

CITY OF BELMONT

PRETREATMENT

ANNUAL

REPORT

2017



## City of Belmont Pretreatment Unit

PO Box 431 \* Belmont, NC 28012 \* [www.cityofbelmont.org](http://www.cityofbelmont.org)  
Telephone 704-825-3791 \* Fax 704-825-6505

January 18, 2018

Vivien Zhong  
NCDENR  
1617 Mail Service Center  
Raleigh, NC 27699-1601

Dear Vivien,

Enclosed is the original and one copy of the Annual PAR report for the City of Belmont Wastewater Treatment Plant for the year 2017.

If you have any questions, please feel free to contact me at 704-825-3791.

Sincerely,

Daniel Perry, MACC  
City of Belmont  
Pretreatment Analyst

# CITY OF BELMONT

## 2017 PAR

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REPORTING PERIOD: January 1, 2017 TO December 31, 2017

CITY OF BELMONT  
PRETREATMENT ANNUAL REPORT  
2017

POTW NAME: CITY OF BELMONT WWTP  
REPORT DATE: January 18, 2018  
PERIOD COVERING: January 1, 2017 TO December 31, 2017

For questions concerning any information contained in this report, please contact the City of Belmont WWTP at P.O. Box 431, Belmont, NC 28012 and/or at 704-825-3791.

**The information in this report has been reviewed thoroughly and I find it to be true, accurate, and complete to the best of my knowledge. All parties responsible for any and all portions of this report are well aware of the significant penalties for submitting false information.**

Sincerely,

Daniel Perry, MACC  
City of Belmont  
Pretreatment Analyst

CITY OF BELMONT

PAR

2017

COMPLIANCE SUMMARY AND WASTE REDUCTION

JANUARY 1, 2017 TO DECEMBER 31, 2017

SPARTAN DYERS #0009

-September 27, 2017 — temperature over permit limit - they received a warning letter, per their permit conditions.

Spartan Dyers had 3 NOV'S issued in 2017 (NO FINES ISSUED):

-July 19 - 20, 2017—temperature over permit limit

-July 21 – August 7, 2016—flow, temperature, pH not being continuously recorded

-August 23 – 24, 30 – September 1, 2017 —flow over permit limit

This industry has been very cooperative with the city in resolving all issues. During the Summer of 2017, there were power outages with Duke Energy that effected this industry. Since then they have taken necessary actions to ensure they operate within their permit limits. This includes installing a generator, having their meters calibrated monthly, having preventative maintenance on their equipment such as aerators, flow meters, etc.

Waste Reduction:

Codes W13, W36

Our pretreatment program is currently working with only one SIU for the year 2017. All SIU's will continue to follow our program and improve on all aspects of compliance.

Sincerely,

Daniel Perry, MACC  
City of Belmont  
Pretreatment Analyst

## Chapter 9, PAR Guidance Pretreatment Performance Summary (PPS)

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1.	Pretreatment Town Name:	<u>City of Belmont</u>	
2.	"Primary" NPDES Number	<u>NC00</u>	<u>21181</u>
	or Non_Discharge Permit # if applicable =>	<u></u>	<u></u>
3.	PAR begin Date, please enter 01/01/yy	3. =>	<u>1/1/2017</u>
4.	PAR end Date, please enter 12/31/yy	4. =>	<u>12/31/2017</u>
5.	Total number of SIUs, includes CIUs	5. =>	<u>1</u>
6.	Number of SIUs with no IUP, or with an expired IUP	6. =>	<u>0</u>
7.	Number of SIUs not inspected by POTW	7. =>	<u>0</u>
8.	Number of SIUs not sampled by POTW	8. =>	<u>0</u>
9.	Number of SIUs in SNC due to IUP Limit violations	9. =>	<u>0</u>
10.	Number of SIUs in SNC due to Reporting violations	10. =>	<u>0</u>
11.	Number of SIUs in SNC due to compliance schedule, CO or similar	11. =>	<u>0</u>
12.	Number of SIUs included in public notice	12. =>	<u>0</u>
13.	Number of SIUs on a compliance schedule, CO or similar	13. =>	<u>0</u>
14.	Number of NOV, NNCs or similar assessed to SIUs	14. =>	<u>3</u>
15.	Number of AOs assessed to SIUs	15. =>	<u>0</u>
16.	Number of Civil Penalties assessed to SIUs	16. =>	<u>0</u>
17.	Number of Criminal Penalties assessed to SIUs	17. =>	<u>0</u>
18.	Number of CIUs	18. =>	<u>0</u>
19.	Number of CIUs in SNC	19. =>	<u>0</u>
20.	Total Amount of Civil Penalties Collected	20. =>	<u>\$ 0</u>
21.	Number of IUs from which penalties collected	21. =>	<u>0</u>

Foot Notes:	AO	Administrative Order	IUP	Industrial User Pretreatment Permit	POTW	Publicly Owned Treatment Works
	CIU	Categorical Industrial User	NNC	Notice of Non-Compliance	SIU	Significant Industrial User
	CO	Consent Order	NOV	Notice of Violation	SNC	Significant Non-Compliance
	IU	Industrial User	PAR	Pretreatment Annual Report		

**Pretreatment Annual Report (PAR)  
Significant Non-Compliance Report (SNCR)**

PAR covers this calendar year => Jan. 2017 - Dec. 2017

Control Authority=Program=Town Name => City of Belmont

WWTP Name => Belmont WWTP

NPDES # => NC0021181

WWTP = Wastewater Treatment Plant, use separate form for each WWTP.

SIU = Significant Industrial User

SNC = Significant Non-Compliance

A SNCR Form must be submitted with every PAR, please write "*None*" if you had No SIUs in SNC during calendar year

IUP #	Pipe #	Industry Name	Parameter or "Reporting"	SNC ? ( Yes / No ) for each 6-month period.	
				Jan. - June	July - Dec.
0009	001	Spartan Dyers	None	NO	NO

Attach a copy of the Division's "SIUs in SNC Historical Report" for your POTW's SIUs behind this page .

Is the database correct ? Notify the Division of any errors ! Database indicates SNC history for previous years.

EVERY SNC MUST be explained in the Narrative, How was, is, or will it be resolved?

REPEAT SNCs are serious matters that MUST be explained in the Narrative.

# SPARTAN DYERS

#0009

JANUARY 1, 2017 TO DECEMBER 31, 2017



**Pretreatment Annual Report (PAR)  
Industrial Data Summary Form (IDSF)**

Use separate forms for each industry/pipe  
Enter BDL values as < (value)

Control Authority,  
Town Name => City of Belmont  
WWTP Name => Belmont WWTP  
NPDES # => NC0021181  
1st 6 months, dates => Jan. 1, 2017 to June 31, 2017  
2nd 6 months, dates => July 1, 2017 to Dec. 31, 2017

Industry  
Name Spartan Dyers  
IUP # 0009  
Pipe # 001

\* Total # of samples =>  
\* Maximum (mg/l) =>  
\* or Maximum (lb/d) =>  
\* or \_\_\_\_\_ Average (mg/l) =>  
\* or Average Loading (lb/d) =>  
% violations, (chronic SNC is >= 66%) =>  
% TRC violations, (SNC is >= 33 %) =>

Flow, mgd		BOD		TSS		Ammonia	
1st 6 months	2nd 6 months	1st 6 months	2nd 6 months	1st 6 months	2nd 6 months	1st 6 months	2nd 6 months
6	6	6	6	6	6	6	6
0.5279	1.062	31	81	94	92	0.79	0.39
0.2323	0.4273	24.33	37	76.83	61	0.36	0.19
0%	0%	0%	0%	0%	0%	N/A	N/A
0%	0%	0%	0%	0%	0%	N/A	N/A

\* Total # of samples =>  
\* Maximum (mg/l) =>  
\* or Maximum (lb/d) =>  
\* or \_\_\_\_\_ Average (mg/l) =>  
\* or Average Loading (lb/d) =>  
% violations, (chronic SNC is >= 66%) =>  
% TRC violations, (SNC is >= 33 %) =>

Arsenic		Cadmium		Chromium		COD	
1st 6 months	2nd 6 months	1st 6 months	2nd 6 months	1st 6 months	2nd 6 months	1st 6 months	2nd 6 months
6	6	6	6	6	6	6	6
0.001	0.001	0.0003	0.0003	0.072	0.014	210	260
0.0008	0.001	0.0002	0.0003	0.0331	0.0058	180	193.33
N/A	N/A	N/A	N/A	N/A	N/A	0%	0%
N/A	N/A	N/A	N/A	N/A	N/A	0%	0%

\* Total # of samples =>  
\* Maximum (mg/l) =>  
\* or Maximum (lb/d) =>  
\* or \_\_\_\_\_ Average (mg/l) =>  
\* or Average Loading (lb/d) =>  
% violations, (chronic SNC is >= 66%) =>  
% TRC violations, (SNC is >= 33 %) =>

Copper		Cyanide		Lead		Mercury	
1st 6 months	2nd 6 months	1st 6 months	2nd 6 months	1st 6 months	2nd 6 months	1st 6 months	2nd 6 months
6	6	6	6	6	6	2	2
0.093	0.19	0.005	0.005	0.001	0.001	0.00001	0.00002
0.072	0.116	0.005	0.005	0.001	0.001	0	0.00001
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* POTW must enter at least one of these  
four rows, Please indicate how averages were calculated  
Avg period could be month, Qtr, or 6-month & if BDL, 1/2BDL, or zero values used.

BDL => Below Detection Limit  
IUP => Industrial User Permit  
SNC => Significant Non-Compliance  
TRC => Technical Review Criteria

mg/l => milligrams per liter  
lb/d => pounds per day  
mgd => million gallons per day  
WWTP => wastewater treatment plant



































Spreadsheet Instructions:  
 1) Applicable Values should be entered in the Heavy Bordered cells. Rest of worksheet is protected, password is "2".  
 2) Formulas are discussed in the Comprehensive Guidance, Chapter 6, Section C.  
 3) HWA and AT worksheets in this workbook are linked. Pollutant Names, MAHLs, Basis, and Uncontrollable load in this AT worksheet are automatically entered from the HWA spreadsheet. This includes pollutant names in columns AT through BK.

Headworks last approved: 8/24/16  
 Allocation Table updated: 11/8/16  
 Permits last modified: 11/8/16

Allocation Table  
 POTW=> Belmont WWTP  
 NPDES#=> NC 0021181

IUP Count	INDUSTRY NAMES <small>(please list alphabetically)</small>	Industry Permit/Pipe number	Type of Industry	Original Effective Date	Modification Effective Date	Date Permit Expires	FLOW		BOD		TSS		Ammonia	
							Permit Limits		Permit Limits		Permit Limits		Permit Limits	
							MGD	gal/day	Conc. mg/l	Load lbs/day	Conc. mg/l	Load lbs/day	Conc. mg/l	Load lbs/day
1	Spartan Dyers	009/001	textile	11/5/2014	11/8/2016	11/4/2019	0.9000	900,000	300.00	2251.80	250.00	1876.50		monitor
2														
3														
4														
5														
6														
7														
8														
9														
10														
Column Totals =>							0.9000	900,000		2251.80		1876.50		0.00

Basis=>	NPDES Permitted Flow=>			
MAHL from HWA (lbs/day) =>	5.0000		10425.00	834.00
Uncontrollable Loading (lbs/day) =>	1.0938		1724.00	141.79
Total Allowable for Industry (lbs/day) =>	3.9062		8701.00	692.21
Total Permitted to Industry (lbs/day) =>	0.9000		2251.80	0.00
Allowable loading left (lbs/day) =>	3.0062		6449.20	692.21
Percent Allow. Ind. still available (%) =>	77.0 %		74.1 %	100.0 %
Percent MAHL still available (%) =>	60.1 %		61.9 %	83.0 %
5 Percent MAHL (lbs/day) =>	0.2500		521	41.70





POTW Name : City of Belmont WWTP  
 NPDES Permit : # NC0021181  
 YEAR 2017

Sample Location : INFLUENT

Readings in mg/l

Date	Flow	Ras/ Flow	Zn	Cu	Cd	Cr	Hg	Ni	Pb	Cn	Ag	TKN	Mo	Se	As	T-N	T-P	BOD	TSS	NH3
Jan.	2.372	1.265	0.12	0.019	<.0001	<.005	0.00011	<.005	0.0018	<.01	<.001	19	<.010	<.001	<.001	19.345	2.5	119.4	142.7	11.425
Feb.	1.744	1.371					<.0001					27.5				27.81	4.45	225.65	192.5	14.75
March	1.816	1.363					<.0001					26				26.1395	3.05	185.565	148.6087	15.5
April	1.839	1.229	0.23	0.046	<.0005	<.005	<.0001	<.005	0.0023	<.01	<.0004	19.5	<.010	<.005	<.002	19.599	3.15	178.42	158.421	10.95
May	1.756	1.208					<.0001					29				29.128	3	163.636	203.59	13.08
June	1.812	1.213					<.0001					17.5				26.075	2.95	124.136	147.181	11.25
July	1.531	1.205	0.14	0.02	<.0005	<.005	<.0001	<.005	0.0013	<.01	<.001	24	<.01	<.005	<.002	24.216	3.3	155.15	160.85	14.75
August	1.751	1.113					0.00011					26				26.355	3.5	137.95	163.82	12.98
Sept.	0.675	1.118					<.0001					30				30.149	3.95	129.55	172	17.25
Oct.	0.494	1.093	0.13	0.067	<.0005	0.0061	<.0001	<.005	0.0017	<.01	<.001	20	<.010	<.005	<.002	19.71	2.7	139.81	161.36	11.14
Nov.	0.54	1.137					<.0001					34.5				34.573	4.6	176.31	180.57	17.5
Dec.	0.477	1.184					<.0001					20				31.63	3.9	195.8	185.3	20.275
<b>Total</b>	16.807	14.4990	0.62	0.152	<.0005	0.0061	0.00022	<.005	0.0071	<.01	<.001	292.5	<.010	<.001	<.001	314.73	41.05	1931.38	2016.901	170.85
<b>Values</b>	12	12	4	4	4	4	12	4	4	4	4	12	4	4	4	12	12	12	12	12
<b>Avg.</b>	1.4006	1.2083	0.155	0.038	0.0000675	0.0061	0.000045	<.005	0.001775	<.01	<.001	24.375	<.010	<.001	<.001	26.2275	3.4208	160.948	168.075	14.2375
<b>Max</b>	2.372	1.3710	0.23	0.067	<.0005	<.005	0.00011	<.005	0.0023	<.01	<.0004	34.5	<.010	<.005	<.002	34.573	4.6	225.65	203.59	20.275
<b>Min</b>	0.477	1.0930	0.12	0.019	<.0001	<.005	<.0001	<.005	0.0013	<.01	<.001	17.5	<.010	<.001	<.001	19.345	2.5	119.4	142.7	10.95

Any Data Below the ( PQL ) Pratical Quantitation Limit will be marked as ( < ) the reported limit.

See PQL sheet for limits.

Note - Automatic barscreen was out of service from Sept. - Dec. 2017. Being in manual affected influent flow.

POTW Name : City of Belmont WWTP  
 NPDES Permit : # NC0021181  
 YEAR 2017

Sample Location : EFFLUENT

Readings in mg/l EXCEPT Hg in ng/l

Date	Flow		Zn	Cu	Cd	Cr	Hg	Ni	Pb	Cn	Ag	TKN	Mo	Se	As	T-N	T-P	BOD	TSS	NH3
Jan	2.4417		0.084	0.011	<.0001	<.005	18.67	<.005	<.001	0.012	<.001	2.095	<.010	<.001	<.001	13.67	1.67	6.575	24.705	0.5205
Feb	2.075											1.50				17	2.225	6.285	21.1	0.041
March	2.0632											0.425				14.675	2.425	5.17391	9.626	0.7178
April	2.111		0.11	0.011	<.0005	<.005	1.855	<.005	<.001	<.0034	<.001	0.825	<.010	<.001	<.005	14.825	2.325	4.28947	6.026	0.2947
May	1.8474											<.5				16.2	1.004	3.1318	6.568	0.06727
June	1.7159											<.5				16.75	1.875	3.25	5.345	1.449
July	1.415		0.037	0.008	<.0005	<.005	1.13	<.005	<.001	<.01	<.001	<.5	<.010	<.005	<.002	20	2.15	5.255	7.125	0.1265
August	1.669											0.6				15.52	1.648	3.486	5.352	0.1352
Sept.	1.743											<.5				16.25	1.725	2.38	7.57	0.164

Oct.	1.738		0.073	0.029	<.0005	<.005	2.7	<.005	<.001	0.01	<.001	0.134	<.010	<.005	<.001	16.734	2.42	1.763	7.55	0.098
Nov.	1.45											0.182				19.43	2.55	1.773	4.42	0.0194
Dec.	1.307											<.5				20.5	2.68	1.4	3.8	0.114
<b>Total</b>	21.576		0.304	0.059	<.0001	<.005	24.355	<.005	<.001	0.056	<.001	5.761	<.010	<.001	<.001	201.554	24.697	44.7622	109.187	3.74737
<b>Values</b>	12		4	4	4	4	4	4	4	4	4	12	4	4	4	12	12	12	12	12
<b>Avg.</b>	1.798		0.076	0.01475	<.0001	<.005	6.08875	<.005	<.001	0.0035	<.001	0.823	<.010	<.001	<.001	16.7962	2.0581	3.73018	9.098917	0.31228
<b>Max</b>	2.4417		0.11	0.029	<.0005	<.005	18.67	<.005	<.001	0.034	<.001	2.095	<.010	<.005	<.005	20.5	2.68	6.575	24.705	1.449
<b>Min</b>	1.307		0.037	0.008	<.0001	<.005	1.13	<.005	<.001	<.01	<.001	<.5	<.010	<.001	<.001	13.67	1.004	1.4	3.8	0.0194

Any Data Below the ( PQL ) Pratical Quantitation Limit will be marked as ( < ) the reported limit.  
See PQL sheet for limits.

POTW Name : City of Belmont WWTP  
NPDES Permit : # NC0021181  
YEAR 2017

Sample Location : WEST AERATION BASIN

Readings in mg/l

Date	Flow	Zn	Cu	Cd	Cr	Hg	Ni	Pb	Cn	Ag	TKN	Mo	Se	As	T-N	T-P	NH3
Jan.	3.637	1.4	0.27	0.00091	0.044	0.00063	0.011	0.018	<.01	0.003	84.5	<.0010	<.028	<0.003	92.5	11	0.365
Feb.	3.115					0.0025					235				246	41.5	0.855
March	3.179					0.00012					123				137	13.9	1.45
April	3.068	0.26	0.049	<.0005	0.0094	<.0001	<.005	0.003	<.01	<.001	170	<.010	<.005	<.002	177.06	25.8	0.5
May	2.964					0.00092					113.5				129.5	25.5	0.4
June	3.025					0.0039					205				216	61	0.98
July	2.69	4.6	0.91	0.0029	0.27	0.0029	0.038	0.072	0.014	0.009	180	<.050	<.025	0.011	198	42.5	0.395
August	2.865					0.0026					140				150.45	30	0.765
Sept.	1.793					0.0018					175				190	37.5	0.59
Oct.	1.587	4.8	1.1	0.0024	0.16	0.0018	0.031	0.062	<.01	0.0066	205.0	<.010	<.005	0.0091	219	5.95	0.57
Nov.	1.677					0.0054					230				252.5	65.5	0.595
Dec.	1.661					0.003					290				306.5	58.5	0.82
<b>Total</b>	31.261	11.06	2.329	0.00621	0.4834	0.02557	0.08	0.155	<.010	0.0186	2151	<0.071	<.063	0.0233	2314.51	418.65	8.285
<b>Values</b>	12	4	4	4	4	12	4	4	4	4	12	4	4	4	12	12	12
<b>Avg.</b>	2.6051	2.765	0.58225	0.00207	0.1209	0.002325	0.02425	0.03875	<.010	0.00305	179.25	<.02	<.015	0.003	192.876	34.888	0.69042
<b>Max</b>	3.637	4.8	1.1	0.0029	0.27	0.0054	0.038	0.072	<.010	0.009	290	<.05	<.028	0.011	306.5	65.5	1.45
<b>Min</b>	1.587	0.26	0.049	0.00091	0.0094	0.00012	<.005	0.003	<.010	<.001	84.5	<.001	<.005	<.001	92.5	5.95	0.365

