	28	1.5
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	1.0	13	1.0	89	11.0	1.0	1.0	3.0	3.0	28	54	2.0
UV Intensity (mW/cm <sup>2</sup> ) Minimum	7.0	5.8	6.1	5.2	6.0	5.9	7.3	8.6	8.5	6.9	7.5	6.2
UV Intensity (mW/cm <sup>2</sup> ) Average Monthly	7.4	6.9	6.6	6.6	6.45	6.8	8.1	8.75	8.9	7.9	8.6	8.4
Nitrate-Nitrite (mg/L) Average Monthly	2.45	3.278	2.605	2.359	3.528	4.237	5.267	1.505	0.936	1.03	1.182	1.488
Nitrate-Nitrite (mg/L) Instantaneous Maximum	4.15	3.476	2.62	3.292	5.526	4.993	5.614	1.57	1.692	1.36	1.257	1.512
Total Nitrogen (mg/L) Daily Maximum					3.62							
Ammonia (mg/L) Average Monthly	4.0	3.25	0.25	0.45	0.85	2.8	0.3	0.15	0.25	1.65	0.95	1.25

Ammonia (mg/L) Instantaneous Maximum	4.7	5.1	0.3	0.6	1.3	4.6	0.5	0.2	0.30	2.4	1.3	1.9
Total Phosphorus (mg/L) Daily Maximum					6.9							

## Compliance History

An Operations Compliance Check Summary Report was completed by David Roote of Operations on June 9, 2020. There are currently no compliance issues with the sewage treatment plant. A copy of the report is shown below.

### **Operations Compliance Check Summary Report**

Facility: Spring Valley STP

NPDES Permit No.: PA0203700

Compliance Review Period: 06/09/2015 – 06/09/2020

Open Violations by Client Summary: None.

Inspection Summary: No inspections in eFACTs.

Violation Summary: No violations in eFACTs.

Enforcement Summary: No enforcement actions.

#### DMR Violation Summary

Current eDMR user.

Effluent limit violation summary 6/9/2017 – 6/9/2020:

No violations reported in eDMR.

#### Compliance Status:

Facility has no compliance issues.

## Development of Effluent Limitations

**Outfall No.** 001  
**Latitude** 39° 48' 43.00"  
**Wastewater Description:** Sewage Effluent

**Design Flow (MGD)** .042  
**Longitude** -79° 33' 14.00"

### Existing Limitations:

Since there have been no changes to the discharge or the receiving stream, the existing limitations are based on the previously approved pollution report which is attached below. The Nemaquin Woodlands STP (PA0098761) was included in the evaluation because it currently discharges to an unnamed tributary of Deadman Run in the watershed upstream of the Spring Valley STP. The modeling results confirmed that no interactions occurred between the two treatment facilities.



PA0203700 Spring  
Valley STP PR

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)

Comments: The above limitations were imposed in the previous NPDES permit.

### Antidegradation Best Available Combination of Technologies (ABACT) Limits (High Quality Watershed)

Parameter	Limit (mg/l)	SBC	Model
CBOD <sub>5</sub>	10	Average Monthly	WQM6.3
NH <sub>3</sub> -N	3	Average Monthly	WQM6.3
TSS	10	Average Monthly	NA

Comments: The above ABACT values are initial discharge concentrations in the WQM6.3 analysis. Modeling confirmed that more stringent water quality based effluent limitations were not necessary.

### Anti-Backsliding

The existing Dissolved Oxygen limit of 7.0 mg/l and Nitrite-Nitrate limit of 10 mg/l will be re-imposed.

### Additional Considerations

Ultraviolet (UV) disinfection is used therefore TRC limits are not applicable. The limits table(s) in Part A will contain routine monitoring of UV intensity (% transmittance) at the same monitoring frequency that would be used for TRC in accordance to the SOP- Establishing Effluent Limitations for Individual Sewage Permits.

The draft permit that was prepared prior to the final permit issued on October 1, 2014 required UV, pH, and Dissolved Oxygen to be monitored daily. The permittee submitted a letter by way of electronic email dated August 28, 2014 to DEP expressing concern with proposed daily monitoring requirements contained in the draft permit. They were proposed to increase to 1/day for the pH and dissolved oxygen parameters; they previously were 2/month. The UV parameter was not

previously required to be monitored but the draft permit required it to also be monitored 1/day. The permittee informed DEP that their UV system at that time did not have the capability to record bulb intensity, their system only had indicator lights to show if the bulbs were functioning. The associated cost to purchase monitoring equipment to monitor UV bulb intensity was also a concern.

DEP agreed to reduce the monitoring frequencies for the final October 1, 2014 permit renewal, because the permittee understood their next permit will require a monitoring frequency of at least "daily when discharging". They however discharge every day and therefore daily monitoring is appropriate. The October 1, 2014 final permit was prepared to require UV monitoring 3 years after the permit effective date and contained a Schedule of Compliance in conformance with 40 CFR122.47 that contained interim requirements not exceeding 1 year between interim dates. This renewal permit will therefore require UV, pH, and DO to be monitored daily as preparations should have been made by now to do so.

The following modifications have been made to be consistent with current DEP policy:

- Effluent limitations for pH and DO are to be reported as "Instantaneous Minimum" in lieu of "Minimum".
- The units for Fecal Coliform are now "No./100 ml" in lieu of "CFU/100 ml".
- A once per year Monitor and Report requirement for Total N and Total P was incorporated into the previous permit as per Chapter 92.a.61 and will be continued.
- Mass loading limits and influent monitoring are not applicable for non-publicly owned treatment works.
- The design flow of the sewage treatment plant is less than 0.1 mgd. For this reason, the permittee is not required to report influent and effluent concentrations for various parameters as listed in the NPDES application. Total Dissolved Solids and its major constituents are therefore not a concern at this time.



**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

**Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Instantaneous Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	0.042	XXX	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	7.0	XXX	XXX	XXX	1/day	Grab
CBOD5 Nov 1 - Apr 30	XXX	XXX	XXX	15.0	XXX	30.0	2/month	Grab
CBOD5 May 1 - Oct 31	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
UV Intensity (mW/cm <sup>2</sup> )	XXX	XXX	Report	Report	XXX	XXX	1/day	Measured
Nitrate-Nitrite	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	8.0	XXX	16.0	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Compliance Sampling Location: 001

