

NPDES PERMIT NO. NM0030279

RESPONSE TO COMMENTS

RECEIVED ON THE SUBJECT DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IN ACCORDANCE WITH REGULATIONS LISTED AT 40 CFR §124.17

APPLICANT: Village of Bosque Farms
1445 West Bosque Loop
Bosque Farms, NM 87068

ISSUING OFFICE: U.S. Environmental Protection Agency
Region 6
1201 Elm Street, Suite 500
Dallas, TX 75270

PREPARED BY: Bryn Copson
Physical Scientist
Permitting & Water Quality Branch (6WD-PE)
Water Division
Phone: 214-665-6427
Email: Copson.bryn@epa.gov

PERMIT ACTION: Final permit decision and response to comments received on the draft reissued NPDES permit publicly noticed on August 26, 2023.

DATE PREPARED: November 14, 2023

Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of October 20, 2023.

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
cfu	Colony forming unit
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
F&WS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
SQL	Minimum quantification level
O&G	Oil and grease
POTW	Publicly owned treatment works
RP	Reasonable potential
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Service
WLA	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan

CHANGES FROM DRAFT PERMIT

There are changes from the draft NPDES permit publicly noticed on August 26, 2023:

- The footnote *5 annotation for pH has been removed from Part I.A.
- The monitoring type for TRC has been corrected to “instantaneous grab”.
- Former footnote 5 has been corrected. Note that the numbering of the footnotes has changed as requested by the permittee in Comment 12.
- Former footnote 9 has been corrected. Note that the numbering of the footnotes has changed as requested by the permittee in Comment 12.
- Former footnote 12 has been deleted and footnote 10 has been corrected. Note that the numbering of the footnotes has changed as requested by the permittee in Comment 12.
- Part I.C. Monitoring and Reporting (Minor Discharges) has been updated.
- In Part II.C Permit Modification and Reopener, the reference to 40 CFR 122.44(d) has been corrected to 40 CFR 122.44(c).
- In Part II.C Permit Modification and Reopener, the reference to 40 CFR 122.62(s)(2) has been corrected to 40 CFR 122.62(a)(2).
- The numbering in Part II.D. Whole Effluent Toxicity Testing (48-hour Acute NOEC Freshwater) has been reformatted.
- In Part I.A, the footnotes have been revised to be in consecutive order of appearance in the table.
- PFAS analyte sampling for the influent and effluent should be reported in ng/L. PFAS analyte sampling for sludge should be reported in ng/g. Footnotes 13 and 14 have been corrected to reflect this and to describe the reporting requirements for PFAS analytes.
- PFAS sampling frequency has changed to three samples per permit term.
- The interim ammonia limit was increased from 41 mg/L to 47 mg/L in the final permit.

CONDITIONS RECEIVED ON THE DRAFT PERMIT

None

COMMENTS RECEIVED ON THE DRAFT PERMIT

Letter from Shelly Lemon, New Mexico Environment Department (NMED) to Troy Hill, EPA dated October 24, 2023.

Letter from Russell Walkup, Mayor of the Village of Bosque Farms (permittee) to Evelyn Rosborough, EPA dated September 21, 2023.

RESPONSE TO COMMENTS

Comment 1 (NMED): NMED requests that the following New Mexico Administrative Code (NMAC) citations be added to the Fact Sheet. V. Draft Permit Rationale and Proposed Permit Conditions. C. Water Quality Based Limitations. 4. Permit Action - Water Quality-Based Limits, c. Toxics, iv. Per- and Polyfluoroalkyl Substances (PFAS) Monitoring.

20.6.4.7(E)(2) NMAC states: “Emerging contaminants” refer to water contaminants that may cause significant ecological or human health effects at low concentrations. Emerging contaminants are generally chemical compounds recognized as having deleterious effects at environmental concentrations whose negative impacts have not been fully quantified and may not have regulatory numeric criteria.

20.6.4.7(T)(2) NMAC states: “Toxic pollutant” means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.

Response 1: Comment is noted for the record and for future reference. After proposing the draft permit, EPA does not revise the Fact Sheet.

Comment 2 (NMED): In Part I. A. Limitations and Monitoring Requirements 1. Outfall 001, the sample type for pH has footnote *5. Footnote *5 discusses TRC sampling, which does not pertain to pH. The footnote *5 annotation for pH should be removed from the table.

Response 2: EPA agrees, and the annotation has been removed.

Comment 3 (NMED): In Part I. A. Limitations and Monitoring Requirements 1. Outfall 001, Total Residual Chlorine (TRC) has a sample type listed as “grab.” The monitoring type should be corrected to “instantaneous grab” to identify the sample needs to be analyzed within 15 minutes of collection.

Response 3: EPA agrees, and “instantaneous grab” has been added.

Comment 4 (NMED): In Part I. A. Limitations and Monitoring Requirements, 1, Outfall 001, footnote *5 references 40 CFR Part 136 and defines grab sample as an instantaneous grab analyzed within 15 minutes of collection. The requirement for analyzing TRC within 15 minutes of sample collection is found in 40 CFR Part 136 Table II- Required Containers, Preservation Techniques, and Holding Times. Footnote *5 should be corrected to read:

“*5 TRC shall be measured during periods when chlorine is used as either backup bacteria control, when disinfection of plant treatment equipment is required or when used for filamentous algae control. For permit reporting, when chlorine is not used in the treatment system the permittee may report N/A on the DMR. Regulations at 40 CFR Part 136 require that the sample be analyzed within 15 minutes of collection. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.”

Response 4: EPA agrees, and the footnote has been corrected. Note that the numbering of the footnotes has changes as requested by the permittee in Comment 12.

Comment 5 (NMED): In Part I. A. Limitations and Monitoring Requirements, 1. Outfall 001, footnote *9 is correlated to PFAS Analytes, Influent and PFAS Analytes, Effluent and requires reporting in ng/g and refers to PFAS, Sludge sampling.

Footnote *9 should be corrected to read:

“*9 Report in nanograms per liter (ng/L). This reporting requirement for the 40 PFAS parameters takes effect on the effective date of the authorization to discharge under the permit. Until there is an analytical method approved in 40 CFR Part 136 for PFAS in wastewater, monitoring shall be conducted using Draft Method 1633. The draft Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with draft method 1633, if appropriate.

Additionally, report, in NetDMR, the results of all 40 PFAS analytes required to be tested as part of the method as shown in Appendix B of Part II. Any parameters that are removed from the method based on

multi-lab validation of the method will not be required for reporting and the Permittee may report “NODI: 9” for any such parameters.”

Response 5: EPA agrees, and the footnote has been corrected. Note that the numbering of the footnotes has changed as requested by the permittee in Comment 12.

Comment 6 (NMED): In Part I. A. Limitations and Monitoring Requirements, 1. Outfall 001, footnote *10 and *12 are identical. Footnote *10 should include information on analytical methods and reporting units specific to sludge. Footnote *12 can be deleted. Footnote *10 should be corrected to read: “*10 Report in nanograms per gram (ng/g). This reporting requirement for the 40 PFAS parameters takes effect on the effective date of the authorization to discharge under the permit. Until there is an analytical method approved in 40 CFR Part 136 for PFAS in sludge, monitoring shall be conducted using Draft Method 1633. The draft Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with draft method 1633, if appropriate. Additionally, report, in NetDMR, the results of all 40 PFAS analytes required to be tested as part of the method, as shown in Appendix B of Part II. Any parameters that are removed from the method based on multi-lab validation of the method will not be required for reporting and the Permittee may report “NODI: 9” for any such parameters.”

Response 6: EPA agrees, footnote 12 has been deleted and footnote 10 has been corrected. Note that the numbering of the footnotes has changed as requested by the permittee in Comment 12.

Comment 7 (NMED): Part I.C. Monitoring and Reporting (Minor Discharges) states: “Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://usepa.servicenowservices.com/oeca_icis?id=netdmr_homepage.” Until approved for NetDMR, the permittee shall request temporary or emergency waivers from electronic reporting.”

Part I.C. Monitoring and Reporting (Minor Discharges). 2 states: “The permittee is required to submit regular reports as described above postmarked no later than the 28th day of the month following each reporting period.”

Part I.C. Monitoring and Reporting (Minor Discharges). 3 states: “NO DISCHARGE REPORTING: If there is no discharge at Outfall 001 during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.”

The introduction paragraph outlines electronic reporting requirements while paragraphs 2 and 3 are applicable to paper reporting. NMED requests that EPA revise the language in Part I.C. Monitoring and Reporting (Minor Discharges) to provide details on both electronic and paper DMR reporting.

Response 7: EPA agrees, Part I.C. Monitoring and Reporting (Minor Discharges) has been updated.

Comment 8 (NMED): In Part II.C Permit Modification and Reopener, the reference to 40 CFR 122.44(d) needs to be corrected to 40 CFR 122.44(c).

Response 8: EPA agrees, and the citation has been corrected.

Comment 9 (NMED): In Part II.C Permit Modification and Reopener, the reference to 40 CFR 122.62(s)(2) needs to be corrected to 40 CFR 122.62(a)(2).

Response 9: EPA agrees, and the citation has been corrected.

Comment 10 (NMED): The numbering in Part II.D. Whole Effluent Toxicity Testing (48-hour Acute NOEC Freshwater) is confusing. NMED requests that EPA review the paragraph and sub-paragraph numbering and not reuse characters in different subparagraphs. Specifically, the numerals 1, 2, 3, etc. are used at multiple subparagraph levels.

Response 10: EPA agrees that the formatting of this section was confusing and has reformatted it for clarity.

Comment 11 (NMED): Part I.A. Limitations and Monitoring Requirements, 1, Outfall 001 details a monitoring and reporting schedule for PFAS Analytes, Influent; PFAS Analytes, Effluent; and PFAS Analytes, Sludge. The design capacity of the Village of Bosque Farms wastewater treatment plant is 0.5 million gallons per day (MGD) and discharge monitoring report data from the current permit cycle (May 2018 to April 2023) details the maximum 30-day average flow is 0.35 MGD and the maximum 7-day average flow is 0.36 MGD. Since the flows are between 0.1 MGD and 1 MGD, the facility will be required to conduct PFAS monitoring once per year per EPA Region 6 communications with the New Mexico Environment Department (NMED).

The NMED supports the addition of a two-year compliance schedule in Part I.B. Schedule of Compliance to allow the Village of Bosque Farms to establish a PFAS monitoring program, which may include identifying analytical laboratory facilities, developing PFAS sampling and monitoring standard operating procedures, establishing data review procedures, identifying funding resources, and other foundational activities. PFAS monitoring would be conducted in years 3, 4, and 5 of the permit cycle.

Response 11: EPA Region 6 has determined that based on the design capacity and nature of the discharge, a reduced PFAS sampling frequency of three samples per permit term will still meet agency goals and provide adequate data to inform future permitting decisions. The permit has been updated to reflect this sampling frequency. PFAS samples must be collected and analyzed in three separate calendar years.

Because the PFAS sampling frequency has been reduced, EPA doesn't think it is necessary to implement a compliance schedule for PFAS monitoring. The permittee will be able to determine which three separate calendar years work best for them to sample.

Comment 12 (permittee): FORMATTING OF TABLE, PAGE 1 OF PART I:

The Table that shows the discharge limits (Page 1 of PART I) includes several numbered footnotes at the bottom of it (Page 2 and Page 3 of PART I). However, during our review, we found it challenging to track the applicability of the various footnotes as they do not follow the consecutive order of appearance, and some appear incorrectly labeled. Examples include:

- Footnote 5 is the first that appears in the table, and it indicates pH sample type (grab). However, footnote 5 is regarding TRC.
- Footnotes 13 and 15 are shown in the table before footnotes 6-12.
- Footnotes 16 and 14 are shown in the table before footnotes 6-12.
- Footnotes 15 and 16 are shown in the table before footnote 14.

To facilitate our use of the permit Table during this next term, the Village respectfully requests that the footnotes included in the Table be numbered in the consecutive order of appearance and correspond to the footnotes at the bottom of the Table.

- Footnotes 9 and 11 refer to the same pollutant (PFAS), but the units required for reporting are inconsistent. Footnote 9 refers to reporting in nanograms per gram (ng/g), but under the Daily Max column it is indicated to report in ng/L.

The Village respectfully requests clarification regarding the units to be used for reporting.

Response 12: EPA has revised the footnotes to be in consecutive order of appearance in the table. PFAS analyte sampling for the influent and effluent should be reported in ng/L. PFAS analyte sampling for sludge should be reported in ng/g. Footnotes 13 and 14 have been corrected to reflect this and to describe the reporting requirements for PFAS analytes.

Comment 13 (permittee): FREQUENCY OF SAMPLING FOR BOD AND TSS:

The Table that shows the discharge limits (Page 1 of PART I) indicates that both BOD₅ and TSS shall be sampled and analyzed 2/month. However, Item D. Monitoring Frequency for Limited Parameters of the Fact Sheet (Page 15 of 25), states that "EPA established the Monitoring frequency based on Table 9 (page 34 of the NMIP) for design flow between 5 and 10 MGD at each outfall". The frequency is indicated as BOD₅, 1/week (increase due to exceedances) and TSS, 3/month.

The Village respectfully requests confirmation about the frequency of sampling for BOD₅ and TSS being 2/month. Our plant is a minor facility with a permitted design flow of 0.5 MGD and only experienced a few exceedances of these pollutants during the past Permit cycle. However, if the EPA identifies the correct frequency is the one called out in the Fact Sheet, the Village requests a condition in the Permit that allows for a reduction in sampling frequency to 2/month upon 12 consecutive months of consistently compliant BOD₅ and TSS results.

Response 13: EPA confirms that the correct frequency of sampling for BOD₅ and TSS is 2/month based on Table 9 of the NMIP (page 34) for an activated sludge WWTP with a design flow between $0.1 \leq 0.5$ MGD. The increased monitoring frequencies listed in the Fact Sheet were made in error. After proposing the draft permit, EPA does not revise the Fact Sheet.

Comment 14 (permittee): PFAS MONITORING REQUIREMENTS:

The Village of Bosque Farms is particularly concerned about the added requirement for annual PFAS monitoring and reporting. Our small rural facility has been discharging only an annual average flow rate between 0.204 and 0.224 MGD in the past three years. It is important to mention that the influent to the facility is domestic wastewater and there are no industrial contributors or any of the PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and/or military installations that can be contributors of PFAS, which are mentioned on Pages 10 and 11 of the Fact Sheet.

Regarding sludge sampling and analysis of PFAS, the sludge generated at the facility is either taken to the Valencia Regional Landfill or transported by truck about 20 miles to a remote and isolated surface disposal site, where it is integrated into the soil for natural treatment under the Village's groundwater discharge permit (DP-1244), issued by the New Mexico Environment Department (NMED) Ground

Water Quality Bureau (GWQB). There are no residences, surface water bodies, or agricultural activities in the vicinity of the disposal site, and the sludge is not given away to other users for beneficial purposes.

After a review of the documents referenced in the PFAS footnotes, the Village has concluded that we currently do not have the personnel and technical capabilities nor the financial resources to conduct the annual sampling and analyses following the protocol indicated under Footnote 11 of the Draft Permit (NMED PFAS sampling standard operating procedures [SOPs]). Unless the NMED or the EPA have the resources to support us in the sampling and analyses of such pollutants, it appears we would need to hire a specialized laboratory, likely from out of state, at an even greater cost to comply with these requirements.

Based on the above comments, the Village believes that the requirement to sample and analyze for PFAS during the term of the permit would be a very marginal contribution to the intended purpose of such sampling, stated on Page 12 of the Fact Sheet: "The purpose of this monitoring and reporting requirement is to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a facility-specific basis."

The Village respectfully requests a reduction of the measurement frequency to once during the permit term. Otherwise, we request assistance (financial or sample collection) from the NMED or the EPA in completing the sampling requirements as described in the Draft Permit.

Response 14: EPA Region 6 has determined that a reduced PFAS sampling frequency of three samples per permit term will still meet agency goals and provide adequate data to inform future permitting decisions. The permit has been updated to reflect this sampling frequency. PFAS samples must be collected and analyzed in three separate calendar years. See also response to Comment 11 (NMED).

Comment 15 (permittee): TOTAL AMMONIA LIMITS:

The Village recognizes the deficiency in collecting the minimum number of samples required for the NPDES permit renewal application Form 2A. However, during the Draft Permit public comment period, the Village collected three additional samples to be analyzed for ammonia. We received results for two of the three samples (enclosed) which are summarized as follows:

- Sample Collected 8/31/2023: 45 mg/L Ammonia
- Sample Collected 9/6/2023: 47 mg/L Ammonia

It is unclear to us as to why our WWTP is not effectively nitrifying the influent ammonia. We will begin troubleshooting our facility operations with our staff and consultants as necessary. The Village acknowledges the Interim Total Ammonia Limit, the Schedule of Compliance, and the Final Total Ammonia Limit.

Once the Village attains compliance with the Final Total Ammonia Limit, we respectfully request a condition in the Permit that allows/or a reduction in sampling frequency to 1/month upon 12 consecutive months of consistently compliant results.

Response 15: The additional samples collected by the permittee during the public comment period were used to run another reasonable potential analysis to determine if the permittee's discharge of ammonia

has potential to exceed NMWQS. RP still exists for the acute ammonia criterion because the estimated average discharge concentration (37.3 mg/L) is greater than the acute criterion (6.95 mg/L), which must be met at the point of discharge per 20.6.4.11.E(2) NMAC. Per 40 CFR 122.47(a)(3) an interim limit was set. The interim limit is set at the highest level (47 mg/L) reported in the application or public comment period. The interim ammonia limit was increased from 41 mg/L to 47 mg/L in the final permit, based on additional ammonia sampling done by the permittee during the public comment period. The compliance schedule states that the interim limit is applicable until 36 months after the permit effective date. The final limit shall then be effective on the first day of the 4th year from the permit effective date.

To ensure that EPA has adequate ammonia sampling data to monitor compliance with NMWQS and to inform future permitting limits, the sampling frequency of 2/month will remain in the final permit. The ammonia limit and sampling frequency will be reassessed during the next permit term. Additionally, in accordance with 40 CFR Part 122.62(a), the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance.