



State of Ohio Environmental Protection Agency

**Southwest District Office**

401 E. Fifth St.  
Dayton, Ohio 45402

TELE: (937) 285-6357 FAX: (937) 285-6249  
[www.epa.state.oh.us](http://www.epa.state.oh.us)

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director.

July 21, 2008

RE: Kerry Proteins and Nutritionals  
Pretreatment Inspection and Notice of Violation

Mr. Larry Hensler  
Kerry Proteins and Nutritionals  
400 Hazel Street  
Covington, OH 45318

Dear Mr. Hensler:

*June 25, 2008 MW*

On ~~May 15, 2007~~ I met with you to conduct a pretreatment inspection of your facility. A compliance review since my previous inspection has revealed that there have been no reported violations of Kerry's permit limits for Oil and Grease or pH. Monitoring data was only available through December 2007 as the report due July 20<sup>th</sup> for the period of January through June 2008 has not been received. Since Ohio EPA is eliminating its SWIMware system, it is necessary for you to establish an account with Ohio EPA's current electronic Discharge Monitoring Report (e-DMR) system as soon as possible. Information about establishing e-DMR accounts can be found at: <http://www.epa.state.oh.us/dsw/swims/eDMR/eDMR.html>.

**Effluent Monitoring**

There were two significant issues regarding your self-monitoring that requires your immediate attention. The first is that composite sampling is occurring for only approximately six hours whereas your discharge occurs over twenty-four hours. You must immediately begin collecting 24-hour composite samples for those parameters specified by your permit. This is a significant deficiency that must be corrected.

The second is that the composite sampling container is not cleaned between sampling events. To ensure that there isn't cross-contamination between sampling events, it is common practice to clean sampling equipment with cleaners such as LiquiNox<sup>®</sup> and I encourage you to adopt a standard practice that will ensure each sampling event is reflective of only the discharge during the sampling period.

**Updated Process Flow Diagram**

During our discussions, I expressed a desire for the *EPA Water Flow* diagram you provided in response to my previous inspection to be amended to provide more detail about the processes that generate wastewater. For instance, knowing that a CIP involves a pre-rinse, a sodium hydroxide wash, a rinse, a phosphoric acid cleaner, a rinse and a sanitizer would provide a better understanding of the process. Approximate volumes of these CIP stages along with the approximate frequency of events would be ideal. I ask that you also denote any floor washing activities that generate waste water. Please provide this update by August 25<sup>th</sup>.



Mr. Larry Hensler  
July 21, 2008  
Page 2

### **Phosphorous**

Recently, I've heard concern from the Village of Covington regarding their ability to comply with discharge limits for phosphorous that are part of a compliance schedule contained in their NPDES permit. Data they have shared revealed that Kerry's discharge may contain significant amounts of phosphorous that could threaten their ability to comply by contributing loading (mass) beyond the capability of their wastewater treatment plant (WWTP) to remove it. With your facility's flow now over 70,000 gpd, the potential loading Kerry can have on the Village's WWTP becomes a significant concern. Since they could be faced with significant expenses associated with upgrading their WWTP to meet their limits, I would like to determine what sources exist at Kerry and determine if they can be minimized. At the time of our meeting you provided me information about a phosphoric acid-based cleaner you use. I request that you conduct an investigation to determine all sources of phosphorous at your facility and to quantify the amount and frequency of use. It would also be helpful if you would conduct phosphorous monitoring to properly characterize the amount of phosphorous in your discharge. Please let me know if you are agreeable to doing this monitoring and, if so, how you would like to conduct the special monitoring event. Daily monitoring for a two-week period would seem to allow for a good characterization, but I will wait for you to provide your initial findings and proposal before deciding how to proceed. Please submit a summary of the findings from your investigation into phosphorous sources by September 1, 2008.

### **Calibration of DAF pH Meter**

I was told that the pH probe on the DAF equalization tank is not calibrated and instead is only checked against a bench-top meter that is kept calibrated. I ask that you find out what frequency the manufacturer of the pH meter recommends their system should be calibrated and adopt it into to your maintenance program.

### **Water Purification**

I continue to encourage Kerry to reroute wastewater generated by its water treatment system around the wastewater pretreatment system. Wastewater from the water treatment system is unaffected by the DAF equipment and removing it from treatment would likely enhance the performance DAF and would provide additional capacity for treating process wastewater that now appears to be an issue.

Please provide a written response to this letter by August 4<sup>th</sup> indicating your intentions to address the issues I have raised including dates for any necessary submittals. If you have any questions concerning this letter or the inspection forms, please call me at (937) 285-6095.

Sincerely,



Matt Walbridge  
Pretreatment Coordinator  
Division of Surface Water

ENCLOSURE

CC: Julia Zhang - Ohio EPA / Central Office / DSW  
Ray Kimmel - Village of Covington





Ohio Environmental Protection Agency

# PRETREATMENT INSPECTION REPORT

PERMIT NUMBER  
**1DP00011\*CP**

FACILITY NUMBER  
**OHP000090**

DATE CONDUCTED  
**June 25, 2008**

INSPECTION TYPE  
**I**

INSPECTOR  
**S**

FACILITY TYPE  
**2**

TIME IN  
**1300**

TIME OUT  
**1520**

## GENERAL INFORMATION

NAME AND LOCATION OF FACILITY

**Kerry Proteins and Nutritionals  
400 Hazel Street  
Covington, OH 45318**

POTW RECEIVING DISCHARGE

**Village of Covington WWTP**

MAILING ADDRESS OF FACILITY

**Kerry Proteins and Nutritionals  
400 Hazel Street  
Covington, OH 45318**

CONTACT (NAME/TITLE/PHONE)

**Mr. Larry Hensler / Plant Manager / (937) 473-2040 ext. 226**

## FACILITY EVALUATION (See Inspection letter for a more complete description of findings)

(S = Satisfactory, M = Marginal, U = Unsatisfactory, NA = Not Applicable)

|          |                                 |           |                                  |
|----------|---------------------------------|-----------|----------------------------------|
| <b>U</b> | Sampling Procedures             | <b>NA</b> | Compliance schedule requirements |
| <b>M</b> | Reporting                       | <b>NA</b> | Notification                     |
| <b>S</b> | Compliance with effluent limits | -         | Other -                          |

Name and Signature of Inspector(s)

**Matt Walbridge**

Agency / Office / Telephone

**Ohio EPA / Southwest District Office / (937) 285-6095**

Date

**7-21-08**

Signature of Reviewer

**Mary G. Bur**

**Ohio EPA / Southwest District Office / (937) 285-6034**

Date

**7/22/08**



## INDUSTRIAL USER INSPECTION CHECKLIST

Facility: **Kerry Proteins and Nutritionals**

Date of inspection: **June 25, 2008**

OH Number of receiving POTW: **OH0020761**

IDP Number: **1DP00011\*CP**

Facility Representative: **Larry Hensler, Jim Homan**

Inspector(s): **Matt Walbridge**

---

### COMPLIANCE

---

1. Date of last pretreatment inspection: **May 15, 2007**
  
2. Has the facility been in compliance with its permit limits since the last inspection? Y / N  
If no, explain:  
  

**Although the last monitoring data available is for December 2007.**
  
3. Is the facility in compliance with all other requirements? Y / N / NA  
Sampling procedures Y / N / NA  
Reporting (late reporting, failure to report, etc) Y / N / NA  
Compliance schedules Y / N / NA  
Submitted BMR and 90 day compliance reports Y / N / NA  
Any other requirements Y / N / NA  
  
If any of the above five answers is no, explain:
  
4. Was the facility required to perform any actions as a result of the last inspection? Y / N  
Explain any unresolved actions:  
  

**None.**

---

### FACILITY OPERATIONAL CHARACTERISTICS

---

5. Number of Employees: **~60**
6. Shifts/Day: **2 (14 on day shift, 9 on night shift in production)**
7. Production Days/Year: **355**
8. Hours/shift: **12**
  
9. Any production changes since the last inspection? Y / N  
If yes, explain:  
  

**The facility has been operating at capacity since June '08 (18 to 20 million pounds of production).**
  
10. General facility description and operations:  
  

**Processes include mixing (formulation), homogenization, pasteurization and spray drying of food ingredients including infant formula base and finished infant formula.**



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

FACILITY OPERATIONAL CHARACTERISTICS - CONTINUED

11. Any change in materials used in production since the last inspection? Y/N  
If yes, explain:

***Predominant ingredients are: Four-blend vegetable oil, casenates (dairy proteins), soy protein isolates and reduced sodium corn syrup.***

12. Any expansion or production increase expected within the next year? Y/N  
If yes, explain:

---

WASTEWATER TREATMENT

---

13. Provide a schematic diagram and description of the wastewater treatment system:

***Daily wash down water and wastewater from CIPs flow to a sump and then on to equalization tanks, flocculation tank and dissolved air flotation system.***

***See attached diagram.***

14. Was a PTI issued for the treatment system? Y/N

15. Were there any modifications to the treatment system since the previous inspection? Y/N

If yes, was a PTI obtained? N.A. Y/N

PTI Number: Date:

16. What is the treatment mode of operation? Batch / Continuous / Combination

If batch, list the frequency and duration:

17. Who is responsible for operating the treatment system? ***Mr. Jim Homan***

18. How often is the treatment system checked?

***Approximately three times per shift (Don Griezzy, Dave Sipes and Kent Mowry).***

***The pretreatment system is automated with seven monitors.***



11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

**WASTEWATER TREATMENT CONTINUED**

19. Is there an alarm system for the system? Y / N  
Explain:

***There is an alarm that is activated if the flow rate is exceeded and many alarms (such as pH) are on the new treatment system.***

20. Is there an operations and maintenance manual? Y / N

21. Is an inventory of critical spare parts maintained? Y / N  
If yes, list:

***Spare pumps for EQ and DAF units, injection pumps, and air filter for blowers***

22. Are there any bypasses in the system? Y / N  
If yes, describe the location:

***All process waste waters only go to the treatment system. Floor drains in the treatment building all drain to the sump that feeds the treatment system.***

Have bypasses occurred since the last inspection? Y / N

Was the POTW notified? N.A. Y / N

23. Are residuals or sludges generated? Y / N

Method of disposal:

***Hauled to lagoon treatment system operated by Mike's Sanitation.***

Frequency and amount of disposal:

***The treatment system generates approximately 2,500 gallons of wastewater at 3 to 5 % solids every week.***

Name of hauler/landfill/disposal facility:

***Mike's Sanitation***

Is any sludge generated subject to RCRA regulations? Y / N

If land applying sludge, is there a sludge management plan? N.A. Y / N



**PROCESS AND WASTEWATER INFORMATION**

24. List all processes generating wastewater, current wastewater flows, and where applicable, production rates as well as values on which the permit limits are based:

| REGULATED PROCESS                                   | SAMPLE LOCATION                    | WASTEWATER FLOW (GPD)   |                          | PRODUCTION DATA (SPECIFY UNITS)   |         |
|---|------------------------------------|-------------------------|--------------------------|---|---------|
|   |                                    | Permit                  | Current                  | Permit  | Current |
| Clean-in-Place (1), general cleaning and washdowns. | Effluent from DAF Treatment system | 50 gpm<br>(72,000 gpd)* | ~ 60,000                 | NA  | NA      |
|   |                                    |                         |                          |   |         |
|   |                                    |                         |                          |   |         |
|   |                                    |                         |                          |   |         |
|   |                                    |                         |                          |   |         |
|   |                                    |                         |                          |   |         |
| <b>Total Regulated Process Flow</b>                 |                                    | 50 gpm<br>(72,000 gpd)* | ~ 60,000                 | * They are at their system's design flow. Flow is not limited by the permit.<br><br>(1) Individual contributions from these sources are not known at this time. The flow value is only an estimated guess.<br><br>Wastewater from these sources discharge through the pretreatment system. It would be ideal if they were able to be routed around the pretreatment system. |         |
| Noncontact Cooling                                  |                                    |                         |                          |   |         |
| Boiler Condensate                                   |                                    |                         |                          |   |         |
| Reverse Osmosis                                     |                                    |                         | (1)                      |   |         |
| Demineralizer Regeneration                          |                                    |                         |                          |   |         |
| Softener Backwash                                   |                                    |                         |                          |   |         |
| Filter Backwash                                     |                                    |                         | (1)                      |   |         |
| Compressor Condensate                               |                                    |                         |                          |   |         |
| Water Softener Regeneration                         |                                    |                         | (1)                      |   |         |
| <b>Total of Dilute Flows</b>                        |                                    |                         | (~10,000) <sup>(1)</sup> |   |         |
| Unregulated Flows                                   |                                    |                         |                          |   |         |
| Sanitary  |                                    |                         |                          |   |         |
| <b>TOTAL FLOW</b>                                   |                                    | 50 gpm<br>(72,000 gpd)* | ~ 70,000                 |   |         |

25. For the above flows not discharged to the POTW, list point of discharge and permit (if any).

*(All industrial wastewaters are discharged to the POTW)*



**SELF MONITORING**

26. Sample location(s) described in the facility's permit:

***"The sampling point shall be the effluent from the dissolved air flotation (DAF) system at the flow monitoring manhole located just outside the pretreatment building. Samples for Oil and Grease (reporting code 00050) can alternately be collected at the overflow weir of the DAF."***

27. Is the facility sampling at the location(s) described in the permit? Y / ~~N~~  
 If no, describe the actual location:

28. Is the location(s) where the facility is sampling representative? Y / ~~N~~  
 If no, indicate a representative location:

29. Is the flow measured or estimated? Measured / Estimated

***They use the DAF flow meter to record and report discharge flow.***

If measured, how often is the meter calibrated?

***Need to check procedure and frequency.***

If estimated, describe method of estimation:

30. Is pH monitored continuously? ~~Y~~ / N

***There is a pH meter on the DAF feed tank that is controlled to (8.5 to 9.0)***

If yes, how often is the meter calibrated?

***Need to calibrate it instead of just checking it against another calibrated probe.***

31. Does the facility collect its own samples? Y / ~~N~~  
 If no, specify the sample collector:

***Kerry delivers samples to Brookside. pH is field-measured by Kerry.***

32. Are appropriate sampling procedures followed? Y / ~~N~~  
 Monitoring frequencies Y / ~~N~~  
 Sample collection (grab for pH, O&G, CN, phenols, VOCs) Y / ~~N~~  
 Flow proportioned samples \* ~~Y~~ / N  
 Proper preservation techniques Y / ~~N~~  
 Sample holding times Y / ~~N~~  
 Chain-of-custody forms Y / ~~N~~

***\* Samples are time-proportional (once every 20 minutes) which is acceptable since the flow rate is fairly constant.***

33. Are samples analyzed in accordance with 40 CFR 136? Y / ~~N~~

34. Laboratory conducting analyses:

***Brookside Laboratories out of New Knoxville***



11  
12  
13  
14  
15

---

**TOXICS MANAGEMENT**

---

35. Are any listed toxic organics used in the facility? Y/N  
If yes, identify organics:
36. Does the facility have a current toxic organic management plan(TOMP)? Y/N  
If yes, is it being implemented? N.A. Y/N
37. Has the facility had any uncontrolled releases or spills to the POTW since the previous inspection? If yes, please explain:
38. Does the facility need a spill prevention plan or slug discharge control plan? Y/N  
*(There is good flow equalization.)*  
If yes, does the facility have a written plan? N.A. Y/N
39. Identify any potential slug load or spill areas:

---

**REQUIRED FOLLOW-UP ACTIONS**

---

*See inspection letter.*

---

**General Observations**

---

1. *They really need to look into getting water from the regeneration of resins used for softening, RO reject and activated carbon filter backwash treatment wastewater out of the pretreatment system (but still discharging to the sanitary sewer).*
2. *The production facility is almost always conducting CIP operations*
3. *Production is currently limited by the capacity of the dryer which is ~20 million pounds a year.*
4. *Only one of the two EQ tanks is really used (and when it is, only ¼ to ¾ of its capacity is used).*



11