



**Environmental  
Protection Agency**

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

Re: Henry County  
Campbell Soup Company  
NPDES Permit

June 14, 2012

Mr. Geoff Sans, Manager  
Services & Utilities  
Campbell Soup Supply Company  
12-773 State Route 110  
Napoleon, Ohio 43545

Dear Mr. Sans:

On January 30, 2012, a National Pollutant Discharge Elimination System (NPDES) permit compliance inspection was conducted at the Campbell Soup Supply Company's Napoleon Plant. Representatives of Campbells included Mr. Aaron McCoy, Chemist, Mr. Mike Maringer, Technical Specialist, of Industrial Fluid Management, Inc., and you, who provided information on operations and maintenance at the plant. Ms. Dana Martin-Hayden and Mr. Brian McGlown represented the Ohio EPA.

During our visit, all major treatment units were in operation. The final effluent discharging to the Maumee River was a very light brown with very slight solids. No samples were taken to verify compliance with permit limits.

Due to the information Campbells provided in a December 19, 2011 response to a Notice of Violation (NOV) letter from Ohio EPA regarding a spray irrigation system leak from the Overland Flow system (OF) and associated NPDES permit limit violations, a more in-depth inquiry into flow records and available spray irrigation system data was performed by Ohio EPA personnel. This investigation prompted Ohio EPA to write a letter dated February 21, 2012, and a follow up letter dated April 10, 2012, which outlined concerns for the OF system related to the lack of monitoring data, lack of facility wastewater characterization data, standard operating procedures that do not identify piping leaks in a timely manner, lack of data needed to calculate loadings to stream, excessive application on fields during storm events (no storm water storage) and application rates that exceed reasonable flow loading/velocity limitations of the treatment system.

As stated in our April 10, 2012, letter, we have strongly encouraged Campbells to develop a schedule of compliance by December 15, 2012, which at a minimum addresses the items listed in Campbell's response letter of March 29, 2012. Those items include the following:

- 1. Segregation of high strength wastewater streams within the manufacturing operations.*
- 2. Improved diversion of storm water away from the overland flow system and the WWTP.*
- 3. Modifications to the existing monitoring stations including the installation of improved monitoring equipment.*
- 4. Possible modifications to the system standard operating procedures to improve treatment of the wastewater throughout the irrigation season.*

During our inspection, we were told by Campbell's personnel that the Wastewater Treatment Plant (WWTP) can handle all storm water flows. However, the WWTP has a design flow of 10 MGD and the facility's effluent data does not indicate that the WWTP is being stressed to take as much storm water as possible during large storm events. Instead, storm flows are being discharged to the OF system during storm water events. The OF system is not designed to handle storm water events while maintaining proper treatment velocities. If the WWTP is unable to handle quick transitions from average daily flow to high flow storm water events, then the facility should investigate options. Possible solutions include redirecting acceptable storm water (i.e. from parking areas) to retention basins for settling of solids prior to discharge to the Maumee River or redirecting the storm water to a storage basin until either one of the facility's wastewater treatment systems, WWTP or OF, can manage the flow without violating NPDES permit limits or compromising the treatment system limitations.

Examination of the OF inspection logs indicate that lower dissolved oxygen readings were experienced at the outfalls from the OF system during or after most storm events. In contrast, the effluent flow rates from the WWTP did not increase significantly during storm events, which is surprising given that the WWTP was at less than half (5 MGD) of its design capacity during most summer storm events. Currently, there is no conveyance system available to utilize the lagoons on site for storage of storm water. No storage of storm water is currently available besides the EQ tank prior to the OF system. Thus, the OF system is used primarily to remove excess storm water from the site. The OF treatment system is not designed to maintain treatment efficiencies with the addition of storm water.

During our review of the OF sampling records, it was noted that each of the OF outfalls are being monitored only on Tuesdays and Thursdays. The discharges from the OF outfalls must be sampled when discharging and when wastewater is being applied two times a week, even if those two days of application do not fall on Tuesday or Thursday. Each outfall from the OF system may have different days that they are sampled depending on when wastewater is applied. If wastewater is applied at least two days a week, then each of those days the effluent should be sampled from the associated outfalls. In addition, the existing standard operating procedure (SOP) used to find spray irrigation piping leaks (the once in the morning dissolved oxygen sampling data from the OF discharges) is not frequent enough to notify personnel of leaks during nighttime application.

As noted during our last inspection, you have completed construction of your two new final settling tanks, post aeration in the final DAF tanks, upgrade of valves, 23 new VFD pumps, improved electrical systems and installed a new computer operation program at the WWTP. You will need to revise your NPDES permit renewal application to include these WWTP process changes at your facility.

On January 31, 2012, you submitted a plan of study conducted by Poggemeyer Design Group to evaluate the WWTP after the installation of the new settling tanks and the other upgrades ("develop a study that will evaluate both sludge treatment... along with treatment alternatives for further reducing NH<sub>3</sub> concentrations.") The study concluded that more time was needed to evaluate which infrastructure and operational changes will best accomplish the goals of the study. We noted in the study that the WWTP influent data, beverage plant effluent data, and lagoon supernatant data all had total phosphorous values reaching up to 5.7, 7.8 and 4.6 mg/l respectively. We also noted that the sampling events that occurred during this study did not include a storm event. The 24 hour composite phosphorous samples do not identify peak phosphorous values that may be associated with a particular process, operation or maintenance activity within the plant. Understanding the sources of high phosphorous in your facility is particularly important in order to reduce the loading of phosphorous to

Mr. Geoff Sans  
June 14, 2012  
Page Three

the Maumee River, since wastewater, which may contain these higher values for phosphorous, is currently discharged to both the overland flow spray irrigation system (OF) and WWTP. The WWTP is able to treat down to 1mg/l of phosphorous, while the OF treatment efficiency and loading to the Maumee River for this parameter is currently unknown. All higher concentration phosphorous wastewater should be directed to the wastewater treatment system that can most efficiently treat it. See discussion above.

Currently, Campbells is collecting and treating all the storm water on the site, including large parking lot areas. Due to rain events, which have very high flow volumes, Campbells has experienced more frequent storm water flooding of one of the utility tunnels that runs below grade. We have been told that if storm water builds up in this utility tunnel to the elevation of a high pressure stream line, an explosion would occur. Due to this concern, Campbells commissioned a storm water management study with Poggemeyer Design Consultants. This storm water study documents that large volumes of storm water is unnecessarily retained on site and provides engineered solutions to this issue. Some of the solutions involve using the abandoned WWTP aerated treatment lagoon for storage of storm water, which can then be bled at a slower rate into the WWTP for treatment. Another solution given is to redirect wastewater draining off parking lot areas and discharging to the WWTP to new retention storm water ponds, which would then discharge to the Maumee River.

Our research documents that the OF system is being relied on to treat this storm water instead of maximizing the WWTP. Given the lack of storage and effective treatment being utilized on site, Campbells should begin efforts immediately to redirect storm water to retention basins and off site discharges when watershed activities and pollutant sources allow. In addition, given the hazards present on site, Campbells should designate lagoon space for storage of storm water and/or wastewater during high flow storm events, thus, allowing complete uncompromised treatment at a time when volumes have decreased.

A review of your discharge monitoring reports indicated that you were violating your NPDES permit limits at outfall 001for CBOD5. Your current theory for these violations is that the lack of influent from the processing plant on weekends, which is high in nutrients, and the increased flow from the lagoon supernatant, which is high in ammonia, may be leading to these violations. During this Monday inspection, we observed an accumulation of dead snails in the diversion box after the trickling filters. As stated above, you are continuing to commission Poggemeyer Design Group to investigate hypotheses such as this one and propose engineered solutions. It is crucial that all further studies on your wastewater system include the effect onsite storm water redirection will have on the WWTP and the OF system. Both systems will need to meet phosphorous loading limits in the NPDES permit.

The Napoleon Biogas facility, which was scheduled to treat Campbell's biosolids using an anaerobic digester process, is currently renegotiating legal contracts concerning utilities. Napoleon Biogas is proposing to locate across the street from your facility and accept your sludge for treatment. Napoleon Biogas would also accept sludge from concentrated animal feed operations (CAFOs) and other food processing wastes from nearby facilities. The facility is proposing to discharge their wastewater supernate to your WWTP for treatment. You will need to document this new wastewater stream in your NPDES permit renewal application. You will also need to provide documentation that this waste stream will not increase your pollutant loadings to the Maumee River. If you will be increasing your loading to the Maumee River, you will need to submit a complete Antidegradation Addendum with a social and economic justification report. Since your facility is located on the Maumee River, we will need to schedule and hold a hearing for public comment, if you propose a loading increase. In addition, Ohio

EPA will need to receive a Permit to Install (PTI) application for the sewer line connecting the Campbell's WWTP to the Napoleon Biogas Facility.

The WWTP appeared to be operating well except for the changes in our understanding of your waste stream, which has again necessitated the need for additional treatment units (i.e. storage of storm water or storm water pumping facilities) and operational studies. The lack of data concerning the spray irrigation OF system should improve with the implementation of the efficiency and wastewater characterization study. A wastewater treatment log with better documentation regarding leaks and other operations and maintenance information should begin immediately.

Action Items:

- A. Immediately conduct specified sampling frequencies for the overland flow wastewater treatment system in accordance with the NPDES permit. (Sampling only on Tuesdays and Thursdays will not capture the two/week land application events at each outfall);
- B. Immediately maintain a wastewater operations log book for the overland flow spray irrigation system that records field outfall sampling data, leaks, field application data (e.g. rates, duration, field/outfall location) and operation and maintenance of the system;
- C. Immediately update Standard Operating Procedures (SOP's) of the overland flow system to include more frequent monitoring of the discharge characteristics at night and at times when detecting leaks into the ravines is visually impaired;
- D. As soon as possible, implement phases of the storm water management plan that can remove acceptable storm water off site to reduce the probability that storm water will back up into the utility line, which presents an explosion hazard;
- E. As soon as possible, designate lagoon space for storage of storm water and/or wastewater during high flow storm events; thus allowing complete uncompromised treatment at a time when volumes have decreased;
- F. Immediately maximize the amount of storm water, which has not been redirected off site or stored, received at the WWTP during storm events. (The WWTP should discharge higher volumes of treated water during high intensity rain events not lower than average flows.);
- G. Immediately identify which processes at Campbells generate higher concentrations of Phosphorous and direct these waste streams to the WWTP, to promote MOR efficient treatment of Phosphorous down to 1 mg/l;
- H. Continue to study the WWTP and consider how the treatment efficiencies of the WWTP will be affected by excess storm water and the availability of stored wastewater to bleed into the system on weekends, which was stored during storm events;
- I. As soon as possible, add documentation to your NPDES renewal permit application that includes the new wastewater stream of supernate from Napoleon Biogas and the storage of digested biomass in the storage lagoons;
- J. As soon as possible, submit a PTI for the sewer line connecting the Campbells WWTP to the Napoleon Biogas Facility. Document if this PTI will trigger antidegradation rules; and
- K. By December 15, 2012, submit to Ohio EPA a proposed schedule to accomplish items #1-4 on the first page of this letter and also shown below:
  1. Segregation of high strength wastewater streams within the manufacturing operations. (Higher phosphorous concentration wastewater should go to WWTP.)
  2. Improved diversion of storm water away from the overland flow system and the WWTP. (Implement storm water plan - removal projects/addition of pump station, sewer lines and utilization of existing storage.)

Mr. Geoff Sans  
June 14, 2012  
Page Five

3. Modifications to the existing monitoring stations including the installation of improved monitoring equipment. (Data necessary to calculate the loading of Phosphorous to the Maumee River required in next permit.)
4. Possible modifications to the system standard operating procedures to improve treatment of the wastewater throughout the irrigation season. (Sampling of the outfalls should be designed to minimize any potential of system leaks reaching waters of the state.)

Our completed inspection report is enclosed for your records. If you have any questions, please call Dana Martin-Hayden at (419) 373-3067.

Yours truly,



Elizabeth A. Wick, P.E.  
Environmental Engineer/Section Manager  
Division of Surface Water

DMH/jlm

Enclosure

ec: Dana Martin-Hayden, DSW, Ohio EPA  
Tracking



State of Ohio Environmental Protection Agency  
Northwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
21H00021	OH0003298	01/30/12	C	S	2

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Campbell Soup Supply Company 12-773 SR 110 Napoleon, Ohio 43545 Henry County	10:10am	January 1, 2004
	Exit Time	Permit Expiration Date
	4:15pm	July 31, 2008
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Mr. Geoff Sans, Manager – Services and Utilities Mr. Aaron McCoy – Lab Supervisor Mr. Mike Maringer – Operations, IFM	419-599-6637 419-439-0106 419-592-1010 ext 6374	
Name, Address and Title of Responsible Official	Phone Number	
Mr. Geoff Sans, Manager – Services and Utilities Campbell Soup Supply, Co. 12-773-SR 110 Napoleon, Ohio 43545	419-599-6631	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
M	Permit	M	Flow Measurement	N	Pretreatment
M	Records/Reports	S	Laboratory	N	Compliance Schedule
M	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
M	Facility Site Review	M	Sludge Storage/Disposal	N	Other
M	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)	
<p>Due to information Campbells provided in a December 19, 2011 letter to Ohio EPA, regarding an Overland Flow spray irrigation system (OF) leak and NPDES permit violation, a more in depth inquiry into flow records and available OF system data prompted Ohio EPA to send a letter to this facility on February 21, 2012. This letter outlined concerns for the OF system related to lack of monitoring data, lack of facility wastewater characterization data, standard operating procedures that don't identify piping leaks in a timely manner, lack of data needed to calculate loadings to stream, excessive application on fields during storm events (no storm water storage) and application rates that exceed reasonable flow loading/velocity limitations of the treatment system. Due to this new information, which is not reflected in permitting documents, the following areas were evaluated as marginal Permit, Records/Reports, Operations and Maintenance, Facility Site Review, Collection System, Flow Measurement and Sludge Storage/Disposal.</p> <p>Update your renewal NPDES permit application to reflect the new processes at the WWTP and add monitoring for the needed overland flow spray monitoring data and a schedule of compliance for removal of storm water from this treatment system.</p>	
Inspector	Reviewer
 Dana Martin-Hayden Division of Surface Water Northwest District Office Date: 6/13/12	 Thomas Poffenbarger, P.E. Compliance & Enforcement Supervisor Division of Surface Water Northwest District Office Date: 6/14/12

Sections E thru K: Complete on all inspections as appropriate  
 Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

**Section E: Permit Verification**

Inspection observations verify the permit

- (a) Correct name and mailing address of permittee ..... Y
- (b) Correct name and location of receiving waters..... Y
- (c) Product(s) and production rates conform with permit application (Industries)..... Y
- (d) Flows and loadings conform with NPDES permit..... Y
- (e) Treatment processes are as described in permit application... N
- (f) New treatment process(es) added since last inspection..... N
- (g) Notification given to State of new, different or increased discharges..... N/A
- (h) All discharges are permitted..... Y
- (i) Number and location of discharge points are as described in permit..... Y

Comments/Status:

c) some increase in production rate, needs to be updated in NPDES permit application, some changes in each sector of the plant  
 e) see f) in addition, the construction of a new sludge digestion facility next door to Campbells' may require additional PTI applications for the installation of a line from the facility into Campbell's property. The new facility plans to take Campbell's sludge, other food processing waste and manure from CAFOs. Digested solids will be returned to Campbells for storage and land application under the Campbells land application plan.

**Section F: Compliance**

- (a) Any significant violations since the last inspection..... Y
- (b) Permittee is taking actions to resolve violations..... Y
- (c) Permittee has a compliance schedule..... N
- (d) Compliance schedule contained in
- (e) Permittee is meeting compliance schedule..... Y

Comments/Status:

a) the facility constructed in 2010 (2) new settling tanks to reduce the amount of solids which collect in the old aeration lagoon, which is believed to be the source of ammonia, CBOD and other violations during the warmer months. The facility is having issues meeting the ammonia limits during the weekend and first part of the week. They believe it is because of lack of influent and nutrients on the weekends, when the facility is not operating. (Lagoons supplying higher concentrations of Ammonia WW to WWTP for treatment during weekends, when process down but stored WTP backwash water needs treating). Also, a power outage at the beverage plant during last spring created a heavy load at WWTP, which resulted in violations.

b) Due to the issues the facility is having meeting limits during and after low influent flow to the plant, a study commissioned with Poggemeyer Design Consultants is continuing to problem solve.

c) currently, the permittee does not have a compliance schedule in their permit, however, a schedule for addressing the excessive loading of combined ww and storm flow to the overland flow spray irrigation system is pending. Influent to OF is same as influent to WWTP except for the sewage. This combine flow of process ww and storm water to the OF lead to questions regarding Phosphorous concentrations, facility process sources and variability of both in the waste water. Cleaning a line use to happen on third shift. Now cleaning occurs at any point in the day when they need to change line to a different product.

New Final Clarifiers were operational 11/2010

**Section G: Operation & Maintenance**

**Treatment Works:**

Treatment facility properly operated and maintained

- (a) Standby power available.....generator  or dual feed ..... N
- (b) Adequate alarm system available for power or equipment failures.. Y
- (c) All treatment units in service other than backup units..... Y
- (d) Wastewater Treatment Works classification (OAC 3745-7)..... IV
- (e) Operator of Record holds unexpired license of class required by permit..... Y  
 Class: IV
- (f) Copy of certificate of Operator of Record displayed on-site..... Y
- (g) Minimum operator staffing requirements fulfilled (OAC 3745-7)... Y
- (h) Routine and preventative maintenance scheduled/performed... Y
- (i) Any major equipment breakdown since last inspection..... Y
- (j) Operation and maintenance manual provided and maintained..... Y
- (k) Any plant bypasses since last inspection..... N
- (l) Regulatory agency notified of bypasses..... N/A  
 On MORs  and/or Spill Hotline (1-800-282-9378)
- (m) Any hydraulic and/or organic overloads since last inspection..... Y

**Comments/Status:**

a) Previously we have been told that "when the plant and treatment system is down they store all waste water and don't discharge". However, if the plant were to lose power

Permit #: 2IH00021  
NPDES #: OH0003298

there would be no way to remove the storm water off site. Our requested schedule of compliance will need to address this issue. In addition, we have been told that when storm water backs up into the plant it can reach a high pressure stream pipe that would cause an explosion. If the solution to storm water removal on site involves pumping, a backup generator will be necessary.

- b) alarms, tied into fire alarms and evacuation alarms
- c) Mike Maringer – Class IV, Shifts 1 and 2 and they have two class III's and Aaron has now received his class II license.
- h) 2010 PM program work order request, which have been keyed to operations and maintenance manuals for each operation or process equipment.
- i) replaced bearing in the 2<sup>nd</sup> roughing tower.
- m) One high CBOD from plant outage

**Record Keeping:**

- (a) Log book provided..... Y
- (b) Format of log book (i.e. computer log, hard bound book)  

They have a log book for the operators and a separate log book, which has a sign off from the operator of record for the class IV operators that are contracted to work for the permittee.
--
- (c) Log book(s) kept onsite (in an area protected from weather)..... Y
- (d) Log book contains the following:
  - I. Identification of treatment works..... Y
  - II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7..... Y
  - III. Daily record of operation and maintenance activities (including preventative maintenance, repairs and request for repairs)..... Y
  - IV. Laboratory results (unless documented on bench sheets)... Y
  - V. Identification of person making log entries..... Y
- (d) Has the operator of record submitted written notification to the permittee, Ohio EPA and (if applicable) any local environmental agencies when a collection system overflow, treatment plant bypass or effluent limit violation has occurred..... Y

**Comments/Status**

d) Incorporate operator of record review of daily sampling results into the operators control room log book.

**Section G: Operation & Maintenance (con't)**

**Collection System:**

- (a) Percent combined system: %
- (b) Any collection system overflows since last inspection..... N/A  
(CSO  and/or SSO )

Permit # : 21H00021  
 NPDES #: OH0003298

- (c) Regulatory agency notified of overflows (SSOs)..... N/A
- (d) CSO O&M plan provided and implemented..... N/A
- (e) CSOs monitored and reported in accordance with permit..... N/A
- (f) Portable pumps used to relieve system..... Y
- (g) Lift station alarms provided and maintained..... Y
- (h) Are lift stations equipped with permanent standby power or equivalent..... N
- (i) Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection..... Y
- (j) Any complaints received since last inspection of basement flooding Y
- (k) Are any portions of the sewer system at or near capacity..... N/A

Comments/Status:

f) portable pumps available (many available on site from contractors)one diesel available to prevent storm water back flow into the plant utility tunnel, however, no specified back up pump available for this crucial job, since we were told an explosion would occur if storm water were to reach the high pressure stream line.

g) alarms at lift stations signal to front gate - guards have protocols in place to notify responsible personnel

i) Currently, the facility is collecting and treating all the storm water on the site, including large parking lot areas. Due to a 4.3" and 2-3" rain event, high flow volume, or (1" in 0.5 hours), high intensity, rain events are causing flooding of one of the utility tunnels which runs below grade (see f for dangerous consequence). The facility has commissioned a storm water management study with Poggemeyer Design Consultants. Some of the solutions involve using the abandoned WWTP aerated treatment lagoon for storage of storm water, which can then be bled at a slower rate into the WWTP for treatment. In addition, they plan to redirect wastewater draining off parking lot areas and discharging to the WWTP to new retention storm water ponds, which would then discharge to the Maumee River. They have completed one phase and they need more \$ allocated to complete the next phases. They first plan to construct a retention pond for the storm water at the beverage plant (since stored product was destroyed by flooding during a rain event) – The roof is an area of 55 acres and contributes a large volume of the storm water they are now trying to treat at the WWTP. There is extensive collection system work that would need to be done to remove the storm water from the existing system into some of the phases of the storm water plan mentioned above.

**Section H: Sludge Management**

- (a) Sludge management plan (SMP)  
 Submitted date: 3/12/02 Approval #: 03-15258 Not submitted  N/A
- (b) Sludge management plan current..... Y
- (c) Sludge adequately disposed..... Y  
 (Method: )
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... Y

Permit # : 21H00021  
NPDES #: OH0003298

(Name: )

- (f) Has amount of sludge generated changed significantly since last inspection..... N
- (g) Adequate sludge storage provided at plant..... Y
- (h) Land application sites monitored and inspected per SMP..... N/E
- (i) Records kept in accordance with State and Federal law..... N/E
- (j) Any complaints received in last year regarding sludge..... N
- (k) Is sludge adequately processed (digestion, pathogen control)..... Y

**Comments/Status:**

b) Plans to pipe the biosolids from this facility across the street to the proposed Napoleon Biogas Facility, on the south side of the property, are on hold since deals fell through with Amp Ohio to buy the electricity they were making. They will be back on track once legal documents can be drawn up for Campbells to buy back the electricity from Napoleon Biogas and the solar field also across the street to the south.

g) During the inspection, we were told that the WWTP can handle all storm water flows. However, the WWTP has a design flow of 10 MGD and the effluent data does not indicate that the WWTP is being stressed to take as much storm water as possible during large storm events. Instead it is being discharged to the OF system during storm water events. The OF system is not designed to handle storm water events and maintain treatment velocities. If the plant is unable to handle quick transitions from average daily flow to high flow storm water events than the facility would need to either redirect acceptable storm water to retention basins for discharge to the Maumee River or to redirect the storm water to a retention basin until the WW treatment systems, WWTP or OF, can manage the flow and not violate their NPDES permit. Examination of inspection logs indicate that lower dissolved oxygen readings were experienced at the outfalls from the OF system during or after these large storm events while the effluent rates from the WWTP did not increase significantly. No storage of storm water is currently available besides the EQ tank prior to the OF system.

h) Land Application of the Biosolids waste stream was not evaluated during this inspection.



Permit # : 2IH00021  
NPDES #: OH0003298

- Sample Handling and Preservation
- Interferences
- Apparatus and Materials
- Reagents
- Maintenance
- Corrective Action
- Reference (Parent Method)

Note: SOP's are required per Standard Methods 1020A and states "Standard operating procedures are to be used in the laboratory in sufficient detail that a competent analyst unfamiliar with the method can conduct a reliable review and/or obtain acceptable results."

- (c) EPA approved analytical testing procedures used for all analysis (40 CFR 136.3, see GLC page 8). Y
- (d) If alternate analytical procedures are used, proper approval has been obtained..... N/A
- (e) Analyses being performed more frequently than required by permit. Y
- (f) If (e) is yes, are results in permittee's self-monitoring report..... N

*Quality Control/Quality Assurance*

- (g) Quality assurance manual provided and maintained..... Y
- (h) Satisfactory calibration and maintenance of instruments/equipment. N  
(see score from GLC page 7)
- (i) Results of latest USEPA quality assurance performance sampling program:  Satisfactory  Marginal  Unsatisfactory  
Date:
- (j) Commercial laboratory used..... Y  
Parameters analyzed by commercial lab:

Lab name: Masi, Alloway, Brookside

**Comments/Status:**

b) Discovered issues with sampling frequency in relationship to the days ww is being applied to the field for each of the OF station numbers. Each of the OF outfalls is being monitored only on Tuesdays and Thursdays. The discharges from the OF outfalls should be sampled when discharging and when ww is being applied 2 times a week, even if those 2 days of application do not fall on Tuesday or Thursday. Each outfall discharging from the OF system may have different days they are sampled depending on when ww is applied. If ww is applied at least two days a week than each of those days should be sampled.

Given the existing standard operating procedure (SOP) used to find spray irrigation piping leaks, this once in the morning dissolved oxygen sampling data from the OF discharges is not frequent enough to notify personnel of leaks during nighttime application.

-They complete Dissolved Oxygen, Phosphorous, alkalinities, volatile solids, ammonia, TSS, COD and CBOD(IFM lab) to assist with process control.

-added Phosphorous in August 2011 to the list of in house sampling for process control. (They use to do total coliform in house and now they have IFM run them)

Permit # : 2IH00021  
 NPDES #: OH0003298

-Masi does the CBOD, TSS, P, Ammonia, Alloway – metals, CN, Brookside – Sludge

**Section J: Effluent/Receiving Water Observations**

Outfall Number	Outfall sign in place?	Oil sheen	Grease	Turbidity	Foam	Solids	Color	Other
001	NA	N	N	Slight	Y	N	Very slight light brown	No odor

**Comments/Status:**

**Section K: Multimedia Observations**

- (a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
- (b) Do you notice staining or discoloration of soils, pavement or floors.. N
- (c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N
- (d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
- (e) Do you notice any unusual odors or strong chemical smells..... N
- (f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N

If any of the above are observed, ask the following questions:

- (1) What is the cause of the condition?
- (2) Is the observed condition or source a waste product?
- (3) Where is the suspected contaminant normally disposed?
- (4) Is this disposal permitted?
- (5) How long has the condition existed and when did it begin?

**Comments/Status:**

## F. GUIDE - VISUAL OBSERVATION - UNIT PROCESS

158-R0035

RATING CODES: S = Satisfactory; U = Unsatisfactory; M = Marginal; IN = In Operation; OUT = Out of Operation

CONDITION OR APPEARANCE		RATING	COMMENTS
General	Grounds	S	
	Buildings	S	
	Potable Water Supply Protection	S	Company has their own and operated water treatment plant
	Safety Features	S	
	Bypasses	---	
	Stormwater Overflows	---	
	Alternate Power Source	---	WWTP shuts down during power outage
Preliminary	Maintenance of Collection Systems	S	
	Pump Station	IN	3 Influent Pumps
	Ventilation	---	
	Bar Screen	IN	1 Unit
	Disposal of Screenings	S	Landfilled
	Comminutor	---	
	Grit Chamber	IN	1 Unit
	Disposal of Grit	S	Landfilled
Primary	Settling Tanks		
	Scum Removal		
	Sludge Removal	IN	To Digester
	Effluent		
	Primary DAF's	IN	3 units, #1, #2, & #3
Sludge Disposal	Digesters	IN	2 Anaerobic; 1 Sludge Storage Tank
	Temperature and pH	S	
	Gas Production	IN	Study being done for the use of methane gas in the facility
	Heating Equipment	IN	
	Sludge Pumps	IN	6 into digester; 3 out to sludge holding tank or 5 sludge storage lagoons
	Drying Beds		
	Vacuum Filter		
	Disposal of Sludge	S	Land Apply; Lagoons have storage for 1 year
	Sludge Holding Tank	IN	1 unit
Other	Flow Meter and Recorder	IN	
	Records		
	Lab Controls	S	
	Chemical Treatment	IN	Polymer 71303 feed in the final DAF tanks, installed on 12/12/2005
	Divider box after trickling filters	IN	Monday(after weekend) see snails slough off from food starved trickling filters
Secondary-Tertiary List items as	Roughing Towers	IN	2 units
	Settling Tanks	IN	4 units
	Trickling Filters	IN	2 primary units and 2 secondary units
	Aerated Lagoon	IN	May be used in future for storm water
	Final DAF's	IN	2 units #2 and #5
	Spray Irrigation	OUT	Used in summer during peak flow months for vegetable wash water and some process water
Disinfection	Effluent	S	Clear but foamy after aeration
	Disinfection System	IN	Chlorine Gas
	Effective Dosage	S	
	Contact Time	S	
	Contact Tank	IN	
	Dechlorination	IN	Sodium bisulfite