

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

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0052591
WQM#
4885410-T1
APS ID 1114306
Authorization ID 1486104

Applicant and Facility Information

Applicant Name <u>Becker Carl D (DBA Walnutport MHP)</u>	Facility Name <u>Walnutport MHP STP</u>
Applicant Address <u>901 S Best Avenue</u> <u>Walnutport, PA 18088-9121</u>	Facility Address <u>Walnutport Mobile Home Park</u> <u>70 Stacey Drive</u> <u>Walnutport, PA 18088</u>
Applicant Contact <u>Carl D. Becker</u>	Facility Contact <u>Craig LaBarre</u>
Applicant Phone <u>(610) 767-5248</u>	Facility Phone <u>(570) 897-7474</u>
Client ID <u>386023</u>	Site ID <u>146335</u>
Ch 94 Load Status <u>Not Overloaded</u>	Municipality <u>Lehigh Township</u>
Connection Status <u>No Limitations</u>	County <u>Northampton</u>
Date Application Received <u>November 17, 2023</u>	EPA Waived? <u>Yes</u>
Date Application Accepted <u>December 5, 2023</u>	If No, Reason <u>-</u>
Purpose of Application <u>RENEWAL/Transfer OF EXISTING NPDES PERMIT and WQM Permit</u>	

Summary of Review

This is an **NPDES Permit renewal/transfer** for the 0.050 MGD Walnutport Mobile Home Park (MHP) STP discharging to Bertsch Creek (CWF), including transfer of **WQM Permit No. 4885410 (STP) with Final NPDES Permit**.

Background:

- **Application Processing:**
 - NPDES Renewal application originally processed/reviewed under APS# 616859, Authorization# 1464287, Account# 487198, but client had changed (original owner deceased, with son taking over). Subsequently NPDES/WQM Permit transfer merged into the application per DEP SOP. See APS entry under WMS for original technical deficiency letters.
 - EDMR Registration information was previously submitted to Central Office.
 - **Flows:**
 - **AADF Flows:** 0.006 MGD AADF flows in 2022 and 2021, plus 0.007 MGD AADF flow in 2020. Highest monthly flow of 0.007 MGD in June 2022.
 - **Underloading:** Portion of previous service area now discharging to POTW. No current Planning to incorporate the remainder of the service area into the POTW service area. Facility contacted the Lehigh Township Sewer Authority and ascertained that there are not plans to incorporate the Walnutport MHC into the public sewer system now or in the next several years (i.e., the captive STP will continue to discharge).
- Excerpts from previous Fact Sheet:
- The Department received a letter from the Walnutport Authority (Authority), dated September 18, 2012, providing comments on the last renewal of the Becker's Mobile Home Park (Park) NPDES permit. The Authority provided the following comments: "the Authority does maintain a public sewer collection system immediately adjacent to this treatment facility. Also, in Lehigh Township, the

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	October 15, 2024
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	10-28-24

Summary of Review

governing body where this facility is located adopted an ordinance for mandatory connection in 1996 if the facility discharging sewerage is one hundred fifty feet of a public sewer system. The Authority, as of this date, already receives sewer flows from a portion of Becker's Mobile Home park, which was previously connected to the wastewater treatment facility. Because of the possible connection of the remaining Becker facility, the Authority does maintain reserve capacity in its system.

- The Department provided the following response: The Department has considered the information you provided and wishes to inform you that before the remainder of the Walnutport Mobile Home Park could be connected to the municipal sewerage system Lehigh Township's Official Sewage Facilities Plan (Plan) would have to be revised, since the Township's current Plan does not call for connection of the remaining units in this mobile home park to the Walnutport Authority's collection system.
- **Individual Owner/Operator:** The previous permittee (Richard C. Becker, Client No. 33334, DBA Walnutport MHP) is deceased and NPDES/WQM permit is being transferred to Carl D. Becker (son) DBA Walnutport MHP per applicant request. Becker is also operating other companies:
 - Walnutport Manufactured Home Communities (MHC), EIN No. 23-2145223, which was identified Client No. 163454 (Becker Mobile Homes Inc. by EIN number) per NPDES/WQM Permit Application. "Walnutport Manufactured Home Communities" (Walnutport Manufactured Home Community I & II) is not a listed name on the PADOS Business Search page.
 - Becker Mobile Homes Inc. is PADOS Business Entity# 707675, registered in 5/2/1980.
- **DRBC Docket:** Facility has 2024 DRBC Docket D-2014-021 CP-3). No significant change noted in draft DRBC Docket renewal.

Sludge use and disposal description and location(s): 0.417 dry tons disposed via LCA Allentown.

Part C Special Conditions: Changes bolded:

- Part C.I.A, B, C, and D: Existing stormwater prohibition; Necessary Property rights; Residuals management; and Planning.
- **Part C.I.E: New Chlorine Minimization condition due to toxicity of chlorine.**
- Part C.II: Existing Standard solids conditions
- **Part C.III: New Requirements for Total Residual Chlorine (TRC) condition due to new TRC WQBELs effective in two (2) years.**

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.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.050
Latitude	40° 44' 13.42"	Longitude	-75° 34' 34.93"
Quad Name	Cementon	Quad Code	1341 (6.21.1)
Wastewater Description: Sewage Effluent			
Receiving Waters	Bertsch Creek (CWF)	Stream Code	3733
NHD Com ID	26297457	RMI	~0.16 (per DRBC Docket)
Drainage Area	9.68 square miles	Yield (cfs/mi ²)	0.0511
Q ₇₋₁₀ Flow (cfs)	0.495	Q ₇₋₁₀ Basis	USGS PA Streamstats
Elevation (ft)	340.8 (per USGS terrain mapper)	Slope (ft/ft)	-
Watershed No.	2-C	Chapter 93 Class.	CWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-
<u>Background/Ambient Data</u>		<u>Data Source</u>	
pH (SU)	7.54	2013 upstream sample (1762828) point data is ~3.5 miles upstream.	
Temperature (°F)	13.12	See above	
Hardness (mg/L)	53	See above	
Zinc (ug/l):	70.2	See above	
<u>Nearest Downstream Public Water Supply Intake</u>		<u>NORTHAMPTON BORO MUNI AUTH WATER SYS</u>	
PWS Waters	Lehigh River	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	~6 miles

Changes Since Last Permit Issuance: Stream classified as Natural Trout Reproduction stream

Other Comments:

- Lehigh Township MS4 (PAG132239) Outfall No. 021 discharges to Bertsch Creek in vicinity of STP outfall.
- Confluence with Lehigh River (TSF; Stream# 3335; AMD-impaired) is ~0.12 to 0.16 miles downstream of Outfall discharge. E-maps measurement varies from DRBC Docket estimate of 0.16 miles.
- Upstream Sample also had AMD metals (267 ug/l Aluminum; 191 ug/l Total Iron; 12 ug/l Manganese; 4.1 ug/l Nickel).
- Q7-10: Previous Fact Sheet assumed Lehigh River LFY applied to Bertsch Creek, but drainage area/characteristics differences are too great, with USGS PA Streamstats Q7-10/LFY representing best information. The DRBC estimated stream flow (0.50 CFS) is consistent.

Treatment Facility Summary				
Treatment Facility Name: Walnutport MHP - WWTP				
WQM Permit No.	Issuance Date	Scope		
4885410	6/6/1986	0.050 MGD STP & 3000 LF pipeline Permit issued to Walnutport Mobile Home Park (Richard C. Becker), 148 mobile homes and 23 existing homes were to be connected.		
4885410-T1	TBD	Transfer will be concurrent with Final NPDES permit action.		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Hypochlorite	0.050
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.050	Unknown	Not Overloaded	None onsite	Disposal

Changes Since Last Permit Issuance: Per 2024 DEP Inspection Report:

- An influent composite sampler was installed at the plant to collect Permit-required influent composite samples.
- A temporary chlorine feed line was put in place last week due to accessibility issues with the old underground line. A new conduit line will be run to securely house the chlorine feed line in the near future. It has not yet been decided whether the new conduit line will be run aboveground or underground.
- Due to lower flows to the plant, train #1 is currently being used as a sludge holding tank

Other Comments:

Process flow diagram shows surge tank, and two (2) Extended Aeration trains (sludge holding tank, Aeration Tank, Clarifier, and Chlorine contact tank. Pipeline to Bertsch Creek parallels Route 145.

Facility is substantially underloaded because large portion of original MHP service area has been connected to the Walnutport Authority POTW.

Compliance History

DMR Data for Outfall 001 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
Flow (MGD) Average Monthly	0.01	0.007	0.014	0.011	0.006	0.007	0.005	0.005	0.007	0.006	0.006	0.005
Flow (MGD) Daily Maximum	0.018	0.015	0.063	0.043	0.013	0.014	0.01	0.011	0.017	0.009	0.012	0.008
pH (S.U.) Instantaneous Minimum	6.56	6.62	6.71	6.89	6.55	6.51	6.63	6.44	6.55	6.56	6.67	6.35
pH (S.U.) Instantaneous Maximum	7.05	6.93	7.03	7.24	7.21	6.96	7.03	7.25	6.85	7.00	7.09	7.02
DO (mg/L) Average Monthly	5.8	6.7	5.5	4.5	4.2	3.0	4.0	3.9	4.0	3.5	4.0	5.0
TRC (mg/L) Average Monthly	0.9	0.96	0.85	0.85	0.94	0.94	0.8	0.79	0.73	0.82	0.91	0.88
TRC (mg/L) Instantaneous Maximum	1.03	1.21	1.14	1.1	1.71	1.23	0.9	1.01	0.96	1.1	1.21	1.25
CBOD5 (mg/L) Average Monthly	< 2.1	2.9	4.7	2.9	< 2.6	< 2.3	4.1	4.3	2.3	4.1	12.1	< 2.3
CBOD5 (mg/L) Raw Sewage Influent Average Monthly	122.0	165.0	151.0	107.0	234.0	178.0	163.0	195.0	147.0	145.0	165.0	152.0
TSS (mg/L) Average Monthly	< 2.0	4.0	4.0	9.0	3.0	5.0	4.0	4.0	3.0	4.0	5.0	< 2.0
Total Dissolved Solids (mg/L) Average Quarterly	231.0			465.0			599.0			614.0		
Fecal Coliform (No./100 ml) Geometric Mean	< 2	< 2	66.83	7.35	< 2	< 2.0	< 2	< 3.16	< 2	< 2	< 1	19
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 2	< 2	17500	27	< 2	< 2.0	< 2	5	< 2	< 2	< 2	76

**NPDES Permit Fact Sheet
Walnutport MHP**

NPDES Permit No. PA0052591

Nitrate-Nitrite (lbs/day) Annual Average				2.0								
Nitrate-Nitrite (mg/L) Annual Average				46.3								
Total Nitrogen (lbs/day) Annual Average				2.0								
Total Nitrogen (mg/L) Annual Average				47.68								
Ammonia (mg/L) Average Monthly	0.17	0.06	0.25	0.04	< 0.02	0.02	0.14	0.15	0.07	19.0	3.81	0.07
TKN (lbs/day) Annual Average				0.05								
TKN (mg/L) Annual Average				1.38								
Total Phosphorus (lbs/day) Annual Average				0.3								
Total Phosphorus (mg/L) Annual Average				8.62								

Compliance History

Effluent Violations for Outfall 001, from: May 1, 2023 To: March 31, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value
Fecal Coliform*	01/31/24	IMAX	17500	No./100 ml	10000

*Blamed on extreme weather event that also triggered an SSO event.

Summary of Inspections:

SITE NAME	INSP PROGRAM	INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	# OF VIOLATIONS
WALNUTPORT MHP	WPCNP	3792395	07/02/2024	Compliance Evaluation	Violations Noted	2
WALNUTPORT MHP	WPCNP	3581239	06/21/2023	Compliance Evaluation	No Violations Noted	0
WALNUTPORT MHP	WPCNP	3339570	03/30/2022	Follow-up Inspection	No Violations Noted	0
WALNUTPORT MHP	WPCNP	3075873	02/01/2022	Routine/Partial Inspection	No Violations Noted	0
WALNUTPORT MHP	WPCNP	3317609	09/03/2020	Compliance Evaluation	Violation(s) Noted	1
WALNUTPORT MHP	WPCNP	3018754	04/13/2020	Administrative/File Review	No Violations Noted	0

Other Comments:

- Approximately 100-gallons overflowed from the influent EQ tank on 1/10/2024 due to excessive influent from a heavy rain event per DEP Inspection Report.
- Per 10/15/2024 WMS query (Open violations by client number), there are two (2) open violations:

FACILITY	INSP PROGRAM	INSP ID	VIOLATION ID	VIOLATION DATE	VIOLATION CODE	VIOLATION
WALNUTPORT MHP - WWTP	WPC NPDES	3792395	8193475	07/02/2024	92A.44	NPDES - Violation of effluent limits in Part A of permit
WALNUTPORT MHP - WWTP	WPC NPDES	3792395	8193476	07/02/2024	92A.47(C)	NPDES - Illegal discharge to waters of the Commonwealth from a sanitary sewer overflow (SSO)

Development of Effluent Limitations

Outfall No. 001
Latitude 40° 44' 13.60"
Wastewater Description: Sewage Effluent

Design Flow (MGD) .050
Longitude -75° 34' 35.30"

Permit Limits and/or Monitoring Requirements:

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
CBOD5	Report lb/d 25.0 50.0 50.0	Monthly Average Monthly Average Daily Max IMAX	Existing TBEL supported by updated water quality modeling. Daily Max limit based on existing IMAX limit. Application data: 10.8 mg/l max and 5.81 mg/l average (12 samples)
CBOD5 (Raw Sewage Influent)	Report	Monthly Average	Existing DRBC Docket requirement, paired with effluent monitoring.
CBOD% Minimum Removal	85%	Min Mon Average	Existing DRBC Docket requirement (Chapter 92a.12)
TSS	Report lb/d 30.0 60.0 60.0	Monthly Average Monthly Average Daily Max IMAX	Existing Technology limit (Chapter 92a.47). Daily Max limit based on existing IMAX limit. Application data: 23.2 mg/l max and 5.3 mg/l average (12 samples)
pH	6.0 – 9.0 SU	Inst. Min - IMAX	Existing Technology limit (Chapter 92a.47) Application data: 6.41 – 7.74 SU (365 samples)
Dissolved Oxygen (DO)	3.0	Inst. Min	New WQBEL based on water quality modeling. Previous monthly average monitoring requirement not consistent with WQBEL. Daily monitoring per Standard requirements. Limit can be met by normally treated sewage, and effective immediately. Application data: None. EDMR data: 3.0 – 5.0 mg/l monthly average.
Fecal Coliform (5/1 – 9/30)	200/100 ml 1,000/100 ml	Geo Mean IMAX	Existing Technology limit (Chapter 92a.47) Application data: <9/100 ml max and 3.5/100 ml average (12 samples). EDMR data: 76/100 ml max
Fecal Coliform (10/1 – 4/30)	2,000/100 ml 10,000 ml/100 ml	Geo Mean IMAX	Existing Technology limit (Chapter 92a.47)
E Coli	Report #/100 ml	IMAX	New monitoring requirement due to Chapter 93 WQS (Chapter 92a.61)
Total Residual Chlorine (Interim)	1.20 2.80	Monthly Average IMAX	Significant digit added to interim facility-specific BAT in effect. Application data: 1.1 mg/l max and 0.92 mg/l average (365 samples). EDMR data: 0.73 – 0.98 mg/l monthly average; 0.9 – 1.27 mg/l IMAX.
Total Residual Chlorine (Final)	0.94 2.80	Monthly Average IMAX	New monthly average WQBEL due to TRC Spreadsheet water quality modeling.

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
			Antibacksliding prohibition applies to existing IMAX limit.
Ammonia-Nitrogen (Nov 1 - Apr 30)	Report lb/d 20.0 40.0 40.0	Monthly Average Monthly Average Daily Max IMAX	Existing year-round WQBEL supported by updated water quality modeling for winter but not summer. Previous permit omitted IMAX limit. Antibacksliding prevent any relaxation for Winter seasonal limits (from previous DRBC-based year-round limit). <u>Application data</u> : 2.07 mg/l min and 3.5 mg/l average (3 samples, 24-hour composite). <u>EDMR Data</u> : <0.02 – 3.81 mg/l average monthly.
Ammonia-Nitrogen (May 1 - Oct 31)	Report lb/d 17.7 35.4 35.4	Monthly Average Monthly Average Daily Max IMAX	New Final WQBEL summer limits per water quality modeling. As application & EDMR information indicates that they can comply upfront, new limits effective upon permit effective date.
Total Phosphorus	Report Lbs/d Report Report	Monthly Average Monthly Average Daily Max	Existing annual monitoring requirement (also DRBC Docket requirement). Daily Max reporting added (no additional sampling required). <u>Application data</u> : 4.65 mg/l max and 3.5 mg/l average (3 samples, 24-hour composite)
Total Nitrogen (Nitrate-Nitrite-N + TKN measured in same sample)	Report Lbs/day Report Report	Annual Average Annual Average Daily Max	Existing annual monitoring requirement (also DRBC Docket requirement). Daily Max reporting added (no additional sampling required). <u>Application data</u> : 5.03 mg/l max and 0.50 mg/l average (3 samples, 24-hour composite)
Total Kjeldahl Nitrogen (TKN)	Report Lbs/day Report Report	Annual Average Annual Average Daily Max	Existing annual monitoring requirement (also DRBC Docket requirement) Daily Max reporting added (no additional sampling required). <u>Application data</u> : None <u>EDMR data</u> : <0.50 mg/l Annual Average
Nitrate-Nitrite-N	Report Lbs/day Report Report	Annual Average Annual Average Daily Max	Existing annual monitoring requirement (also DRBC Docket requirement) Daily Max reporting added (no additional sampling required). <u>Application data</u> : None <u>EDMR data</u> : 31.5 mg/l Annual Average

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
Total Dissolved Solids (TDS)	Report lb/d 1000.0 2000.0 2000.0	Monthly Average Monthly Average Daily Max IMAX	Previous permit had monthly average limit with quarterly testing, but EDMR limitations would result in de-facto quarterly average reporting, so monthly monitoring required. Daily Max/IMAX limits based on standard sewage multiplier. Application data: None EDMR data: 486.0 – 614.0 mg/l Quarterly Average

Comments: This is a MHP STP (only domestic wastewater received).

- Daily max limits based on existing IMAX limits (any exceedance of the IMAX limit of any duration is an exceedance), with monthly average mass loading reporting required. No additional sampling is required.
- DO monitoring frequency changed to daily per standard minimum frequencies.
- 8-hour versus 24-hour composite sampling. Application indicates that they can do 24-hour composite sampling.

Water Quality Modeling:



WalnutportMHPW
QM1.pdf



WalnutportMHPTR
C.xls

Communications Log:

- 11/17/2023: Original Hard copy of application received
- 12/14/2023: Technical Deficiency letter issued.
- 1/12/2024: Public Upload No. 200094 (revised application)
- 1/12/2023: DEP (Berger) E-mail asking for clarification on connection question, correct NPDES/WQM Permit Transfer Application Form (with fee), and completed GIF certification section.
- 1/23/2024: Public Upload No. 203883
- 1/25/2024: Public Upload No. 204566 (1/25/2024 Application for NPDES/WQM Permit Transfer).
- 2/5/2024: Transfer application fee check received (routed to wrong office)
- 2/7/2024: 2nd Tech Def letter
- 2/29/2024: Public Upload No. 205132

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	October 15, 2024
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	10-28-24