



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend				Page 1 of 11				Permit Number: IN0024520												
Facility: South Bend Municipal WWTP				Public Notification Requirements Met? Y																
Monitoring Period: January 2023				Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																
Design Peak Hourly Flow (MGD): 77				Design Average Flow (MGD): 48				Measured/Metered (M) or Estimated (E) must be specified												
WWTP Influent Data			Precipitation Data					CSO Outfall No. 001					CSO Outfall No. 002							
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	25.1	30.5	5:30 AM	0.92	0.09	0.09	1 hr													
2	24.9	27.5																		
3	41.1	77.8	3:00 AM	6.42	0.63	0.28	1 hr	5:10 AM	E	1.34	E	0.11	E	5:10 AM	E	0.84	E	0.00	E	
4	26.5	29.1																		
5	26.4	28.9	12:30 PM	0.67	0.05	0.02	1 hr													
6	25.8	29.2																		
7	25.3	27.5																		
8	26.0	29.4																		
9	26.2	28.9																		
10	26.6	30.0	7:40 AM	0.67	0.06	0.06	1 hr													
11	26.0	29.2	10:00 AM	0.08	0.01	0.01	1 hr													
12	25.8	28.5																		
13	25.5	27.6																		
14	25.1	27.7																		
15	24.9	28.5																		
16	28.0	40.2	12:15 PM	2.33	0.16	0.09	1 hr													
17	25.5	27.6																		
18	25.9	38.3	8:30 PM	2.58	0.29	0.20	1 hr													
19	44.0	79.5	12:00 AM	4.33	0.43	0.22	1 hr	2:10 AM	E	0.40	E	0.02	E							
20	28.9	33.7	12:05 AM	0.75	0.03	0.01	1 hr													
21	26.6	29.5																		
22	27.0	30.4	6:20 AM	0.75	0.03	0.02	1 hr													
23	26.8	29.3	12:05 AM	0.08		0.01	1 hr													
24	26.3	30.0																		
25	29.0	37.3	4:25 AM	6.08	0.26	0.05	1 hr													
26	28.2	33.2	3:15 AM	2.33	0.08	0.05	1 hr													
27	26.6	29.4	3:45 PM	0.42	0.02	0.02	1 hr													
28	26.5	31.3																		
29	27.1	32.8	1:45 AM	1.00	0.06	0.03	1 hr													
30	26.9	31.5																		
31	26.1	29.1																		
Totals:	850.9			29.42	2.20			2	De	1.74		0.13		1	Da	0.84		0.00		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent												Telephone								
Kim Thompson, Director of Wastewater												574-235-5969								
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent												Date (mm/dd/yy)								
<i>Kim Thompson</i>												2-21-2023								



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 2 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: January 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 003					CSO Outfall No. 004					CSO Outfall No. 006					CSO Outfall No. 007									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3													7:40 AM	M	0.25	M	0.00	E						
4																			5:05 AM	E	0.79	E	0.00	E
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19	1:35 AM	M	0.75	M	0.17	E							12:05 AM	M	2.75	M	0.49	E						
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
Totals:		1	Da ys	0.75		0.17		0	Da ys		0.00		2	Da ys	3.00		0.49		1	Da ys	0.79		0.00	



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Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 008					CSO Outfall No. 010					CSO Outfall No. 11A					CSO Outfall No. 11B									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	7:35 AM	E	0.22	E	0.00	E																		
2																								
3	5:05 AM	E	10.17	E	0.12	E	5:05 AM	E	5.25	E	0.13	E							5:05 AM	E	4.86	E	0.80	E
4																								
5																								
6																								
7																								
8																								
9																								
10	9:45 AM	E	0.00	E	0.00	E																		
11																								
12																								
13																								
14																								
15																								
16	2:15 PM	E	1.75	E	0.00	E	2:15 PM	E	0.00	E	0.00	E							2:15 PM	E	0.00	E	0.00	E
17																								
18	10:30 PM	E	1.50	E	0.01	E	10:30 PM	E	1.50	E	0.02	E							10:30 PM	E	1.50	E	0.07	E
19	12:00 AM	E	9.39	E	0.09	E	12:00 AM	E	4.32	E	0.08	E							12:00 AM	E	3.67	E	0.41	E
20																								
21																								
22																								
23																								
24																								
25	6:40 AM	E	3.02	E	0.02	E	6:40 AM	E	1.27	E	0.01	E							6:40 AM	E	1.08	E	0.05	E
26	6:10 AM	E	0.22	E	0.00	E																		
27																								
28																								
29																								
30																								
31																								
Totals:	8	Da	26.27	0.24	5	Da	12.34	0.24	0	Da	0.00	5	Da	11.11	1.33									



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Monitoring Period: January 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 014					CSO Outfall No. 018					CSO Outfall No. 019					CSO Outfall No. 021									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3	5:05 AM	E	1.21	E	0.05	E	5:05 AM	E	6.72	E	0.32	E	5:00 AM	E	1.06	E	0.02	E	5:00 AM	E	0.17	E	0.00	E
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19	2:00 AM	E	0.56	E	0.03	E	2:00 AM	E	3.69	E	0.13	E	10:30 PM	E	0.03	E	0.00	E	2:00 AM	E	0.39	E	0.01	E
20																								
21																								
22																								
23																								
24																								
25													6:25 AM	E	0.03	E	0.00	E						
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	2	Da ys	1.77		0.08		2	Da ys	10.41		0.45		4	Da ys	1.51		0.03		1	Da ys	0.17		0.00	



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Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 022						CSO Outfall No. 025					CSO Outfall No. 026					CSO Outfall No. 027									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3	3:45 AM	M	3.50	M	0.32	E														5:10 AM	E	0.05	E	0.00	E
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18	11:00 PM	M	0.25	M	0.00	E																			
19	12:15 AM	M	2.83	M	0.78	E																			
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
Totals:	3	Days	6.58		1.11		0	Days			0.00		0	Days			0.00		1	Days		0.05		0.00	



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Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 028					CSO Outfall No. 029					CSO Outfall No. 031					CSO Outfall No. 033									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3	5:05 AM	E	0.24	E	0.00	E	5:05 AM	E	2.22	E	0.03	E	5:05 AM	E	6.40	E	0.81	E	5:05 AM	E	6.93	E	0.02	E
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16							2:15 PM	E	0.00	E	0.00	E	2:15 PM	E	0.00	E	0.00	E	2:15 PM	E	0.00	E	0.00	E
17																								
18							10:30 PM	E	0.46	E	0.00	E	10:30 PM	E	1.50	E	0.07	E	10:30 PM	E	1.10	E	0.00	E
19							2:00 AM	E	1.51	E	0.01	E	12:00 AM	E	5.41	E	0.47	E	2:00 AM	E	4.20	E	0.01	E
20																								
21																								
22																								
23																								
24																								
25							6:40 AM	E	0.31	E	0.00	E	6:40 AM	E	1.58	E	0.07	E	6:40 AM	E	0.73	E	0.00	E
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	1	Da ys	0.24		0.00		5	Da ys	4.50		0.04		5	Da ys	14.89		1.41		5	Da ys	12.96		0.04	



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Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Monitoring Period: January 2023		Design Peak Flow (Hourly) (MGD): 77		Design Flow (MGD): 48																		
CSO Outfall No. 035		CSO Outfall No. 036		CSO Outfall No. 037		CSO Outfall No. 038																
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E				
1	7:35 AM	E	0.04	E	0.00	E																
2																						
3	5:05 AM	E	9.71	E	0.15	E	5:05 AM	E	2.77	E	0.01	E										
4																						
5																						
6																						
7																						
8																						
9																						
10	9:45 AM	E	0.00	E	0.00	E																
11																						
12																						
13																						
14																						
15																						
16	2:15 PM	E	0.33	E	0.00	E																
17																						
18	10:30 PM	E	1.50	E	0.01	E																
19	12:00 AM	E	9.34	E	0.11	E	2:00 AM	E	1.45	E	0.01	E	1:05 AM	M	0.92	M	0.10	E				
20																						
21																						
22																						
23																						
24																						
25	6:40 AM	E	2.64	E	0.02	E																
26	6:10 AM	E	0.04	E	0.00	E																
27																						
28																						
29																						
30																						
31																						
Totals:	8	Days	23.60		0.29		2	Days	4.22		0.02		1	Days	0.92		0.10		0	Days		0.00



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Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 039					CSO Outfall No. 040					CSO Outfall No. 041					CSO Outfall No. 042									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3	5:00 AM	E	2.76	E	0.09	E	5:10 AM	E	0.05	E	0.00	E	5:00 AM	E	0.92	E	0.00	E						
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18	10:30 PM	E	0.10	E	0.00	E																		
19	2:00 AM	E	1.26	E	0.03	E																		
20																								
21																								
22																								
23																								
24																								
25	6:25 AM	E	0.10	E	0.00	E																		
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	4	Days	4.22		0.12		1	Days	0.05		0.00		1	Days	0.92		0.00		0	Days			0.00	



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Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3													5:00 AM	E	7.03	E	0.38	E						
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16													2:20 PM	E	0.00	E	0.00	E						
17																								
18													10:30 PM	E	1.50	E	0.04	E						
19							1:15 AM	M	1.92	M	0.54	E	12:00 AM	E	5.06	E	0.21	E						
20																								
21																								
22																								
23																								
24																								
25													6:25 AM	E	2.40	E	0.07	E						
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	0	Days			0.00		1	Days	1.92		0.54		5	Days	15.99		0.70		0	Days			0.00	



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Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 060					CSO Outfall No.					CSO Outfall No. [#]					CSO Outfall No. [#]									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3	5:05 AM	E	8.53	E	0.01	E																		
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16	2:15 PM	E	0.00	E	0.00	E																		
17																								
18	10:30 PM	E	1.50	E	0.00	E																		
19	12:00 AM	E	9.19	E	0.01	E																		
20																								
21																								
22																								
23																								
24																								
25	6:40 AM	E	2.69	E	0.00	E																		
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	5	Day	21.91		0.02		0	Day			0.00		0	Day			0.00		0	Day			0.00	



**National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)**
State Form 50546 (R3 / 7-13)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input type="checkbox"/>	
Monitoring Period: January	Year: 2023	Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77	Design Average Flow (MGD): 48		
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1	Precipitation Event Observed		
2			
3	Precipitation Event Observed		
4			
5			
6			
7			
8			
9			
10	Precipitation Event Observed		
11			
12			
13			
14			
15			
16	Precipitation Event Observed		
17			
18	Precipitation Event Observed		
19	Precipitation Event Observed		
20			
21			
22			
23			
24			
25	Precipitation Event Observed		
26	Precipitation Event Observed		
27			
28			
29			
30			
31			
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>Kim Thompson</i>		02/21/2023	

CSO Public Notification - January

Day of Month	Day of Week	Total Daily Precip. (inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Sun	0.09	0.00	YES	
2	Mon	-	-		
3	Tue	0.63	3.39	YES	
4	Wed	-	-		
5	Thu	0.05	0.00	YES	Notice Sent, But No Overflows
6	Fri	-	-		
7	Sat	-	-		
8	Sun	-	-		
9	Mon	-	-		
10	Tue	0.06	0.00	YES	<10,000 Gallons
11	Wed	0.01	0.00		
12	Thu	-	-		
13	Fri	-	-		
14	Sat	-	-		
15	Sun	-	-		
16	Mon	0.16	0.00	YES	<10,000 Gallons
17	Tue	-	-	YES	Notice Sent, But No Overflows
18	Wed	0.29	0.23	YES	
19	Thu	0.43	3.69	YES	
20	Fri	0.03	0.00		
21	Sat	-	-		
22	Sun	0.03	0.00		
23	Mon	-	-		
24	Tue	-	-		
25	Wed	0.26	0.24	YES	
26	Thu	0.08	0.00	YES	<10,000 Gallons
27	Fri	0.02	0.00		
28	Sat	-	-		
29	Sun	0.06	0.00	YES	Notice Sent, But No Overflows
30	Mon	-	-		
31	Tue	-	-		

Notes

Average Daily Flow	Average value of 5-min WWTP flow data
Peak Hourly Flow	Maximum value of the rolling hourly average flow rate
Time Precipitation Began	First precipitation recorded between the six rain gauges
Precipitation Duration	Cumulative duration of all precipitation for the day
Total Daily Precipitation	Maximum value of precipitation for all the six rain gauges
Peak Intensity	Maximum precipitation depth in an hour
Design Peak Hourly Flow	Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.

City of South Bend, Indiana
 CSO Overflow Summary
 JANUARY 2023

NUMBER OF OVERFLOW EVENTS IN JANUARY 2023 = 8

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	1.74	0.13	2
002	0.84	0.00	1
003	0.75	0.17	1
004			0
006	3.00	0.49	2
007	0.79	0.00	1
008	26.27	0.24	8
010	12.34	0.24	5
11A			0
11B	11.11	1.33	5
014	1.77	0.08	2
018	10.41	0.45	2
019	1.51	0.03	4
021	0.17	0.00	1
022	6.58	1.11	3
025			0
026			0
027	0.05	0.00	1
028	0.24	0.00	1
029	4.50	0.04	5
031	14.89	1.41	5
033	12.96	0.04	5
035	23.60	0.29	8
036	4.22	0.02	2
037	0.92	0.10	1
038			0
039	4.22	0.12	4
040	0.05	0.00	1
041	0.92	0.00	1
042			0
044			0
045	1.92	0.54	1
048	15.99	0.70	5
049			0
060	21.91	0.02	5
Total		7.55	

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.



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 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend				Page 1 of 11				Permit Number: IN0024520												
Facility: South Bend Municipal WWTP				Public Notification Requirements Met? Y																
Monitoring Period: February 2023				Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																
Design Peak Hourly Flow (MGD): 77				Design Average Flow (MGD): 48				Measured/Metered (M) or Estimated (E) must be specified												
WWTP Influent Data			Precipitation Data					CSO Outfall No. 001					CSO Outfall No. 002							
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	25.8	29.0			-															
2	26.8	29.3	11:10 AM	0.08	0.01	0.01	1 hr													
3	26.0	29.7			-															
4	26.2	29.6			-															
5	27.8	37.1			-															
6	25.9	28.1			-															
7	25.9	28.4			-															
8	25.5	28.6			-															
9	46.4	80.8	12:50 AM	8.92	0.97	0.30	1 hr	3:15 AM	E	2.13	E	0.27	E	3:15 AM	E	2.64	E	0.08	E	
10	27.9	31.8			-															
11	27.1	31.0			-															
12	27.1	32.0			-															
13	27.4	30.5			-															
14	27.3	30.9	8:45 PM	0.25	0.01	0.02	1 hr													
15	27.5	30.8	12:10 AM	0.42	0.03	0.02	1 hr													
16	31.4	45.9	11:40 AM	2.92	0.20	0.09	1 hr													
17	27.0	32.6			-															
18	27.0	31.0			-															
19	26.6	29.9			-															
20	27.4	31.7			-															
21	26.9	29.4			-															
22	52.6	80.0	5:35 AM	9.00	1.31	0.31	1 hr	7:50 AM	E	2.66	E	0.43	E	7:50 AM	E	4.24	E	0.25	E	
23	33.1	64.8			-															
24	29.1	32.6			-															
25	28.9	32.0	12:05 AM	1.08	0.07	0.06	1 hr													
26	28.6	32.8			-															
27	52.9	79.7	5:50 AM	7.08	1.36	0.37	1 hr	8:10 AM	E	2.60	E	0.41	E	8:10 AM	E	4.05	E	0.23	E	
28	33.6	38.4			-															
29	#DIV/0!	0.0			-															
Totals:	#DIV/0!			29.75	3.96			3	Dis	7.39		1.11		3	Dis	10.93		0.57		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent												Telephone								
Kim Thompson, Director of Wastewater												574-235-5969								
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent												Date (mm/dd/yy)								
K. Thompson												3-16-2023								



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 2 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: February 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																			
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 003						CSO Outfall No. 004						CSO Outfall No. 006						CSO Outfall No. 007							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9	8:05 AM	M	1.75	M	0.71	E	3:25 AM	E	0.20	E	0.00	E	7:00 AM	M	4.25	M	1.15	E	3:25 AM	E	3.66	E	0.03	E	
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22	5:05 PM	M	2.50	M	1.02	E	7:40 AM	E	1.16	E	0.02	E	4:00 PM	M	5.50	M	1.64	E	7:40 AM	E	4.44	E	0.07	E	
23																									
24																									
25																									
26																									
27	8:20 AM	M	4.50	M	2.39	E	8:00 AM	E	2.21	E	0.04	E	7:10 AM	M	8.00	M	2.82	E	8:00 AM	E	5.28	E	0.12	E	
28																									
29																									
Totals:	3	Da ys	8.75		4.12		3	Da ys	3.57		0.07		3	Da ys	17.75		5.62		3	Da ys	13.38		0.22		



National Pollutant Discharge Elimination System (NPDES)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 3 of 11					Permit Number: IN0024520											
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y																
Monitoring Period: February 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified																
CSO Outfall No. 008					CSO Outfall No. 010					CSO Outfall No. 11A					CSO Outfall No. 11B											
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E		
1																										
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9	3:25 AM	E	12.25	E	0.20	E	3:25 AM	E	7.02	E	0.22	E								3:25 AM	E	6.43	E	1.44	E	
10																										
11																										
12																										
13																										
14																										
15																										
16	1:45 PM	E	3.02	E	0.02	E	1:45 PM	E	1.27	E	0.01	E								1:45 PM	E	1.08	E	0.05	E	
17																										
18																										
19																										
20																										
21																										
22	7:40 AM	E	13.83	E	0.25	E	7:40 AM	E	8.72	E	0.30	E								7:40 AM	E	8.09	E	1.92	E	
23																										
24																										
25																										
26																										
27	8:00 AM	E	15.51	E	0.31	E	8:00 AM	E	10.51	E	0.37	E								8:00 AM	E	9.85	E	2.45	E	
28																										
29																										
Totals:	4	Da ys	44.61		0.79		4	Da ys	27.52		0.91		0	Da ys			0.00		4	Da ys	25.45		5.86			



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City: City of South Bend										Page 4 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: February 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 014					CSO Outfall No. 018					CSO Outfall No. 019					CSO Outfall No. 021									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9	3:25 AM	E	2.00	E	0.08	E	3:25 AM	E	7.33	E	0.67	E	3:25 AM	E	1.80	E	0.05	E	3:25 AM	E	0.56	E	0.00	E
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22	7:40 AM	E	2.41	E	0.13	E	7:40 AM	E	8.10	E	0.91	E	7:35 AM	E	2.19	E	0.12	E	7:35 AM	E	1.15	E	0.01	E
23																								
24																								
25																								
26																								
27	8:00 AM	E	2.84	E	0.19	E	8:00 AM	E	8.93	E	1.19	E	8:00 AM	E	2.31	E	0.14	E	8:00 AM	E	1.49	E	0.02	E
28																								
29																								
Totals:	3	Da ys	7.25		0.41		3	Da ys	24.36		2.77		3	Da ys	6.30		0.31		3	Da ys	3.20		0.03	



National Pollutant Discharge Elimination System (NPDES)
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Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y																	
Monitoring Period: February 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																	
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified																	
CSO Outfall No. 022					CSO Outfall No. 025					CSO Outfall No. 026					CSO Outfall No. 027												
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E			
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9	6:00 AM	M	4.50	M	1.23	E																					
10																					2:50 AM	E	1.76	E	0.13	E	
11																											
12																											
13																											
14																											
15																											
16																											
17																											
18																											
19																											
20																											
21																											
22	6:50 AM	M	6.17	M	2.48	E															7:40 AM	E	2.39	E	0.28	E	
23																											
24																											
25																											
26																											
27	7:00 AM	M	9.00	M	3.76	E								8:00 AM	E	0.03	E	0.00	E								
28																						8:00 AM	E	2.43	E	0.32	E
29																											
Totals:	3	Days	19.67		7.47		0	Days			0.00		1	Days	0.03		0.00			3	Days	6.58		0.74			



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Monitoring Period: February 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 028					CSO Outfall No. 029					CSO Outfall No. 031					CSO Outfall No. 033									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9	3:25 AM	E	1.21	E	0.01	E	3:25 AM	E	2.59	E	0.05	E	3:25 AM	E	10.09	E	1.43	E	3:25 AM	E	9.61	E	0.04	E
10																								
11																								
12																								
13																								
14																								
15																								
16							1:45 PM	E	0.31	E	0.00	E	1:45 PM	E	1.58	E	0.07	E	1:45 PM	E	0.73	E	0.00	E
17																								
18																								
19																								
20																								
21																								
22	7:40 AM	E	1.80	E	0.03	E	7:40 AM	E	3.44	E	0.07	E	7:40 AM	E	11.71	E	1.85	E	7:40 AM	E	11.34	E	0.06	E
23																								
24																								
25																								
26																								
27	8:00 AM	E	2.44	E	0.06	E	8:00 AM	E	4.34	E	0.09	E	8:00 AM	E	13.45	E	2.31	E	8:00 AM	E	13.21	E	0.08	E
28																								
29																								
Totals:	3	Da ys	5.45		0.10		4	Da ys	10.68		0.22		4	Da ys	36.83		5.66		4	Da ys	34.89		0.19	



National Pollutant Discharge Elimination System (NPDES)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 7 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: February 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 035					CSO Outfall No. 036					CSO Outfall No. 037					CSO Outfall No. 038									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9	3:25 AM	E	12.80	E	0.24	E	3:25 AM	E	3.53	E	0.02	E	7:30 AM	M	1.50	M	0.24	E						
10																								
11																								
12																								
13																								
14																								
15																								
16	1:45 PM	E	2.64	E	0.02	E																		
17																								
18																								
19																								
20																								
21																								
22	7:40 AM	E	14.65	E	0.29	E	7:40 AM	E	4.09	E	0.04	E	4:05 PM	M	2.67	M	0.34	E						
23																								
24																								
25																								
26																								
27	8:00 AM	E	16.00	E	0.34	E	8:00 AM	E	4.69	E	0.05	E	7:30 AM	M	5.33	M	0.96	E						
28	12:00 AM	E	0.59	E	0.01	E																		
29																								
Totals:	5	Days	46.68		0.91		3	Days	12.31		0.11		3	Days	9.50		1.54		0	Days			0.00	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 8 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: February 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 039					CSO Outfall No. 040					CSO Outfall No. 041					CSO Outfall No. 042									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9	3:25 AM	E	3.55	E	0.15	E	2:50 AM	E	1.83	E	0.05	E	3:25 AM	E	1.71	E	0.01	E						
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22	7:35 AM	E	4.96	E	0.27	E	7:40 AM	E	2.36	E	0.10	E	7:35 AM	E	2.51	E	0.03	E						
23																								
24																								
25																								
26	5:20 AM	E	0.25	E	0.00	E																		
27	8:00 AM	E	5.19	E	0.29	E	8:00 AM	E	2.45	E	0.11	E	8:00 AM	E	2.55	E	0.03	E						
28																								
29																								
Totals:	4	Da ys	13.95		0.71		3	Da ys	6.64		0.26		3	Da ys	6.77		0.07		0	Da ys		0.00		



National Pollutant Discharge Elimination System (NPDES)
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 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 9 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: February 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9							7:55 AM	M	3.58	M	1.26	M	3:25 AM	E	9.63	E	0.56	E						
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17													1:40 PM	E	0.69	E	0.02	E						
18																								
19																								
20																								
21																								
22							4:55 PM	M	4.75	M	1.88	M	7:35 AM	E	14.00	E	0.90	E						
23																								
24																								
25																								
26																								
27							8:15 AM	M	6.67	M	3.26	M	8:00 AM	E	14.42	E	0.94	E						
28																								
29																								
Totals:		0	Da			0.00	3	Da	15.00		6.40	4	Da	38.74		2.42	0	Da					0.00	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 10 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: February 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 060					CSO Outfall No.					CSO Outfall No. [#]					CSO Outfall No. [#]										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9	3:25 AM	E	9.83	E	0.03	E																			
10																									
11																									
12																									
13																									
14																									
15																									
16	1:45 PM	E	2.69	E	0.00	E																			
17																									
18																									
19																									
20																									
21																									
22	7:40 AM	E	11.37	E	0.04	E																			
23																									
24																									
25																									
26																									
27	8:00 AM	E	13.04	E	0.05	E																			
28																									
29																									
Totals:	4	Days	36.93		0.12		0	Days			0.00		0	Days			0.00		0	Days			0.00		



**National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)**
State Form 50546 (R3 / 7-13)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input type="checkbox"/>	
Monitoring Period: February Year: 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48	
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1			
2			
3			
4			
5			
6			
7			
8			
9	Precipitation Event Observed		
10			
11			
12			
13			
14			
15			
16	Precipitation Event Observed		
17			
18			
19			
20			
21			
22	Precipitation Event Observed		
23			
24			
25			
26	CSO 039 DWO		
27	Precipitation Event Observed		
28	Precipitation Event Observed		
29			
30			
31			
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>Kim Thompson</i>		3-16-2023	

CSO Public Notification - February

Day of Month	Day of Week	Total Daily Precip. (inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Wed	-	-		
2	Thu	0.01	0.00		
3	Fri	-	-		
4	Sat	-	-		
5	Sun	-	-		
6	Mon	-	-		
7	Tue	-	-		
8	Wed	-	-		
9	Thu	0.97	10.38	YES	
10	Fri	-	-		
11	Sat	-	-		
12	Sun	-	-		
13	Mon	-	-		
14	Tue	0.01	0.00		
15	Wed	0.03	0.00		
16	Thu	0.20	0.19	YES	
17	Fri	-	-		
18	Sat	-	-		
19	Sun	-	-		
20	Mon	-	-		
21	Tue	-	-		
22	Wed	1.31	15.76	YES	
23	Thu	-	-		
24	Fri	-	-		
25	Sat	0.07	0.00	YES	
26	Sun	-	0.00	YES	There Was A Short Duration DWO At CSO 039. <10,000 Gallons
27	Mon	1.36	23.36	YES	
28	Tue	-	-		

Notes

Average Daily Flow Average value of 5-min WWTP flow data
 Peak Hourly Flow Maximum value of the rolling hourly average flow rate
 Time Precipitation Beg First precipitation recorded between the six rain gauges
 Precipitation Duration Cumulative duration of all precipitation for the day
 Total Daily Precipitatio Maximum value of precipitation for all the six rain gauges
 Peak Intensity Maximum precipitation depth in an hour
 Design Peak Hourly FI Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.

City of South Bend, Indiana
 CSO Overflow Summary
 FEBRUARY 2023

NUMBER OF OVERFLOW EVENTS IN FEBRUARY 2023 5

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	7.39	1.11	3
002	10.93	0.57	3
003	8.75	4.12	3
004	3.57	0.07	3
006	17.75	5.62	3
007	13.38	0.22	3
008	44.61	0.79	4
010	27.52	0.91	4
11A			0
11B	25.45	5.86	4
014	7.25	0.41	3
018	24.36	2.77	3
019	6.30	0.31	3
021	3.20	0.03	3
022	19.67	7.47	3
025			0
026	0.03	0.00	1
027	6.58	0.74	3
028	5.45	0.10	3
029	10.68	0.22	4
031	36.83	5.66	4
033	34.89	0.19	4
035	46.68	0.91	4
036	12.31	0.11	3
037	9.50	1.54	3
038			0
039	13.95	0.71	4
040	6.64	0.26	3
041	6.77	0.07	3
042			0
044			0
045	15.00	6.40	3
048	38.74	2.42	4
049			0
060	36.93	0.12	4
Total		49.7	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 1 of 11		Permit Number: IN0024520																
Facility: South Bend Municipal WWTP				Public Notification Requirements Met? Y																
Monitoring Period: March 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48		Measured/Metered (M) or Estimated (E) must be specified																
WWTP Influent Data			Precipitation Data					CSO Outfall No. 001					CSO Outfall No. 002							
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	33.1	36.1	2:00 AM	0.75	0.06	0.06	1 hr													
2	31.0	33.7			-															
3	34.2	42.8	1:25 PM	6.67	1.15	0.39	1 hr	3:35 PM	E	2.64	E	0.42	E	3:35 PM	E	4.17	E	0.25	E	
4	52.3	80.3	12:15 AM	0.50	0.03	0.03	1 hr													
5	35.9	44.7			-															
6	44.3	69.0	12:35 AM	5.00	0.39	0.12	1 hr	2:45 AM	E	0.18	E	0.01	E							
7	35.4	37.5			-															
8	34.8	37.6			-															
9	34.2	37.8	1:00 PM	2.00	0.16	0.10	1 hr													
10	40.1	45.4	12:00 AM	5.33	0.23	0.06	1 hr													
11	34.2	39.7	11:30 PM	0.33	-	0.06	1 hr													
12	35.9	37.6	12:00 AM	4.25	0.19	0.14	1 hr													
13	34.7	40.9	7:25 AM	1.58	0.07	0.04	1 hr													
14	32.9	35.2			-															
15	33.2	36.9			-															
16	33.4	40.5	2:20 PM	2.67	0.30	0.19	1 hr													
17	50.7	80.3	12:05 AM	5.17	0.51	0.23	1 hr	2:10 AM	E	0.59	E	0.03	E							
18	33.2	35.4			-															
19	33.6	38.1			-															
20	33.7	36.5			-															
21	33.4	36.3			-															
22	36.2	55.4	4:00 PM	4.83	0.26	0.10	1 hr													
23	39.1	50.6	12:20 AM	5.25	0.24	0.06	1 hr													
24	33.8	37.5			-															
25	41.7	75.1	4:45 AM	4.50	0.44	0.31	1 hr													
26	38.9	72.7	5:50 PM	2.83	0.45	0.26	1 hr	8:00 PM	E	0.73	E	0.03	E							
27	36.3	67.2			-															
28	33.6	36.7			-															
29	33.7	39.7	12:35 PM	0.83	0.03	0.03	1 hr													
30	33.2	37.5			-															
31	43.3	80.3	6:05 AM	4.83	1.54	0.82	1 hr	8:05 AM	E	3.31	E	0.63	E	8:05 AM	E	5.15	E	0.45	E	
Totals:	1134.1			57.33	6.05			5	Days	7.45		1.12		2	Days	9.32		0.70		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent												Telephone								
Kim Thompson, Director of Wastewater												574-235-5969								
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent												Date (mm/dd/yy)								
<i>Kim Thompson</i>												4-24-2023								



National Pollutant Discharge Elimination System (NPDES)
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 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 2 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: March 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 003			CSO Outfall No. 004			CSO Outfall No. 006			CSO Outfall No. 007			CSO Outfall No. 006			CSO Outfall No. 007									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E						
1																								
2																								
3																								
4													12:45 PM	M	3.00	M	0.17	E						
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17	1:35 AM	M	1.50	M	0.38	E							12:40 AM	M	3.25	M	0.53	E						
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25													8:30 AM	M	1.00	M	0.08	E						
26													8:40 PM	M	1.25	M	0.07	E						
27																								
28																								
29																								
30																								
31	10:35 PM	M	1.42	M	5.75	E	8:05 AM	E	2.33	E	0.05	E	8:05 AM	E	5.83	E	4.52	E	8:05 AM	E	5.36	E	0.13	E
Totals:	2	Da ys	2.92		6.14		1	Da ys	2.33		0.05		5	Da ys	14.33		5.38		2	Da ys	7.73		0.14	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 3 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: March 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
Day of Month	CSO Outfall No. 008						CSO Outfall No. 010						CSO Outfall No. 11A						CSO Outfall No. 11B					
	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	4:10 AM	E	0.00	E	0.00	E																		
2																								
3	3:35 PM	E	8.42	E	0.12	E	3:35 PM	E	6.08	E	0.18	E							3:35 PM	E	5.57	E	1.11	E
4	12:00 AM	E	2.77	E	0.04	E																		
5																								
6	3:05 AM	E	5.95	E	0.06	E	3:05 AM	E	3.33	E	0.05	E							3:05 AM	E	2.94	E	0.26	E
7																								
8																								
9																								
10	12:05 AM	E	4.98	E	0.02	E	2:00 AM	E	1.48	E	0.01	E							12:05 AM	E	1.26	E	0.06	E
11																								
12	2:10 AM	E	2.38	E	0.01	E	2:10 AM	E	0.63	E	0.01	E							2:10 AM	E	0.54	E	0.03	E
13																								
14																								
15																								
16	4:30 PM	E	3.23	E	0.02	E	4:30 PM	E	1.48	E	0.02	E							4:30 PM	E	1.26	E	0.06	E
17	2:05 AM	E	8.22	E	0.08	E	2:05 AM	E	4.25	E	0.09	E							2:05 AM	E	3.89	E	0.49	E
18																								
19																								
20																								
21																								
22	6:05 PM	E	4.29	E	0.04	E	6:05 PM	E	2.54	E	0.03	E							6:05 PM	E	2.15	E	0.10	E
23	2:25 AM	E	3.02	E	0.02	E	2:25 AM	E	1.27	E	0.01	E							2:25 AM	E	1.08	E	0.05	E
24																								
25	6:55 AM	E	5.53	E	0.05	E	6:55 AM	E	3.17	E	0.05	E							6:55 AM	E	2.77	E	0.22	E
26	7:50 PM	E	3.23	E	0.02	E	7:50 PM	E	1.48	E	0.02	E							7:50 PM	E	1.26	E	0.06	E
27																								
28																								
29																								
30																								
31	8:05 AM	E	15.53	E	0.32	E	8:05 AM	E	10.55	E	0.38	E							8:05 AM	E	9.92	E	2.54	E
Totals:	13	Da ys	67.55		0.80		11	Da ys	36.26		0.84		0	Da ys			0.00		11	Da ys	32.64		4.98	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 4 of 11		Permit Number: IN0024520																				
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																				
Monitoring Period: March 2023		Design Peak Flow (Hourly) (MGD): 77		Design Flow (MGD): 48																				
				Measured/Metered (M) or Estimated (E) must be specified																				
		CSO Outfall No. 014		CSO Outfall No. 018																				
				CSO Outfall No. 019																				
				CSO Outfall No. 021																				
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E						
1																								
2																								
3	3:35 PM	E	1.62	E	0.06	E	3:35 PM	E	6.98	E	0.49	E	3:30 PM	E	1.97	E	0.08	E	3:30 PM	E	0.79	E	0.00	E
4																								
5																								
6	3:05 AM	E	0.28	E	0.01	E	3:05 AM	E	1.84	E	0.06	E	3:00 AM	E	0.12	E	0.00	E						
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17	2:05 AM	E	0.72	E	0.04	E	2:05 AM	E	4.74	E	0.17	E	2:25 AM	E	0.48	E	0.01	E						
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25	6:55 AM	E	0.20	E	0.01	E	6:55 AM	E	1.32	E	0.05	E	6:45 AM	E	0.57	E	0.01	E						
26													8:35 PM	E	0.21	E	0.00	E						
27																								
28																								
29																								
30																								
31	8:05 AM	E	2.85	E	0.20	E	8:05 AM	E	8.98	E	1.24	E	8:05 AM	E	2.19	E	0.12	E	8:05 AM	E	1.15	E	0.01	E
Totals:	5	Da ys	5.67		0.32		5	Da ys	23.86		2.01		6	Da ys	5.54		0.22		2	Da ys	1.94		0.02	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 55046 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 5 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: March 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
Day of Month	CSO Outfall No. 022						CSO Outfall No. 025						CSO Outfall No. 026						CSO Outfall No. 027					
	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4	12:15 PM	M	4.25	M	0.38	E													3:35 PM	E	1.97	E	0.17	E
5																								
6	11:45 AM	M	0.67	M	0.06	E																		
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16	11:00 PM	M	0.75	M	0.06	E																		
17	12:00 AM	M	4.92	M	0.34	E													2:05 AM	E	0.05	E	0.00	E
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25	8:15 AM	M	1.25	M	0.52	E																		
26	8:20 PM	M	1.50	M	0.47	E																		
27																								
28																								
29																								
30																								
31	7:35 PM	M	2.42	M	2.14	E							8:05 AM	E	0.12	E	0.00	E	8:05 AM	E	2.44	E	0.33	E
Totals:	7	Days	15.75		3.97		0	Days			0.00		1	Days	0.12		0.00		3	Days	4.46		0.50	



National Pollutant Discharge Elimination System (NPDES)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 6 of 11		Permit Number: IN0024520																				
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																				
Monitoring Period: March 2023		Design Peak Flow (Hourly) (MGD): 77		Design Flow (MGD): 48																				
				Measured/Metered (M) or Estimated (E) must be specified																				
		CSO Outfall No. 028		CSO Outfall No. 029																				
				CSO Outfall No. 031																				
				CSO Outfall No. 033																				
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E						
1																								
2																								
3	3:35 PM	E	0.73	E	0.00	E	3:35 PM	E	2.34	E	0.04	E	3:35 PM	E	8.35	E	1.12	E	3:35 PM	E	8.28	E	0.03	E
4																								
5																								
6							3:05 AM	E	1.09	E	0.01	E	3:05 AM	E	3.98	E	0.29	E	3:05 AM	E	2.89	E	0.01	E
7																								
8																								
9																								
10							12:05 AM	E	0.36	E	0.00	E	12:05 AM	E	1.84	E	0.08	E	12:05 AM	E	0.85	E	0.00	E
11																								
12							2:10 AM	E	0.15	E	0.00	E	2:10 AM	E	0.79	E	0.03	E	2:10 AM	E	0.37	E	0.00	E
13																								
14																								
15																								
16							4:30 PM	E	0.36	E	0.00	E	4:30 PM	E	1.84	E	0.08	E	4:30 PM	E	0.85	E	0.00	E
17							2:05 AM	E	1.75	E	0.01	E	2:05 AM	E	4.86	E	0.51	E	2:05 AM	E	4.94	E	0.01	E
18																								
19																								
20																								
21																								
22							6:05 PM	E	0.62	E	0.00	E	6:05 PM	E	3.15	E	0.14	E	6:05 PM	E	1.46	E	0.00	E
23							2:25 AM	E	0.31	E	0.00	E	2:25 AM	E	1.58	E	0.07	E	2:25 AM	E	0.73	E	0.00	E
24																								
25							6:55 AM	E	0.97	E	0.00	E	6:55 AM	E	3.82	E	0.25	E	6:55 AM	E	2.52	E	0.00	E
26							7:50 PM	E	0.36	E	0.00	E	7:50 PM	E	1.84	E	0.08	E	7:50 PM	E	0.85	E	0.00	E
27																								
28																								
29																								
30																								
31	8:05 AM	E	2.49	E	0.07	E	8:05 AM	E	4.36	E	0.10	E	8:05 AM	E	13.54	E	2.37	E	8:05 AM	E	13.35	E	0.08	E
Totals:	2	Da ys	3.22		0.07		11	Da ys	12.67		0.16		11	Da ys	45.59		5.02		11	Da ys	37.09		0.14	



National Pollutant Discharge Elimination System (NPDES)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 7 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: March 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																			
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 035						CSO Outfall No. 036						CSO Outfall No. 037						CSO Outfall No. 038							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	4:10 AM	E	0.00	E	0.00	E																			
2																									
3	3:35 PM	E	8.42	E	0.15	E	3:35 PM	E	3.15	E	0.02	E													
4	12:00 AM	E	2.87	E	0.05	E																			
5																									
6	3:05 AM	E	6.34	E	0.07	E	3:05 AM	E	0.72	E	0.00	E													
7																									
8																									
9																									
10	12:05 AM	E	3.36	E	0.02	E																			
11																									
12	2:10 AM	E	1.49	E	0.01	E																			
13																									
14																									
15																									
16	4:30 PM	E	3.03	E	0.02	E																			
17	2:05 AM	E	7.91	E	0.10	E	2:05 AM	E	1.86	E	0.01	E	1:45 AM	M	0.75	M	0.02	E							
18																									
19																									
20																									
21																									
22	6:05 PM	E	4.95	E	0.04	E																			
23	2:25 AM	E	2.64	E	0.02	E																			
24																									
25	6:55 AM	E	6.05	E	0.06	E	6:55 AM	E	0.52	E	0.00	E	8:15 AM	M	1.08	M	0.19	E							
26	7:50 PM	E	3.03	E	0.02	E							8:35 PM	M	0.58	M	0.01	E							
27																									
28																									
29																									
30																									
31	8:05 AM	E	15.92	E	0.34	E	8:05 AM	E	4.77	E	0.05	E	10:10 PM	M	1.83	M	4.47	E							
Totals:	13	Da ys	66.01		0.90		5	Da ys	11.02		0.08		4	Da ys	4.25		4.69		0	Da ys				0.00	



National Pollutant Discharge Elimination System (NPDES)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 8 of 11		Permit Number: IN0024520																	
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																	
Monitoring Period: March 2023		Design Peak Flow (Hourly) (MGD): 77		Design Flow (MGD): 48																	
				Measured/Metered (M) or Estimated (E) must be specified																	
		CSO Outfall No. 039		CSO Outfall No. 040																	
				CSO Outfall No. 041																	
				CSO Outfall No. 042																	
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E			
1																					
2																					
3	3:30 PM	E	4.14	E	0.20	E	3:35 PM	E	1.99	E	0.07	E	3:30 PM	E	2.06	E	0.02	E			
4																					
5																					
6	3:00 AM	E	0.39	E	0.01	E															
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17	2:25 AM	E	1.55	E	0.04	E	2:05 AM	E	0.05	E	0.00	E									
18																					
19																					
20																					
21																					
22																					
23																					
24																					
25	6:45 AM	E	1.84	E	0.05	E															
26	8:35 PM	E	0.68	E	0.02	E															
27																					
28																					
29	3:55 AM	E	0.42	E	0.02	E															
30																					
31	8:05 AM	E	4.96	E	0.27	E	8:05 AM	E	2.46	E	0.11	E	8:05 AM	E	2.51	E	0.03	E			
Totals:	7	Da ys	13.98		0.59		3	Da ys	4.50		0.18		2	Da ys	4.57		0.05		0	Da ys	0.00

DWO At CSO 039 On 3/29/23



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend										Page 9 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: March 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3													3:30 PM	E	8.50	E	0.52	E						
4													12:00 AM	E	2.99	E	0.18	E						
5																								
6													3:00 AM	E	2.84	E	0.10	E						
7																								
8																								
9																								
10													12:00 AM	E	1.73	E	0.04	E						
11																								
12													2:05 AM	E	1.04	E	0.03	E						
13																								
14																								
15																								
16													4:25 PM	E	2.08	E	0.06	E						
17							1:25 AM	M	2.67	M	0.84	E	2:25 AM	E	4.60	E	0.21	E						
18																								
19																								
20																								
21																								
22													6:10 PM	E	0.69	E	0.02	E						
23													2:20 AM	E	1.21	E	0.03	E						
24																								
25													6:45 AM	E	5.04	E	0.24	E						
26													8:35 PM	E	3.28	E	0.13	E						
27																								
28																								
29																								
30																								
31							10:30 PM	M	1.50	M	1.97	E	8:05 AM	E	14.00	E	0.90	E						
Totals:	0	Days			0.00		2	Days	4.17		2.80		12	Days	48.00		2.46		0	Days			0.00	



National Pollutant Discharge Elimination System (NPDES)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 10 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: March 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 060						CSO Outfall No.					CSO Outfall No. [#]					CSO Outfall No. [#]								
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3	3:35 PM	E	8.42	E	0.02	E																		
4	12:00 AM	E	0.68	E	0.00	E																		
5																								
6	3:05 AM	E	6.51	E	0.00	E																		
7																								
8																								
9																								
10	12:05 AM	E	3.14	E	0.00	E																		
11																								
12	2:10 AM	E	1.35	E	0.00	E																		
13																								
14																								
15																								
16	4:30 PM	E	3.14	E	0.00	E																		
17	2:05 AM	E	7.57	E	0.01	E																		
18																								
19																								
20																								
21																								
22	6:05 PM	E	5.38	E	0.00	E																		
23	2:25 AM	E	2.69	E	0.00	E																		
24																								
25	6:55 AM	E	6.32	E	0.00	E																		
26	7:50 PM	E	3.14	E	0.00	E																		
27																								
28																								
29																								
30																								
31	8:05 AM	E	13.17	E	0.05	E																		
Totals:	12	Day	61.51		0.09		0	Day			0.00		0	Day			0.00		0	Day			0.00	



**National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)**
State Form 50546 (R3 / 7-13)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input type="checkbox"/>	
Monitoring Period: March Year: 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48	
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1	Precipitation Event Observed		
2			
3	Precipitation Event Observed		
4	Precipitation Event Observed		
5			
6	Precipitation Event Observed		
7			
8			
9	Precipitation Event Observed		
10	Precipitation Event Observed		
11			
12	Precipitation Event Observed		
13			
14			
15			
16	Precipitation Event Observed		
17	Precipitation Event Observed		
18			
19			
20			
21			
22	Precipitation Event Observed		
23	Precipitation Event Observed		
24			
25	Precipitation Event Observed		
26	Precipitation Event Observed		
27			
28			
29	Dry Weather Overflow at CSO 039		
30			
31	Precipitation Event Observed		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>Kim Thompson</i>		4-24-2023	

CSO Public Notification - March

Day of Month	Day of Week	Total Daily Precip. (Inches)	CSO Discharge Volume (MG)	Notification Sent	Notes
1	Wed	0.06	0.00	YES	<10,000 Gallons
2	Thu	-	-		
3	Fri	1.15	5.09	YES	
4	Sat	0.03	0.82	YES	
5	Sun	-	-		
6	Mon	0.39	0.99	YES	
7	Tue	-	-		
8	Wed	-	-		
9	Thu	0.16	0.00	YES	Rain That Began On The 9th Resulted In An Overflow On The 10th
10	Fri	0.23	0.23	YES	
11	Sat	-	-		
12	Sun	0.19	0.11	YES	
13	Mon	0.07	0.00	YES	Notice Sent, But No Overflow
14	Tue	-	-		
15	Wed	-	-		
16	Thu	0.30	0.32	YES	
17	Fri	0.51	3.92	YES	
18	Sat	-	-		
19	Sun	-	-		
20	Mon	-	-		
21	Tue	-	-		
22	Wed	0.26	0.36	YES	
23	Thu	0.24	0.20	YES	
24	Fri	-	-		
25	Sat	0.44	1.79	YES	
26	Sun	0.45	0.93	YES	
27	Mon	-	-		
28	Tue	-	-		
29	Wed	0.03	0.02	YES	There Was A Dry Weather Overflow At CSO 039
30	Thu	-	-		
31	Fri	1.54	29.64	YES	

Notes

Average Daily Flow	Average value of 5-min WWTP flow data
Peak Hourly Flow	Maximum value of the rolling hourly average flow rate
Time Precipitation Began	First precipitation recorded between the six rain gauges
Precipitation Duration	Cumulative duration of all precipitation for the day
Total Daily Precipitation	Maximum value of precipitation for all the six rain gauges
Peak Intensity	Maximum precipitation depth in an hour
Design Peak Hourly Flow	Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

The sensors at CSO 003, 006, 022 & 037 did not work properly on the 31st and CSO 037 had another failure earlier in the month. The Matrix was used to calculate overflows in periods when the sensor(s) were not working.

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.

City of South Bend, Indiana
 CSO Overflow Summary
 MARCH 2023

NUMBER OF OVERFLOW EVENTS IN MARCH 2023 =

14

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	7.45	1.12	5
002	9.32	0.70	2
003	2.92	6.14	2
004	2.33	0.05	1
006	14.33	5.38	5
007	7.73	0.14	2
008	67.55	0.80	13
010	36.26	0.84	11
11A			0
11B	32.64	4.98	11
014	5.67	0.32	5
018	23.86	2.01	5
019	5.54	0.22	6
021	1.94	0.02	2
022	15.75	3.97	7
025			0
026	0.12	0.00	1
027	4.46	0.50	3
028	3.22	0.07	2
029	12.67	0.16	11
031	45.59	5.02	11
033	37.09	0.14	11
035	66.01	0.90	13
036	11.02	0.08	5
037	4.25	4.69	4
038			0
039	13.98	0.59	7
040	4.50	0.18	3
041	4.57	0.05	2
042			0
044			0
045	4.17	2.80	2
048	48.00	2.46	12
049			0
060	61.51	0.09	12
Total		44.4	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

One Event Was A DWO.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.

There Were 13 Wet Weather Events & 1 DWO at CSO 039 For A Total Of 14 Events

Precipitation Data Summary - March

Day of Month	Day of Week	Daily Precipitation (in)						Average Daily Precipitation (in)
		Colfax RG1	Ethanol RG2	Vaness RG3	Southfield RG4	WWTP RG5	Ironwood RG6	
1	Wed	0.04	0.04	0.05	0.05	0.04	0.06	0.05
2	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Fri	0.71	0.71	1.07	1.06	1.15	0.99	0.95
4	Sat	0.03	0.03	0.01	0.02	0.00	0.03	0.02
5	Sun	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Mon	0.31	0.31	0.39	0.28	0.30	0.29	0.31
7	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Thu	0.13	0.06	0.16	0.12	0.11	0.13	0.12
10	Fri	0.18	0.10	0.23	0.16	0.12	0.21	0.17
11	Sat	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Sun	0.14	0.10	0.19	0.13	0.14	0.17	0.14
13	Mon	0.02	0.02	0.06	0.01	0.07	0.03	0.03
14	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	Thu	0.19	0.22	0.23	0.30	0.19	0.24	0.23
17	Fri	0.43	0.48	0.51	0.37	0.41	0.41	0.43
18	Sat	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Sun	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	Mon	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Wed	0.24	0.18	0.26	0.15	0.20	0.16	0.20
23	Thu	0.17	0.24	0.23	0.20	0.21	0.19	0.21
24	Fri	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	Sat	0.30	0.20	0.40	0.44	0.22	0.44	0.33
26	Sun	0.19	0.08	0.32	0.32	0.45	0.32	0.28
27	Mon	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	Wed	0.02	0.02	0.03	0.02	0.03	0.03	0.02
30	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Fri	1.28	1.23	1.38	1.54	1.45	1.26	1.36



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend				Page 1 of 11				Permit Number: IN0024520												
Facility: South Bend Municipal WWTP				Public Notification Requirements Met? Y																
Monitoring Period: April 2023				Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																
Design Peak Hourly Flow (MGD): 77				Design Average Flow (MGD): 48				Measured/Metered (M) or Estimated (E) must be specified												
WWTP Influent Data			Precipitation Data					CSO Outfall No. 001					CSO Outfall No. 002							
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	57.1	79.9	1:20 AM	2.75	0.23	0.16	1 hr													
2	39.4	43.9			-															
3	38.7	42.5	2:00 PM	0.17	0.01	0.01	1 hr													
4	38.0	41.3	12:15 AM	0.17	0.01	0.01	1 hr													
5	48.9	79.3	8:45 AM	2.50	0.82	0.71	1 hr	11:15 AM	E	1.43	E	0.13	E	11:15 AM	E	1.03	E	0.01	E	
6	38.6	42.4			-															
7	37.9	42.3			-															
8	37.0	41.2			-															
9	37.2	42.2			-															
10	37.4	41.1			-															
11	36.7	40.0			-															
12	36.9	40.2			-															
13	36.7	40.5			-															
14	36.3	40.2			-															
15	35.7	39.4			-															
16	36.6	45.8	5:20 AM	1.58	0.18	0.12	1 hr													
17	35.5	39.9	1:00 AM	2.42	0.13	0.09	1 hr													
18	33.9	36.5			-															
19	34.1	39.6	9:25 PM	1.08	0.09	0.09	1 hr													
20	35.0	41.3	3:50 AM	2.50	0.18	0.08	1 hr													
21	35.3	42.3	12:10 AM	1.17	0.04	0.02	1 hr													
22	34.5	40.6	1:00 AM	2.75	0.14	0.06	1 hr													
23	33.3	37.9	5:15 AM	1.42	0.10	0.04	1 hr													
24	33.0	36.0			-															
25	34.2	46.5	3:20 AM	2.50	0.15	0.11	1 hr													
26	33.0	36.4			-															
27	32.9	36.4			-															
28	34.1	41.9	8:25 AM	3.83	0.18	0.07	1 hr													
29	36.8	56.4	2:55 PM	2.25	0.21	0.14	1 hr													
30	33.9	41.7	11:35 AM	3.58	0.17	0.07	1 hr													
Totals: 1108.4				30.67	2.64			1	Days	1.43		0.13		1	Days	1.03		0.01		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent												Telephone								
Kim Thompson, Director of Wastewater												574-235-5969								
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent												Date (mm/dd/yy)								
<i>Kim Thompson</i>												5-15-23								

5-15-23



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 2 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: April 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 003						CSO Outfall No. 004						CSO Outfall No. 006						CSO Outfall No. 007							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	12:00 AM	M	1.33	M	1.60	E																			
2																									
3																									
4																									
5	11:00 AM	M	2.25	M	2.98	E							11:15 AM	E	4.61	E	2.36	E	11:35 AM	E	1.47	E	0.01	E	
6																									
7																									
8																									
9																									
10																									
11																									
12																									
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23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
Totals:	2	Days	3.58		4.58		0	Days			0.00		1	Days	4.61		2.36		1	Days	1.47		0.01		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 3 of 11			Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: April 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 008						CSO Outfall No. 010						CSO Outfall No. 11A						CSO Outfall No. 11B						
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	9:55 AM	E	3.02	E	0.02	E	9:55 AM	E	1.27	E	0.01	E							9:55 AM	E	1.08	E	0.05	E
2																								
3																								
4																								
5	11:35 AM	E	10.61	E	0.14	E	11:35 AM	E	5.60	E	0.15	E							11:35 AM	E	5.16	E	0.93	E
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16	12:40 PM	E	1.53	E	0.00	E																		
17	4:20 AM	E	0.88	E	0.00	E																		
18																								
19	11:40 PM	E	0.33	E	0.00	E																		
20	12:00 AM	E	1.42	E	0.00	E																		
21																								
22	3:10 AM	E	2.38	E	0.01	E	3:10 AM	E	0.63	E	0.01	E							3:10 AM	E	0.54	E	0.03	E
23																								
24																								
25	8:00 AM	E	0.88	E	0.00	E																		
26																								
27																								
28	10:45 AM	E	1.75	E	0.00	E	10:45 AM	E	0.00	E	0.00	E							10:45 AM	E	0.00	E	0.00	E
29	5:00 PM	E	1.75	E	0.00	E	5:00 PM	E	0.00	E	0.00	E							5:00 PM	E	0.00	E	0.00	E
30	5:50 PM	E	1.53	E	0.00	E																		
Totals:	11	Da ys	26.08		0.17		5	Da ys	7.50		0.17		0	Da ys			0.00		5	Da ys	6.78		1.01	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 4 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: April 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																			
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 014						CSO Outfall No. 018						CSO Outfall No. 019						CSO Outfall No. 021							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5	11:35 AM	E	1.38	E	0.06	E	11:35 AM	E	6.83	E	0.39	E	10:50 AM	E	1.20	E	0.03	E	10:50 AM	E	0.24	E	0.00	E	
6																									
7																									
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23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
Totals:	1	Da ys	1.38		0.06		1	Da ys	6.83		0.39		1	Da ys	1.20		0.03		1	Da ys	0.24		0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 5 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: April 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 022					CSO Outfall No. 025					CSO Outfall No. 026					CSO Outfall No. 027										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	12:00 AM	M	3.00	M	0.45	E																			
2																									
3																									
4																									
5	10:30 AM	M	2.25	M	0.96	E									11:15 AM	E	0.41	E	0.02	E					
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
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22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
Totals:	2	Da ys	5.25		1.41		0	Da ys			0.00		0	Da ys			0.00		1	Da ys		0.41		0.02	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 6 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: April 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 028					CSO Outfall No. 029					CSO Outfall No. 031					CSO Outfall No. 033									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E						
1							9:55 AM	E	0.31	E	0.00	E	9:55 AM	E	1.58	E	0.07	E	9:55 AM	E	0.73	E	0.00	E
2																								
3																								
4																								
5	11:35 AM	E	0.45	E	0.00	E	11:35 AM	E	2.27	E	0.03	E	11:35 AM	E	7.23	E	0.94	E	11:35 AM	E	7.51	E	0.03	E
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22							3:10 AM	E	0.15	E	0.00	E	3:10 AM	E	0.79	E	0.03	E	3:10 AM	E	0.37	E	0.00	E
23																								
24																								
25																								
26																								
27																								
28							10:45 AM	E	0.00	E	0.00	E	10:45 AM	E	0.00	E	0.00	E	10:45 AM	E	0.00	E	0.00	E
29							5:00 PM	E	0.00	E	0.00	E	5:00 PM	E	0.00	E	0.00	E	5:00 PM	E	0.00	E	0.00	E
30																								
Totals:	1	Da ys	0.45		0.00		5	Da ys	2.73		0.03		5	Da ys	9.60		1.04		5	Da ys	8.61		0.03	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 7 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: April 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 035						CSO Outfall No. 036						CSO Outfall No. 037						CSO Outfall No. 038							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	9:55 AM	E	2.64	E	0.02	E							12:00 AM	M	0.50	M	0.06	E							
2																									
3																									
4																									
5	11:35 AM	E	10.38	E	0.17	E	11:35 AM	E	2.93	E	0.01	E	11:05 AM	M	1.17	M	0.52	E							
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16	12:40 PM	E	0.29	E	0.00	E																			
17	4:20 AM	E	0.17	E	0.00	E																			
18																									
19	11:40 PM	E	0.08	E	0.00	E																			
20	8:55 AM	E	0.25	E	0.00	E																			
21																									
22	3:10 AM	E	1.49	E	0.01	E																			
23																									
24																									
25	8:00 AM	E	0.17	E	0.00	E																			
26																									
27																									
28	10:45 AM	E	0.33	E	0.00	E																			
29	5:00 PM	E	0.33	E	0.00	E																			
30	5:50 PM	E	0.29	E	0.00	E																			
Totals:	11	Da ys	16.42		0.20		1	Da ys	2.93		0.01		2	Da ys	1.67		0.58		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 8 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: April 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																			
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 039						CSO Outfall No. 040						CSO Outfall No. 041						CSO Outfall No. 042							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5	10:50 AM	E	2.91	E	0.10	E	11:15 AM	E	0.46	E	0.01	E	10:50 AM	E	1.07	E	0.00	E							
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
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22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
Totals:	1	Da ys	2.91		0.10		1	Da ys	0.46		0.01		1	Da ys	1.07		0.00		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 9 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: April 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1							12:00 AM	M	2.17	M	1.20	E	3:20 AM	E	1.56	E	0.04	E							
2																									
3																									
4																									
5							11:25 AM	M	2.75	M	1.92	E	10:50 AM	E	7.52	E	0.41	E							
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16													12:40 PM	E	1.04	E	0.03	E							
17																									
18																									
19																									
20													10:30 AM	E	0.00	E	0.00	E							
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28													10:25 AM	E	1.04	E	0.03	E							
29													5:05 PM	E	1.04	E	0.03	E							
30													5:40 PM	E	0.69	E	0.02	E							
Totals:	0	Da ys			0.00		2	Da ys	4.92		3.12		7	Da ys	12.89		0.56		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 10 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: April 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 060							CSO Outfall No.							CSO Outfall No. [#]					CSO Outfall No. [#]					
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	9:55 AM	E	2.69	E	0.00	E																		
2																								
3																								
4																								
5	11:35 AM	E	8.77	E	0.02	E																		
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22	3:10 AM	E	1.35	E	0.00	E																		
23																								
24																								
25																								
26																								
27																								
28	10:45 AM	E	0.00	E	0.00	E																		
29	5:00 PM	E	0.00	E	0.00	E																		
30																								
Totals:	5	Days	12.81		0.02		0	Days			0.00		0	Days			0.00		0	Days			0.00	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input type="checkbox"/>	
Monitoring Period: April Year: 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48	
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1	Precipitation Event Observed		
2			
3			
4			
5	Precipitation Event Observed		
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16	Precipitation Event Observed		
17	Precipitation Event Observed		
18			
19	Precipitation Event Observed		
20	Precipitation Event Observed		
21			
22	Precipitation Event Observed		
23			
24			
25	Precipitation Event Observed		
26			
27			
28	Precipitation Event Observed		
29	Precipitation Event Observed		
30	Precipitation Event Observed		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson , Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>X-Thomp</i>		5-15-2023	

CSO Public Notification - April

Day of Month	Day of Week	Total Daily Precip. (inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Sat	0.23	3.52	YES	
2	Sun	-	-		
3	Mon	0.01	0.00		
4	Tue	0.01	0.00		
5	Wed	0.82	12.33	YES	
6	Thu	-	-		
7	Fri	-	-		
8	Sat	-	-		
9	Sun	-	-		
10	Mon	-	-		
11	Tue	-	-		
12	Wed	-	-		
13	Thu	-	-		
14	Fri	-	-		
15	Sat	-	-		
16	Sun	0.18	0.03	YES	
17	Mon	0.13	0.00	YES	<10,000 Gallons
18	Tue	-	-		
19	Wed	0.09	0.00	YES	Overflow began on 4/19 and continued into 4/20. <10,000 Gallons
20	Thu	0.18	0.00	YES	<10,000 Gallons
21	Fri	0.04	0.00	YES	Notice Sent Due To Precipitation, But No Overflows
22	Sat	0.14	0.09	YES	
23	Sun	0.10	0.00	YES	Notice Sent Due To Precipitation, But No Overflows
24	Mon	-	-		
25	Tue	0.15	0.00	YES	<10,000 Gallons
26	Wed	-	-		
27	Thu	-	-		
28	Fri	0.18	0.03	YES	
29	Sat	0.21	0.03	YES	
30	Sun	0.17	0.02	YES	

Notes

Average Daily Flow	Average value of 5-min WWTP flow data
Peak Hourly Flow	Maximum value of the rolling hourly average flow rate
Time Precipitation Began	First precipitation recorded between the six rain gauges
Precipitation Duration	Cumulative duration of all precipitation for the day
Total Daily Precipitation	Maximum value of precipitation for all the six rain gauges
Peak Intensity	Maximum precipitation depth in an hour
Design Peak Hourly Flow	Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.

City of South Bend, Indiana
 CSO Overflow Summary
 APRIL 2023

NUMBER OF OVERFLOW EVENTS IN APRIL 2023 =

11

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	1.43	0.13	1
002	1.03	0.01	1
003	3.58	4.58	2
004			0
006	4.61	2.36	1
007	1.47	0.01	1
008	26.08	0.17	11
010	7.50	0.17	5
11A			0
11B	6.78	1.01	5
014	1.38	0.06	1
018	6.83	0.39	1
019	1.20	0.03	1
021	0.24	0.00	1
022	5.25	1.41	2
025			0
026			0
027	0.41	0.02	1
028	0.45	0.00	1
029	2.73	0.03	5
031	9.60	1.04	5
033	8.61	0.03	5
035	16.42	0.20	11
036	2.93	0.01	1
037	1.67	0.58	2
038			0
039	2.91	0.10	1
040	0.46	0.01	1
041	1.07	0.00	1
042			0
044			0
045	4.92	3.12	2
048	12.89	0.56	7
049			0
060	12.81	0.02	5
Total		16.0	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.

Precipitation Data Summary - April

Day of Month	Day of Week	Daily Precipitation (in)						Average Daily Precipitation (in)
		Colfax RG1	Ethanol RG2	Vaness RG3	Southfield RG4	WWTP RG5	Ironwood RG6	
1	Sat	0.18	0.19	0.23	0.18	0.23	0.21	0.20
2	Sun	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Mon	0.00	0.00	0.01	0.01	0.01	0.00	0.00
4	Tue	0.00	0.00	0.00	0.01	0.00	0.01	0.00
5	Wed	0.62	0.82	0.59	0.57	0.66	0.63	0.65
6	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Fri	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Sat	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Sun	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Mon	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Fri	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Sat	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	Sun	0.11	0.10	0.16	0.18	0.10	0.17	0.14
17	Mon	0.08	0.13	0.07	0.06	0.05	0.07	0.08
18	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Wed	0.06	0.04	0.09	0.07	0.09	0.08	0.07
20	Thu	0.10	0.14	0.12	0.18	0.04	0.12	0.12
21	Fri	0.02	0.04	0.03	0.02	0.04	0.02	0.03
22	Sat	0.14	0.09	0.12	0.01	0.13	0.07	0.09
23	Sun	0.01	0.04	0.00	0.10	0.00	0.03	0.03
24	Mon	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	Tue	0.08	0.04	0.15	0.07	0.15	0.09	0.10
26	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	Fri	0.12	0.04	0.17	0.14	0.12	0.18	0.13
29	Sat	0.12	0.17	0.21	0.17	0.14	0.18	0.16
30	Sun	0.11	0.17	0.10	0.15	0.12	0.16	0.13



National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 1 of 11		Permit Number: IN0024520															
Facility: South Bend Municipal WWTP				Public Notification Requirements Met? Y															
Monitoring Period: May 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48		Measured/Metered (M) or Estimated (E) must be specified															
WWTP Influent Data			Precipitation Data					CSO Outfall No. 001					CSO Outfall No. 002						
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	49.1	65.8	12:25 AM	14.83	0.74	0.10	1 hr	2:50 AM	E	1.14	E	0.08	E	2:50 AM	E	0.45	E	0.00	E
2	45.4	66.8	12:00 AM	5.25	0.18	0.05	1 hr												
3	33.4	36.0			-														
4	33.5	37.2			-														
5	33.0	36.6			-														
6	32.1	35.7	10:35 AM	0.08	0.01	0.01	1 hr												
7	35.1	49.7	1:05 AM	1.25	0.26	0.26	1 hr												
8	32.5	35.9	4:45 PM	0.42	0.04	0.03	1 hr												
9	32.7	37.0			-														
10	32.5	36.8			-														
11	32.7	36.6			-														
12	34.0	48.4	8:00 PM	3.00	0.39	0.34	1 hr												
13	33.3	46.8	12:00 AM	1.42	0.08	0.03	1 hr												
14	31.4	35.2	6:30 AM	0.08	0.01	0.01	1 hr												
15	31.6	35.4			-														
16	31.6	36.1			-														
17	31.5	34.5			-														
18	31.1	35.1			-														
19	37.8	71.8	2:20 PM	4.00	0.41	0.27	1 hr	4:20 PM	E	0.59	E	0.03	E						
20	30.3	35.0	2:05 AM	0.08	0.01	0.01	1 hr												
21	29.8	33.7			-														
22	30.2	33.6			-														
23	29.9	33.5			-														
24	29.5	32.7			-														
25	28.7	31.2			-														
26	29.1	32.4			-														
27	29.7	34.1			-														
28	29.3	33.6			-														
29	29.1	33.3			-														
30	29.8	34.0			-														
31	30.1	33.9			-														
Totals:	1009.9			30.42	2.13			2	Dis	1.73		0.10		1	Dis	0.45		0.00	
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent												Telephone							
Kim Thompson, Director of Wastewater												574-235-5969							
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																			
Signature of Principal Executive Officer or Authorized Agent												Date (mm/dd/yy)							
<i>Kim Thompson</i>												6-16-23							



National Pollutant Discharge Elimination System (NPDES)

CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 2 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: May 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 003					CSO Outfall No. 004					CSO Outfall No. 006					CSO Outfall No. 007										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
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18																									
19													5:00 PM	M	0.50	M	0.01	E							
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21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
Totals:	0	Da ys			0.00		0	Da ys			0.00		1	Da ys	0.50		0.01		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 3 of 11			Permit Number: IN0024520							
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y										
Monitoring Period: May 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>										
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified										
CSO Outfall No. 008						CSO Outfall No. 010						CSO Outfall No. 11A			CSO Outfall No. 11B							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E				
1	2:50 AM	E	8.43	E	0.09	E	2:50 AM	E	4.33	E	0.09	E					2:50 AM	E	3.98	E	0.51	E
2	2:10 AM	E	1.96	E	0.00	E	2:10 AM	E	0.21	E	0.00	E					2:10 AM	E	0.18	E	0.01	E
3																						
4																						
5																						
6																						
7	3:05 AM	E	1.09	E	0.00	E																
8																						
9																						
10																						
11																						
12	10:20 PM	E	1.67	E	0.01	E	10:20 PM	E	1.67	E	0.02	E					10:20 PM	E	1.67	E	0.08	E
13	12:00 AM	E	2.20	E	0.02	E	12:00 AM	E	0.45	E	0.00	E					12:00 AM	E	0.12	E	0.01	E
14																						
15																						
16																						
17																						
18																						
19	4:45 PM	E	5.33	E	0.05	E	4:45 PM	E	3.08	E	0.04	E					4:45 PM	E	2.68	E	0.19	E
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						
29																						
30																						
31																						
Totals:		6	Da	20.68	0.17		5	Da	9.74	0.16			0	Da		0.00	5	Da	8.63	0.80		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 4 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: May 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 014					CSO Outfall No. 018					CSO Outfall No. 019					CSO Outfall No. 021									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	2:50 AM	E	0.76	E	0.04	E	2:50 AM	E	5.00	E	0.17	E	2:25 AM	E	1.34	E	0.03	E	2:25 AM	E	0.32	E	0.00	E
2																								
3																								
4																								
5																								
6																								
7													3:20 AM	E	0.03	E	0.00	E						
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19	4:45 PM	E	0.16	E	0.01	E	4:45 PM	E	1.05	E	0.04	E												
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	2	Da ys	0.92		0.05		2	Da ys	6.05		0.21		2	Da ys	1.37		0.03		1	Da ys	0.32		0.00	



National Pollutant Discharge Elimination System (NPDES)

CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 5 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: May 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 022					CSO Outfall No. 025					CSO Outfall No. 026					CSO Outfall No. 027										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																				2:55 AM	E	0.05	E	0.00	E
2																									
3																									
4																									
5																									
6																									
7	2:30 AM	M	0.25	M	0.05	E																			
8																									
9																									
10																									
11																									
12	8:50 PM	M	0.75	M	0.44	E																			
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
Totals:		2	Da ys	1.00		0.49	0	Da ys			0.00		0	Da ys			0.00		1	Da ys	0.05		0.00		



National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 6 of 11					Permit Number: IN0024520															
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y																				
Monitoring Period: May 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																				
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified																				
Day of Month	CSO Outfall No. 028						CSO Outfall No. 029						CSO Outfall No. 031						CSO Outfall No. 033											
	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E						
1							2:50 AM	E	1.81	E	0.02	E	2:50 AM	E	4.94	E	0.53	E	2:50 AM	E	5.13	E	0.02	E						
2							2:10 AM	E	0.05	E	0.00	E	2:10 AM	E	0.26	E	0.01	E	2:10 AM	E	0.12	E	0.00	E						
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12							10:20 PM	E	0.51	E	0.00	E	10:20 PM	E	1.67	E	0.07	E	10:20 PM	E	1.22	E	0.00	E						
13													12:00 AM	E	0.96	E	0.04	E												
14																														
15																														
16																														
17																														
18																														
19							4:45 PM	E	0.91	E	0.00	E	4:45 PM	E	3.74	E	0.23	E	4:45 PM	E	2.33	E	0.00	E						
20																														
21																														
22																														
23																														
24																														
25																														
26																														
27																														
28																														
29																														
30																														
31																														
Totals:	0	Da			0.00		4	Da	3.28		0.02		5	Da	11.57		0.89		4	Da	8.80		0.02							



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 7 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: May 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 035					CSO Outfall No. 036					CSO Outfall No. 037					CSO Outfall No. 038									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	2:50 AM	E	8.06	E	0.11	E	2:50 AM	E	1.96	E	0.01	E												
2	2:10 AM	E	0.72	E	0.00	E																		
3																								
4																								
5																								
6																								
7	3:05 AM	E	0.21	E	0.00	E																		
8																								
9																								
10																								
11																								
12	10:20 PM	E	1.67	E	0.01	E																		
13	12:00 AM	E	2.51	E	0.02	E																		
14																								
15																								
16																								
17																								
18																								
19	4:45 PM	E	5.91	E	0.05	E	4:45 PM	E	0.41	E	0.00	E												
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	6	Da	19.08		0.20		2	Da	2.37		0.01		0	Da			0.00		0	Da			0.00	



National Pollutant Discharge Elimination System (NPDES)

CSO Monthly Report of Operation (CSO MRO)

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 8 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: May 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 039					CSO Outfall No. 040					CSO Outfall No. 041					CSO Outfall No. 042										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	2:25 AM	E	3.06	E	0.11	E	2:55 AM	E	0.05	E	0.00	E	2:25 AM	E	1.22	E	0.01	E							
2																									
3																									
4																									
5																									
6																									
7	3:20 AM	E	0.10	E	0.00	E																			
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
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20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
Totals:	2	Da ys	3.16		0.11		1	Da ys	0.05		0.00		1	Da ys	1.22		0.01		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 9 of 11					Permit Number: IN0024520							
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y												
Monitoring Period: May 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E				
1													2:25 AM	E	8.02	E	0.45	E				
2													2:10 AM	E	1.04	E	0.03	E				
3																						
4																						
5																						
6																						
7													3:20 AM	E	2.40	E	0.07	E				
8																						
9																						
10																						
11																						
12													10:15 PM	E	1.04	E	0.03	E				
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						
29																						
30																						
31																						
Totals:	0	Days			0.00		0	Days			0.00		4	Days	12.50		0.57		0	Days		0.00



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 10 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: May 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77										Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified									
CSO Outfall No. 060										CSO Outfall No.					CSO Outfall No. [#]					CSO Outfall No. [#]				
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	2:50 AM	E	7.67	E	0.01	E																		
2	2:10 AM	E	0.45	E	0.00	E																		
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12	10:20 PM	E	1.67	E	0.00	E																		
13	12:00 AM	E	2.82	E	0.00	E																		
14																								
15																								
16																								
17																								
18																								
19	4:45 PM	E	6.22	E	0.00	E																		
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	5	Da ys	18.83		0.01		0	Da ys		0.00			0	Da ys		0.00			0	Da ys		0.00		



**National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)**
State Form 50546 (R3 / 7-13)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input type="checkbox"/>	
Monitoring Period: May Year: 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48	
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1	Precipitation Event Observed		
2	Precipitation Event Observed		
3			
4			
5			
6			
7	Precipitation Event Observed		
8			
9			
10			
11			
12	Precipitation Event Observed		
13	Precipitation Event Observed		
14			
15			
16			
17			
18			
19	Precipitation Event Observed		
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>Kim Thompson</i>		6-16-23	

CSO Public Notification - May

Day of Month	Day of Week	Total Daily Precip. (inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Mon	0.74	2.26	YES	
2	Tue	0.18	0.06	YES	
3	Wed	-	-		
4	Thu	-	-		
5	Fri	-	-		
6	Sat	0.01	0.00		
7	Sun	0.26	0.12	YES	
8	Mon	0.04	0.00	YES	Notification Sent Due To Precipitation, But No Overflows
9	Tue	-	-		
10	Wed	-	-		
11	Thu	-	-		
12	Fri	0.39	0.66	YES	
13	Sat	0.08	0.09	YES	
14	Sun	0.01	0.00		
15	Mon	-	-		
16	Tue	-	-		
17	Wed	-	-		
18	Thu	-	-		
19	Fri	0.41	0.67	YES	
20	Sat	0.01	0.00		
21	Sun	-	-		
22	Mon	-	-		
23	Tue	-	-		
24	Wed	-	-		
25	Thu	-	-		
26	Fri	-	-		
27	Sat	-	-		
28	Sun	-	-		
29	Mon	-	-		
30	Tue	-	-		
31	Wed	-	-		

Notes

- Average Daily Flow Average value of 5-min WWTP flow data
- Peak Hourly Flow Maximum value of the rolling hourly average flow rate
- Time Precipitation Began First precipitation recorded between the six rain gauges
- Precipitation Duration Cumulative duration of all precipitation for the day
- Total Daily Precipitation Maximum value of precipitation for all the six rain gauges
- Peak Intensity Maximum precipitation depth in an hour
- Design Peak Hourly Flow Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.

City of South Bend, Indiana
CSO Overflow Summary
MAY 2023

NUMBER OF OVERFLOW EVENTS IN MAY 2023 = 5

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	1.73	0.10	2
002	0.45	0.00	1
003			0
004			0
006	0.50	0.01	1
007			0
008	20.68	0.17	5
010	9.74	0.16	4
11A			0
11B	8.63	0.80	4
014	0.92	0.05	2
018	6.05	0.21	2
019	1.37	0.03	2
021	0.32	0.00	1
022	1.00	0.49	2
025			0
026			0
027	0.05	0.00	1
028			0
029	3.28	0.02	4
031	11.57	0.89	4
033	8.80	0.02	4
035	19.08	0.20	5
036	2.37	0.01	2
037			0
038			0
039	3.16	0.11	2
040	0.05	0.00	1
041	1.22	0.01	1
042			0
044			0
045			0
048	12.50	0.57	4
049			0
060	18.83	0.01	4
Total		3.9	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.



National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend				Page 1 of 11				Permit Number: IN0024520												
Facility: South Bend Municipal WWTP				Public Notification Requirements Met? Y																
Monitoring Period: June 2023				Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																
Design Peak Hourly Flow (MGD): 77				Design Average Flow (MGD): 48				Measured/Metered (M) or Estimated (E) must be specified												
WWTP Influent Data			Precipitation Data					CSO Outfall No. 001					CSO Outfall No. 002							
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	36.3	75.8	1:15 PM	2.17	1.05	0.81	1 hr													
2	30.0	33.9	5:25 AM	0.08	0.01	0.01	1 hr													
3	30.0	34.8	6:55 PM	0.50	0.21	0.21	1 hr													
4	28.4	31.6			-															
5	28.8	32.0			-															
6	28.4	32.0			-															
7	28.1	31.5			-															
8	27.6	30.9			-															
9	27.8	31.6			-															
10	27.7	32.0			-															
11	30.3	41.2	9:15 AM	6.33	0.43	0.19	1 hr													
12	28.1	39.8	12:30 AM	0.25	0.03	0.02	1 hr													
13	37.1	80.1	5:15 PM	6.00	0.82	0.28	1 hr	7:15 PM	E	1.76	E	0.18	E	7:15 PM	E	1.68	E	0.01	E	
14	31.4	73.8	12:10 AM	1.75	0.21	0.05	1 hr													
15	28.4	32.3			-															
16	27.6	31.0	6:15 AM	0.08	0.01	0.01	1 hr													
17	27.2	30.8			-															
18	27.3	31.2			-															
19	28.3	32.4			-															
20	28.5	31.3			-															
21	28.9	34.0			-															
22	28.3	31.8			-															
23	28.2	31.4			-															
24	27.2	32.1	11:45 PM	0.17	-	0.13	1 hr													
25	35.0	72.3	12:00 AM	5.00	0.81	0.37	1 hr	6:50 AM	E	1.94	E	0.22	E	6:50 AM	E	2.06	E	0.02	E	
26	33.6	52.4	12:00 AM	5.67	0.29	0.07	1 hr													
27	27.6	30.8			-															
28	27.6	32.2			-															
29	28.7	36.3	5:55 AM	1.08	0.16	0.16	1 hr													
30	27.8	31.3	9:10 PM	0.08	0.01	0.01	1 hr													
Totals:			880.2		29.17	4.04		2	Days	3.70		0.40		2	Days	3.74		0.03		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent												Telephone								
Kim Thompson, Director of Wastewater												574-235-5969								
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent												Date (mm/dd/yy)								
<i>Kim Thompson</i>												7-20-23								



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 2 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: June 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 003					CSO Outfall No. 004					CSO Outfall No. 006					CSO Outfall No. 007									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1							3:15 PM	E	1.21	E	0.02	E	2:45 PM	M	1.75	M	0.53	E	3:15 PM	E	4.48	E	0.08	E
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14													7:00 PM	M	4.00	M	0.60	E	7:20 PM	E	1.47	E	0.01	E
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25													6:15 AM	M	0.50	M	0.04	E	7:05 AM	E	0.23	E	0.00	E
26																								
27																								
28																								
29																								
30																								
Totals:	0	Da ys			0.00		1	Da ys	1.21		0.02		3	Da ys	6.25		1.17		3	Da ys	6.18		0.09	



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend										Page 3 of 11					Permit Number: IN0024520								
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y													
Monitoring Period: June 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 008					CSO Outfall No. 010					CSO Outfall No. 11A					CSO Outfall No. 11B								
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E					
1	3:15 PM	E	8.75	E	0.16	E	3:15 PM	E	8.75	E	0.30	E					3:15 PM	E	8.17	E	1.94	E	
2	12:00 AM	E	5.17	E	0.10	E	12:00 AM	E	0.06	E	0.00	E											
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11	11:20 AM	E	4.71	E	0.04	E	11:20 AM	E	2.83	E	0.03	E					11:20 AM	E	2.42	E	0.13	E	
12																							
13	7:20 PM	E	4.67	E	0.06	E	7:20 PM	E	4.67	E	0.13	E					7:20 PM	E	4.67	E	0.84	E	
14	12:00 AM	E	5.94	E	0.08	E	12:00 AM	E	0.93	E	0.03	E					12:00 AM	E	0.49	E	0.09	E	
15																							
16																							
17																							
18																							
19																							
20																							
21																							
22																							
23																							
24																							
25	7:05 AM	E	9.81	E	0.11	E	7:05 AM	E	4.95	E	0.12	E					7:05 AM	E	4.60	E	0.69	E	
26	7:00 AM	E	3.87	E	0.03	E	7:00 AM	E	2.12	E	0.02	E					7:00 AM	E	1.79	E	0.08	E	
27																							
28																							
29	10:00 AM	E	0.22	E	0.00	E																	
30																							
Totals:	8	Da ys	43.14		0.57		7	Da ys	24.31		0.62		0	Da ys			0.00		6	Da ys	22.14		3.78



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City: City of South Bend		Page 4 of 11		Permit Number: IN0024520																				
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y																						
Monitoring Period: June 2023		Design Peak Flow (Hourly) (MGD): 77		Design Flow (MGD): 48																				
		Measured/Metered (M) or Estimated (E) must be specified		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																				
CSO Outfall No. 014		CSO Outfall No. 018		CSO Outfall No. 019		CSO Outfall No. 021																		
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E						
1	3:15 PM	E	2.43	E	0.14	E																		
2																								
3													12:55 PM	E	0.25	E	0.00	E						
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11	11:20 AM	E	0.04	E	0.00	E	11:20 AM	E	0.26	E	0.01	E												
12																								
13	7:20 PM	E	1.38	E	0.06	E	7:20 PM	E	4.67	E	0.27	E	7:15 PM	E	1.84	E	0.05	E	7:15 PM	E	0.59	E	0.00	E
14							12:00 AM	E	2.16	E	0.12	E												
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25	7:05 AM	E	1.06	E	0.05	E	7:05 AM	E	6.62	E	0.26	E	7:10 AM	E	1.20	E	0.03	E	7:10 AM	E	0.24	E	0.00	E
26													2:00 AM	E	0.12	E	0.00	E						
27																								
28																								
29																								
30																								
Totals:	4	Da ys	4.91		0.25		5	Da ys	21.85		1.58		4	Da ys	3.41		0.08		2	Da ys	0.83		0.00	

Dry Weather Overflow on 3rd.



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City: City of South Bend										Page 5 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: June 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 022					CSO Outfall No. 025					CSO Outfall No. 026					CSO Outfall No. 027									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	2:05 PM	M	0.92	M	0.37	E																		
2																								
3	7:45 PM	M	0.25	M	0.00	E																		
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11	8:30 PM	M	0.25	M	0.02	E																		
12																								
13	6:45 PM	M	3.00	M	0.23	E									7:20 PM	E	0.41	E	0.02	E				
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25	6:05 AM	M	0.67	M	0.06	E									2:00 AM	E	0.41	E	0.02	E				
26																								
27																								
28																								
29																								
30																								
Totals:	5	Da ys	5.08		0.68		0	Da ys		0.00		0	Da ys		0.00		2	Da ys	0.82		0.04			



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Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: June 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 028					CSO Outfall No. 029					CSO Outfall No. 031					CSO Outfall No. 033									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	3:15 PM	E	1.83	E	0.03	E	3:15 PM	E	3.49	E	0.07	E	3:15 PM	E	8.75	E	1.39	E	3:15 PM	E	8.75	E	0.05	E
2													12:00 AM	E	3.05	E	0.48	E	12:00 AM	E	2.69	E	0.01	E
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11							11:20 AM	E	0.73	E	0.00	E	11:20 AM	E	3.50	E	0.17	E	11:20 AM	E	1.77	E	0.00	E
12																								
13	7:20 PM	E	0.45	E	0.00	E	7:20 PM	E	2.27	E	0.03	E	7:20 PM	E	4.67	E	0.61	E	7:20 PM	E	4.67	E	0.02	E
14													12:00 AM	E	2.56	E	0.33	E	12:00 AM	E	2.84	E	0.01	E
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25	7:05 AM	E	0.07	E	0.00	E	7:05 AM	E	2.18	E	0.02	E	7:05 AM	E	5.70	E	0.69	E	7:05 AM	E	6.44	E	0.02	E
26							7:00 AM	E	0.51	E	0.00	E	7:00 AM	E	2.63	E	0.12	E	7:00 AM	E	1.22	E	0.00	E
27																								
28																								
29																								
30																								
Totals:	3	Da ys	2.35		0.03		5	Da ys	9.18		0.13		7	Da ys	30.86		3.79		7	Da ys	28.38		0.11	



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City: City of South Bend		Page 7 of 11		Permit Number: IN0024520																	
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																	
Monitoring Period: June 2023		Design Peak Flow (Hourly) (MGD): 77		Design Flow (MGD): 48																	
				Measured/Metered (M) or Estimated (E) must be specified																	
		CSO Outfall No. 035		CSO Outfall No. 036																	
				CSO Outfall No. 037																	
				CSO Outfall No. 038																	
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E			
1	3:15 PM	E	8.75	E	0.18	E	3:15 PM	E	4.11	E	0.04	E	2:05 PM	M	2.00	M	1.41	E			
2	12:00 AM	E	5.99	E	0.12	E															
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11	11:20 AM	E	5.48	E	0.04	E	11:20 AM	E	0.10	E	0.00	E									
12																					
13	7:20 PM	E	4.67	E	0.08	E	7:20 PM	E	2.93	E	0.01	E	8:10 PM	M	0.75	M	0.02	E			
14	12:00 AM	E	5.71	E	0.09	E															
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					
25	7:05 AM	E	9.14	E	0.14	E	7:05 AM	E	2.64	E	0.01	E									
26	7:00 AM	E	4.18	E	0.03	E															
27																					
28																					
29	10:00 AM	E	0.04	E	0.00	E															
30																					
Totals:	8	Days	43.96		0.68		4	Days	9.78		0.06		2	Days	2.75		1.43		0	Days	0.00



National Pollutant Discharge Elimination System (NPDES)
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Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: June 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 039					CSO Outfall No. 040					CSO Outfall No. 041					CSO Outfall No. 042										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13	7:15 PM	E	3.61	E	0.15	E	7:20 PM	E	0.46	E	0.01	E	7:15 PM	E	1.77	E	0.01	E							
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25	7:10 AM	E	2.91	E	0.10	E	2:00 AM	E	0.46	E	0.01	E	7:10 AM	E	1.07	E	0.00	E							
26	2:00 AM	E	0.39	E	0.01	E																			
27																									
28																									
29																									
30																									
Totals:	3	Da ys	6.91		0.26		2	Da ys	0.92		0.02		2	Da ys	2.84		0.01		0	Da ys			0.00		



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City: City of South Bend										Page 9 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: June 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13							8:45 PM	M	2.17	M	0.66	E	7:15 PM	E	4.75	E	0.28	E						
14													12:00 AM	E	5.10	E	0.30	E						
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25													7:10 AM	E	7.52	E	0.41	E						
26													2:00 AM	E	2.84	E	0.10	E						
27																								
28																								
29																								
30																								
Totals:	0	Da			0.00		1	Da		2.17		0.66		4	Da		20.21		1.09		0	Da		0.00



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Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: June 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 060					CSO Outfall No.					CSO Outfall No. [#]					CSO Outfall No. [#]									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	3:15 PM	E	8.75	E	0.03	E																		
2	12:00 AM	E	2.70	E	0.01	E																		
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11	11:20 AM	E	5.93	E	0.00	E																		
12																								
13	7:20 PM	E	4.67	E	0.01	E																		
14	12:00 AM	E	4.10	E	0.01	E																		
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25	7:05 AM	E	8.33	E	0.01	E																		
26	7:00 AM	E	4.49	E	0.00	E																		
27																								
28																								
29																								
30																								
Totals:	7	Da ys	38.97		0.07		0	Da ys		0.00		0	Da ys		0.00		0	Da ys		0.00		0	Da ys	0.00



**National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)**
State Form 50546 (R3 / 7-13)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y	
Monitoring Period: June	Year: 2023	Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77	Design Average Flow (MGD): 48		
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1	Precipitation Event Observed		
2	Precipitation Event Observed		
3	Dry Weather Overflow At CSO 019, Precipitation Event Observed After the DWO		
4			
5			
6			
7			
8			
9			
10			
11	Precipitation Event Observed		
12			
13	Precipitation Event Observed		
14	Precipitation Event Observed		
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25	Precipitation Event Observed		
26	Precipitation Event Observed		
27			
28			
29	Precipitation Event Observed		
30			
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>Kim Thompson</i>		7-20-23	

CSO Public Notification - June

Day of Month	Day of Week	Total Daily Precip. (inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Thu	1.05	7.65	YES	
2	Fri	0.01	0.73	YES	
3	Sat	0.21	0.00	YES	There was a Dry Weather Overflow at CSO 019, Precipitation Event Observed After the DWO
4	Sun	-	-		
5	Mon	-	-		
6	Tue	-	-		
7	Wed	-	-		
8	Thu	-	-		
9	Fri	-	-		
10	Sat	-	-		
11	Sun	0.43	0.45	YES	
12	Mon	0.03	0.00		
13	Tue	0.82	4.35	YES	
14	Wed	0.21	1.06	YES	
15	Thu	-	-		
16	Fri	0.01	0.00		
17	Sat	-	-		
18	Sun	-	-		
19	Mon	-	-		
20	Tue	-	-		
21	Wed	-	-		
22	Thu	-	-		
23	Fri	-	-		
24	Sat	-	-		
25	Sun	0.81	3.01	YES	
26	Mon	0.29	0.39	YES	
27	Tue	-	-	YES	Notification Sent But No Overflows
28	Wed	-	-		
29	Thu	0.16	0.00	YES	<10,000 Gallons
30	Fri	0.01	0.00		

Notes

Average Daily Flow	Average value of 5-min WWTP flow data
Peak Hourly Flow	Maximum value of the rolling hourly average flow rate
Time Precipitation Began	First precipitation recorded between the six rain gauges
Precipitation Duration	Cumulative duration of all precipitation for the day
Total Daily Precipitation	Maximum value of precipitation for all the six rain gauges
Peak Intensity	Maximum precipitation depth in an hour
Design Peak Hourly Flow	Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.

Precipitation Data Summary - Jun

Day of Month	Day of Week	Daily Precipitation (in)						Average Daily Precipitation (in)
		Colfax RG1	Ethanol RG2	Vaness RG3	Southfield RG4	WWTP RG5	Ironwood RG6	
1	Thu	1.05	0.16	0.14	0.10	0.08	0.05	0.26
2	Fri	0.00	0.00	0.00	0.00	0.00	0.01	0.00
3	Sat	0.02	0.00	0.03	0.21	0.00	0.00	0.04
4	Sun	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Mon	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Fri	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Sat	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Sun	0.25	0.12	0.36	0.43	0.24	0.09	0.25
12	Mon	0.00	0.00	0.00	0.03	0.00	0.00	0.00
13	Tue	0.63	0.62	0.59	0.82	0.76	0.82	0.71
14	Wed	0.00	0.21	0.00	0.00	0.00	0.00	0.03
15	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	Fri	0.00	0.00	0.00	0.00	0.00	0.01	0.00
17	Sat	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	Sun	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Mon	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	Fri	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	Sat	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	Sun	0.52	0.51	0.59	0.62	0.81	0.62	0.61
26	Mon	0.22	0.22	0.21	0.29	0.24	0.29	0.24
27	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	Thu	0.05	0.16	0.12	0.09	0.04	0.09	0.09
30	Fri	0.00	0.00	0.01	0.00	0.00	0.00	0.00

City of South Bend, Indiana
 CSO Overflow Summary
 JUNE 2023

NUMBER OF OVERFLOW EVENTS IN JUNE 2023 = 7

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	3.70	0.40	2
002	3.74	0.03	2
003			0
004	1.21	0.02	1
006	6.25	1.17	3
007	6.18	0.09	3
008	43.14	0.57	6
010	24.31	0.62	5
11A			0
11B	22.14	3.78	5
014	4.91	0.25	4
018	21.85	1.58	4
019	3.41	0.08	4
021	0.83	0.00	2
022	5.08	0.68	5
025			0
026			0
027	0.82	0.04	2
028	2.35	0.03	3
029	9.18	0.13	5
031	30.86	3.79	5
033	28.38	0.11	5
035	43.96	0.68	6
036	9.78	0.06	4
037	2.75	1.43	2
038			0
039	6.91	0.26	3
040	0.92	0.02	2
041	2.84	0.01	2
042			0
044			0
045	2.17	0.66	1
048	20.21	1.09	3
049			0
060	38.97	0.07	5
Total		17.7	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

Dry weather overflow on June 3rd.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.



National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 1 of 11		Permit Number: IN0024520																
Facility: South Bend Municipal WWTP			Public Notification Requirements Met? Y																	
Monitoring Period: July 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48		Measured/Metered (M) or Estimated (E) must be specified																
WWTP Influent Data			Precipitation Data					CSO Outfall No. 001					CSO Outfall No. 002							
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	33.5	76.1	9:55 AM	2.75	0.81	0.50	1 hr													
2	38.1	67.3	2:10 AM	3.25	0.58	0.41	1 hr	4:15 AM	E	0.70	E	0.03	E							
3	27.2	31.0			-															
4	27.1	30.9			-															
5	29.3	44.2	2:50 PM	1.50	0.46	0.45	1 hr													
6	30.5	45.3			-															
7	27.8	31.4			-															
8	31.0	51.9	4:30 AM	3.58	0.35	0.13	1 hr	6:30 AM	E	0.04	E	0.00	E							
9	26.8	31.2			-															
10	27.3	31.3			-															
11	27.6	32.7	5:15 PM	0.42	0.04	0.04	1 hr													
12	36.9	76.2	1:55 AM	3.67	0.72	0.33	1 hr	7:55 AM	E	0.51	E	0.02	E							
13	27.0	31.9			-															
14	27.3	31.9			-															
15	31.9	44.8	1:15 AM	3.50	0.36	0.31	1 hr	3:15 AM	E	0.37	E	0.02	E							
16	26.2	30.0			-															
17	26.5	29.7			-															
18	26.6	31.9			-															
19	26.6	30.8			-															
20	35.7	80.5	8:05 AM	1.50	0.57	0.57	1 hr	4:35 PM	E	0.04	E	0.00	E							
21	26.7	30.6			-															
22	25.8	29.7			-															
23	30.0	52.8	7:45 AM	2.08	0.72	0.66	1 hr	9:45 AM	E	0.18	E	0.01	E							
24	26.5	30.9			-															
25	26.9	33.0			-															
26	36.3	85.5	12:45 PM	1.08	1.00	1.00	1 hr	2:50 PM	E	2.34	E	0.34	E	2:50 PM	E	3.28	E	0.15	E	
27	27.1	31.0			-															
28	33.9	70.3	6:20 AM	5.67	0.69	1.49	1 hr	8:45 AM	E	0.66	E	0.03	E							
29	55.6	82.8	12:00 AM	3.42	2.66	1.48	1 hr	2:05 AM	E	5.48	E	1.10	E	2:05 AM	E	5.98	E	0.78	E	
30	35.4	38.7			-															
31	32.5	36.6			-															
Totals:	947.5			32.42	8.96			9	Da ys	10.32		1.54		2	Da ys	9.26		0.93		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent											Telephone									
Kim Thompson, Director of Wastewater											574-235-5969									
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent											Date (mm/dd/yy)									
K. Thompson											8-21-23									



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 2 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: July 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 003						CSO Outfall No. 004						CSO Outfall No. 006						CSO Outfall No. 007							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	9:40 PM	M	0.25	M	0.06	E							9:30 PM	M	0.25	M	0.01	E							
2													4:30 PM	M	0.50	M	0.02	E							
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13													4:00 PM	M	1.75	M	0.30	E	7:50 AM	E	0.79	E	0.00	E	
14																									
15																									
16																									
17																									
18																									
19																									
20	3:55 PM	M	0.75	M	0.41	E							3:15 PM	M	2.00	M	1.00	E	4:40 PM	E	0.79	E	0.00	E	
21																									
22																									
23																									
24																									
25																									
26	1:25 PM	M	1.75	M	2.51	E							1:10 PM	M	2.25	M	1.68	E							
27																									
28																									
29	12:40 AM	M	3.75	M	16.17	E	2:00 AM	E	3.45	E	0.12	E	12:15 AM	M	6.00	M	12.61	E	2:00 AM	E	6.15	E	0.17	E	
30																									
31																									
Totals:	4	Da ys	6.50		19.16		1	Da ys	3.45		0.12		6	Da ys	12.75		15.62		3	Da ys	7.73		0.17		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 3 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: July 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 008						CSO Outfall No. 010						CSO Outfall No. 11A					CSO Outfall No. 11B								
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	12:15 PM	E	1.75	E	0.00	E	12:15 PM	E	0.00	E	0.00	E								12:15 PM	E	0.00	E	0.00	E
2	4:20 AM	E	8.01	E	0.08	E	4:20 AM	E	4.17	E	0.08	E								4:20 AM	E	3.81	E	0.47	E
3																									
4																									
5	11:35 PM	E	0.42	E	0.00	E	11:35 PM	E	0.42	E	0.00	E								11:35 PM	E	0.42	E	0.02	E
6	12:00 AM	E	2.81	E	0.02	E	12:00 AM	E	1.06	E	0.01	E								12:00 AM	E	0.84	E	0.04	E
7																									
8	6:40 AM	E	4.71	E	0.04	E	6:40 AM	E	2.83	E	0.03	E								6:40 AM	E	2.42	E	0.13	E
9																									
10																									
11																									
12	7:50 AM	E	10.17	E	0.12	E	7:50 AM	E	5.25	E	0.13	E								7:50 AM	E	4.86	E	0.80	E
13																									
14																									
15	3:20 AM	E	3.44	E	0.02	E	3:20 AM	E	1.69	E	0.02	E								3:20 AM	E	1.44	E	0.07	E
16																									
17																									
18																									
19																									
20	4:40 PM	E	7.33	E	0.09	E	4:40 PM	E	5.25	E	0.13	E								4:40 PM	E	4.86	E	0.80	E
21	12:00 AM	E	2.84	E	0.03	E																			
22																									
23	10:20 AM	E	1.96	E	0.00	E	10:20 AM	E	0.21	E	0.00	E								10:20 AM	E	0.18	E	0.01	E
24																									
25																									
26	2:50 PM	E	7.19	E	0.07	E	2:50 PM	E	3.83	E	0.07	E								2:50 PM	E	3.46	E	0.39	E
27																									
28	8:55 AM	E	9.25	E	0.10	E	8:55 AM	E	4.67	E	0.10	E								8:55 AM	E	4.33	E	0.60	E
29	2:00 AM	E	16.72	E	0.43	E	2:00 AM	E	13.31	E	0.53	E								2:00 AM	E	12.81	E	3.65	E
30																									
31																									
Totals:	13	Da	76.60		1.01		12	Da	42.69		1.12		0	Da			0.00		12	Da	39.43		6.97		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend							Page 4 of 11							Permit Number: IN0024520													
Facility: South Bend Municipal WWTP							Public Notification Requirements Met? Y																				
Monitoring Period: July 2023														Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77							Design Flow (MGD): 48							Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 014							CSO Outfall No. 018							CSO Outfall No. 019							CSO Outfall No. 021						
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E			
1													11:55 AM	E	1.84	E	0.05	E	11:55 AM	E	0.59	E	0.00	E			
2	4:20 AM	E	0.68	E	0.03	E	4:20 AM	E	4.48	E	0.16	E	4:10 AM	E	1.03	E	0.02	E	4:10 AM	E	0.15	E	0.00	E			
3																											
4																											
5													11:35 PM	E	0.42	E	0.01	E									
6													12:00 AM	E	0.21	E	0.00	E									
7																											
8	6:40 AM	E	0.04	E	0.00	E	6:40 AM	E	0.26	E	0.01	E	6:55 AM	E	0.12	E	0.00	E									
9																											
10																											
11																											
12	7:50 AM	E	1.21	E	0.05	E	7:50 AM	E	6.72	E	0.32	E	7:45 AM	E	0.33	E	0.00	E									
13																											
14																											
15													3:20 AM	E	0.33	E	0.00	E									
16																											
17																											
18																											
19																											
20	4:40 PM	E	1.21	E	0.05	E	4:40 PM	E	6.72	E	0.32	E															
21																											
22																											
23													10:35 AM	E	1.52	E	0.04	E	10:35 AM	E	0.41	E	0.00	E			
24																											
25																											
26	2:50 PM	E	0.52	E	0.03	E	2:50 PM	E	3.42	E	0.12	E	2:50 PM	E	0.39	E	0.01	E									
27																											
28	8:55 AM	E	0.92	E	0.05	E	8:55 AM	E	6.06	E	0.21	E	8:20 AM	E	1.34	E	0.03	E	8:20 AM	E	0.32	E	0.00	E			
29	2:00 AM	E	3.00	E	0.32	E	2:00 AM	E	9.80	E	1.88	E	2:00 AM	E	4.31	E	0.35	E	2:00 AM	E	2.07	E	0.10	E			
30																											
31																											
Totals:	7	Da ys	7.58		0.53		7	Da ys	37.46		3.01		11	Da ys	11.84		0.51		5	Da ys	3.54		0.10				



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 55046 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 5 of 11		Permit Number: IN0024520																				
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y																						
Monitoring Period: July 2023		Design Peak Flow (Hourly) (MGD): 77		Design Flow (MGD): 48																				
		Measured/Metered (M) or Estimated (E) must be specified		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																				
		CSO Outfall No. 022		CSO Outfall No. 025																				
		CSO Outfall No. 026		CSO Outfall No. 027																				
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E						
1	10:50 AM	M	0.50	M	0.10	E																		
2	3:20 AM	M	1.75	M	0.61	E																		
3																								
4																								
5	10:15 PM	M	0.25	M	0.04	E																		
6																								
7																								
8																								
9																								
10																								
11																								
12	4:20 PM	M	0.25	M	0.01	E																		
13																								
14																								
15	2:00 AM	M	0.50	M	0.01	E																		
16																								
17																								
18																								
19																								
20	3:30 PM	M	0.50	M	0.04	E							4:40 PM	E	0.32	E	0.02	E						
21																								
22																								
23	9:35 AM	M	1.25	M	0.41	E																		
24																								
25																								
26	1:20 PM	M	0.75	M	0.23	E							2:55 PM	E	1.05	E	0.05	E						
27																								
28													8:50 AM	E	0.87	E	0.04	E						
29	12:10 AM	M	4.92	M	6.84	E							2:00 AM	E	1.04	E	0.02	E	2:05 AM	E	2.85	E	0.77	E
30																								
31																								
Totals:	9	Da ys	10.67		8.31		0	Da ys			0.00		1	Da ys	1.04		0.02		4	Da ys	5.09		0.89	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
 State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 6 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: July 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 028					CSO Outfall No. 029					CSO Outfall No. 031					CSO Outfall No. 033									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1							12:15 PM	E	0.00	E	0.00	E	12:15 PM	E	0.00	E	0.00	E	12:15 PM	E	0.00	E	0.00	E
2							4:20 AM	E	1.69	E	0.01	E	4:20 AM	E	4.78	E	0.49	E	4:20 AM	E	4.76	E	0.01	E
3																								
4																								
5							11:35 PM	E	0.36	E	0.00	E	11:35 PM	E	0.42	E	0.02	E	11:35 PM	E	0.42	E	0.00	E
6													12:00 AM	E	1.42	E	0.06	E	12:00 AM	E	0.43	E	0.00	E
7																								
8							6:40 AM	E	0.73	E	0.00	E	6:40 AM	E	3.50	E	0.17	E	6:40 AM	E	1.77	E	0.00	E
9																								
10																								
11																								
12	7:50 AM	E	0.24	E	0.00	E	7:50 AM	E	2.22	E	0.03	E	7:50 AM	E	6.40	E	0.81	E	7:50 AM	E	6.93	E	0.02	E
13																								
14																								
15							3:20 AM	E	0.41	E	0.00	E	3:20 AM	E	2.10	E	0.09	E	3:20 AM	E	0.97	E	0.00	E
16																								
17																								
18																								
19																								
20	4:40 PM	E	0.24	E	0.00	E	4:40 PM	E	2.22	E	0.03	E	4:40 PM	E	6.40	E	0.81	E	4:40 PM	E	6.93	E	0.02	E
21																								
22																								
23							10:20 AM	E	0.05	E	0.00	E	10:20 AM	E	0.26	E	0.01	E	10:20 AM	E	0.12	E	0.00	E
24																								
25																								
26							2:50 PM	E	1.45	E	0.01	E	2:50 PM	E	4.46	E	0.41	E	2:50 PM	E	4.01	E	0.01	E
27																								
28							8:55 AM	E	2.05	E	0.02	E	8:55 AM	E	5.26	E	0.61	E	8:55 AM	E	5.88	E	0.02	E
29	2:00 AM	E	2.86	E	0.21	E	2:00 AM	E	5.03	E	0.14	E	2:00 AM	E	15.35	E	3.19	E	2:00 AM	E	15.80	E	0.12	E
30																								
31																								
Totals:	3	Da ys	3.34		0.21		11	Da ys	16.21		0.24		12	Da ys	50.35		6.67		12	Da ys	48.02		0.21	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 7 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: July 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 035					CSO Outfall No. 036					CSO Outfall No. 037					CSO Outfall No. 038										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	12:15 PM	E	0.33	E	0.00	E							9:20 PM	M	0.42	M	0.02	E							
2	4:20 AM	E	7.77	E	0.10	E	4:20 AM	E	1.76	E	0.01	E	4:15 PM	M	0.50	M	0.05	E							
3																									
4																									
5	11:35 PM	E	0.42	E	0.00	E																			
6	12:00 AM	E	2.61	E	0.02	E																			
7																									
8	6:40 AM	E	5.48	E	0.04	E	6:40 AM	E	0.10	E	0.00	E													
9																									
10																									
11																									
12	7:50 AM	E	9.71	E	0.15	E	7:50 AM	E	2.77	E	0.01	E	4:00 PM	M	0.67	M	0.06	E							
13																									
14																									
15	3:20 AM	E	3.41	E	0.02	E																			
16																									
17																									
18																									
19																									
20	4:40 PM	E	7.33	E	0.12	E	4:40 PM	E	2.77	E	0.01	E	3:15 PM	M	1.42	M	3.79	E							
21	12:00 AM	E	2.38	E	0.04	E																			
22																									
23	10:20 AM	E	0.72	E	0.00	E							9:30 AM	M	0.50	M	0.01	E							
24																									
25																									
26	2:50 PM	E	7.20	E	0.09	E	2:50 PM	E	1.34	E	0.01	E	1:15 PM	M	1.42	M	2.62	E							
27																									
28	8:55 AM	E	8.63	E	0.12	E	8:55 AM	E	2.38	E	0.01	E													
29	2:00 AM	E	18.50	E	0.46	E	2:00 AM	E	5.96	E	0.08	E	12:05 AM	M	4.25	M	17.12	E							
30																									
31																									
Totals:	13	Da ys	74.49		1.17		7	Da ys	17.08		0.12		7	Da ys	9.17		23.68		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 8 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: July 2023										Check box If no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 039					CSO Outfall No. 040					CSO Outfall No. 041					CSO Outfall No. 042										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	11:55 AM	E	3.61	E	0.15	E							11:55 AM	E	1.77	E	0.01	E							
2	4:10 AM	E	2.72	E	0.08	E							4:10 AM	E	0.88	E	0.00	E							
3																									
4																									
5	11:35 PM	E	0.42	E	0.01	E																			
6	12:00 AM	E	1.61	E	0.04	E																			
7																									
8	6:55 AM	E	0.39	E	0.01	E																			
9																									
10																									
11																									
12	7:45 AM	E	1.06	E	0.03	E																			
13																									
14																									
15	3:20 AM	E	1.06	E	0.03	E																			
16																									
17																									
18																									
19																									
20							4:40 PM	E	0.36	E	0.01	E													
21																									
22																									
23	10:35 AM	E	3.24	E	0.12	E							10:35 AM	E	1.41	E	0.01	E							
24																									
25																									
26	2:50 PM	E	1.26	E	0.03	E	2:55 PM	E	1.17	E	0.02	E													
27																									
28	8:20 AM	E	3.06	E	0.11	E	8:50 AM	E	0.97	E	0.02	E	8:20 AM	E	1.22	E	0.01	E							
29	2:00 AM	E	9.49	E	0.62	E	2:05 AM	E	4.16	E	0.21	E	2:00 AM	E	3.22	E	0.08	E							
30																									
31																									
Totals:	11	Da ys	27.92		1.24		4	Da ys	6.66		0.25		5	Da ys	8.50		0.10		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 9 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: July 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1													11:55 AM	E	9.85	E	0.58	E							
2													4:10 AM	E	6.91	E	0.37	E							
3																									
4																									
5													11:35 PM	E	0.42	E	0.02	E							
6													12:00 AM	E	4.91	E	0.24	E							
7																									
8													6:55 AM	E	2.84	E	0.10	E							
9																									
10																									
11																									
12																									
13													7:45 AM	E	3.86	E	0.17	E							
14																									
15																									
16													3:20 AM	E	3.86	E	0.17	E							
17																									
18																									
19																									
20							3:55 PM	M	1.50	M	0.84	E	3:45 PM	E	0.00	E	0.00	E							
21																									
22																									
23													10:35 AM	E	8.64	E	0.49	E							
24																									
25																									
26							1:45 PM	M	1.75	M	1.17	E	2:50 PM	E	4.16	E	0.18	E							
27																									
28													8:20 AM	E	8.02	E	0.45	E							
29	2:05 AM	E	1.35	E	0.03	E	12:50 AM	M	5.08	M	6.57	E	2:00 AM	E	22.00	E	1.56	E							
30													12:00 AM	E	1.26	E	0.09	E							
31																									
Totals:	1	Da ys	1.35		0.03		3	Da ys	8.33		8.58		13	Da ys	76.73		4.41		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 10 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: July 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 060					CSO Outfall No.					CSO Outfall No. [#]					CSO Outfall No. [#]									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	12:15 PM	E	0.00	E	0.00	E																		
2	4:20 AM	E	7.48	E	0.01	E																		
3																								
4																								
5	11:35 PM	E	0.42	E	0.00	E																		
6	12:00 AM	E	2.72	E	0.00	E																		
7																								
8	6:40 AM	E	5.93	E	0.00	E																		
9																								
10																								
11																								
12	7:50 AM	E	8.53	E	0.01	E																		
13																								
14																								
15	3:20 AM	E	3.59	E	0.00	E																		
16																								
17																								
18																								
19																								
20	4:40 PM	E	7.33	E	0.01	E																		
21	12:00 AM	E	1.20	E	0.00	E																		
22																								
23	10:20 AM	E	0.45	E	0.00	E																		
24																								
25																								
26	2:50 PM	E	7.09	E	0.01	E																		
27																								
28	8:55 AM	E	8.06	E	0.01	E																		
29	2:00 AM	E	15.24	E	0.10	E																		
30																								
31																								
Totals:	13	Day	68.04		0.15		0	Da			0.00		0	Da			0.00		0	Da			0.00	



**National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)**
State Form 50546 (R3 / 7-13)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input type="checkbox"/>	
Monitoring Period: July Year: 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48	
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1	Precipitation Event Observed		
2	Precipitation Event Observed		
3			
4			
5	Precipitation Event Observed		
6	Precipitation Event Observed		
7			
8	Precipitation Event Observed		
9			
10			
11			
12	Precipitation Event Observed		
13			
14			
15	Precipitation Event Observed		
16			
17			
18			
19			
20	Precipitation Event Observed		
21	Precipitation Event Observed		
22			
23	Precipitation Event Observed		
24			
25			
26	Precipitation Event Observed		
27			
28	Precipitation Event Observed		
29	Precipitation Event Observed		
30	Precipitation Event Observed		
31			
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
		8-21-23	

CSO Public Notification - July

Day of Month	Day of Week	Total Daily Precip. (inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Sat	0.81	1.00	YES	
2	Sun	0.58	2.65	YES	
3	Mon	-	-	YES	Notification Sent Due To Rain Gauge Glitch
4	Tue	-	-	YES	Notification Sent Due To Rain Gauge Glitch
5	Wed	0.46	0.13	YES	
6	Thu	-	-		
7	Fri	-	-		
8	Sat	0.35	0.55	YES	
9	Sun	-	-		
10	Mon	-	-		
11	Tue	0.04	0.00	YES	Notification Sent, But No Overflows
12	Wed	0.72	3.06	YES	
13	Thu	-	-		
14	Fri	-	-		
15	Sat	0.36	0.45	YES	
16	Sun	-	-		
17	Mon	-	-		
18	Tue	-	-		
19	Wed	-	-		
20	Thu	0.57	8.50	YES	
21	Fri	-	-		
22	Sat	-	-		
23	Sun	0.72	1.12	YES	
24	Mon	-	-		
25	Tue	-	-		
26	Wed	1.00	10.20	YES	
27	Thu	-	-		
28	Fri	0.69	2.53	YES	
29	Sat	2.66	76.32	YES	
30	Sun	-	-		
31	Mon	-	-		

Notes

Average Daily Flow	Average value of 5-min WWTP flow data
Peak Hourly Flow	Maximum value of the rolling hourly average flow rate
Time Precipitation Began	First precipitation recorded between the six rain gauges
Precipitation Duration	Cumulative duration of all precipitation for the day
Total Daily Precipitation	Maximum value of precipitation for all the six rain gauges
Peak Intensity	Maximum precipitation depth in an hour
Design Peak Hourly Flow	Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data
- Discharge volume is calculated using level data.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time.

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR

City of South Bend, Indiana
 CSO Overflow Summary
 JULY 2023

NUMBER OF OVERFLOW EVENTS IN JULY 2023 = 11

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	10.32	1.54	9
002	9.26	0.93	2
003	6.50	19.16	4
004	3.45	0.12	1
006	12.75	15.62	6
007	7.73	0.17	3
008	76.60	1.01	11
010	42.69	1.12	11
11A			0
11B	39.43	6.97	11
014	7.58	0.53	7
018	37.46	3.01	7
019	11.84	0.51	10
021	3.54	0.10	5
022	10.67	8.31	9
025			0
026	1.04	0.02	1
027	5.09	0.89	4
028	3.34	0.21	3
029	16.21	0.24	11
031	50.35	6.67	11
033	48.02	0.21	11
035	74.49	1.17	11
036	17.08	0.12	7
037	9.17	23.68	7
038			0
039	27.92	1.24	10
040	6.66	0.25	4
041	8.50	0.10	5
042			0
044	1.35	0.03	1
045	8.33	8.58	3
048	76.73	4.41	11
049			0
060	68.04	0.15	11
Total		107.1	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 1 of 11		Permit Number: IN0024520																
Facility: South Bend Municipal WWTP				Public Notification Requirements Met? Y																
Monitoring Period: August 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48		Measured/Metered (M) or Estimated (E) must be specified																
WWTP Influent Data			Precipitation Data					CSO Outfall No. 001					CSO Outfall No. 002							
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	31.5	36.6			-															
2	30.3	34.0			-															
3	29.7	33.1			-															
4	29.9	33.1			-															
5	40.3	82.2	3:30 PM	8.00	1.08	0.23	1 hr	5:30 PM	E	2.49	E	0.38	E	5:30 PM	E	3.73	E	0.20	E	
6	41.6	80.7	12:00 AM	4.42	0.25	0.14	1 hr													
7	29.7	33.0	1:10 AM	0.50	0.02	0.02	1 hr													
8	29.8	33.9			-															
9	29.7	33.7	7:55 PM	0.17	0.02	0.02	1 hr													
10	29.0	32.4	12:00 AM	0.33	0.03	0.03	1 hr													
11	29.1	33.0			-															
12	28.7	36.4	2:45 AM	1.08	0.15	0.13	1 hr													
13	27.3	31.5			-															
14	29.4	42.1	4:25 PM	2.33	0.23	0.14	1 hr													
15	27.6	30.3	3:00 AM	1.83	0.10	0.06	1 hr													
16	27.9	31.1			-															
17	36.7	80.4	10:20 AM	4.08	0.66	0.61	1 hr	12:20 PM	E	0.62	E	0.03	E							
18	27.9	31.0	10:00 AM	0.08	0.01	0.01	1 hr													
19	26.8	30.7			-															
20	27.8	32.0			-															
21	28.0	31.1	9:55 AM	0.08	0.01	0.01	1 hr													
22	27.9	31.4			-															
23	29.3	33.6			-															
24	29.7	32.4			-															
25	28.3	31.2			-															
26	27.1	31.0			-															
27	27.2	30.8			-															
28	26.8	30.2			-															
29	26.9	30.4	3:00 PM	0.17	0.02	0.02	1 hr													
30	26.1	29.4			-															
31	26.6	30.2			-															
Totals:	914.7			23.08	2.58			2	Da	3.11		0.41		1	Da	3.73		0.20		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent													Telephone							
Kim Thompson, Director of Wastewater													574-235-5989							
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent													Date (mm/dd/yy)							
<i>Kim Thompson</i>													9-18-23							



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 2 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: August 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 003						CSO Outfall No. 004						CSO Outfall No. 006						CSO Outfall No. 007							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5							6:15 PM	E	1.01	E	0.02	E	6:00 PM	M	6.00	M	2.17	E	6:15 PM	E	4.31	E	0.07	E	
6													12:00 AM	M	2.67	M	0.57	E							
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17													12:25 PM	E	3.72	E	1.43	E	12:30 PM	E	0.11	E	0.00	E	
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
Totals:	0	Da ys			0.00		1	Da ys	1.01		0.02		2	Da ys	12.39		4.17		2	Da ys	4.42		0.07		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 3 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: August 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 008					CSO Outfall No. 010					CSO Outfall No. 11A					CSO Outfall No. 11B										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5	6:15 PM	E	5.75	E	0.10	E	6:15 PM	E	5.75	E	0.19	E							6:15 PM	E	5.75	E	1.35	E	
6	12:00 AM	E	5.02	E	0.16	E	12:00 AM	E	3.27	E	0.10	E							12:00 AM	E	3.08	E	0.54	E	
7																									
8																									
9																									
10																									
11																									
12	12:45 PM	E	0.44	E	0.00	E																			
13																									
14	6:30 PM	E	3.65	E	0.03	E	6:30 PM	E	1.90	E	0.02	E							6:30 PM	E	1.62	E	0.08	E	
15	5:15 AM	E	0.22	E	0.00	E																			
16																									
17	12:30 PM	E	9.74	E	0.10	E	12:30 PM	E	4.89	E	0.11	E							12:30 PM	E	4.55	E	0.66	E	
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
Totals:	6	Da ys	24.82		0.39		4	Da ys	15.81		0.43		0	Da ys			0.00		4	Da ys	15.00		2.63		



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend		Page 4 of 11		Permit Number: IN0024520																				
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																				
Monitoring Period: August 2023		Design Peak Flow (Hourly) (MGD): 77		Design Flow (MGD): 48																				
CSO Outfall No. 014		CSO Outfall No. 018		CSO Outfall No. 019		CSO Outfall No. 021																		
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E						
1																								
2																								
3																								
4																								
5	6:15 PM	E	2.34	E	0.13	E	6:15 PM	E	5.75	E	0.63	E	5:55 PM	E	1.97	E	0.08	E	5:55 PM	E	0.79	E	0.00	E
6							12:00 AM	E	2.23	E	0.24	E												
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17	12:30 PM	E	1.03	E	0.05	E	12:30 PM	E	6.60	E	0.24	E	12:25 PM	E	1.03	E	0.02	E	12:25 PM	E	0.15	E	0.00	E
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	2	Da ys	3.37		0.18		3	Da ys	14.58		1.12		2	Da ys	3.00		0.10		2	Da ys	0.94		0.00	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 5 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: August 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 022					CSO Outfall No. 025					CSO Outfall No. 026					CSO Outfall No. 027										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5	7:35 PM	M	1.00	M	0.01	E																			
6																				6:00 PM	E	1.84	E	0.15	E
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17	11:20 AM	M	1.25	M	0.29	E																			
18																				12:25 PM	E	0.27	E	0.01	E
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
Totals:	2	Da ys	2.25		0.30		0	Da ys			0.00		0	Da ys			0.00		2	Da ys		2.11		0.16	



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend										Page 6 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: August 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 028					CSO Outfall No. 029					CSO Outfall No. 031					CSO Outfall No. 033										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5	6:15 PM	E	1.70	E	0.03	E	6:15 PM	E	3.31	E	0.07	E	6:15 PM	E	5.75	E	0.89	E	6:15 PM	E	5.75	E	0.03	E	
6							2:00 AM	E	0.31	E	0.00	E	12:00 AM	E	3.58	E	0.96	E	12:00 AM	E	2.73	E	0.03	E	
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14							6:30 PM	E	0.46	E	0.00	E	6:30 PM	E	2.37	E	0.10	E	6:30 PM	E	1.10	E	0.00	E	
15																									
16																									
17	12:30 PM	E	0.03	E	0.00	E	12:30 PM	E	2.17	E	0.02	E	12:30 PM	E	5.56	E	0.67	E	12:30 PM	E	6.35	E	0.02	E	
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
Totals:	2	Da ys	1.73		0.03		4	Da ys	6.25		0.09		4	Da ys	17.26		2.63		4	Da ys	15.93		0.08		



National Pollutant Discharge Elimination System (NPDES)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 7 of 11		Permit Number: IN0024520																		
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Monitoring Period: August 2023		Design Peak Flow (Hourly) (MGD): 77		Design Flow (MGD): 48																		
CSO Outfall No. 035		CSO Outfall No. 036		CSO Outfall No. 037		CSO Outfall No. 038																
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E				
1																						
2																						
3																						
4																						
5	6:15 PM	E	5.75	E	0.11	E	6:15 PM	E	4.00	E	0.03	E										
6	12:00 AM	E	4.64	E	0.19	E																
7																						
8																						
9																						
10																						
11																						
12	12:45 PM	E	0.08	E	0.00	E																
13																						
14	6:30 PM	E	3.79	E	0.03	E																
15	5:15 AM	E	0.04	E	0.00	E																
16																						
17	12:30 PM	E	9.03	E	0.13	E	12:30 PM	E	2.61	E	0.01	E	11:10 AM	M	1.42	M	0.56	E				
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						
29																						
30																						
31																						
Totals:	6	Days	23.33		0.47		2	Days	6.61		0.04		1	Days	1.42		0.56		0	Days		0.00



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend										Page 8 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: August 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 039					CSO Outfall No. 040					CSO Outfall No. 041					CSO Outfall No. 042									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5	5:55 PM	E	4.14	E	0.20	E	6:00 PM	E	1.89	E	0.06	E	5:55 PM	E	2.06	E	0.02	E						
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17	12:25 PM	E	2.72	E	0.08	E	12:25 PM	E	0.31	E	0.01	E	12:25 PM	E	0.88	E	0.00	E						
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
Totals:	2	Da ys	6.86		0.28		2	Da ys	2.20		0.06		2	Da ys	2.94		0.02		0	Da ys			0.00	



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend										Page 9 of 11					Permit Number: IN0024520							
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y												
Monitoring Period: August 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E				
1																						
2																						
3																						
4																						
5							11:00 PM	M	1.00	M	0.02	E	5:55 PM	E	6.08	E	0.37	E				
6							12:00 AM	M	1.33	M	0.21	E	12:00 AM	E	3.29	E	0.36	E				
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17							12:35 PM	M	0.58	M	0.04	E	12:25 PM	E	6.91	E	0.37	E				
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						
29																						
30																						
31																						
Totals:		0	Days		0.00		3	Days	2.92		0.26		3	Days	16.29		1.11		0	Days		0.00



National Pollutant Discharge Elimination System (NPDES)
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 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 10 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: August 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 060					CSO Outfall No.					CSO Outfall No. [#]					CSO Outfall No. [#]										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5	6:15 PM	E	5.75	E	0.02	E																			
6	12:00 AM	E	4.69	E	0.02	E																			
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14	6:30 PM	E	4.04	E	0.00	E																			
15																									
16																									
17	12:30 PM	E	8.29	E	0.01	E																			
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
Totals:	4	Days	22.77		0.05		0	Days		0.00			0	Days		0.00			0	Days		0.00			



**National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)**

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input type="checkbox"/>	
Monitoring Period: August Year: 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48	
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1			
2			
3			
4			
5	Precipitation Event Observed		
6	Precipitation Event Observed		
7			
8			
9			
10			
11			
12	Precipitation Event Observed		
13			
14	Precipitation Event Observed		
15	Precipitation Event Observed		
16			
17	Precipitation Event Observed		
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>Kim Thompson</i>		9-23-23 18	

CSO Public Notification - August

Day of Month	Day of Week	Total Daily Precip. (inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Tue	-	-		
2	Wed	-	-		
3	Thu	-	-		
4	Fri	-	-		
5	Sat	1.08	7.34	YES	
6	Sun	0.25	3.38	YES	
7	Mon	0.02	0.00		
8	Tue	-	-		
9	Wed	0.02	0.00		
10	Thu	0.03	0.00		
11	Fri	-	-		
12	Sat	0.15	0.00	YES	<10,000 Gallons
13	Sun	-	-		
14	Mon	0.23	0.26	YES	
15	Tue	0.10	0.00	YES	<10,000 Gallons
16	Wed	-	-		
17	Thu	0.66	4.89	YES	
18	Fri	0.01	0.00		
19	Sat	-	-		
20	Sun	-	-		
21	Mon	0.01	0.00		
22	Tue	-	-		
23	Wed	-	-		
24	Thu	-	-		
25	Fri	-	-		
26	Sat	-	-		
27	Sun	-	-		
28	Mon	-	-		
29	Tue	0.02	0.00		
30	Wed	-	-		
31	Thu	-	-		

Notes

Average Daily Flow	Average value of 5-min WWTP flow data
Peak Hourly Flow	Maximum value of the rolling hourly average flow rate
Time Precipitation Began	First precipitation recorded between the six rain gauges
Precipitation Duration	Cumulative duration of all precipitation for the day
Total Daily Precipitation	Maximum value of precipitation for all the six rain gauges
Peak Intensity	Maximum precipitation depth in an hour
Design Peak Hourly Flow	Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

The sensor at CSO 006 needed maintenance during the period of 8/11 to 8/17. The matrix was used to calculate overflows from CSO 006 during this period.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.

City of South Bend, Indiana
 CSO Overflow Summary
 AUGUST 2023

NUMBER OF OVERFLOW EVENTS IN AUGUST 2023

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	3.11	0.41	2
002	3.73	0.20	1
003			0
004	1.01	0.02	1
006	6.47	4.17	3
007	4.42	0.07	2
008	24.82	0.39	6
010	15.81	0.43	4
11A			0
11B	15.00	2.63	4
014	3.37	0.18	2
018	14.58	1.12	2
019	3.00	0.10	2
021	0.94	0.00	2
022	2.25	0.30	2
025			0
026			0
027	2.11	0.16	2
028	1.73	0.03	2
029	6.25	0.09	4
031	17.26	2.63	4
033	15.93	0.08	4
035	23.33	0.47	6
036	6.61	0.04	2
037	1.42	0.56	1
038			0
039	6.86	0.28	2
040	2.20	0.06	2
041	2.94	0.02	2
042			0
044			0
045	2.92	0.26	3
048	16.29	1.11	3
049			0
060	22.77	0.05	4
Total		15.9	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 1 of 11		Permit Number: IN0024520																
Facility: South Bend Municipal WWTP			Public Notification Requirements Met? Y																	
Monitoring Period: September 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48		Measured/Metered (M) or Estimated (E) must be specified																
WWTP Influent Data			Precipitation Data				CSO Outfall No. 001					CSO Outfall No. 002								
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	26.9	30.6			-															
2	26.8	31.9			-															
3	26.8	30.9			-															
4	27.0	31.0			-															
5	27.8	31.7			-															
6	37.5	80.8	8:15 AM	2.08	0.86	0.75	1 hr	10:15 AM	E	1.76	E	0.18	E	10:15 AM	E	1.68	E	0.01	E	
7	26.5	30.1	8:40 AM	0.17	0.01	0.01	1 hr													
8	25.7	29.4			-															
9	25.1	29.7			-															
10	25.1	29.4			-															
11	32.9	69.6	9:50 AM	7.42	0.59	0.36	1 hr	11:50 AM	E	1.14	E	0.08	E	11:50 AM	E	0.45	E	0.00	E	
12	32.3	53.2	12:00 AM	4.42	0.44	0.14	1 hr													
13	25.4	28.4			-															
14	25.5	29.3			-															
15	25.9	30.4			-															
16	25.0	29.9			-															
17	25.0	28.8	3:20 PM	0.33	0.18	0.18	1 hr													
18	24.6	27.5	12:15 PM	0.08	0.01	0.01	1 hr													
19	24.7	27.5	3:15 PM	1.83	0.06	0.03	1 hr													
20	26.0	31.0	2:30 AM	0.25	0.02	0.02	1 hr													
21	25.8	29.4			-															
22	26.0	30.2			-															
23	25.4	29.6			-															
24	25.2	29.6			-															
25	25.2	28.3			-															
26	28.8	57.6	2:05 PM	2.58	0.39	0.33	1 hr													
27	25.0	28.5	9:55 AM	0.17	0.02	0.02	1 hr													
28	24.6	28.1			-															
29	24.5	27.4			-															
30	24.3	28.3			-															
Totals:	797.3			19.33	2.58			2	Days	2.90		0.26		2	Days	2.13		0.01		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent												Telephone								
Kim Thompson, Director of Wastewater												574-235-5969								
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent												Date (mm/dd/yy)								
<i>Kim Thompson</i>												10-26-23								



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 2 of 11				Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: September 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																			
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 003						CSO Outfall No. 004						CSO Outfall No. 006						CSO Outfall No. 007							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5																									
6	9:25 AM	M	1.00	M	0.27	E	10:20 AM	E	0.25	E	0.00	E	9:00 AM	M	0.75	M	0.38	E	10:20 AM	E	3.70	E	0.03	E	
7																									
8																									
9																									
10																									
11													11:55 AM	E	3.24	E	0.94	E	11:55 AM	E	0.68	E	0.00	E	
12													2:00 AM	E	0.12	E	0.02	E							
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
Totals:	1	Days	1.00		0.27		1	Days	0.25		0.00		3	Days	4.11		1.35		2	Days	4.38		0.04		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 3 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: September 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 008						CSO Outfall No. 010						CSO Outfall No. 11A			CSO Outfall No. 11B										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5																									
6	10:20 AM	E	12.33	E	0.20	E	10:20 AM	E	7.11	E	0.23	E							10:20 AM	E	6.52	E	1.47	E	
7																									
8																									
9																									
10																									
11	11:55 AM	E	10.10	E	0.12	E	11:55 AM	E	5.19	E	0.13	E							11:55 AM	E	4.81	E	0.78	E	
12	2:00 AM	E	4.71	E	0.04	E	2:00 AM	E	2.83	E	0.03	E							2:00 AM	E	2.42	E	0.13	E	
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26	4:25 PM	E	7.39	E	0.07	E	4:25 PM	E	3.92	E	0.07	E							4:25 PM	E	3.55	E	0.41	E	
27																									
28																									
29																									
30																									
Totals:	4	Da ys	34.53		0.44		4	Da ys	19.05		0.47		0	Da ys			0.00		4	Da ys	17.30		2.78		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 4 of 11			Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: September 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77				Design Flow (MGD): 48				Measured/Metered (M) or Estimated (E) must be specified																
CSO Outfall No. 014				CSO Outfall No. 018				CSO Outfall No. 019				CSO Outfall No. 021												
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6	10:20 AM	E	2.02	E	0.08	E	10:20 AM	E	7.37	E	0.68	E	10:20 AM	E	1.10	E	0.02	E	10:20 AM	E	0.19	E	0.00	E
7																								
8																								
9																								
10																								
11	11:55 AM	E	1.18	E	0.05	E	11:55 AM	E	6.70	E	0.31	E	12:20 PM	E	0.96	E	0.02	E	12:20 PM	E	0.11	E	0.00	E
12	2:00 AM	E	0.04	E	0.00	E	2:00 AM	E	0.26	E	0.01	E	2:00 AM	E	0.57	E	0.01	E						
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26	4:25 PM	E	0.56	E	0.03	E	4:25 PM	E	3.69	E	0.13	E	4:15 PM	E	0.12	E	0.00	E						
27																								
28																								
29																								
30																								
Totals:	4	Da ys	3.80		0.17		4	Da ys	18.02		1.13		4	Da ys	2.75		0.05		2	Da ys	0.30		0.00	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 5 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: September 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 022						CSO Outfall No. 025						CSO Outfall No. 026						CSO Outfall No. 027							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5																									
6	8:45 AM	M	0.67	M	0.33	E													10:20 AM	E	0.96	E	0.05	E	
7																									
8																									
9																									
10																									
11																			12:05 PM	E	0.14	E	0.01	E	
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
Totals:	1	Da ys	0.67		0.33		0	Da ys			0.00		0	Da ys			0.00		2	Da ys	1.10		0.05		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend						Page 6 of 11						Permit Number: IN0024520												
Facility: South Bend Municipal WWTP						Public Notification Requirements Met? Y						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Monitoring Period: September 2023						Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48												
CSO Outfall No. 028						CSO Outfall No. 029						CSO Outfall No. 031						CSO Outfall No. 033						
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6	10:20 AM	E	1.24	E	0.01	E	10:20 AM	E	2.64	E	0.05	E	10:20 AM	E	10.18	E	1.45	E	10:20 AM	E	9.71	E	0.04	E
7																								
8																								
9																								
10																								
11	11:55 AM	E	0.21	E	0.00	E	11:55 AM	E	2.22	E	0.03	E	11:55 AM	E	6.26	E	0.78	E	11:55 AM	E	6.83	E	0.02	E
12							2:00 AM	E	0.73	E	0.00	E	2:00 AM	E	3.50	E	0.17	E	2:00 AM	E	1.77	E	0.00	E
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26							4:25 PM	E	1.51	E	0.01	E	4:25 PM	E	4.54	E	0.43	E	4:25 PM	E	4.20	E	0.01	E
27																								
28																								
29																								
30																								
Totals:	2	Da ys	1.45		0.01		4	Da ys	7.10		0.09		4	Da ys	24.48		2.83		4	Da ys	22.51		0.08	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 7 of 11				Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: September 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 035						CSO Outfall No. 036						CSO Outfall No. 037						CSO Outfall No. 038							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5																									
6	10:20 AM	E	12.90	E	0.24	E	10:20 AM	E	3.56	E	0.02	E	10:20 AM	E	4.91	E	1.08	E							
7																									
8																									
9																									
10																									
11	11:55 AM	E	9.59	E	0.15	E	11:55 AM	E	2.74	E	0.01	E	12:05 PM	E	3.99	E	0.59	E							
12	2:00 AM	E	5.48	E	0.04	E	2:00 AM	E	0.10	E	0.00	E	2:00 AM	E	0.31	E	0.04	E							
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26	4:25 PM	E	7.34	E	0.09	E	4:25 PM	E	1.45	E	0.01	E													
27																									
28																									
29																									
30																									
Totals:	4	Da ys	35.31		0.53		4	Da ys	7.85		0.04		3	Da ys	9.21		1.71		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 8 of 11				Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: September 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 039						CSO Outfall No. 040						CSO Outfall No. 041				CSO Outfall No. 042									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5																									
6	10:20 AM	E	2.79	E	0.09	E	10:20 AM	E	1.07	E	0.02	E	10:20 AM	E	0.96	E	0.00	E							
7																									
8																									
9																									
10																									
11	12:20 PM	E	2.64	E	0.08	E	12:05 PM	E	0.15	E	0.00	E	12:20 PM	E	0.81	E	0.00	E							
12	2:00 AM	E	1.84	E	0.05	E																			
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26	4 15 PM	E	0.39	E	0.01	E																			
27																									
28																									
29																									
30																									
Totals:	4	Days	7.66		0.22		2	Days	1.22		0.02		2	Days	1.77		0.01		0	Days			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 9 of 11				Permit Number: IN0024520								
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: September 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 044						CSO Outfall No. 045						CSO Outfall No. 048				CSO Outfall No. 049								
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6							9:35 AM	M	1.75	M	0.89	E	10:20 AM	E	7.15	E	0.39	E						
7																								
8																								
9																								
10																								
11													12:20 PM	E	6.66	E	0.35	E						
12													2:00 AM	E	5.04	E	0.24	E						
13																								
14																								
15																								
16																								
17													5:20 PM	E	1.04	E	0.03	E						
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26													4:15 PM	E	2.84	E	0.10	E						
27																								
28																								
29																								
30																								
Totals:	0	Da ys			0.00		1	Da ys	1.75		0.89		5	Da ys	22.73		1.11		0	Da ys			0.00	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 10 of 11				Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: September 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 060						CSO Outfall No.						CSO Outfall No. [#]				CSO Outfall No. [#]									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5																									
6	10:20 AM	E	9.91	E	0.03	E																			
7																									
8																									
9																									
10																									
11	11:55 AM	E	8.49	E	0.01	E																			
12	2:00 AM	E	5.93	E	0.00	E																			
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26	4:25 PM	E	7.19	E	0.01	E																			
27																									
28																									
29																									
30																									
Totals:	4	Da ys	31.52		0.05		0	Da ys			0.00		0	Da ys			0.00		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input type="checkbox"/>	
Monitoring Period: September	Year: 2023	Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD):	77	Design Average Flow (MGD):	48
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1			
2			
3			
4			
5			
6	Precipitation Event Observed		
7			
8			
9			
10			
11	Precipitation Event Observed		
12	Precipitation Event Observed		
13			
14			
15			
16			
17	Precipitation Event Observed		
18			
19			
20			
21			
22			
23			
24			
25			
26	Precipitation Event Observed		
27			
28			
29			
30			
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>Kim Thompson</i>		10-26-23	

CSO Public Notification - September

Day of Month	Day of Week	Total Daily Precip. (Inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Fri	-	-		
2	Sat	-	-		
3	Sun	-	-		
4	Mon	-	-		
5	Tue	-	-		
6	Wed	0.86	8.26	YES	
7	Thu	0.01	0.00		
8	Fri	-	-		
9	Sat	-	-		
10	Sun	-	-		
11	Mon	0.59	4.46	YES	
12	Tue	0.44	0.79	YES	
13	Wed	-	-		
14	Thu	-	-		
15	Fri	-	-		
16	Sat	-	-		
17	Sun	0.18	0.03	YES	
18	Mon	0.01	0.00		
19	Tue	0.06	0.00	YES	Notification Sent, But No Overflows
20	Wed	0.02	0.00		
21	Thu	-	-		
22	Fri	-	-		
23	Sat	-	-		
24	Sun	-	-		
25	Mon	-	-		
26	Tue	0.39	1.38	YES	
27	Wed	0.02	0.00		
28	Thu	-	-		
29	Fri	-	-		
30	Sat	-	-		

Notes

- Average Daily Flow Average value of 5-min WWTP flow data
- Peak Hourly Flow Maximum value of the rolling hourly average flow rate
- Time Precipitation Began First precipitation recorded between the six rain gauges
- Precipitation Duration Cumulative duration of all precipitation for the day
- Total Daily Precipitation Maximum value of precipitation for all the six rain gauges
- Peak Intensity Maximum precipitation depth in an hour
- Design Peak Hourly Flow Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data

Data for CSO 037 was suspect for the period of the 1st through 12:40 pm on the 20th. Data for CSO 006 was not available for the period of the 7th through early on the 12th due to loss of power at the sensor. The matrix was used to calculate overflows during this period.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood. Data for all rain gauges was not available for the period of the 5th to 8:15 on the 6th. No rain was reported by NOAA on the 5th. It is assumed that the rain reported on the 6th is accurate

Rain gauge data from the Ethanol, Vaness, Southfield & the WWTP were not available for the early part of the 19th. Based on the fact that no precipitation was noted at the other rain gauges during this period, the missing data was replaced with 0 precipitation

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR

City of South Bend, Indiana
 CSO Overflow Summary
 SEPTEMBER 2023

NUMBER OF OVERFLOW EVENTS IN SEPTEMBER 2023 : 5

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	2.90	0.26	2
002	2.13	0.01	2
003	1.00	0.27	1
004	0.25	0.00	1
006	4.11	1.35	3
007	4.38	0.04	2
008	34.53	0.44	4
010	19.05	0.47	4
11A			0
11B	17.30	2.78	4
014	3.80	0.17	4
018	18.02	1.13	4
019	2.75	0.05	4
021	0.30	0.00	2
022	0.67	0.33	1
025			0
026			0
027	1.10	0.05	2
028	1.45	0.01	2
029	7.10	0.09	4
031	24.48	2.83	4
033	22.51	0.08	4
035	35.31	0.53	4
036	7.85	0.04	4
037	9.21	1.71	3
038			0
039	7.66	0.22	4
040	1.22	0.02	2
041	1.77	0.01	2
042			0
044			0
045	1.75	0.89	1
048	22.73	1.11	5
049			0
060	31.52	0.05	4
Total		14.9	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 1 of 11		Permit Number: IN0024520																
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y																		
Monitoring Period: October 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48		Measured/Metered (M) or Estimated (E) must be specified																
WWTP Influent Data			Precipitation Data					CSO Outfall No. 001					CSO Outfall No. 002							
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	24.6	29.0			-															
2	25.3	29.7			-															
3	24.5	27.6			-															
4	24.6	27.8			-															
5	45.3	82.9	3:20 AM	8.83	2.28	0.70	1 hr	9:20 AM	E	3.33	E	0.64	E	9:20 AM	E	5.17	E	0.46	E	
6	27.1	29.9	4:55 PM	2.33	0.17	0.09	1 hr													
7	30.1	40.1	12:55 AM	3.33	0.18	0.08	1 hr													
8	24.4	27.9	4:35 AM	0.92	0.08	0.05	1 hr													
9	25.1	30.2	6:25 AM	0.08	0.01	0.01	1 hr													
10	24.9	28.2			-															
11	25.3	29.6	9:10 PM	0.67	0.05	0.07	1 hr													
12	28.7	40.8	12:00 AM	5.58	0.36	0.12	1 hr													
13	26.5	47.9	5:10 PM	4.75	0.49	0.18	1 hr	7:15 PM	E	0.04	E	0.00	E							
14	60.9	84.6	12:00 AM	11.83	1.53	0.51	1 hr	2:05 AM	E	3.58	E	0.69	E	2:05 AM	E	5.25	E	0.50	E	
15	27.1	30.0	11:05 PM	0.42	0.02	0.02	1 hr													
16	26.0	28.7	1:25 AM	0.08	0.01	0.01	1 hr													
17	25.3	28.4			-															
18	24.8	27.5			-															
19	28.8	52.5	3:25 AM	6.08	0.45	0.16	1 hr	5:30 AM	E	0.51	E	0.02	E							
20	39.9	67.3	12:05 AM	5.67	0.42	0.20	1 hr	2:20 AM	E	0.26	E	0.01	E							
21	26.4	35.1	10:40 AM	2.75	0.24	0.15	1 hr													
22	26.6	31.5			-															
23	26.0	28.9			-															
24	26.1	28.5			-															
25	27.7	34.0	7:50 AM	4.75	0.27	0.16	1 hr													
26	27.0	32.3	5:00 AM	2.75	0.21	0.14	1 hr													
27	27.5	33.0	12:20 AM	2.67	0.31	0.21	1 hr	2:35 AM	E	0.26	E	0.01	E							
28	32.8	73.0	12:00 AM	1.92	0.15	0.11	1 hr													
29	33.4	46.2	12:00 AM	7.17	0.35	0.09	1 hr	2:35 AM	E	0.04	E	0.00	E							
30	26.4	32.7	12:10 AM	0.25	0.01	0.01	1 hr													
31	24.9	28.2	6:55 PM	1.50	0.07	0.05	1 hr													
Totals:	894.1			74.33	7.66			7	Da ys	8.02		1.38		2	Da ys	10.42		0.96		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent													Telephone							
Kim Thompson, Director of Wastewater													574-235-5969							
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent													Date (mm/dd/yy)							
<i>K. Thompson</i>													11-21-23							



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 2 of 11			Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? <input checked="" type="checkbox"/> Y												
Monitoring Period: October 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 003						CSO Outfall No. 004						CSO Outfall No. 006						CSO Outfall No. 007						
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5	10:35 AM	M	4.50	M	7.75	E	5:35 AM	E	3.90	E	0.17	E	9:45 AM	M	5.75	M	4.14	E	5:35 AM	E	6.53	E	0.19	E
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14	2:10 AM	E	0.15	E	0.00	E	2:40 AM	E	2.75	E	0.07	E	12:15 AM	M	9.75	M	4.81	E	2:40 AM	E	5.62	E	0.14	E
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28													12:00 AM	M	0.50	M	0.01	E						
29																								
30																								
31																								
Totals:	2	Da ys	4.65		7.75		2	Da ys	6.65		0.24		3	Da ys	16.00		8.97		2	Da ys	12.15		0.32	



National Pollutant Discharge Elimination System (NPDES)

CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 3 of 11			Permit Number: IN0024520											
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y														
Monitoring Period: October 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 008						CSO Outfall No. 010						CSO Outfall No. 11A			CSO Outfall No. 11B											
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E		
1																										
2																										
3																										
4																										
5	5:35 AM	E	18.00	E	0.50	E	5:35 AM	E	16.41	E	0.62	E								5:35 AM	E	15.82	E	4.33	E	
6	7:00 PM	E	1.53	E	0.00	E																				
7	2:55 AM	E	2.60	E	0.01	E	2:55 AM	E	0.85	E	0.01	E								2:55 AM	E	0.72	E	0.03	E	
8	6:45 AM	E	0.00	E	0.00	E																				
9																										
10																										
11																										
12	2:05 AM	E	3.65	E	0.03	E	2:05 AM	E	1.90	E	0.02	E								2:05 AM	E	1.62	E	0.08	E	
13	8:20 PM	E	3.67	E	0.04	E	8:20 PM	E	3.67	E	0.07	E								8:20 PM	E	3.29	E	0.34	E	
14	12:00 AM	E	18.28	E	0.38	E	12:00 AM	E	10.66	E	0.42	E								2:40 AM	E	10.15	E	2.85	E	
15																										
16																										
17																										
18																										
19	5:35 AM	E	6.57	E	0.06	E	5:35 AM	E	3.58	E	0.06	E								5:35 AM	E	3.20	E	0.32	E	
20	2:15 AM	E	5.53	E	0.05	E	2:15 AM	E	3.17	E	0.05	E								2:15 AM	E	2.77	E	0.22	E	
21	12:40 PM	E	1.31	E	0.00	E																				
22																										
23																										
24																										
25	10:05 AM	E	2.60	E	0.01	E	10:05 AM	E	0.85	E	0.01	E								10:05 AM	E	0.72	E	0.03	E	
26	6:30 PM	E	0.00	E	0.00	E																				
27	2:55 AM	E	5.33	E	0.05	E	2:55 AM	E	3.08	E	0.04	E								2:55 AM	E	2.68	E	0.19	E	
28	2:35 AM	E	0.88	E	0.00	E																				
29	2:00 AM	E	5.95	E	0.06	E	2:00 AM	E	3.33	E	0.05	E								2:00 AM	E	2.94	E	0.26	E	
30																										
31	9:20 PM	E	0.22	E	0.00	E																				
Totals:	16	Da	76.11		1.19		10	Da	47.50		1.35		0	Da			0.00		10	Da	43.91		8.65			



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

Slate Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 4 of 11				Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: October 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																			
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 014						CSO Outfall No. 018						CSO Outfall No. 019						CSO Outfall No. 021							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5	5:35 AM	E	3.09	E	0.40	E	5:35 AM	E	10.48	E	2.25	E	9:50 AM	E	3.56	E	0.23	E	9:50 AM	E	1.94	E	0.06	E	
6																									
7																									
8																									
9																									
10																									
11																									
12													2:00 AM	E	0.33	E	0.00	E							
13	8:20 PM	E	0.44	F	0.02	E	8:20 PM	E	2.90	E	0.10	E	7:10 PM	E	0.72	E	0.01	E							
14	2:40 AM	E	2.89	E	0.23	E	2:40 AM	E	9.13	E	1.42	E	2:20 AM	E	1.91	E	0.07	E	2:20 AM	E	0.70	E	0.00	E	
15																									
16																									
17																									
18																									
19	5:35 AM	E	0.40	E	0.02	E	5:35 AM	E	2.63	E	0.09	E	5:45 AM	E	0.39	E	0.01	E							
20	2:15 AM	E	0.20	E	0.01	E	2:15 AM	E	1.32	E	0.05	E	2:25 AM	E	0.39	E	0.01	E							
21																									
22																									
23																									
24																									
25																									
26																									
27	2:55 AM	E	0.16	E	0.01	E	2:55 AM	E	1.05	E	0.04	E													
28																									
29	2:00 AM	E	0.28	E	0.01	E	2:00 AM	E	1.84	E	0.06	E	2:05 AM	E	0.12	E	0.00	E							
30																									
31																									
Totals:	7	Days	7.46		0.70		7	Days	29.35		4.01		7	Days	7.42		0.32		2	Days	2.64		0.06		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 5 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y <input type="checkbox"/>														
Monitoring Period: October 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 022					CSO Outfall No. 025					CSO Outfall No. 026					CSO Outfall No. 027									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5	9:35 AM	M	6.25	M	6.48	E							5:35 AM	E	1.48	E	0.05	E	5:20 AM	E	2.86	E	0.79	E
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13	10:05 PM	M	1.42	M	0.38	E																		
14	12:00 AM	M	8.00	M	3.90	E							2:40 AM	E	0.42	E	0.00	E	2:00 AM	E	2.50	E	0.38	E
15																								
16																								
17																								
18																								
19	7:50 PM	M	1.42	M	0.57	E																		
20	12:00 AM	M	1.42	M	0.34	E																		
21																								
22																								
23																								
24																								
25																								
26																								
27	11:50 PM	M	0.17	M	0.14	E																		
28	12:00 AM	M	0.83	M	0.39	E																		
29																								
30																								
31																								
Totals:	7	Da ys	19.50		12.21		0	Da ys			0.00		2	Da ys	1.90		0.05		2	Da ys	5.36		1.17	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 6 of 11			Permit Number: IN0024520											
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y														
Monitoring Period: October 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 028						CSO Outfall No. 029						CSO Outfall No. 031						CSO Outfall No. 033								
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E		
1																										
2																										
3																										
4																										
5	5:35 AM	E	2.89	E	0.29	E	5:35 AM	E	5.67	E	0.17	E	5:35 AM	E	16.88	E	3.74	E	5:35 AM	E	17.78	E	0.14	E		
6																										
7							2:55 AM	E	0.21	E	0.00	E	2:55 AM	E	1.05	E	0.05	E	2:55 AM	E	0.49	E	0.00	E		
8																										
9																										
10																										
11																										
12							2:05 AM	E	0.46	E	0.00	E	2:05 AM	E	2.37	E	0.10	E	2:05 AM	E	1.10	E	0.00	E		
13							8:20 PM	E	1.33	E	0.01	E	8:20 PM	E	3.67	E	0.32	E	8:20 PM	E	3.64	E	0.01	E		
14	2:40 AM	E	2.68	E	0.11	E	2:40 AM	E	4.44	E	0.11	E	12:00 AM	E	14.47	E	2.63	E	2:40 AM	E	13.80	E	0.09	E		
15																										
16																										
17																										
18																										
19							5:35 AM	E	1.27	E	0.01	E	5:35 AM	E	4.22	E	0.35	E	5:35 AM	E	3.45	E	0.01	E		
20							2:15 AM	E	0.97	E	0.00	E	2:15 AM	E	3.82	E	0.25	E	2:15 AM	E	2.52	E	0.00	E		
21																										
22																										
23																										
24																										
25							10:05 AM	E	0.21	E	0.00	E	10:05 AM	E	1.05	E	0.05	E	10:05 AM	E	0.49	E	0.00	E		
26																										
27							2:55 AM	E	0.91	E	0.00	E	2:55 AM	E	3.74	E	0.23	E	2:55 AM	E	2.33	E	0.00	E		
28																										
29							2:00 AM	E	1.09	E	0.01	E	2:00 AM	E	3.98	E	0.29	E	2:00 AM	E	2.89	E	0.01	E		
30																										
31																										
Totals:	2	Da	5.57		0.40		10	Da	16.56		0.31		10	Da	55.25		8.00		10	Da	48.49		0.26			



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 7 of 11				Permit Number: IN0024520								
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: October 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77												Design Flow (MGD): 48				Measured/Metered (M) or Estimated (E) must be specified								
CSO Outfall No. 035				CSO Outfall No. 036				CSO Outfall No. 037				CSO Outfall No. 038												
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5	5:35 AM	E	18.42	E	0.47	E	5:35 AM	E	6.82	E	0.10	E	9:50 AM	M	5.00	M	2.37	E						
6	12:00 AM	E	2.38	E	0.05	E																		
7	2:55 AM	E	1.87	E	0.01	E																		
8	6:45 AM	E	0.00	E	0.00	E																		
9																								
10																								
11																								
12	2:05 AM	E	3.79	E	0.03	E																		
13	8:20 PM	E	3.67	E	0.04	E	8:20 PM	E	1.14	E	0.00	E	8:05 PM	E	1.23	E	0.16	E						
14	12:00 AM	E	19.41	E	0.42	E	2:40 AM	E	5.04	E	0.06	E	2:00 AM	E	9.08	E	3.25	E						
15																								
16																								
17																								
18																								
19	5:35 AM	E	6.77	E	0.08	E	5:35 AM	E	1.03	E	0.00	E	5:25 AM	E	0.77	E	0.10	E						
20	2:15 AM	E	6.05	E	0.06	E	2:15 AM	E	0.52	E	0.00	E	2:15 AM	E	0.61	E	0.08	E						
21	12:40 PM	E	0.25	E	0.00	E																		
22																								
23																								
24																								
25	10:05 AM	E	1.87	E	0.01	E																		
26	6:30 PM	E	0.00	E	0.00	E																		
27	2:55 AM	E	5.91	E	0.05	E	2:55 AM	E	0.41	E	0.00	E	2:50 AM	E	1.07	E	0.14	E						
28	2:35 AM	E	0.17	E	0.00	E																		
29	2:00 AM	E	6.34	E	0.07	E	2:00 AM	E	0.72	E	0.00	E	2:00 AM	E	1.53	E	0.20	E						
30																								
31	9:20 PM	E	0.04	E	0.00	E																		
Totals:	16	Da ys	76.93		1.29		7	Da ys	15.68		0.17		7	Da ys	19.29		6.31		0	Da ys		0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 8 of 11			Permit Number: IN0024520						
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y									
Monitoring Period: October 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>									
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified									
CSO Outfall No. 039						CSO Outfall No. 040						CSO Outfall No. 041			CSO Outfall No. 042						
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E			
1																					
2																					
3																					
4																					
5	9:50 AM	E	7.69	E	0.44	E	5:20 AM	E	4.19	E	0.21	E	9:50 AM	E	2.85	E	0.05	E			
6																					
7																					
8																					
9																					
10																					
11																					
12	2:00 AM	E	1.06	E	0.03	E															
13	7:10 PM	E	2.32	E	0.06	E															
14	2:20 AM	E	3.89	E	0.18	E	2:00 AM	E	2.58	E	0.12	E	2:20 AM	E	1.92	E	0.01	E			
15																					
16																					
17																					
18																					
19	5:45 AM	E	1.26	E	0.03	E															
20	2:25 AM	E	1.26	E	0.03	E															
21																					
22																					
23																					
24																					
25																					
26																					
27																					
28																					
29	2:05 AM	E	0.39	E	0.01	E															
30																					
31																					
Totals:	7	Days	17.87		0.78		2	Days	6.77		0.33		2	Days	4.77		0.06		0	Days	0.00



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 9 of 11					Permit Number: IN0024520											
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y																
Monitoring Period: October 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified																
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049											
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E		
1																										
2																										
3																										
4																										
5	9:20 AM	E	0.00	E	0.00	E	10:35 AM	M	5.33	M	4.88	E	9:50 AM	E	14.17	E	0.97	E								
6													12:00 AM	E	4.25	E	0.28	E								
7													4:00 AM	E	1.04	E	0.03	E								
8																										
9																										
10																										
11																										
12													2:00 AM	E	3.86	E	0.17	E								
13													7:10 PM	E	4.83	E	0.24	E								
14	2:05 AM	E	0.16	E	0.00	E	5:50 AM	M	6.42	M	2.19	E	12:00 AM	E	11.66	E	0.69	E								
15																										
16																										
17																										
18																										
19													5:45 AM	E	4.16	E	0.18	E								
20													2:25 AM	E	4.16	E	0.18	E								
21																										
22																										
23																										
24																										
25													9:50 AM	E	1.38	E	0.04	E								
26													8:00 AM	E	1.04	E	0.03	E								
27													2:45 AM	E	2.08	E	0.06	E								
28													2:00 AM	E	0.52	E	0.01	E								
29													2:05 AM	E	2.84	E	0.10	E								
30																										
31																										
Totals:	2	Da ys	0.16		0.00		2	Da ys	11.75		7.06		13	Da ys	55.99		2.99		0	Da ys			0.00			



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 10 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: October 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77										Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified										
CSO Outfall No. 060										CSO Outfall No.					CSO Outfall No. [#]					CSO Outfall No. [#]					
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
3																									
4																									
5	5:35 AM	E	16.83	E	0.16	E																			
6																									
7	2:55 AM	E	1.79	E	0.00	E																			
8																									
9																									
10																									
11																									
12	2:05 AM	E	4.04	E	0.00	E																			
13	8:20 PM	F	3.67	E	0.00	E																			
14	12:00 AM	E	16.25	E	0.06	E																			
15																									
16																									
17																									
18																									
19	5:35 AM	E	6.80	E	0.00	E																			
20	2:15 AM	E	6.32	E	0.00	E																			
21																									
22																									
23																									
24																									
25	10:05 AM	E	1.79	E	0.00	E																			
26																									
27	2:55 AM	E	6.22	E	0.00	E																			
28																									
29	2:00 AM	E	6.51	E	0.00	E																			
30																									
31																									
Totals:	10	Day	70.21		0.23		0	Day			0.00		0	Day			0.00		0	Day			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input checked="" type="checkbox"/>	
Monitoring Period: October Year: 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48	
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1			
2			
3			
4			
5	Precipitation Event Observed		
6	Precipitation Event Observed		
7	Precipitation Event Observed		
8	Precipitation Event Observed		
9			
10			
11			
12	Precipitation Event Observed		
13	Precipitation Event Observed		
14	Precipitation Event Observed		
15			
16			
17			
18			
19	Precipitation Event Observed		
20	Precipitation Event Observed		
21	Precipitation Event Observed		
22			
23			
24			
25	Precipitation Event Observed		
26	Precipitation Event Observed		
27	Precipitation Event Observed		
28	Precipitation Event Observed		
29	Precipitation Event Observed		
30			
31	Precipitation Event Observed		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>Kim Thompson</i>		11-21-23	

CSO Public Notification - October

Day of Month	Day of Week	Total Daily Precip. (Inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Sun	-	-		
2	Mon	-	-		
3	Tue	-	-		
4	Wed	-	-		
5	Thu	2.28	43.04	YES	Overflow Continued Past Midnight Into The 6th
6	Fri	0.17	0.34	YES	
7	Sat	0.18	0.14	YES	
8	Sun	0.08	0.00	YES	<10,000 Gallons
9	Mon	0.01	0.00		
10	Tue	-	-		
11	Wed	0.05	0.00	YES	Notification Sent, But No Overflows
12	Thu	0.36	0.45	YES	
13	Fri	0.49	1.81	YES	Overflow Continued Past Midnight Into The 14th
14	Sat	1.53	25.77	YES	
15	Sun	0.02	0.00		
16	Mon	0.01	0.00		
17	Tue	-	-		
18	Wed	-	-		
19	Thu	0.45	1.93	YES	
20	Fri	0.42	1.35	YES	
21	Sat	0.24	0.00	YES	<10,000 Gallons
22	Sun	-	-		
23	Mon	-	-		
24	Tue	-	-		
25	Wed	0.27	0.15	YES	
26	Thu	0.21	0.03	YES	
27	Fri	0.31	0.97	YES	
28	Sat	0.15	0.42	YES	
29	Sun	0.35	1.13	YES	
30	Mon	0.01	0.00		
31	Tue	0.07	0.00	YES	<10,000 Gallons

Notes

Average Daily Flow	Average value of 5-min WWTP flow data
Peak Hourly Flow	Maximum value of the rolling hourly average flow rate
Time Precipitation Began	First precipitation recorded between the six rain gauges
Precipitation Duration	Cumulative duration of all precipitation for the day
Total Daily Precipitation	Maximum value of precipitation for all the six rain gauges
Peak Intensity	Maximum precipitation depth in an hour
Design Peak Hourly Flow	Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

The power at CSO 003 failed from 12:45 pm on the 9th through 13:00 on the 17th. The Matrix of Storms was used to predict overflows during this period.

The sensor at CSO 037 was not working properly from October 9th to November 2nd. The Matrix of Storms was used to predict overflows during this period.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time.

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.

City of South Bend, Indiana
 CSO Overflow Summary
 OCTOBER 2023

NUMBER OF OVERFLOW EVENTS IN OCTOBER 2023 = 16

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	8.02	1.38	7
002	10.42	0.96	2
003	4.65	7.75	2
004	6.65	0.24	2
006	16.00	8.97	3
007	12.15	0.32	2
008	76.11	1.19	16
010	47.50	1.35	10
11A			0
11B	43.91	8.65	10
014	7.46	0.70	7
018	29.35	4.01	7
019	7.42	0.32	7
021	2.64	0.06	2
022	19.50	12.21	7
025			0
026	1.90	0.05	2
027	5.36	1.17	2
028	5.57	0.40	2
029	16.56	0.31	10
031	55.25	8.00	10
033	48.49	0.26	10
035	76.93	1.29	16
036	15.68	0.17	7
037	19.29	6.31	7
038			0
039	17.87	0.78	7
040	6.77	0.33	2
041	4.77	0.06	2
042			0
044	0.16	0.00	2
045	11.75	7.06	2
048	55.99	2.99	13
049			0
060	70.21	0.23	10
Total		77.5	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.

Day of Month	Day of Week	Daily Precipitation (in)						Average Daily Precipitation (in)
		Colfax RG1	Ethanol RG2	Vaness RG3	Southfield RG4	WWTP RG5	Ironwood RG6	
1	Sun	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Mon	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Thu	1.87	2.28	2.12	1.97	1.46	1.85	1.92
6	Fri	0.11	0.07	0.11	0.05	0.17	0.13	0.11
7	Sat	0.16	0.08	0.17	0.07	0.15	0.18	0.13
8	Sun	0.04	0.00	0.05	0.00	0.08	0.02	0.03
9	Mon	0.00	0.00	0.00	0.01	0.00	0.00	0.00
10	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Wed	0.00	0.01	0.03	0.05	0.01	0.01	0.02
12	Thu	0.21	0.19	0.22	0.36	0.15	0.36	0.25
13	Fri	0.36	0.28	0.33	0.44	0.25	0.49	0.36
14	Sat	1.37	0.92	1.46	0.62	1.53	0.91	1.13
15	Sun	0.01	0.00	0.01	0.02	0.00	0.01	0.01
16	Mon	0.00	0.00	0.01	0.00	0.00	0.00	0.00
17	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Thu	0.35	0.45	0.30	0.38	0.39	0.38	0.37
20	Fri	0.30	0.42	0.29	0.24	0.32	0.37	0.32
21	Sat	0.10	0.05	0.24	0.07	0.11	0.11	0.11
22	Sun	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	Mon	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	Wed	0.16	0.17	0.21	0.27	0.14	0.20	0.19
26	Thu	0.04	0.04	0.04	0.21	0.02	0.18	0.09
27	Fri	0.29	0.30	0.31	0.19	0.31	0.24	0.27
28	Sat	0.08	0.06	0.12	0.11	0.11	0.15	0.10
29	Sun	0.32	0.21	0.35	0.17	0.25	0.29	0.26
30	Mon	0.01	0.00	0.00	0.00	0.01	0.01	0.01
31	Tue	0.05	0.06	0.06	0.06	0.05	0.07	0.06



National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 1 of 11		Permit Number: IN0024520																
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y																		
Monitoring Period: November 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48		Measured/Metered (M) or Estimated (E) must be specified																
WWTP Influent Data			Precipitation Data				CSO Outfall No. 001				CSO Outfall No. 002									
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	25.7	29.2			-															
2	25.8	28.7			-															
3	25.8	29.3			-															
4	25.3	29.3			-															
5	25.2	30.2			-															
6	25.7	28.5			-															
7	24.9	27.6			-															
8	27.8	49.9	5:05 AM	1.17	0.22	0.20	1 hr													
9	25.5	48.8	3:10 AM	0.08	0.01	0.01	1 hr													
10	24.8	28.0			-															
11	24.4	28.2			-															
12	24.0	27.4			-															
13	24.7	36.3			-															
14	24.7	36.6			-															
15	24.1	27.1			-															
16	24.0	26.6			-															
17	24.1	26.5	8:25 AM	0.08	0.01	0.01	1 hr													
18	23.3	28.1			-															
19	24.3	28.4			-															
20	24.1	27.3			-															
21	29.8	57.7	12:45 AM	5.42	0.35	0.16	1 hr	3:05 AM	E	0.26	E	0.01	E							
22	24.3	26.9	12:25 PM	0.50	0.02	0.02	1 hr													
23	22.9	26.9			-															
24	21.4	24.2			-															
25	22.1	25.4			-															
26	23.7	28.2	12:05 PM	2.50	0.10	0.04	1 hr													
27	23.6	25.8			-															
28	23.4	25.8			-															
29	23.4	26.7			-															
30	23.6	26.9			-															
Totals:		736.4			9.75	0.71		1	Da	0.26		0.01		0	Da			0.00		
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent													Telephone							
Kim Thompson, Director of Wastewater													574-235-5969							
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																				
Signature of Principal Executive Officer or Authorized Agent													Date (mm/dd/yy)							
<i>Kim Thompson</i>													12-18-23							



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend										Page 2 of 11			Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y												
Monitoring Period: November 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 003			CSO Outfall No. 004			CSO Outfall No. 006			CSO Outfall No. 007													
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E				
1																						
2																						
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6																						
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8													9:05 PM	M	0.50	M	0.00	E				
9																						
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28																						
29																						
30																						
Totals:	0	Days			0.00		0	Days			0.00		1	Days	0.50		0.00		0	Days		0.00



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend										Page 3 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: November 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 008						CSO Outfall No. 010						CSO Outfall No. 11A					CSO Outfall No. 11B								
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
2																									
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5																									
6																									
7																									
8	7:10 AM	E	3.44	E	0.02	E	7:10 AM	E	1.69	E	0.02	E							7:10 AM	E	1.44	E	0.07	E	
9																									
10																									
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17																									
18																									
19																									
20																									
21	3:00 AM	E	6.57	E	0.06	E	3:00 AM	E	3.58	E	0.06	E							3:00 AM	E	3.20	E	0.32	E	
22																									
23																									
24																									
25																									
26	2:45 PM	E	0.44	E	0.00	E																			
27																									
28																									
29																									
30																									
Totals:	3	Da ys	10.45		0.09		2	Da ys	5.27		0.08		0	Da ys			0.00		2	Da ys	4.64		0.39		



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City: City of South Bend												Page 4 of 11				Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: November 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 014						CSO Outfall No. 018						CSO Outfall No. 019				CSO Outfall No. 021									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
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21	3:00 AM	E	0.40	E	0.02	E	3:00 AM	E	2.63	E	0.09	E	2:55 AM	E	0.30	E	0.00	E							
22																									
23																									
24																									
25																									
26																									
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28																									
29																									
30																									
Totals:	1	Da ys	0.40		0.02		1	Da ys	2.63		0.09		1	Da ys	0.30		0.00		0	Da ys			0.00		



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Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: November 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 022						CSO Outfall No. 025						CSO Outfall No. 026			CSO Outfall No. 027									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8	9:10 PM	M	0.67	M	0.12	E																		
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21	7:40 AM	M	0.67	M	0.06	E																		
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Totals:	2	Da ys	1.33		0.18		0	Da ys			0.00		0	Da ys			0.00		0	Da ys			0.00	



National Pollutant Discharge Elimination System (NPDES)
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Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: November 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 028						CSO Outfall No. 029						CSO Outfall No. 031				CSO Outfall No. 033								
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E						
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8							7:10 AM	E	0.41	E	0.00	E	7:10 AM	E	2.10	E	0.09	E	7:10 AM	E	0.97	E	0.00	E
9																								
10																								
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14																								
15																								
16																								
17																								
18																								
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20																								
21							3:00 AM	E	1.27	E	0.01	E	3:00 AM	E	4.22	E	0.35	E	3:00 AM	E	3.45	E	0.01	E
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
Totals:	0	Days			0.00		2	Days	1.68		0.01		2	Days	6.32		0.44		2	Days	4.42		0.01	



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend												Page 7 of 11			Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: November 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 035						CSO Outfall No. 036						CSO Outfall No. 037			CSO Outfall No. 038									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
2																								
3																								
4																								
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8	7:10 AM	E	3.41	E	0.02	E																		
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14																								
15																								
16																								
17																								
18																								
19																								
20																								
21	3:00 AM	E	6.77	E	0.08	E	3:00 AM	E	1.03	E	0.00	E												
22																								
23																								
24																								
25																								
26	2:45 PM	E	0.08	E	0.00	E																		
27																								
28																								
29																								
30																								
Totals:	3	Da ys	10.26		0.10		1	Da ys	1.03		0.00		0	Da ys			0.00		0	Da ys			0.00	



National Pollutant Discharge Elimination System (NPDES)
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City: City of South Bend												Page 8 of 11			Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: November 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 039						CSO Outfall No. 040						CSO Outfall No. 041			CSO Outfall No. 042									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1																								
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19																								
20																								
21	2:55 AM	E	0.97	E	0.02	E																		
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23																								
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29																								
30																								
Totals:	1	Da ys	0.97		0.02		0	Da ys			0.00		0	Da ys			0.00		0	Da ys			0.00	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 9 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: November 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																			
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 044						CSO Outfall No. 045						CSO Outfall No. 048					CSO Outfall No. 049								
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
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8													7:35 AM	E	1.56	E	0.04	E							
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19																									
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21													2:55 AM	E	3.72	E	0.16	E							
22																									
23																									
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27																									
28																									
29																									
30																									
Totals:	0	Days			0.00		0	Days			0.00		2	Days	5.28		0.20		0	Days			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 10 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: November 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>													
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 060						CSO Outfall No.						CSO Outfall No. [#]			CSO Outfall No. [#]										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1																									
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8	7:10 AM	E	3.59	E	0.00	E																			
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20																									
21	3:00 AM	E	6.80	E	0.00	E																			
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27																									
28																									
29																									
30																									
Totals:	2	Day	10.39		0.00		0	Days			0.00		0	Days			0.00		0	Days			0.00		



**National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)**

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input checked="" type="checkbox"/>	
Monitoring Period: November Year: 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48	
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1			
2			
3			
4			
5			
6			
7			
8	Precipitation Event Observed		
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21	Precipitation Event Observed		
22			
23			
24			
25			
26	Precipitation Event Observed		
27			
28			
29			
30			
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson, Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>KThompson</i>		12/18/23	

CSO Public Notification - November

Day of Month	Day of Week	Total Daily Precip. (inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Wed	-	-		
2	Thu	-	-		
3	Fri	-	-		
4	Sat	-	-		
5	Sun	-	-		
6	Mon	-	-		
7	Tue	-	-		
8	Wed	0.22	0.39	YES	
9	Thu	0.01	0.00		
10	Fri	-	-		
11	Sat	-	-		
12	Sun	-	-		
13	Mon	-	-		
14	Tue	-	-		
15	Wed	-	-		
16	Thu	-	-		
17	Fri	0.01	0.00		
18	Sat	-	-		
19	Sun	-	-		
20	Mon	-	-		
21	Tue	0.35	1.27	YES	
22	Wed	0.02	0.00		
23	Thu	-	-		
24	Fri	-	-		
25	Sat	-	-		
26	Sun	0.10	0.00	YES	<10,000 Gallons
27	Mon	-	-		
28	Tue	-	-		
29	Wed	-	-		
30	Thu	-	-		

Notes

Average Daily Flow Average value of 5-min WWTP flow data
 Peak Hourly Flow Maximum value of the rolling hourly average flow rate
 Time Precipitation Began First precipitation recorded between the six rain gauges
 Precipitation Duration Cumulative duration of all precipitation for the day
 Total Daily Precipitation Maximum value of precipitation for all the six rain gauges
 Peak Intensity Maximum precipitation depth in an hour
 Design Peak Hourly Flow Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

The sensor at CSO 006 is beginning to fail. The sensor was checked several times in the month. The data was deemed invalid for all days except a portion of the 8th to the 12th due to continuous declining values. The Matrix of Storms was used to prepare overflows for CSO 006 for most of November. A new sensor has been ordered.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.

City of South Bend, Indiana
 CSO Overflow Summary
 NOVEMBER 2023

NUMBER OF OVERFLOW EVENTS IN NOVEMBER 2023 = 3

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	0.26	0.01	1
002			0
003			0
004			0
006	0.50	0.00	1
007			0
008	10.45	0.09	3
010	5.27	0.08	2
11A			0
11B	4.64	0.39	2
014	0.40	0.02	1
018	2.63	0.09	1
019	0.30	0.00	1
021			0
022	1.33	0.18	2
025			0
026			0
027			0
028			0
029	1.68	0.01	2
031	6.32	0.44	2
033	4.42	0.01	2
035	10.26	0.10	3
036	1.03	0.00	1
037			0
038			0
039	0.97	0.02	1
040			0
041			0
042			0
044			0
045			0
048	5.28	0.20	2
049			0
060	10.39	0.00	2
Total		1.66	

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page 1 of 11		Permit Number: IN0024520															
Facility: South Bend Municipal WWTP			Public Notification Requirements Met? <input type="checkbox"/> Y																
Monitoring Period: December 2023		Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																	
Design Peak Hourly Flow (MGD): 77		Design Average Flow (MGD): 48		Measured/Metered (M) or Estimated (E) must be specified															
WWTP Influent Data			Precipitation Data				CSO Outfall No. 001					CSO Outfall No. 002							
Day of Month	Average Daily Flow (MGD)	Peak Hourly Flow (MGD)	Time Precip. Began (am/pm)	Precip. Duration (Hours)	Total Daily Precip. (Inches)	Peak Intensity (Inch/hr)	Measurement Interval (hr, 30 m, 15 m)	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	36.6	79.0	12:35 AM	9.33	0.69	0.17	1 hr	6:40 AM	E	1.17	E	0.08	E	6:40 AM	E	0.52	E	0.00	E
2	24.7	27.5	12:55 AM	1.17	0.05	0.03	1 hr												
3	26.1	31.6	12:10 AM	2.75	0.15	0.08	1 hr												
4	24.4	27.3	12:50 AM	0.17	0.01	0.01	1 hr												
5	25.9	32.6	7:35 AM	3.00	0.11	0.03	1 hr												
6	24.5	27.0																	
7	24.4	27.7																	
8	24.4	28.0																	
9	24.9	27.8	2:40 AM	1.42	0.10	0.06	1 hr												
10	24.4	28.0	2:10 PM	0.92	0.05	0.04	1 hr												
11	23.7	26.1																	
12	23.7	26.0																	
13	24.1	27.5																	
14	24.3	27.6																	
15	24.2	28.2																	
16	23.9	32.6	7:15 PM	3.00	0.18	0.08	1 hr												
17	25.3	38.6	12:20 AM	0.25	0.01	0.01	1 hr												
18	23.6	27.4	1:45 AM	1.08	0.04	0.02	1 hr												
19	23.1	25.4																	
20	23.2	25.6																	
21	23.0	25.8																	
22	28.5	70.2	12:30 AM	7.67	0.42	0.09	1 hr	6:45 AM	E	0.37	E	0.02	E						
23	30.4	69.4	12:00 AM	2.75	0.25	0.13	1 hr												
24	23.0	26.5																	
25	24.2	41.5	5:55 PM	3.92	0.18	0.07	1 hr												
26	25.1	41.5	6:50 AM	0.08	0.01	0.01	1 hr												
27	23.9	27.9																	
28	34.5	62.1	3:05 AM	9.83	0.62	0.19	1 hr	5:20 AM	E	0.04	E	0.00	E						
29	25.9	32.6	12:10 AM	0.67	0.03	0.02	1 hr												
30	23.9	26.7																	
31	23.7	27.8	10:00 AM	1.17	0.04	0.03	1 hr												
Totals:	785.5			49.17	2.94			3	De	1.58		0.10		1	De	0.52		0.00	
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent													Telephone						
Kim Thompson, Director of Wastewater													574-235-5969						
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.																			
Signature of Principal Executive Officer or Authorized Agent													Date (mm/dd/yy)						
<i>Kim Thompson</i>													1-16-23 <i>24</i>						



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 2 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y														
Monitoring Period: December 2023					Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																			
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 003					CSO Outfall No. 004					CSO Outfall No. 006					CSO Outfall No. 007									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1													5:00 AM	E	3.02	E	0.72	E	4:20 AM	E	1.13	E	0.01	E
2																								
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22													4:55 AM	E	1.17	E	0.24	E						
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26																								
27																								
28													5:30 AM	E	0.58	E	0.12	E						
29																								
30																								
31																								
Totals:	0	De			0.00		0	De			0.00		3	De		4.77		1.09		1	De		1.13	0.01



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 3 of 11			Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: December 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 008						CSO Outfall No. 010						CSO Outfall No. 11A					CSO Outfall No. 11B							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	4:20 AM	E	10.39	E	0.13	E	4:20 AM	E	5.42	E	0.14	E							4:20 AM	E	5.01	E	0.87	E
2																								
3	6:25 AM	E	1.96	E	0.00	E	6:25 AM	E	0.21	E	0.00	E							6:25 AM	E	0.18	E	0.01	E
4																								
5	10:00 AM	E	0.88	E	0.00	E																		
6																								
7																								
8																								
9	4:45 AM	E	0.44	E	0.00	E																		
10																								
11																								
12																								
13																								
14																								
15																								
16	9:45 PM	E	1.96	E	0.00	E	9:45 PM	E	0.21	E	0.00	E							9:45 PM	E	0.18	E	0.01	E
17																								
18																								
19																								
20																								
21																								
22	5:00 AM	E	7.19	E	0.07	E	5:00 AM	E	3.83	E	0.07	E							5:00 AM	E	3.46	E	0.39	E
23	2:15 AM	E	1.53	E	0.00	E																		
24																								
25	8:30 PM	E	2.60	E	0.01	E	8:30 PM	E	0.85	E	0.01	E							8:30 PM	E	0.72	E	0.03	E
26																								
27																								
28	5:15 AM	E	5.95	E	0.06	E	5:15 AM	E	3.33	E	0.05	E							5:15 AM	E	2.94	E	0.26	E
29																								
30																								
31																								
Totals:	9	Da ys	32.90		0.28		6	Da ys	13.85		0.28		0	Da ys			0.00		6	Da ys	12.49		1.56	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

Slate Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 4 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y <input type="checkbox"/>														
Monitoring Period: December 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 014					CSO Outfall No. 018					CSO Outfall No. 019					CSO Outfall No. 021									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	4:20 AM	E	1.30	E	0.06	E	4:20 AM	E	6.77	E	0.36	E	5:10 AM	E	1.06	E	0.02	E	5:10 AM	E	0.17	E	0.00	E
2																								
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20																								
21																								
22	5:00 AM	E	0.52	E	0.03	E	5:00 AM	E	3.42	E	0.12	E	5:00 AM	E	0.21	E	0.00	E						
23																								
24																								
25																								
26																								
27																								
28	5:15 AM	E	0.28	E	0.01	E	5:15 AM	E	1.84	E	0.06	E	5:05 AM	E	1.03	E	0.02	E	5:05 AM	E	0.15	E	0.00	E
29																								
30																								
31																								
Totals:	3	De ys	2.10		0.10		3	De ys	12.03		0.54		3	De ys	2.30		0.04		2	De ys	0.32		0.00	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 5 of 11					Permit Number: IN0024520									
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y <input type="checkbox"/>														
Monitoring Period: December 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>														
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified														
CSO Outfall No. 022					CSO Outfall No. 025					CSO Outfall No. 026					CSO Outfall No. 027									
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	8:20 AM	M	2.75	M	0.48	E													2:35 AM	E	0.87	E	0.04	E
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
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18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28	4:35 AM	M	0.75	M	0.08	E																		
29																								
30																								
31																								
Totals:	2	Da ys	3.50		0.56		0	Da ys			0.00		0	Da ys			0.00		1	Da ys		0.87		0.04



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 6 of 11			Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: December 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																		
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 028						CSO Outfall No. 029						CSO Outfall No. 031						CSO Outfall No. 033						
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	4:20 AM	E	0.35	E	0.00	E	4:20 AM	E	2.25	E	0.03	E	4:20 AM	E	6.81	E	0.87	E	4:20 AM	E	7.22	E	0.03	E
2																								
3							6:25 AM	E	0.05	E	0.00	E	6:25 AM	E	0.26	E	0.01	E	6:25 AM	E	0.12	E	0.00	E
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16							9:45 PM	E	0.05	E	0.00	E	9:45 PM	E	0.26	E	0.01	E	9:45 PM	E	0.12	E	0.00	E
17																								
18																								
19																								
20																								
21																								
22							5:00 AM	E	1.45	E	0.01	E	5:00 AM	E	4.46	E	0.41	E	5:00 AM	E	4.01	E	0.01	E
23																								
24																								
25							8:30 PM	E	0.21	E	0.00	E	8:30 PM	E	1.05	E	0.05	E	8:30 PM	E	0.49	E	0.00	E
26																								
27																								
28							5:15 AM	E	1.09	E	0.01	E	5:15 AM	E	3.98	E	0.29	E	5:15 AM	E	2.89	E	0.01	E
29																								
30																								
31																								
Totals:	1	Da ys	0.35		0.00		6	Da ys	5.10		0.05		6	Da ys	16.82		1.64		6	Da ys	14.85		0.04	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 55046 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 7 of 11			Permit Number: IN0024520									
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y												
Monitoring Period: December 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>												
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified												
CSO Outfall No. 035						CSO Outfall No. 036						CSO Outfall No. 037					CSO Outfall No. 038							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E
1	4:20 AM	E	10.05	E	0.16	E	4:20 AM	E	2.85	E	0.01	E												
2																								
3	6:25 AM	E	0.72	E	0.00	E																		
4																								
5	10:00 AM	E	0.17	E	0.00	E																		
6																								
7																								
8																								
9	4:45 AM	E	0.08	E	0.00	E																		
10																								
11																								
12																								
13																								
14																								
15																								
16	9:45 PM	E	0.72	E	0.00	E																		
17																								
18																								
19																								
20																								
21																								
22	5:00 AM	E	7.20	E	0.09	E	5:00 AM	E	1.34	E	0.01	E												
23	2:15 AM	E	0.29	E	0.00	E																		
24																								
25	8:30 PM	E	1.87	E	0.01	E																		
26																								
27																								
28	5:15 AM	E	6.34	E	0.07	E	5:15 AM	E	0.72	E	0.00	E												
29																								
30																								
31																								
Totals:	9	Da ys	27.44		0.33		3	Da ys	4.91		0.02		0	Da ys			0.00		0	Da ys			0.00	



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

Slate Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 8 of 11			Permit Number: IN0024520										
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y													
Monitoring Period: December 2023						Check box if no CSO discharge occurred for the month: <input type="checkbox"/>																			
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified													
CSO Outfall No. 039						CSO Outfall No. 040						CSO Outfall No. 041						CSO Outfall No. 042							
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1	5:10 AM	E	2.76	E	0.09	E	2:35 AM	E	0.97	E	0.02	E	5:10 AM	E	0.92	E	0.00	E							
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
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14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22	5:00 AM	E	0.68	E	0.02	E																			
23																									
24																									
25																									
26																									
27																									
28	5:05 AM	E	2.72	E	0.08	E							5:05 AM	E	0.88	E	0.00	E							
29																									
30																									
31																									
Totals:	3	Da ys	6.16		0.19		1	Da ys	0.97		0.02		2	Da ys	1.80		0.01		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend										Page 9 of 11					Permit Number: IN0024520										
Facility: South Bend Municipal WWTP										Public Notification Requirements Met? Y															
Monitoring Period: December 2023										Check box if no CSO discharge occurred for the month: <input type="checkbox"/>															
Design Peak Flow (Hourly) (MGD): 77					Design Flow (MGD): 48					Measured/Metered (M) or Estimated (E) must be specified															
CSO Outfall No. 044					CSO Outfall No. 045					CSO Outfall No. 048					CSO Outfall No. 049										
Day of Month	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	
1													5:10 AM	E	7.03	E	0.38	E							
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16													9:30 PM	E	0.69	E	0.02	E							
17																									
18																									
19																									
20																									
21																									
22													5:00 AM	E	3.28	E	0.13	E							
23																									
24																									
25													8:25 PM	E	0.69	E	0.02	E							
26																									
27																									
28													5:05 AM	E	6.91	E	0.37	E							
29																									
30																									
31																									
Totals:	0	Da ys			0.00		0	Da ys			0.00		5	Da ys	18.60		0.91		0	Da ys			0.00		



National Pollutant Discharge Elimination System (NPDES)
 CSO Monthly Report of Operation (CSO MRO)

State Form 50546 (R3 / 7-13)
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend												Page 10 of 11			Permit Number: IN0024520								
Facility: South Bend Municipal WWTP												Public Notification Requirements Met? Y											
Monitoring Period: December 2023												Check box if no CSO discharge occurred for the month: <input type="checkbox"/>											
Design Peak Flow (Hourly) (MGD): 77						Design Flow (MGD): 48						Measured/Metered (M) or Estimated (E) must be specified											
Day of Month	CSO Outfall No. 060						CSO Outfall No.						CSO Outfall No. [#]										
	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E	Time Discharge Began	M or E	Event Duration (Hours)	M or E	Event Discharge (MG)	M or E					
1	4:20 AM	E	8.65	E	0.02	E																	
2																							
3	6:25 AM	E	0.45	E	0.00	E																	
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
16	9:45 PM	E	0.45	E	0.00	E																	
17																							
18																							
19																							
20																							
21																							
22	5:00 AM	E	7.09	E	0.01	E																	
23																							
24																							
25	8:30 PM	E	1.79	E	0.00	E																	
26																							
27																							
28	5:15 AM	E	6.51	E	0.00	E																	
29																							
30																							
31																							
Totals:	6	Day	24.94		0.02		0	Day			0.00		0	Day			0.00		0	Day			0.00

CSO Public Notification - December

Day of Month	Day of Week	Total Daily Precip. (inches)	Total Daily CSO Discharge Volume (MG)	Notification Sent	Notes
1	Fri	0.69	4.51	YES	
2	Sat	0.05	0.00	YES	Notification Sent, But No Discharge
3	Sun	0.15	0.03	YES	
4	Mon	0.01	0.00		
5	Tue	0.11	0.00	YES	<10,000 Gallons
6	Wed	-	-		
7	Thu	-	-		
8	Fri	-	-		
9	Sat	0.10	0.00	YES	<10,000 Gallons
10	Sun	0.05	0.00	YES	Notification Sent, But No Discharge
11	Mon	-	-		
12	Tue	-	-		
13	Wed	-	-		
14	Thu	-	-		
15	Fri	-	-		
16	Sat	0.18	0.05	YES	
17	Sun	0.01	0.00		
18	Mon	0.04	0.00	YES	Notification Sent, But No Discharge
19	Tue	-	-		
20	Wed	-	-		
21	Thu	-	-		
22	Fri	0.42	1.61	YES	
23	Sat	0.25	0.00	YES	
24	Sun	-	-		
25	Mon	0.18	0.13	YES	
26	Tue	0.01	0.00		
27	Wed	-	-		
28	Thu	0.62	1.50	YES	
29	Fri	0.03	0.00		
30	Sat	-	-		
31	Sun	0.04	0.00	YES	Notification Sent, But No Discharge

Notes

Average Daily Flow	Average value of 5-min WWTP flow data
Peak Hourly Flow	Maximum value of the rolling hourly average flow rate
Time Precipitation Began	First precipitation recorded between the six rain gauges
Precipitation Duration	Cumulative duration of all precipitation for the day
Total Daily Precipitation	Maximum value of precipitation for all the six rain gauges
Peak Intensity	Maximum precipitation depth in an hour
Design Peak Hourly Flow	Per the NPDES Permit, the WWTP facility has a peak design flow of 77 MGD

Metered CSOs

- CSOs 3, 6, 22, 37 and 45 are metered with flow meter equipment.
- Data is downloaded from these sites and entered into the report.
- Discharge begin time and duration is obtained from this data.
- Discharge volume is calculated using level data.

The sensors at CSO 003 & 006 failed at various times during the month. The Matrix of Storms was used to predict overflows when sensor data was not available.

Other CSOs

For non-metered CSOs, matrix relating precipitation to CSO volume is used to calculate CSO volume and the same for duration. The matrix was created from the South Bend design storms SWMM model results. The discharge time is estimated from the precipitation start time

Rain Gauges

Used the following rain gauges data in the CSO MRO: Colfax, Ethanol, Vaness, Southfield, WWTP and Ironwood.

Overflows less than 10,000 gallons are reported as 0.00 MG on the CSO MRO and as <0.01 MG on the NetDMR.



**National Pollutant Discharge Elimination System (NPDES)
CSO Monthly Report of Operation (CSO MRO)**

State Form 50546 (R3 / 7-13)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

City: City of South Bend		Page: 11 of 11	Permit Number: IN0024520
Facility: South Bend Municipal WWTP		Public Notification Requirements Met? Y <input type="checkbox"/>	
Monitoring Period: December	Year: 2023	Check box if no CSO discharge occurred for the month: <input type="checkbox"/>	
Design Peak Hourly Flow (MGD):	77	Design Average Flow (MGD):	48
Day of Month	Comments (further explanation as to why each CSO event occurred)		
1	Precipitation Event Observed		
2			
3	Precipitation Event Observed		
4			
5	Precipitation Event Observed		
6			
7			
8			
9	Precipitation Event Observed		
10			
11			
12			
13			
14			
15			
16	Precipitation Event Observed		
17			
18			
19			
20			
21			
22	Precipitation Event Observed		
23	Precipitation Event Observed		
24			
25	Precipitation Event Observed		
26			
27			
28	Precipitation Event Observed		
29			
30			
31			
Typed or Printed Name and Title of Principal Executive Officer or Authorized Agent		Telephone	
Kim Thompson Director of Wastewater		574-235-5969	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION; THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			
Signature of Principal Executive Officer or Authorized Agent		Date (mm/dd/yy)	
<i>Kim Thompson</i>		1-16-24	

City of South Bend, Indiana
 CSO Overflow Summary
 DECEMBER 2023

NUMBER OF OVERFLOW EVENTS IN DECEMBER 2023 = 9

CSO Outfall	Total Overflow Duration (Hours)	Total Overflow Volume (MG)	Number of Overflow Events ¹
001	1.58	0.10	3
002	0.52	0.00	1
003			0
004			0
006	4.77	1.09	3
007	1.13	0.01	1
008	32.90	0.28	9
010	13.85	0.28	6
11A			0
11B	12.49	1.56	6
014	2.10	0.10	3
018	12.03	0.54	3
019	2.30	0.04	3
021	0.32	0.00	2
022	3.50	0.56	2
025			0
026			0
027	0.87	0.04	1
028	0.35	0.00	1
029	5.10	0.05	6
031	16.82	1.64	6
033	14.85	0.04	6
035	27.44	0.33	9
036	4.91	0.02	3
037			0
038			0
039	6.16	0.19	3
040	0.97	0.02	1
041	1.80	0.01	2
042			0
044			0
045			0
048	18.60	0.91	5
049			0
060	24.94	0.02	6
Total		7.8	

This tab summarizes the total overflow volume, total overflow duration and number of overflow events for every CSO for that particular month.

¹More than one event on the same day is counted as one event. If an Overflow event is rolled over to the next day, it is still counted as one event.

Precipitation Data Summary - December

Day of Month	Day of Week	Daily Precipitation (in)						Average Daily Precipitation (in)
		Colfax RG1	Ethanol RG2	Vaness RG3	Southfield RG4	WWTP RG5	Ironwood RG6	
1	Fri	0.60	0.52	0.69	0.55	0.58	0.59	0.59
2	Sat	0.03	0.02	0.02	0.05	0.02	0.03	0.03
3	Sun	0.13	0.10	0.15	0.08	0.10	0.10	0.11
4	Mon	0.00	0.00	0.00	0.00	0.01	0.01	0.00
5	Tue	0.08	0.04	0.11	0.08	0.04	0.11	0.08
6	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Fri	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Sat	0.06	0.10	0.08	0.06	0.08	0.04	0.07
10	Sun	0.01	0.05	0.00	0.01	0.01	0.04	0.02
11	Mon	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Fri	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	Sat	0.13	0.13	0.16	0.18	0.13	0.16	0.15
17	Sun	0.01	0.00	0.00	0.01	0.01	0.00	0.00
18	Mon	0.02	0.02	0.04	0.01	0.02	0.04	0.02
19	Tue	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	Thu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Fri	0.37	0.35	0.42	0.41	0.34	0.32	0.37
23	Sat	0.11	0.10	0.12	0.25	0.08	0.11	0.13
24	Sun	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	Mon	0.16	0.15	0.18	0.18	0.15	0.16	0.16
26	Tue	0.00	0.00	0.00	0.01	0.00	0.00	0.00
27	Wed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	Thu	0.31	0.30	0.48	0.62	0.26	0.58	0.42
29	Fri	0.01	0.02	0.01	0.01	0.03	0.02	0.02
30	Sat	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Sun	0.02	0.03	0.02	0.04	0.02	0.03	0.03