

**REPORT OF COMPLIANCE SAMPLING INSPECTION (CSI) &
INDUSTRIAL STORMWATER
COMPLIANCE EVALUATION INSPECTION (CEI)**

AT

**Nestle Purina Petcare
22450 State Hwy Y
Bloomfield, MO 63825**

NPDES NO: MO0101788

September 24-25, 2024

BY

**U. S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)**

INTRODUCTION

At the request of the Enforcement and Compliance Assurance Division, Water Branch, I conducted a Compliance Sampling Inspection and an Industrial Stormwater Compliance Evaluation Inspection at Nestle Purina Petcare, the Bloomfield, Missouri location, on September 24-25, 2024. The inspection was conducted under the authority of Section 308 of the Clean Water Act (as amended) and in accordance with EPA Region 7 Standard Operating Procedures. This narrative report and attachments present the results of the inspection.

PARTICIPANTS

Nestle Purina Petcare

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INSPECTION PROCEDURES

I arrived unannounced at Nestle Purina Petcare (hereinafter referred to as NPPC) at approximately 1:20 p.m. on September 24, 2024, and I introduced myself to Mr. Harris. I presented my credentials and explained the purpose and procedures of the inspection. I then had a short entrance meeting explaining the purpose and procedures of the inspection. During the entrance meeting, I explained to Mr. Harris that I was going to conduct an inspection of the facility's National Pollutant Discharge Elimination System (NPDES) individual permit which includes the facility's industrial stormwater requirements in lieu of obtaining coverage under the state's general permit. I explained that I would complete a full walk-through inspection of the facility, complete a record review as necessary, and collect samples each day. During my inspection, I completed the Industrial User Inspection Checklist (attachment 1) and a facility walk-through with photos (attachment 2). Mr. Harris explained to me that Mr. Chamberlin, is typically in charge of the facility's NPDES management and compliance. He then explained that Mr. Chamberlain was out of state and would not be able to be present for the inspection. Mr. Chamberlain was available by phone to answer questions during the inspection and was called upon as needed.

SAMPLING PROCEDURES

On September 24 and 25, 2024, I collected grab samples of the wastewater effluent for permit parameters from outfall 001 (photo 8). The samples were collected directly into a clean 1-Liter glass jar and transferred to individual, pre-labeled polyethylene or glass sample containers for the analysis of chemical oxygen demand (COD), non-filterable solids (NFS), settleable solids (SS), ammonia (NH₃), nitrate plus nitrite (NO₃+NO₂), total kjeldahl nitrogen (TKN) and total phosphorus (TP). Oil and grease (O&G) samples were collected directly into the 1-Liter glass containers that were submitted for analysis. At the time of sampling, I preserved the NH₃, NO₃+NO₂, TKN and TP samples with 5 mL of sulfuric acid. I also preserved O&G samples with hydrochloric acid to a pH of less than 2. I collected a grab sample from the same location to measure the pH and temperature using a field meter, which was completed within 15 minutes of collecting the sample. The facility is only required to collect a flow measurement once per month. The facility was not sampling at the time of my inspection, and the permit does not have any mass-based limits, so a flow measurement was not collected on either day of the inspection.

On September 24 and 25, 2024, I collected grab samples of the wastewater effluent for permit parameters from outfall 002. The samples were collected directly into a clean 1-Liter glass jar and transferred to individual, pre-labeled polyethylene sample containers for the analysis of biochemical oxygen demand (BOD), NFS, NH₃, NO₃+NO₂, TKN and TP. O&G samples were collected directly into the 1-Liter glass containers that were submitted for analysis. At the time of sampling, I preserved the NH₃, NO₃+NO₂, TKN and TP samples with 5 mL of sulfuric acid. I also preserved O&G samples with hydrochloric acid to a pH of less than 2. I collected a grab sample from the same location to measure the pH and temperature using a field meter, which was completed within 15 minutes of collecting the sample. The facility is only required to collect a flow measurement once per month. The facility was not sampling at the time of my inspection, and the permit does not have any mass-based limits, so a flow measurement was not collected on

either day of the inspection.

On September 25, 2024, I collected grab samples of the wastewater effluent for permit parameters from outfall 007 (photos 4 & 5). The samples were collected directly into a clean 1-Liter glass jar and transferred to individual, pre-labeled polyethylene or glass sample containers for the analysis of COD, BOD, NFS, SS, NH₃, NO₃+NO₂, TKN and TP. O&G samples were collected directly into the 1-Liter glass containers that were sent for analysis. At the time of sampling, I preserved the NH₃, NO₃+NO₂, TKN and TP samples with 5 mL of sulfuric acid. I also preserved O&G samples with hydrochloric acid to a pH of less than 2. I collected a grab sample from the same location to measure the dissolved oxygen (DO), pH and temperature using a field meter, which was completed within 15 minutes of collecting the sample. The facility is only required to collect a flow measurement once per month. The facility was not sampling at the time of my inspection, and the permit does not have any mass-based limits, so a flow measurement was not collected at the time of inspection.

For the first day of sampling, I placed the samples I collected on ice in an ice chest, sealed the container, and shipped it overnight to the EPA Region 7 Science and Technology Center (STC) for analysis. On the second and final day of sampling, I placed the samples on ice in an ice chest, sealed the container, and hand delivered it to the R7 STC. Electronic field sheets and electronic chain of custodies were emailed to the STC each day after samples were shipped or delivered. I followed Region 7 Laboratory Services and Applied Science Division (LSASD) standard operating procedures in the collection, packaging, transportation, and handling of the samples.

FACILITY DESCRIPTION

NPPC is a facility that processes, formulates and packages pet litter. Local clay material used in the litter production is mined at a separate NPPC owned facility approximately two miles south of the main production plant. Powdered sodium bentonite and granulated perlite are transported to the site via truck and rail. All raw materials and additives are stored indoors or in bins. The raw materials are processed using equipment including dryers, conveyors, elevators, mills, screens and packaging equipment. Off spec perlite, unused clay and off-spec clay litter is placed as fill in MDNR permitted mined land reclamation areas. Dust suppression at the site occurs using clean water. The facility also operates a wastewater treatment facility (WWTF) with a design population equivalent of 100. The WWTF is an extended aeration wastewater treatment plant.

At the time of inspection, the facility had eight identified outfalls. Seven of the outfalls are permitted. Outfalls 001-006 are permitted under NPDES permit # MO0101788 (permit being inspected (attachment 3)). Outfall 007 was unpermitted at the time of inspection, but is being included in the facility's renewed permit (attachment 4), which was under review with Missouri Department of Natural Resources (MDNR) at the time of my inspection. An eighth outfall, which will be referred to as outfall 008 for the purpose of this report, is permitted under land disturbance permit #MORA20755 (attachment 5) with MDNR.

NPPC is located approximately five and a half miles north of Bloomfield, Missouri just east of State Highway 25. The latitude and longitude of the plant office are 36.962120 and -89.868883, respectively, in Stoddard County, Missouri.

The facility's NPDES permit MO0101788 was issued on June 1, 2020. The permit expires on May 31, 2025. The permit includes effluent limits for O&G, pH, SS, total suspended solids (TSS), BOD, *E. coli* and NH3.

The facility was last inspected by MDNR on January 31, 2024 (attachment 6). The inspection report states the inspector found that the facility had discharged unsightly water contaminants into waters of the state in violation of state standards. The inspection led MDNR to take formal enforcement on the facility with a Notice of Violation on April 8, 2024 (attachment 7).

FINDINGS AND OBSERVATIONS

The following findings were noted during the plant and record review.

Self-Monitoring Data Review:

Prior to the inspection, I obtained a spreadsheet of the discharge monitoring report (DMR) data for NPPC from the Region 7 (R7) Data Team. The spreadsheet contained the information requested from January 2021, through June 2024. The facility also had copies of the DMRs on site. All DMR data obtained for this report can be found on ECAD's official electronic file management system. The facility had 28 effluent violations in that timeframe. This included five for BOD, eight for ammonia, and 15 for TSS. This was noted as item #1 on the Notice of Preliminary Findings (NOPF) that was left on-site.

Sample Results

The analytical results from the inspection were received on October 23, 2024, from the Region 7 STC laboratory (attachment 8). This data was not discussed during the exit interview. The analytical results for the samples I collected are presented in Tables 1-3 below. Results for pH and temperature were collected at the time of my inspection.

As described in attachment 8, for results followed by a J, the analyte is acceptable; the reported value is an estimate. For results followed by a UJ, the analyte was not detected at or above the reporting limit. The reporting limit is an estimate.

Table 1: Analytical Results for Samples Collected During Inspection at Outfall 001

Parameter	(September 24)	(September 25)	Permit Limits ¹ (Daily/Monthly)
COD (mg/L)	ND	ND	NA
O&G (mg/L)	ND	ND	15/10
SS (mL/L/hr)	1.0	ND	1.5/1.0
TSS (mg/L)	392	5.07	120/80
NH3 (mg/L)	0.111 J	0.252	NA
NO3+NO2 (mg/L)	15.8J	2.00	NA
TKN (mg/L)	1.31J	0.923	NA
TN (mg/L)	17.1J	2.93	NA
TP (mg/L)	1.74J	0.567	NA
pH (S.U.)	7.5	7.22	6.5-9.0
Temp (°F)	26.4	25.6	NA

1 Permit limits for pH are minimum followed by maximum.

2 “ND” denotes a non-detect result

Table 2: Analytical Results for Samples Collected During Inspection at Outfall 002

Parameter	(September 24)	(September 25)	Permit Limits ¹ (Daily/Monthly)
BOD (mg/L)	8.14	3.07J	33/22
O&G (mg/L)	NDJ	ND	15/10
TSS (mg/L)	315	No Sample	33/22
NH3 (mg/L)	4.70	0.321	1.7/0.6
NO3+NO2 (mg/L)	76.3	89.0	NA
TKN (mg/L)	5.72	1.47	NA
TN (mg/L)	82.0	90.5	NA
TP (mg/L)	5.60	6.83	NA
pH (S.U.)	7.94	8.20	6.5-9.0
Temp (°F)	31.1	31.6	NA

1 Permit limits for pH are minimum followed by maximum.

2 “ND” denotes a non-detect result

Table 3: Analytical Results for Samples Collected During Inspection at Outfall 007

Parameter	(September 25)
COD (mg/L)	64.4
BOD (mg/L)	5.60
O&G (mg/L)	ND UJ
SS (mL/L/hr)	ND
TSS (mg/L)	3600
NH3 (mg/L)	ND
NO3+NO2 (mg/L)	0.067
TKN (mg/L)	2.76
TN (mg/L)	2.83
TP (mg/L)	1.70
pH (S.U.)	7.35
Temp (°F)	23.3
DO (mg/L)	3.07

1 “ND“ denotes a non-detect result

EPA sample results from the inspection showed a permit exceedance for TSS at outfall 001 on September 24, 2024. Sample results also show an exceedance for TSS and NH3 at outfall 002 on September 24, 2024. Effluent exceedances are shown highlighted in red in table #1. Sample results for September 25, 2024, at outfall 007 show a lower-than-normal DO concentration and elevated levels of COD and TSS. While there are no limits at outfall 007, the results are indicative of what the facility is discharging at the unpermitted outfall.

Laboratory

The facility utilizes a contract laboratory for their analyses except for pH and temperature, which are analyzed on-site. During the inspection, I reviewed laboratory records to ensure that all analyses complied with requirements of 40 CFR part 136. I found that all holding times were met for the analysis reports that I reviewed.

During my inspection, I asked facility personnel if they calibrated the meters used for on-site analyses. They stated they do and provided me adequate calibration logs.

Collection System

The collection system for the facility is private and only collects wastewater and stormwater from the facility property. Sanitary waste is collected from facility buildings separately from process wastewaters and flows to the facility’s on-site WWTF.

Operations and Maintenance

During the inspection I observed the facility's wastewater treatment system. Facility personnel add soda ash to the influent of the system. Wastewater flows to one of two aeration basins where a polymer and a bio boost are added. From the aeration basin, wastewater flows to one of two clarifiers for settling. After the clarifier, treated water is discharged to outfall 002.

Outfall 002 is an internal outfall used for sampling treated water prior to being discharged to a small retention pond on the southeast portion of the property (photo 8). Once the treated water is discharged to the retention pond, it mixes with industrial impacted stormwater. The retention pond then discharges to a ditch along the railroad tracks on the east side of the property through outfall 001, then flows to a tributary of Castor River.

I did not observe any issues with the wastewater treatment facility at the time of my inspection.

Sludge

Sludge from the clarifiers is hauled off-site to the Bloomfield WWTF by a third-party hauler.

Stormwater

I also inspected the facility for compliance with the stormwater discharge requirements. The facility's individual permit includes stormwater requirements in lieu of being covered by an MDNR General Permit for Stormwater Discharge. The facility's permit also requires that the facility develop, maintain and implement a Stormwater Pollution Prevention Plan (SWPPP). The facility's SWPPP was available at the time of inspection, and an electronic version was provided after the inspection (attachment 9).

All of the facility's stormwater is collected in stormwater drains or surface flows to one of six outfalls. As discussed above, outfall 001(photo 8) is stormwater mixed with treated wastewater from outfall 002. Outfalls 003-006 (photos 9, 10, 17 & 18) are stormwater only and discharge off-site to a tributary of the Castor River.

Outfall 007 is an unpermitted outfall that receives industrial impacted stormwater from an approximately 20' high, 16-acre pile of off-spec materials (photos 1-2) consisting of perlite fines and clays (including portions containing additives such as fragrances, paint, etc.). At the time of inspection, the facility had a berm built around the downhill portion of the pile to contain stormwater, making a retention pond (photos 1-3, 6 & 7) around the south and west portion of the pile. When stormwater flows are more that the berms can contain, the facility has designed outfalls on the west side and the south end of the retention pond (photos 6 & 7).

At the time of inspection, the retention pond was full from a recent rain and was completely covered in perlite. The facility has a boom constructed around the upstream side of the outfall to keep perlite from flowing off-site (photos 6&7). The retention pond was discharging from the south outfall (photos 4-5), referred to as outfall 007 in this report and in the facility's permit

renewal and modification application (attachment 4). Process wastewater discharging from outfall 007 was a dark grayish-brown color and had a neutral odor at the time of inspection. This was noted as item #2 on the NOPF that was left on-site after the inspection.

The outfall on the west side of the pile is not included in the application. The west outfall was not discharging at the time of inspection, but would effectively discharge the same quality water from the same retention pond as outfall 007.

At the time of inspection, I took samples from the unpermitted discharge. As discussed above in the sampling section, the analyses of the samples taken showed the discharge to have a lower-than-normal concentration of DO and elevated levels of COD and TSS.

I observed two fuel tanks on-site that were in secondary containment (photo 33). On the north side of the north warehouse, I observed two other fuel tanks that were not in secondary containment (photo 11). It was not apparent at the time of the inspection if the tanks were double walled or not. I discussed with facility personnel that they needed to ensure the tanks were double walled or ensure they were in secondary containment. Facility personnel stated they believed the tanks were double walled, but would confirm the tanks were double walled.

Stormwater from the majority of the areas around the blow mold plant flows around the building to either a ditch on the east or south sides of the building. These two ditches come together at the southeast area of the blow mold plant near the railroad tracks, then flows through a culvert under the tracks. This outfall is not included in the facility's SWPPP as one of their stormwater outfalls. I explained to facility personnel that this outfall is separate from the other stormwater outfalls and must be included in the SWPPP. This is noted as item #3 on the NOPF that was left on-site at the time of inspection.

While reviewing the facility's SWPPP, I found that the Pollution Prevention Team was out of date with the current facility personnel. I also found the description of outfalls to be inconsistent with what I observed during my inspection. This includes the outfall southeast of the blow mold plant and stormwater outfall 005 (not the same as outfall 005 in the facility's individual permit). Outfall 005 (stormwater) is the discharge from McKee Lake on the north side of the highway, west of the blow mold plant. At the time of my inspection, I did not observe any industrial impacted stormwater in the area of McKee Lake (photo 10). I explained to facility personnel that it did not appear to be necessary to include this outfall in their SWPPP. I suggested that if they wanted to remove the outfall from their stormwater management program, they should work with MDNR on removing it. These observations were noted as item #4 on the NOPF.

During my inspection of the facility's stormwater management, I observed multiple areas that were lacking in housekeeping. I observed multiple areas around the facility where fugitive perlite had accumulated (photos 12-14 & 25-31), including around stormwater inlet structures (photos 25, 26 & 28). I also observed piles of perlite along the railroad tracks where it had come out of rail cars and had not been cleaned up (photos 12-14). I explained to facility personnel that these areas must be maintained and cleaned as needed to avoid fugitive materials from accumulating. These observations were noted as item #5 on the NOPF that was left on-site at the time of

inspection.

The facility's permit and/or SWPPP requires that they conduct bi-weekly visual site inspections and an annual comprehensive site evaluation. The permit and SWPPP also required that the facility conduct new hire training and annual refresher training on the facility's stormwater practices. During my inspection, I reviewed records that indicated the facility was in compliance with these requirements.

Summary

During the exit briefing on September 25, 2024, I went over the facility's rights to claim confidential business information. The facility did not make any claims of confidentiality (attachment 10). During the exit briefing, I issued a NOPF for the following (attachment 11):

1. Failure to meet effluent limits.
2. Discharging from an unpermitted outfall (future 007).
3. Ensure stormwater outfalls are up to date with MDNR.
4. Update SWPPP as needed.
 - Pollution Prevention Team
 - Outfalls (east of blow mold plant, outfall 005)
5. Stormwater housekeeping
 - Blowing material
 - Stormwater inlets

The facility responded to the NOPF on October 9, 2024, via e-mail, addressing the preliminary findings observed during the inspection (attachment 12). The facility's response addressed each of the original findings.

**BRIAN
D'ALFONSO**
Brian D'Alfonso
Biologist

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**JOSEPH
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Attachments:

1. Industrial User Inspection Checklist (6 pages)
2. Digital Photographs with Photo Log (36 pages)
3. NPPC NPDES Permit # MO0101788 (94 pages)
4. NPPC NPDES Permit Renewal Application (6 pages)
5. NPPC Land Disturbance General Permit # MORA20755 (36 pages)
6. January 31, 2024, MDNR Inspection (12 pages)

7. April 8, 2024, MDNR Notice of Violation (1 page)
8. Data Transmittal Packet for Activity BPD2414 (24 pages)
9. NPPC June 7, 2019, SWPPP (123 pages)
10. September 25, 2024, USEPA Confidential Business Information Notice (4 pages)
11. September 25, 2024, NOPF (1 page)
12. NPPC October 9, 2024, NOPF email and response (50 page)