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

April 19, 2013

Re: Vinton County
Austin Powder Company
Compliance Inspection
NPDES Permit 0IF00003*ED
Correspondence (IWW)

Mr. Gerald Stewart
Austin Powder Company
P.O. Box 317
McArthur, Ohio 45651

Dear Mr. Stewart:

On March 21, 2013, I conducted a compliance inspection of the wastewater treatment systems serving Austin Powder Company. Vicki German of the Division of Hazardous Waste Management accompanied me on the inspection. You and Mark Walker accompanied me and represented Austin Powder during the inspection. The purpose of the inspection was to determine if the wastewater treatment systems were meeting the terms and conditions set forth in the NPDES permit. Results of the inspection are summarized below.

At the time of the inspection, the sewage treatment plants serving the A-Line Change House (outfall 003), Dope House (outfall 004), The Fuse Line (outfall 005), and Emulsion Plant (outfall 006) sanitary wastewater aeration basins appeared light in color. Sludge from the sludge return was clear. The weirs are in various stages of disrepair or have been replaced with below standard parts. Some of the sludge return lines have been repaired with PVC pipe, these originally had steel. Many of the grates are rusting and need repaired. The trash trap lids are corroding on almost all plants and need to be replaced, the trash traps should be pumped and have someone check to see if they also need to be replaced. The sand filters are clean and effluent from these plants was clear. The sanitary treatment plants have an average daily flow that is lower than their design flow. It appears that some of the concrete is degrading in all plant. The plants have been in operation since the mid to late 1970s; typically package plants last 20-25 years. The plants are approaching the end of their expected design life. They need to be replaced.

The new booster line (outfall 010) building is online. It serves the two new booster buildings, the unloading area, and the new shower house. The booster line buildings and the unloading area all require a wet process. The water is collected in the floor drain, flows to a catch tank, and is filtered through several filters, then through a carbon filter form which the water is returned to a tank that reused in the process. This plant is in great shape.

The Bangalore WWTP (outfall 001) had clear effluent. However, it continues to have the most violations. This is likely due that this plant receives low sewage input, and three different industrial wastewater processes. Though this water is pretreated through various filters before being discharged to the Bangalore plant, it is likely the lack of the right carbon nitrogen ratio will plague this plant. Before I thought the reddish color of the sludge was from perhaps the well water or industrial process. Now I think it is because the concrete is corroding badly in the plant and the rebar in the concrete is degrading. The original plan was to phase out this facility, however since it seems the plan is to still keep it in operation, the plant should be replaced on a higher priority than the other facilities.

I am in the process of renewing the facilities permit, in this permit cycle we will be switching from the fecal coliform standard to the e.coli limits. With the exception of the new plant, the plants may not be able to accommodate these standards without additional upgrades to the plants. Please work with Mark to determine what additional treatment options may be needed.

Please feel free to contact me at (740) 380-5266.

Sincerely,

Cynthia Yandrich
District Representative
Division of Surface Water

CY/dh

Enclosure

c: Vicky German, Ohio EPA, DHWM, SEDO

State of Ohio Environmental Protection Agency
Southeast District Office

Semi-Public NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	**NPDES #**	**Month/Day/Year**	**Inspection Type**	**Inspector**	**Facility Type**
0IF00003*ED	OH0006173	March 21, 2013	C	S	2

Section B: Facility Data		
Name and Location of Facility Inspected	**Entry Time**	**Permit Effective Date**
Austin Powder Company, Red Diamond Plant 430 Powder Plant Road, P.O. Box 317 McArthur, Ohio 45651	9:08 a.m.	March 12, 2008
	Exit Time	**Permit Expiration Date**
	1:30 p.m.	March 31, 2013
Name(s) and Title(s) of On-Site Representatives	**Phone Number(s)**	
Gerald Stewart, Environmental Manager	(740) 596-5286	
Name(s), Address and Title(s) of Operator of Record	**Phone Number(s)**	
Mark Walker, Operator	(740) 596-5286	
Name, Address, and Title of Responsible Official	**Phone Number**	
Gerald Stewart, Environmental Manager P.O. Box 317 McArthur, Ohio 45651	(740) 596-5286	

Section D: Summary of Findings (attach additional sheets if necessary)

All but the new sanitary plants, are in need of significant repair or replacement.

Inspector	Reviewer
Cynthia Yandrich 4-19-13	Jennifer M. Witte 4/19/13
Cynthia Yandrich Date Division of Surface Water Southeast District Office	**Jennifer M. Witte** Date Compliance & Enforcement Supervisor Division of Surface Water Southeast District Office

Average Daily Design Flow:	**001: 2500; 003: 2500; 004: 3500; 005: 2500; 006: 2500; 007: stormwater; 010: 10,000 Gallons/Day**
Plant Serves:	**Offices; Explosion Assembling Plants**
Average Daily Flow:	**384; 420; 720; 400; 400; 65,000; 715 Gallons/Day**
(Period of Review):	**(1/1/11 - 3/1/13)**
Method of flow monitoring:	varies, water use records, pump run time, and ultrasonic inline meter
Type of alarms for plant:	audio/visual

Pretreatment

Type of Pretreatment: **Trash Trap**
Does the Trash Trap need pumped: **No**
Maintenance of pretreatment components is: **Good**

Comments/Status:

Secondary Treatment (Aeration)

Color of sludge: **Light Brown**
Quality of sludge: **Thin**
Foam: **None Present**
Odor: **No objectionable odor present**

	Yes	No		Yes	No
Aeration is taking place	☒	☐	Plant is septic	☐	☒
Blowers are operating	☒	☐	Blowers are on a timer	☒	☐
Skimmers are operating	☒	☐	Plant is flooded	☐	☒
Diffusers are operating	☒	☐	Grating is present	☒	☐
Sludge return is operating	☒	☐			

Maintenance of aerating equipment is: **Excellent**

Comments/Status:

Secondary Treatment (Settling)

Clarity: **Clear**
Condition of Weir: **Excessive Algae**
Weir is level: **Yes**
Effluent in weir: **Clear**
Clarifier walls need scraped: **No**

Overall maintenance of settling components is: **Good**

Comments/Status:

The weirs have been replaced and need to be replaced again.

Tertiary Treatment

	Yes	No		Yes	No
Surface sand filters:	☒	☐		☐	☐
Distribution box operating	☒	☐	Beds alternated	☒	☐
Are filters ponding/flooding	☐	☒	Beds raked	☒	☐
Sand filters overgrown	☐	☒	Chlorination present	☐	☒
UV present	☐	☒	Dechlorination present	☐	☒

Overall maintenance of settling components is: **Excellent**

Comments/Status:

They consistently meet fecals despite not having chlorination.

Sludge Handling/Storage Disposal

Hauler name:
Disposal site:
Sludge wasted from:
How often is sludge wasted:
Sludge drying beds: **No** Sludge holding tank: **No**

Overall maintenance of settling components is: **Excellent**

Comments/Status:

No sludge removed most years.

Record Keeping/Operator of Record

(a)	Wastewater Treatment Works classification (OAC 3745-7)	A
(b)	Operator of Record holds unexpired license of class required by Permit	Y
(c)	Copy of certificate of Operator of Record displayed on-site	Y
(d)	Has the Operator of Record submitted an ORC Notification form	Y
(e)	Minimum operator staffing requirements fulfilled (OAC 3745-7)	Y
(f)	If a Staffing Reduction plan has been approved, are the stipulations of the plan being met	N/A
(g)	Operator of Record log book provided	Y
(h)	Format of log book (e.g. computer log, hard bound book)	
(i)	Log book kept onsite (in an area protected from weather)	Y
(j)	Log book contains the following:	
	I. Identification of treatment works	N
	II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7	Y
	III. Daily record of operator and maintenance activities (including preventative maintenance, repairs and request for repairs, process control test results, etc.)	Y
	IV. Laboratory results (unless documented on bench sheets)	Y
	V. Identification of person making entries	N/E
(k)	Has the Operator of Record submitted written notifications 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	N/A

Comments/Status:

Plant Discharge

Discharge point is a:	**Ditch**
Name of discharge point:	**Various**
Discharge is visible:	**No**
Quality of Effluent:	**Other**

Comments/Status:

Various discharges, only the new 010 had a dribble coming out and it was clear. All other sanitary discharges were not discharging at the time of the inspection. Stormwater pond needs a better way of evaluating flow.

Effluent Limit Violations

Period of Review:

7D = Weekly; 30D = Monthly; 1D = Daily; Conc. = Concentration (mg/l); Qty. = Quantity (Kg/Day)

Month Reported	Parameter	Frequency/Units	Limit	Value
March 2012	CBOD 5 day	1D Conc	8	14.7
March 2012	CBOD 5 day	1D Qty	0.072	.07289
April 2012	Chemical Oxygen Demand	30D Conc	31	31.525
April 2012	CBOD 5 day	30D Conc	10	13.
April 2012	Chemical Oxygen Demand	30D Conc	31	31.9