pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SOUTHWEST REGIONAL OFFICE
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0255416**
Facility Type	**Sewage**	APS ID	**1050381**
Major / Minor	**Minor**	Authorization ID	**1374019**

NPDES PERMIT FACT SHEET ADDENDUM

Applicant and Facility Information

Applicant Name	**Empire Realty Homes LLC**	Facility Name	**Rolling Hills Village MHP STP**
Applicant Address	1 Oak Drive	Facility Address	1 Oak Drive
	Buena Vista, PA 15018-9534		Buena Vista, PA 15018
Applicant Contact	Aman Gulati	Facility Contact	Same as Applicant
Applicant Phone	(484) 498-4000	Facility Phone	Same as Applicant
Client ID	366366	Site ID	238039
SIC Code	7033	Municipality	Elizabeth Township
SIC Description	Services - Trailer Parks And Campsites	County	Allegheny
Date Published in PA Bulletin	September 24, 2022 (Attachment A)	EPA Waived?	Yes
Comment Period End Date	October 24, 2022	If No, Reason	

Purpose of Application: Application for a new NPDES permit for discharge of treated Sewage

Internal Review and Recommendations

The Department of Environmental Protection (DEP) published notice of draft Authorization to Discharge under the National Discharge Elimination System (NPDES) discharge requirements for treated sewage for Rolling Hills Village MHP STP in the *Pennsylvania Bulletin* on September 24, 2022 [52 Pa.B, 6050]. A 30-day comment period was provided during which interested parties were directed to submit comments to DEP.

Comments were received from Bob Dengler with Gannett Fleming and Dustie Specht with the Allegheny County Health Department (ACHD). As a result of those comments, the following changes are being made:

- The dissolved oxygen instantaneous minimum limit was changed to 6.0 mg/L to be consistent with DEP's dry swale guidance.
- The total suspended solids average monthly and instantaneous maximum limits were changed to 10 mg/L and 20 mg/L to be consistent with the DEP's dry swale guidance.
- The $CBOD_5$ average monthly and instantaneous maximum limits were changed to 10 mg/L and 20 mg/L to be consistent with the DEP's dry swale guidance.
- Total nitrogen average monthly and instantaneous limits of 5.0 mg/L and 10.0 mg/L were added to be consistent with DEP's dry swale guidance.
- Total phosphorus average monthly and instantaneous limits of 0.5 mg/L and 1.0 mg/L were added to be consistent with DEP's dry swale guidance.

Additionally, the minimum measurement frequency for TRC in Part A.I.B. of the permit was changed from 1/weekday to 1/day. The schedule of compliance for TRC in the permit has been slightly modified.

The permittee is currently working with Elizabeth Township to be able to tap into its sewer collection system. Once tapped, the sewage will be conveyed through Buena Vista pump station (Buena Vista STP currently permitted under NPDES Permit No. PA0024732 has been recently converted into a pump station) owned and operated by Elizabeth Township. The sewage

Approve	Deny	Signatures	Date
X		Stephanie Conrad / Environmental Engineer	May 20, 2024
X		Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineering Manager	May 21, 2024

Internal Review and Recommendations

will be ultimately treated at McKeesport STP (PA0026913) owned and operated by PA American Water. At that time, this NPDES permit will no longer be needed and the facility will be required to submit a Notice of Termination (NOT) to DEP. A Consent Order and Agreement (COA) is currently in the process of development which will detail the corrective actions that the permittee will be subject to until the sewage produced from Rolling Hills Village MHP is tapped into Elizabeth Township's sewage collection system.

Following shows the details of comments received, DEP responses, and additional information on development of effluent limits.

In response to the original draft permit, Bob Dengler with Gannett Fleming sent a formal letter dated October 22, 2022 (Attachment B) on behalf of Empire Realty Homes LLC. The letter contained comments regarding the sampling frequency for total residual chlorine (TRC), pH, and dissolved oxygen (DO).

1. We respectfully request the frequency of the interim TRC monitoring be reduced from once per day to three times per week. This request is due to the difficult access to the wastewater treatment plant that includes the need to travel approximately one-half mile over the Great Allegheny Passage Trail.

   DEP's Response: Monitoring frequency for TRC is based upon Table 6-3, Self-Monitoring Requirements for Sewage Dischargers, from the Department's *Technical Guidance for the Development and Specification of Effluent Limitations* [Doc No. 362-0400-001]. The permittee had demonstrated their willingness to work towards bringing this discharge into compliance and their intent to build a pump station and send their flow to McKeesport STP (NPDES Permit No. PA0026913) for treatment. They have also documented that accessing the treatment plant is a significant burden. Given these facts, the Department is willing to include 3/weekly monitoring for TRC during the first two years of this permit. After that, sampling frequency will be increased to 1/week in accordance with the SOPs.

2. We respectfully request the frequency of the final TRC monitoring be reduced from once per day to three times per week. This request is due to the difficult access to the wastewater treatment plant that includes the need to travel approximately one-half mile over the Great Allegheny Passage Trail.

   DEP's Response: Monitoring frequency for TRC is based upon Table 6-3, Self-Monitoring Requirements for Sewage Dischargers, from the Department's *Technical Guidance for the Development and Specification of Effluent Limitations* [Doc No. 362-0400-001]. The frequency will not be changed in the second draft permit.

3. We respectfully request the frequency of pH monitoring be reduced from once per day to three times per week. This request is due to the difficult access to the wastewater treatment plant that includes the need to travel approximately one-half mile over the Great Allegheny Passage Trail.

   DEP's Response: Monitoring frequency for pH is based upon Table 6-3, Self-Monitoring Requirements for Sewage Dischargers, from the Department's *Technical Guidance for the Development and Specification of Effluent Limitations* [Doc No. 362-0400-001]. The permittee had demonstrated their willingness to work towards bringing this discharge into compliance and their intent to build a pump station and send their flow to McKeesport STP (NPDES Permit No. PA0026913) for treatment. They have also documented that accessing the treatment plant is a significant burden. Given these facts, the Department is willing to include 3/weekly monitoring for pH during the first two years of this permit. After that, sampling frequency will be increased to 1/week in accordance with the SOPs.

4. We respectfully request the frequency of DO monitoring be reduced from once per day to three times per week. This request is due to the difficult access to the wastewater treatment plant that includes the need to travel approximately one-half mile over the Great Allegheny Passage Trail.

   DEP's Response: Monitoring frequency for DO is based upon Table 6-3, Self-Monitoring Requirements for Sewage Dischargers, from the Department's *Technical Guidance for the Development and Specification of Effluent Limitations* [Doc No. 362-0400-001]. The permittee had demonstrated their willingness to work towards bringing this discharge into compliance and their intent to build a pump station and send their flow to McKeesport STP (NPDES Permit No. PA0026913) for treatment. They have also documented that accessing the treatment plant is a significant burden. Given these facts, the Department is willing to include 3/weekly monitoring for TRC during the first two years of this permit. After that, sampling frequency will be increased to 1/week in accordance with the SOPs.

Internal Review and Recommendations

In response to the draft permit, Dustie Specht with Allegheny County Health Department sent an email dated September 9, 2022 (Attachment C). The email contained a comment regarding the discharge location of the treatment facility.

1. The old permit and new draft permit for this plant state that the outfall is to the Youghiogheny River. Actually, the headwall for the outfall is in the woods near the plant believed to be an unknown tributary of the Youghiogheny River.

   DEP's Response: As a result of this comment, a site visit was conducted on October 12, 2022 which confirmed that the facility is discharging to a dry swale. A Point of First Use (POFU) study was conducted on April 13, 2023, which determined that the point of first use to be the Youghiogheny River. The POFU study report is provided in Attachment D. As a result of these investigations, the permit limits are being reevaluated.

This permit is being redrafted. Draft permit issuance is recommended.

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)	.035
Latitude	40º 17' 36"	Longitude	-79º 47' 38"
Quad Name	McKeesport	Quad Code	1607
Wastewater Description:	Sewage Effluent		
Receiving Waters	Youghiogheny River (WWF)	Stream Code	37456
NHD Com ID	69912357	RMI	8.75
Drainage Area	1740	Yield (cfs/mi^2)	0.293
Q_{7-10} Flow (cfs)	510	Q_{7-10} Basis	US Army Corp of Engineers
Elevation (ft)	740	Slope (ft/ft)	
Watershed No.	19-D	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Not Assessed		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake	West County Municipal Authority-McKeesport		
PWS Waters	Youghiogheny River	Flow at Intake (MGD)	12
PWS RMI	1.38	Distance from Outfall (mi)	7.29

Changes Since Last Permit Issuance: N/A, this permit is being processed as a new permit.

Other Comments: The facility discharges to a dry swale. The receiving water information above reflects stream information at the Point of First Use.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .035
Latitude 40º 17' 36" **Longitude** -79º 47' 38"
Wastewater Description: Sewage Effluent

Technology-Based Limitations (TBELs)

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

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
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)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Advanced Treatment Requirements

The Department issued the guidance document, *Policy and Procedure for Evaluating Wastewater Discharges to the Intermittent and Ephemeral Streams, Drainage Channels and Swales and Storm Sewers* [Doc. No. 391-2000-014] (dry swale guidance) on April 12, 2008. The guidance document established the following limits for discharges to a dry channel:

Parameter	Advanced Treatment Requirement	Reporting Frequency
$CBOD_5$	10 mg/L	Monthly Average
Total Suspended Solids	10 mg/L	Monthly Average
Total Nitrogen	5 mg/L	Monthly Average
Dissolved Oxygen	6 mg/L	Instantaneous Minimum
Phosphorus	0.5 mg/L	Monthly Average

Point of First Use (POFU)

On April 13, 2023, PA DEP Aquatic Biologist Jamie Detweiler conducted a POFU Study for this facility. During the study, the outfall was confirmed to discharge to a dry swale. The study found that the POFU occurs at (Lat 40.294547; Long -79.795858) and at a RMI of 8.75 on the Youghiogheny River (ID 37456).

Water Quality-Based Effluent Limitations (WQBELs)

WQM 7.0 Water Quality Modeling

DEP's WQM 7.0 version 1.1 model is a Microsoft Access Program used for sewage dischargers to determine whether TBELs are sufficient to meet in-stream water quality criteria for ammonia-nitrogen, carbonaceous biochemical oxygen demand ($CBOD_5$), and dissolved oxygen (DO). To accomplish this, the model simultaneously simulates mixing and degradation of ammonia-nitrogen and mixing and consumption of DO through $CBOD_5$ and ammonia-nitrogen degradation. WQM 7.0 determines the highest pollutant loadings that the stream can assimilate while still meeting water quality criteria under design conditions.

Modeling is a two-step process. The discharge is first modeled for the summer period (May through October) because warm temperatures are more likely to result in critical loading conditions. Reduced DO levels likely also play a role in ammonia toxicity and solubility of DO decreases at increased water temperatures. If summer modeling determines that WQBELs are appropriate for the summer period, then modeling is completed for the winter period (November through April). This is in accordance with DEP's *Implementation Guidance of Section 93.7 Ammonia Criteria* [Doc. No. 391-2000-013] (Ammonia Guidance).

River Mile Index (RMI) was measured in eMAP PA as the distance from the facility's outfall to the mouth of the Youghiogheny River. Elevation was read by applying a topomap in eMAP PA. Discharge point and downstream drainage areas as well as Q_{7-10} flow were generated by USGS Stream Stats. Output files are included in Attachment E. In the absence of site-specific data, discharge temperature, stream temperature, and stream pH were assumed to be 20° C, 25 ° C, and 7 S.U. in accordance with the Ammonia Guidance. Stream width to depth was assumed to be 10 in accordance with Department's *Technical Reference Guide (TRG) WQM 7.0 for Windows Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen Version 1.0* [Doc. No. 391-2000-007].

WQM 7.0 modeling inputs are documented in the table below:

Discharge Characteristics		Basin/Stream Characteristics	
Parameter	**Value**	**Parameter**	**Value**
River Mile Index (RMI)	8.75	Drainage Area	1740
Discharge Flow (MGD)	0.035	Q_{7-10} (cfs)	510
Discharge Temp (°C)	20.0	Low-flow yield (cfs/mi^2)	0.293
Ammonia-Nitrogen (mg/L)	25.00	Elevation (ft)	740
$CBOD_5$ (mg/L)	25.00	Stream Width/Depth	10
		Stream Temp (°C)	20.0
		Stream pH (s.u.)	7.0

Summer effluent limits for $CBOD_5$, ammonia-nitrogen, and DO were evaluated using WQM 7.0. The modeling results show that technology-based summer effluent limitations are appropriate for these three parameters at the POFU. In accordance with Section 1.A. Note 5 of the of DEP's SOP *Establishing Effluent Limitations for Individual Sewage Permits* [SOP no. BCW-PMT-033 Version 1.9], for new discharges, if WQM modeling results for summer indicate that an average monthly limit of 25 mg/L is acceptable for summer, then a monitoring requirement should be imposed for winter.

Permit Limits

Parameter	Limit (mg/l)	SBC	Model	Basis
Dissolved Oxygen	6.0	Instantaneous Minimum	N/A	Advanced Treatment Requirement
$CBOD_5$	10	Average Monthly	N/A	Advanced Treatment Requirement
Ammonia-Nitrogen (summer)	25.0	Average Monthly	N/A	TBEL
Ammonia-Nitrogen (winter)	Report	Average Monthly	N/A	TBEL
Interim Total Residual Chlorine	1.4	Average Monthly	N/A	Previous Permit Limit
Total Residual Chlorine Final	0.5	Average Monthly	N/A	TBEL
Total Suspended Solids	10.0	Average Monthly	N/A	Advanced Treatment Requirement
Total Phosphorus	0.5	Average Monthly	N/A	Advanced Treatment Requirement

Total Nitrogen	5.0	Average Monthly	N/A	Advanced Treatment Requirement

Compliance Schedule

This facility is receiving Advanced Treatment Requirements for discharges to dry swales. This treatment plant is an existing activated sludge treatment plant that is reaching the end of its serviceable life. The owner has decided to construct a pump station to send the sewage from Rolling Hills Mobile Home Park to McKeesport STP (NPDES Permit No. PA0026913) with an estimated completion date of December 2025.

Rolling Hills Mobile Home Park STP has been operating without a permit since 2006, so the Department does not have record of the pollutant concentrations in its effluent. A typical extended aeration plant is not expected to be able to meet the more Advanced Treatment Requirements without plant and/or process upgrades. These upgrades would result in a significant burden on the Permittee, who has already decided to decommission the plant. The current owner purchased the facility in 2021 and has demonstrated an intention to bring this discharge into compliance. For these reasons, the Department is including a two-year compliance period for TRC, CBOD5, TSS, total nitrogen, Do, and total phosphorus.

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" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Two Years Following Permit Issuance through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	5.0 Annl Avg	XXX	10.0	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	0.5 Annl Avg	XXX	1.0	1/year	Grab

Compliance Sampling Location: 001

Other Comments: None

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" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Two Years Following Permit Issuance Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	Report Inst Min	XXX	XXX	Report	3/week	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	3/week	Grab
TRC	XXX	XXX	XXX	1.4	XXX	3.3	3/week	Grab
TSS	XXX	XXX	XXX	25.0	XXX	50.0	2/month	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50.0	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	Report Annl Avg	XXX	Report	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	Report Daily Max	XXX	Report	1/year	Grab

Compliance Sampling Location: 001

Other Comments: None

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" (386-0400-001), SOPs and/or BPJ.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/week	Measured
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
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	Report	XXX	Report	2/month	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	25.0	XXX	50.0	2/month	Grab

Compliance Sampling Location: Outfall 001

Other Comments: None

ATTACHMENT A

Original Draft Permit PA Bulletin Notice

NOTICES

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Applications, Actions and Special Notices

APPLICATIONS

[52 Pa.B. 6050]
[Saturday, September 24, 2022]

THE PENNSYLVANIA CLEAN STREAMS LAW AND THE FEDERAL CLEAN WATER ACT

APPLICATIONS FOR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITS AND WATER QUALITY MANAGEMENT (WQM) PERMITS UNDER THE CLEAN STREAMS LAW AND FEDERAL CLEAN WATER ACT

This notice provides information about persons who have applied to the Department of Environmental Protection (DEP) for a new, renewed, or amended NPDES or WQM permit, or a permit waiver for certain stormwater discharges, or have submitted a Notice of Intent (NOI) for coverage under a General Permit. The applications and NOIs concern, but are not limited to, effluent discharges from sewage treatment facilities and industrial facilities to surface waters or groundwater; stormwater discharges associated with industrial activity (industrial stormwater), construction activity (construction stormwater), and municipal separate storm sewer systems (MS4s); the application of pesticides; the operation of Concentrated Animal Feeding Operations (CAFOs); and the construction of sewage, industrial waste, and manure storage, collection and treatment facilities. This notice is provided in accordance with 25 Pa. Code Chapters 91 and 92a and 40 CFR Part 122, implementing The Clean Streams Law (35 P.S. §§ 691.1—691.1001) and the Federal Clean Water Act (33 U.S.C.A. §§ 1251—1376). More information on the types of NPDES and WQM permits that are available can be found on DEP's website (visit www.dep.pa.gov and select Businesses, Water, Bureau of Clean Water, Wastewater Management, and NPDES and WQM Permitting Programs).

Section	Category
I	Individual and General WQM Permit Applications/NOIs Received, General NPDES Permit NOIs Received, and All Transfer and Minor Amendment Applications/NOIs Received
II	Individual NPDES Permits—New, Renewal, and Major Amendment Applications and Draft Permits for Discharges Relating to Sewage, Industrial Waste, Industrial Stormwater, MS4s, Pesticides and CAFOs
III	Individual NPDES Permit Applications for Discharges of Stormwater Associated with Construction Activity

Section I identifies the following applications and NOIs that have been received by DEP:

- Individual and General WQM Permit Applications Received—DEP provides a 15-day public comment period for Individual WQM Permit Applications for new and reissued permits. There is no public comment period for General WQM Permit NOIs.

- General Chapter 92a NPDES Permit NOIs Received—There is no public comment period for General NPDES NOIs received.

- All Transfer and Minor Amendment Applications/NOIs Received—Transfer and Minor Amendment Applications/NOIs received for Individual and General WQM Permits and Individual and General NPDES Permits, excluding PAG-01 and PAG-02, are identified but do not have public comment periods. DEP provides a 15-day public comment period for Individual WQM Permit Applications for amendments.

Additional information on these applications and NOIs may be reviewed by generating the "Applications and NOIs without Comment Periods Report" or, for Individual WQM Permit Applications, the "Applications Received with Comment Periods Report" on DEP's website at www.dep.pa.gov/CWPublicNotice.

ATTACHMENT B

Gannett Fleming Comment Letter

GANNETT FLEMING

Foster Plaza 8, Suite 400
730 Holiday Drive
Pittsburgh, PA 15220
412-503-4369

October 22, 2022

Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222
RA-EPNPDES_SWRO@pa.gov

Re: Empire Realty Homes LLC
PA0255416
Comments on Draft NPDES Permit
GF 072650.001

Ladies/Gentlemen:

On behalf of Empire Realty Homes LLC, we are respectfully providing the following comments on the draft NPDES Permit Number PA0255416:

1. We respectfully request the frequency of the interim Total Residual Chlorine (TRC) monitoring be reduced from once per day to three (3) times per week. This request is due to the difficult access to the wastewater treatment plant that includes the need to travel over approximately one-half mile over the Great Allegheny Passage Trail.

2. We respectfully request the frequency of the final Total Residual Chlorine (TRC) monitoring be reduced from once per weekday to three (3) times per week. This request is due to the difficult access to the wastewater treatment plant that includes the need to travel over approximately one-half mile over the Great Allegheny Passage Trail.

3. We respectfully request the frequency of pH monitoring be reduced from once per day to three (3) times per week. This request is due to the difficult access to the wastewater treatment plant that includes the need to travel over approximately one-half mile over the Great Allegheny Passage Trail.

4. We respectfully request the frequency of Dissolved Oxygen (D.O.) monitoring be reduced from once per day to three (3) times per week. This request is due to the difficult access to the wastewater treatment plant that includes the need to travel over approximately one-half mile over the Great Allegheny Passage Trail.

If you have any questions regarding this request, please contact us.

Very truly yours,

GANNETT FLEMING, INC.

ROBERT W. DENGLER II, P.E.
Senior Project Manager

cc: Empire Realty Homes
File

ATTACHMENT C

Allegheny County Health Department Comment Email

Conrad, Stephanie

From: Specht, Dustie <Dustie.Specht@AlleghenyCounty.US>
Sent: Friday, September 9, 2022 1:57 PM
To: Conrad, Stephanie
Subject: FW: NPDES Permit No. PA0255416, Rolling Hills Village MHP STP, Elizabeth Township, Allegheny Township
Attachments: NPDES_Draft Cover Letter_Rolling Hills Village.pdf; NPDES_Draft Permit_Rolling Hills Village.pdf; NPDES_Fact Sheet_Rolling Hills Village.pdf; NPDES_Public Notice_Rolling Hills Village.pdf

Stephanie,

I just received a copy of the draft NPDES Permit for Rolling Hills Village Mobile Home Park PA0095346. The old permit and the new draft permit for this plant states that the outfall is the Youghiogheny River. Actually the headwall for the outfall is in the woods near the plant believed to be an Unknown Trib. of the Youghiogheny River. I also saw a comment in the chain of emails below about not having a lot of effluent data for the STP, I'm not sure how many years back you take into consideration but I looked at our log here at ACHD and pulled these Sample numbers for you, if you wanted to look at them.

Sample date	Collector Id/Sequence Number
11/19/9	0596 029 0596 030
12/9/10	0596 285 0596 286
10/26/11	0596 503 0596 504
8/15/12	0596 644 0596 645
8/13/13	0596 831 0596 832
8/21/14	0596 062 0596 063
8/13/21	0615 242 0615 243

Dustie Specht
Environmental Health Specailist II

ATTACHMENT D

Point of First Use Study Report

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMO

TO	Stephanie Conrad Environmental Engineering Specialist Clean Water Program
FROM	Jamie Detweiler Aquatic Biologist 2 Clean Water Program
THROUGH	Richard Spear Aquatic Biologist 3 Clean Water Program
DATE	April 26, 2023
RE	Point of First Use Survey Youghiogheny River State Water Plan: 19D Hydrologic Unit Code: 05020006 Stream Code: 37456 Aquatic Use Designation: WWF Rolling Hills Mobile Home Park (MHP) Elizabeth Township, Allegheny County

INTRODUCTION

On April 13, 2023, at the request of Stephanie Conrad of the Clean Water Program, a Point of First Surface Water Use (POFU) survey was conducted in the vicinity of the Rolling Hills MHP Sewage Treatment Plant (STP) discharge, located in Elizabeth Township, Allegheny County (Latitude: 40.29355, Longitude: -79.79392) (Figures 1 and 2). The objective of the survey was to determine if the STP discharged to a water that was capable of supporting an Aquatic Life Use as defined in 25 Pennsylvania Code §93.9q.

The survey location was adjacent to the Great Allegheny Passage which, in the subject area, is a biking and walking trail that follows the Youghiogheny River. Upslope of the discharge, there was a swale but no defined bed and bank. At the point of discharge, there was a channel with defined bed and bank. The channel was approximately 1-2 feet wide and was flowing on the date of the POFU survey. No previous surveys are known on the drainage. A survey was completed in 2013 on the nearby Youghiogheny River, approximately 3.24 Miles upstream from the subject area. Long-lived taxa (Heptageniidae, Baetidae, Elmidae, Hydropsychidae, and Ephemerellidae) were found at the previous study location.

According to USGS StreamStats (Figure 3), the drainage area to the stream at the location of the discharge is 0.0416 square miles, and the discharge to the Youghiogheny River, near the STP (Figure 4) is 1740 square miles. The discharge point is in the Lower Youghiogheny River State Water Plan (19D), and the Little Youghiogheny River Hydrologic Unit (Hydrologic Unit Code 05020006). This section of the Youghiogheny River has not been assessed to determine if it is supporting its designated Aquatic Life Use for Warm Water Fishes (WWF).

Southwest Regional Office
400 Waterfront Drive | Pittsburgh, PA 16335 | 412.442.4000 | Fax. 412.442.4194 | www.dep.pa.gov

SAMPLING PROTOCOLS

The point of first aquatic life use is the location at which a body of water is capable of supporting aquatic life as defined in 25 Pennsylvania Code §93. Guidance for determining the point of first aquatic life use is in the Department's guidance document #391-2000-014, Policy and Procedures for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers (revised April 12, 2008). Specifically, Appendix B of the guidance document provides additional guidance when making a point of first use determination.

On April 13, 2023, macroinvertebrates (Table 1) were examined in the discharge of the MHP. The station was established approximately 10 meters downstream from the point where the MHP discharges (Figures 5, 6, 7, & 8). Macroinvertebrates were also examined in a channel downslope and across the Great Allegheny Passage Trail from the STP (Figures 9 & 10). Macroinvertebrates were collected according to the Department's Qualitative Benthic Macroinvertebrate Data Collection Protocol, found in the Water Quality Monitoring Protocols for Streams and Rivers 2021 (Monitoring Book), which can be found by accessing the following website:
http://files.dep.state.pa.us/Water/Drinking%20Water%20and%20Facility%20Regulation/WaterQualityPortalFiles/Technical%20Documentation/MONITORING_BOOK.pdf

RESULTS

On the day of the survey, the wetted width of the channel was approximately 0.5 meters. Five aquatic invertebrate taxa were found and identified at the discharge location. Chironomids and Clitalata were the most common invertebrates found. No long-lived taxa were found. Across the trail, six taxa were found. Tipula (subgenus Platytipula) were most common. This subgenus of Tipula is typically found in ponds, seepage, and seasonal aquatic habitats. We attempted to follow the channel, to the Youghiogheny River, but the channel dissipated within a suspected wetland. Another channel was found close to the Youghiogheny River (Figure 11). This channel was dry at the time of investigation, but may carry water during a storm event.

DISCUSSION AND CONCLUSIONS

The objective of this study was to examine aquatic life in the channel below the Rolling Hills MHP STP discharge to determine if and where the stream is capable of supporting an aquatic life use as defined in 25 Pennsylvania Code §93.9q, where water quality standards must be met.

Findings from this study suggest that the discharge channel does not have an aquatic life use. There is no defined bed and back upslope from the discharge location, indicating that the discharge is the main source of hydrology to the channel. The closest point with an Aquatic Life Use to the discharge would be the Youghiogheny River (Lat: 40.294547; Long:-79.795858). Therefore, the Youghiogheny River would be the POFU for this discharge. As per Department guidance, the best scenario would be if the sewage was piped to an existing municipal sewage treatment facility or if the treated discharge would be piped directly to the Youghiogheny River, as seems to be required by their permit.

cc: Stream File – Youghiogheny River
Brenden Valko – SWRO, Sewage Planning Specialist
Mahbuba Iasmin – SWRO, Environmental Group Manager
Stacey Greenwald – SWRO, Environmental Group Manager
Christopher Kriley – SWRO, Environmental Program Manager
Erika Arnold – CO, Environmental Group Manager

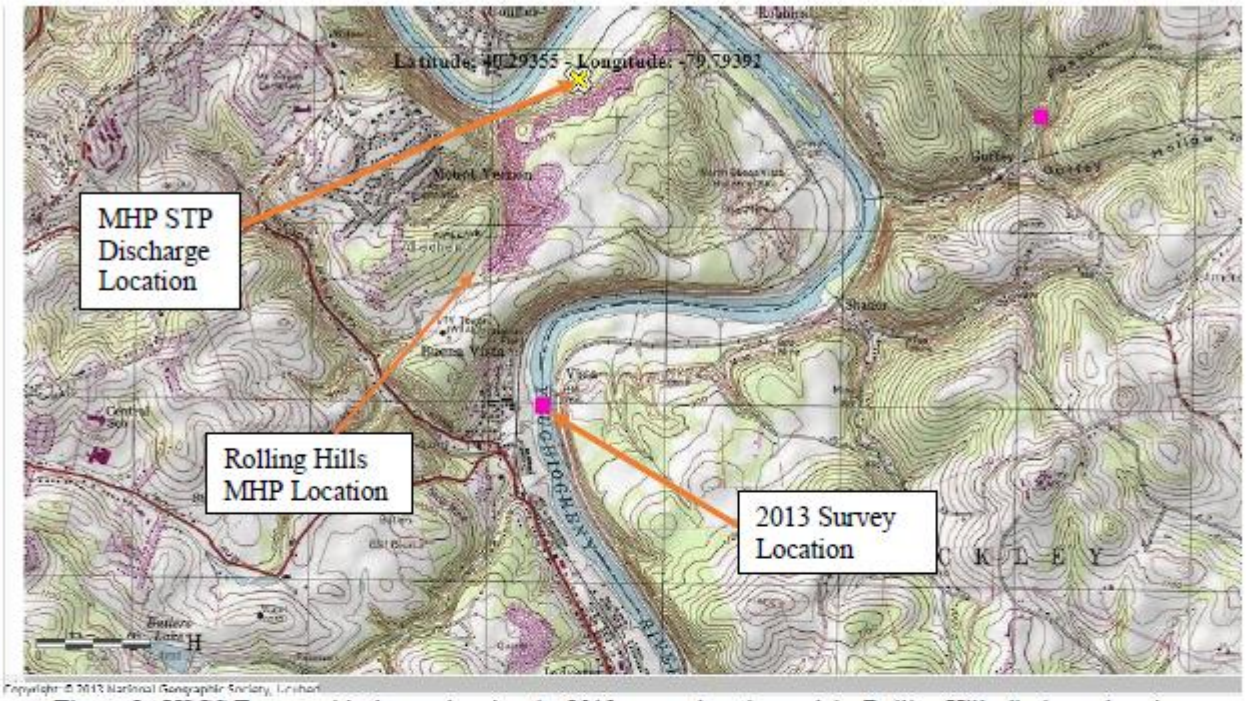

Figure 1. USGS Topographical map showing the 2013 survey location and the Rolling Hills discharge location.

Figure 2. Aerial showing the location of the STP, the STP discharge, surveys, and the channel that carries the STP discharge toward the Youghiogheny River. Please note, locations are approximate.

StreamStats Report

Region ID:	PA
Workspace ID:	PA20230417152926081000
Clicked Point (Latitude, Longitude):	40.29394, -79.79363
Time:	2023-04-17 11:29:49 -0400

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0416	square miles
FOREST	Percentage of area covered by forest	94.8652	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	0	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	0	percent
URBAN	Percentage of basin with urban development	1.577	percent

Figure 3. USGS StreamStats report for the drainage area to the STP discharge location.

StreamStats Report

Region ID:	PA
Workspace ID:	PA20230417154505646000
Clicked Point (Latitude, Longitude):	40.29552, -79.79559
Time:	2023-04-17 11:45:32 -0400

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	1740	square miles

Figure 4. Drainage area to the Youghiogheny River, adjacent to the STP outfall.

Table 1. Macroinvertebrates observed in the channel, approximately 10M from the discharge location.

TAXA	Common Name	Abundance in sample	Long lived taxa
Chironomidae	Non-biting Midge	Dominant	No
Clitellata	Segmented worm	Dominant	No
Nematoda	Roundworms	Common	No
Collembola	Springtail	Rare	No
Hydrophilidae	Water scavenger beetle	Rare	No

Table 2. Macroinvertebrates observed in the channel, downgradient from the trail crossing.

TAXA	Common Name	Abundance in sample	Long lived taxa
Chironomidae	Non-biting Midge	Rare	No
Platyhelminthes	Flatworm	Common	No
Clitellata	Segmented worm	Rare	No
Tipula (subgenus Platytipula)	Crane Fly Larvae	Common	No*
Nematoda	Roundworms	Common	No
Velidae	Riffle Bugs	Rare	No

*While Tipula is usually considered long-lived, this subgenus is commonly found in semi aquatic environments.

- 6 –

Figure 5. STP discharge, looking upslope.

Figure 6. STP discharge.

- 7 –

Figure 7. Survey location, facing down -channel.

Figure 8. From the Great Allegheny Passage trail, looking up-channel.

Figure 9. From the channel, downslope of the trail crossing, looking at the trail crossing (note the lack of culvert).

- 8 –

Figure 10. Location where channel dissipates.

- 9 –

Figure 11. Dry channel at the Youghiogheny River, in the vicinity of the STP discharge.

ATTACHMENT E

WQM 7.0 Modeling Results

Summer

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
19D	37456	YOUGHIOGHENY RIVER	8.750	740.00	1740.00	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.293	0.00	0.00	0.000	0.000	10.0	0.00	0.00	25.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Rolling Hills	PA0255416	0.0000	0.0350	0.0000	0.000	20.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	4.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
19D	37456	YOUGHIOGHENY RIVER	0.010	719.00	1760.00	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.293	0.00	0.00	0.000	0.000	10.0	0.00	0.00	25.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
		0.0000	0.0000	0.0000	0.000	25.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
19D	37456	YOUGHIOGHENY RIVER

RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
Q7-10 Flow												
8.750	509.82	0.00	509.82	.0541	0.00046	1.141	396.41	347.4	1.13	0.474	25.00	7.00
Q1-10 Flow												
8.750	326.28	0.00	326.28	.0541	0.00046	NA	NA	NA	0.88	0.608	25.00	7.00
Q30-10 Flow												
8.750	693.36	0.00	693.36	.0541	0.00046	NA	NA	NA	1.34	0.399	25.00	7.00

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	☑
WLA Method	EMPR	Use Inputted W/D Ratio	☐
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	☐
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	☑
D.O. Saturation	90.00%	Use Balanced Technology	☑
D.O. Goal	5		

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
19D	37456	YOUGHIOGHENY RIVER

NH3-N Acute Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
8.750	Rolling Hills	11.07	50	11.07	50	0	0

NH3-N Chronic Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
8.750	Rolling Hills	1.37	25	1.37	25	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	CBOD5		NH3-N		Dissolved Oxygen		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
8.75	Rolling Hills	25	25	25	25	4	4	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
19D	37456	YOUGHIOGHENY RIVER

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
8.750	0.035	24.999	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
396.412	1.141	347.401	1.127
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
2.00	0.001	0.00	1.028
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
8.243	2.694	Tsivoglou	5
Reach Travel Time (days)			
0.474			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.047	2.00	0.00	7.54
0.095	2.00	0.00	7.54
0.142	2.00	0.00	7.54
0.190	2.00	0.00	7.54
0.237	2.00	0.00	7.54
0.284	2.00	0.00	7.54
0.332	2.00	0.00	7.54
0.379	2.00	0.00	7.54
0.426	2.00	0.00	7.54
0.474	2.00	0.00	7.54

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
19D	37456	YOUGHIOGHENY RIVER

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
8.750	Rolling Hills	PA0255416	0.000	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			4