200

200

[2020] 103

[200
]

:

:

:

13336722222

/

318000

0576-88300161

0576-88300161

318000

799 729 8 4

	200				
	799				
	200				
	200				
	2020 6		2020 7		
	/		2020 11 30 ~12 1		
	300		45		13.2%
	296		43		14.5%
	1 1 2014 4 24 2 2017 6 27 3 2018 2018 10 26 4 2018 12 29 5				

	2020 4 29 6 682 2017 10 1 7 < > [2020]688 8 2021 15 2021 1 1 9 [2017]4 10 2021 2021.2.10 **2** 1 2018 9 2018 5 16 **3** 1 200 2020 6 2 200 [2020]65 2020 7 24 **4** 1 2 3 4
	1

GB8978-1996

DB33/887-2013

1-1

1-1 **mg/L pH**

		pH			P		
	500	6~9	20	400	8.0	35	100
	30	6~9	0.5	5	0.3	1.5 2.5 *	0.5

12 1 3 31

2

GB9078-1996

2

GB16297-1996

GB16297-1996

1-2 1-3

1-2 **GB9078-1996 2**

			(mg/m^3)		
			30	1	5

< >

[2019]56 2019.7.1

30

200 300 /

1-3 **GB16297-1996**

	mg/Nm^3	m	kg/h		mg/m^3
	120	15	3.5		1.0
		20	5.9		
		30	23		
	120	15	10		4.0
		20	17		
		30	53		
	190	15	5.1		12
		20	8.6		
		30	29		

VOCs

GB37822 -2019 A.1 1-4

1-4 **GB37822-2019**

NMHC	6 mg/m^3	1h	
	20mg/m^3		

3

GB12348-2008 3 1-5

1-5 **dB**

3	65	55

4

2021

GB18597-2001 2013 36

HJ 2025-2012

GB18599-2020

5

1-6 **t/a**

					VOCs
	0.209	0.021	0.063	0.776	0.752
	0.209	0.021	0.063	0.776	0.752
	0.209	0.021	0.063	0.776	0.752

1

1

799

E121.497325° N28.657454° 2#

1#

1 2-1 2

2-1

1			1#
2			
3			
4			

2020 6

200

2

2#

2-2 3

2-2

1			
2			
3			
4			

2

200

799

296 43 14.5%

80 300 8

24

200 2-3

2-3

			2020 8-10	
1		200 /a	46	92%

3

2-4

2-4

1		9	9	1F	
2		1	1	1F	
3		1	1	1F	
4		2	2	1F	
5		2	2	1F	
6		10	10	2F	
7		30	25	2F	-5
8		36	36	4F	
9		10	10	3F	
10		23	15	4F	-8
11		2	4	3F	+2
12	2m×1m×1m	1	1	3F	
13		2	2	2F	
14		1	1	2F	
15		4	5	2F	+1

5 8

2 1

4

200

1

2-5

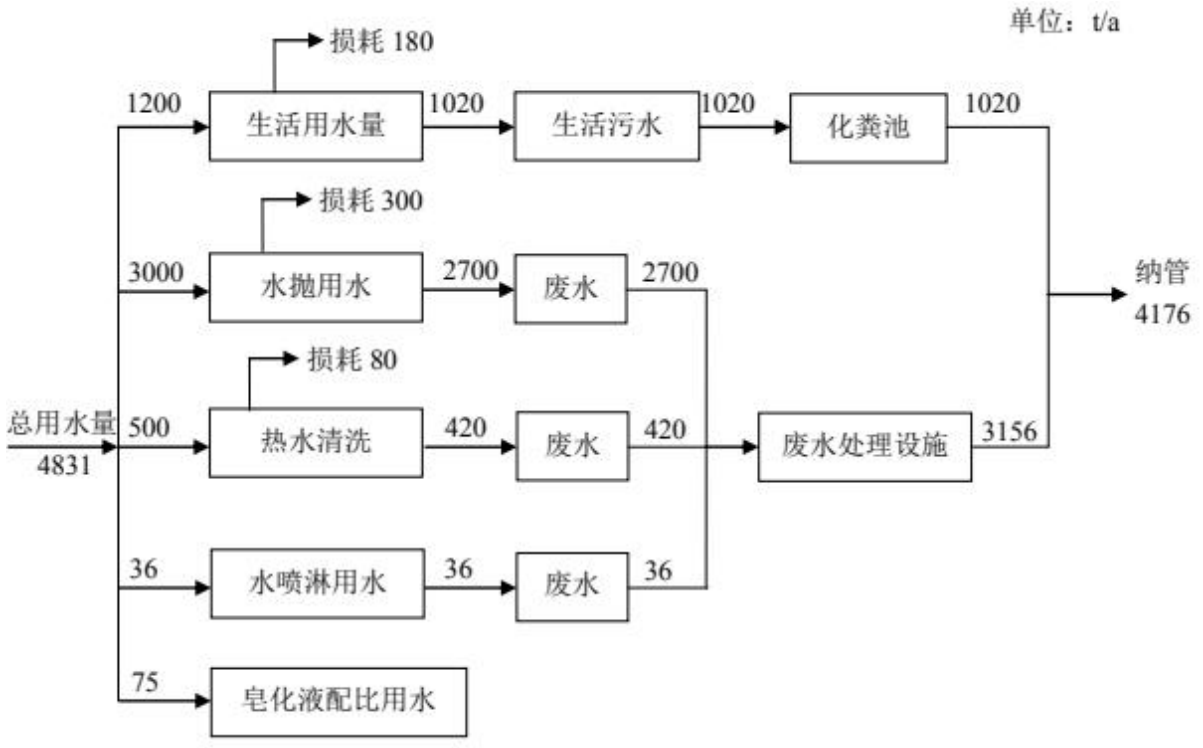
					t/a	8-10 t	t/a	
1		/	/		150	34.5	150	64Mn
2		/	/		1200	276	1200	64Mn 400t 800t
3			25kg/		10	2.3	10	
4			180kg/		1.5	0.345	1.5	/
5			180kg/		1.5	0.345	1.5	/
6			180kg/		8.6	2.0	8.7	/
7			20kg/		0.5	0.115	0.5	pH>8
8			40kg/		5	1.15	5	/
9			50kg/		2	0.46	2	/
10			50kg/		3	0.69	3	/

2020 8 -10 46

2-5

3

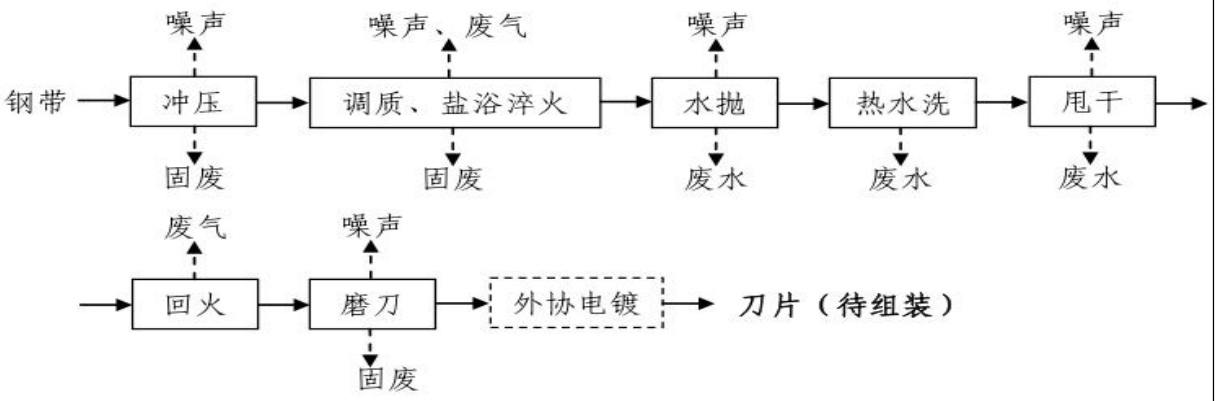
2-1



2-1 **t/a**

2-2~ 2-5

1

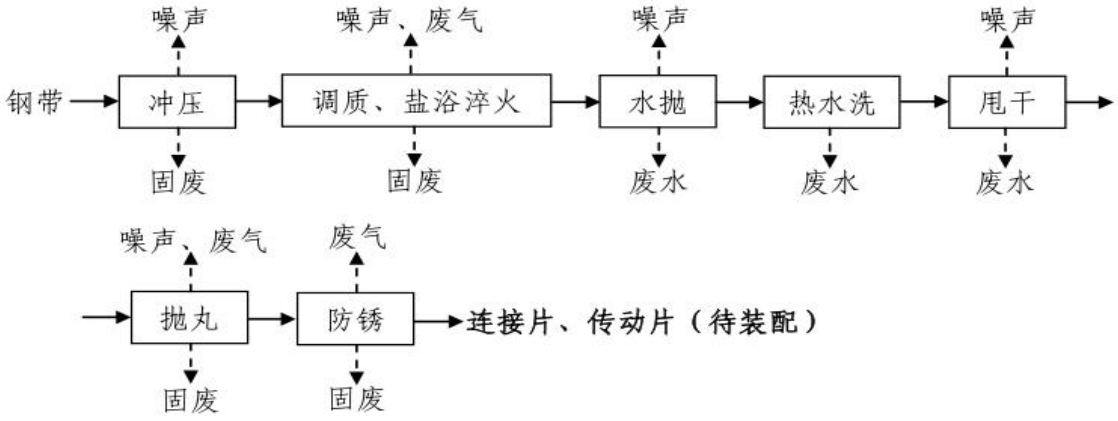


2-2

800 260

260

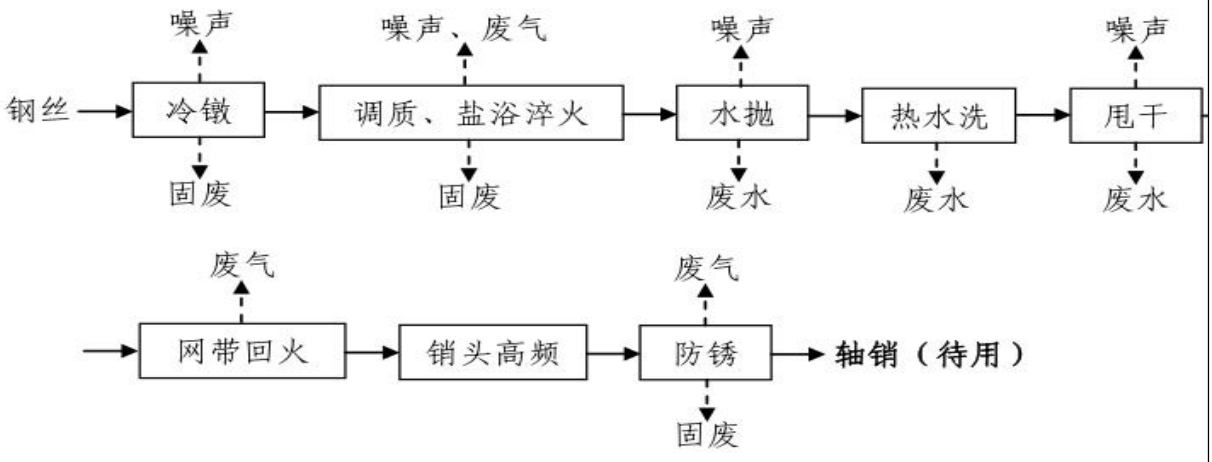
2



2-3

800 260

3

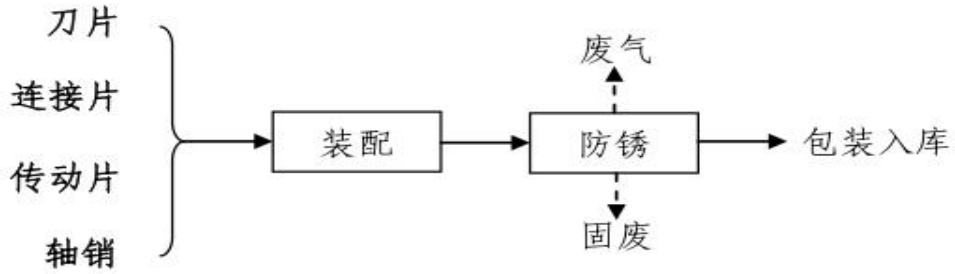


2-4

800 260

260

4



2-5

2-6

2-6

		-
		-
		-
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		-
		-
	5 8 2 1	
		-
		-

			-
			-

[2020]688 “ ”

2-7

2-7

1			
2		30%	
3			
4		10%	
5			
6		1 2 3 4 10%	5 8 2 1
7		10%	
8		6	

		10%	
9			
10		10%	
11			
12			
13			

[2020]688 “

”

1

3-1

1

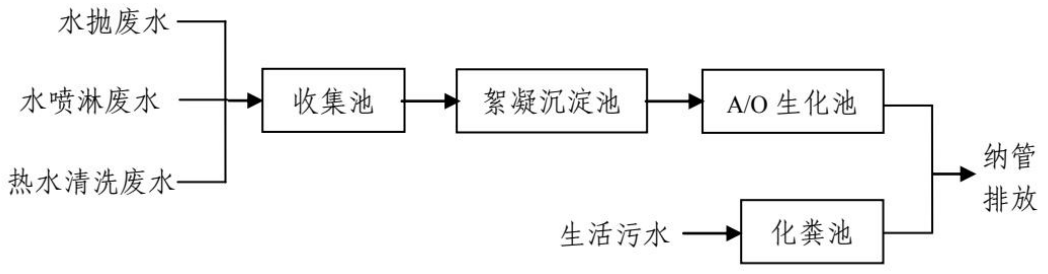
2

3-2

3-2

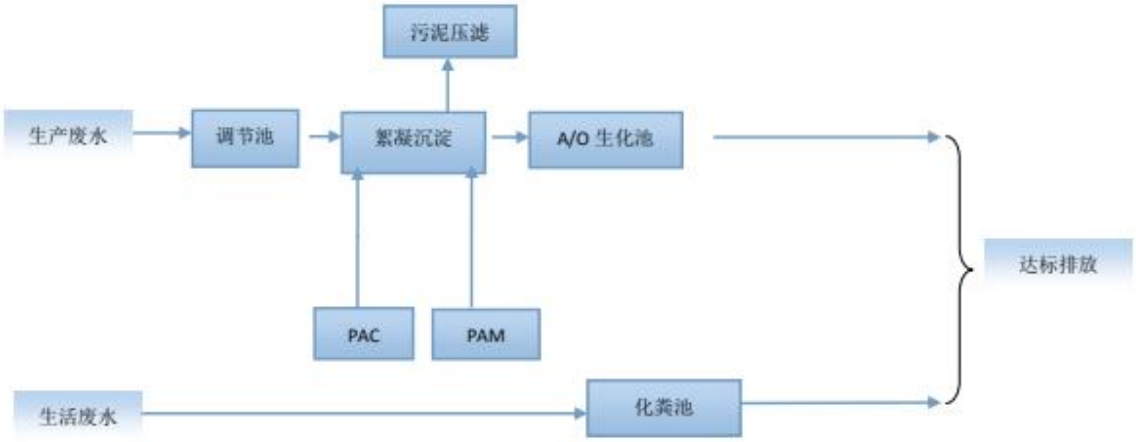
				+	
				+A/O	

15t/d



3-1

15 / “ A/O ”



3-2

PAC PAM

NaOH

COD SS

60%-80% A/O

GB8978-1996

DB33/887-2013

3

2

3-3

3-3

		“ + ” 20m
		20m

1

2

3-4

3-4

				“ + + ” 1# 20m
				2# 20m

CO_2 H_2O

“ + ”

1# 20m

“ +

+ ” 1#

20m

2# 20m

2#

20m

3

3-5

1

2

3-6

1			9	1F	
2			1	1F	
3			1	1F	
4			2	1F	
5			2	1F	
6			10	2F	
7			25	2F	
8			36	4F	
9			10	3F	
10			15	4F	

11			4	3F	
12			2	2F	
13			1	2F	
14			5	2F	

4

3-7

3-7

1

2

2

14m^2

16m^2

3

3-8

1						
2						
3						
4						
5				-		
6				-		
7				-		
8				HW08 900-200-08		
9				HW09 900-006-09		
10				HW08 900-216-08		
11				HW49 900-041-49		
12				HW17 336-064-17		

5

296 43 14.5%

3-9

3-9

1		15
2		18
3		7
4		3
		43

6 “ ”

3-10 “ ”

				“ A/O ”
			“ + + ” 20m	“ + + ” 1# 20m
			20m	2# 20m

3-11		**[2020]65**
	799 2 200	799 2# 200
	COD_{Cr}0.209t/a 0.021t/a 0.063t/a VOCs0.752t/a 0.776t/a COD_{Cr} VOCs	0.125t/a 6.26×10^{-3}t/a 0.050t/a VOCs 0.079t/a 0.281t/a 0.209t/a 0.021t/a 0.063t/a VOCs0.752t/a 0.776t/a
	(GB8978-1996) (DB33/887-2013) ( )	“ A/O ”

	(GB9078-1996) (GB16297-1996) （ ）	“ + + ” 1# 20m 2# 20m
	(GB12348-2008)3	
	GB18599-2001 （ 2013 36 ） GB18597-2001 （ 2013 36 ） HJ2025-2012	2 14m^2 16m^2

1

1

a

1# 20m

2#

20m

10%

b

4176t/a

GB18918-2002 A COD_{Cr}0.209t/a $BOD_5$0.042t/a 0.021t/a LAS0.002t/a SS0.042t/a 0.063t/a

COD_{Cr}0.125t/a $BOD_5$0.025t/a 0.006t/a LAS0.002t/a SS0.021t/a 0.05t/a

c

647.229t/a

d

GB12348-2008 3

2

a

1

“ + ”

20m

2 2#

20m

3

b

c

GB18597-2001 2013 36

(HJ 2025-2012)

d

2.

200

“ ”

3

[2020]65

200 1

1

5-1

5-1

			/	
	1	pH	pH 2002	/
	2		HJ 828-2017	4mg/L
	3		GB/T11901-1989	4mg/L
	4		HJ 535-2009	0.025mg/L
	5		GB/T 11893-1989	0.01mg/L
	6		HJ 636-2012	0.05mg/L
	7		HJ 637-2018	0.04mg/L
	8			
	9		GB/T 11896-1989	1mg/L
	1		GB/T 15432-1995	0.001mg/m^3
	2		HJ 38-2017	0.07mg/m^3
			- HJ604-2017	0.07mg/m^3
	3		HJ 836-2017	1.0mg/m^3
	1		GB 12348-2008	/

2

5-2

5-2

	pH		AZ8601	JZHX2020060549	2020.06.11-2021.06.10
			50mL	YR201701580	2019.01.16-2022.01.15
			2100	JZHX2020060542	2020.06.11-2021.06.10
			UVmini-1240	JZHX2020060545	2020.06.11-2021.06.10
			7200	JZHX2020060543	2020.06.11-2021.06.10
			BSA124S	JZHQ2020060358	2020.06.11-2021.06.1
				OIL480	JZHX2020060678
				OIL480	JZHX2020060678
			50mL	YR201701580	2019.01.16-2022.01.15
			GC9790	JZHX2019060641	2019.06.14-2021.06.13
	TSP		ZC-Q0102	LH1912159696-001	2020.12.12-2021.12.11
			3012H	LH1912159693-003	2020.12.12-2021.12.11
			AWA6228+	DX0812053701-001	2020.12.21-2021.12.20

3

5-3

5-3

1			KD027	2016 12 10
2			KD063	2018 2 23
3			KD030	2015 8 24
4			KD020	2013 10 8
5			KD082	2020 3 23
6			KD078	2019 7 8
7			KD014	2016 12 10
8			KD024	2016 12 10
9			KD065	2018 3 26

10			KD015	2016 12 10

4

1

2

3

4

5

5-4

5-4

					%	mg/L		%	
1		36	2	4	11.1	270	1.5	≤10	
						262			
						28	3.7		
						26			
						258	0.6		
						255			
						24	4.3		
						22			
2		36	2	4	11.1	6.18	1.0	≤10	
						6.30			
						12.2	1.6		
						12.6			
						6.61	1.2		
						6.77			
						13.9	1.4		
						13.5			

								%	
					mg/L	mg/L	%		
1		36	2	2	118	112±7	5.4	±6.3	
					118		5.4		
					37.7	35.7+3.0	5.6	±8.4	
					38.1		6.7		
2		36	2	1	2.37	1.49±0.06	-0.8	±4.0	
					2.42		1.3		

5-5

0.5dB 0.5dB

5-5

1	2020.11.30	93.9dB	93.8dB	93.8dB	0.1dB	≤0.5dB	
2	2020.12.01	93.9dB	93.8dB	93.8dB	0.1dB	≤0.5dB	

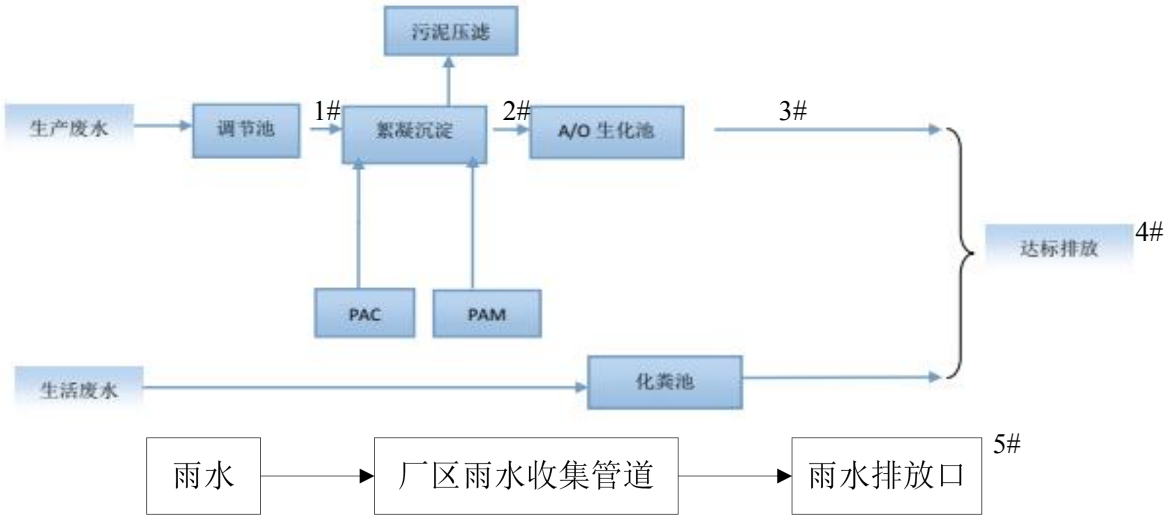
1

5

6-1 6-1 “ ”

6-1

1		1#	pH	4 / 2
2		2#		
3		3#	pH	
4		4#		
5		5#	pH	2 / 2



6-1

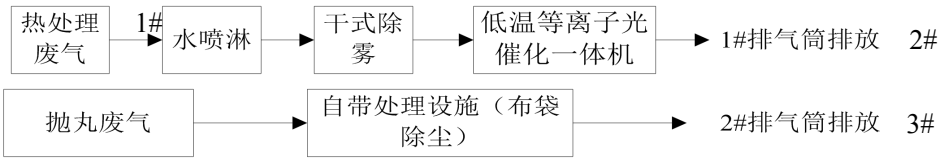
2

1

6-2 6-2 “ ”

6-2

		1# 2#		4 / 2
		3#		



6-2

2

4 1

6-3 4 “○”

6-3

○1#~○4#	4 3 10m 1 4		4 / 2
○5#			

3

6-4 4 “▲”

6-4

▲1#		2	1 1.2 1m
▲2#			
▲3#			
▲4#			

4

GB18599-2020

GB18597-2001

200

7-1 7-2

7-1

			2020 11 30		2020 12 1	
				%		%
	200 /	277	222	80	216	78

7-2

			11 30	12 1
1		9	9	9
2		1	1	1
3		1	1	1
4		2	2	2
5		2	2	2
6		10	10	10
7		25	25	25
8		36	36	36
9		10	10	10
10		15	15	15
11		4	4	4
12	2mx1mx1m	1	1	1
13		2	2	2
14		1	1	1
15		5	5	5

1

7-3 7-4

			7-3				**mg/L**	**pH**			
			pH								
	2020.11.30	1	8.45	660	989	6.24	62.5	4.40	0.35	1.56	350
		2	8.40	675	921	6.56	60.2	4.52	0.39	1.62	352
		3	8.56	683	899	6.81	65.0	4.45	0.31	1.48	345
		4	8.50	694	966	5.96	62.2	4.50	0.42	1.65	348
			/	678	944	6.39	62.5	4.47	0.37	1.58	349
	2020.12.01	1	8.39	632	951	6.69	63.8	4.04	0.36	1.50	340
		2	8.30	615	996	6.45	61.3	3.94	0.32	1.57	344
		3	8.35	627	914	6.04	62.3	4.19	0.30	1.45	352
		4	8.42	646	929	6.27	63.5	4.15	0.45	1.63	348
			/	630	946	6.36	62.7	4.08	0.36	1.54	346
	2020.11.30	1	8.30	435	562	5.57	47.5	3.16	0.30	0.82	370
		2	8.34	436	543	5.10	49.6	3.28	0.23	0.69	372
		3	8.29	444	524	5.66	48.7	3.06	0.25	0.75	368
		4	8.35	420	573	5.20	47.2	3.19	0.30	0.85	370
			/	434	551	5.38	48.3	3.17	0.27	0.78	370
	2020.12.01	1	8.25	402	588	5.44	48.5	2.88	0.22	0.78	380
		2	8.28	439	551	5.22	49.8	2.96	0.28	0.84	376
		3	8.20	415	532	5.66	48.0	2.69	0.20	0.73	378
		4	8.23	427	577	5.78	49.2	2.78	0.25	0.80	372
			/	421	562	5.53	48.9	2.83	0.24	0.79	377
	2020.11.30	1	8.95	62	266	3.14	28.5	1.83	0.12	0.56	390
		2	8.90	66	285	3.24	25.0	1.79	0.15	0.60	395
		3	8.89	69	251	3.01	26.7	1.89	0.13	0.50	393
		4	8.82	60	240	3..27	27.0	1.86	0.13	0.47	392
			/	64	261	3.13	26.8	1.84	0.13	0.53	393
	2020.12.01	1	8.86	66	256	3.24	23.5	1.93	0.10	0.46	394
		2	8.82	63	277	3.06	25.0	1.75	0.14	0.55	390
		3	8.79	70	243	3.17	26.4	1.77	0.09	0.43	398
		4	8.72	74	288	3.13	27.6	1.76	0.16	0.62	390
			/	68	266	3.15	25.6	1.80	0.12	0.52	393
	2020.11.30	1	8.14	83	362	13.1	28.4	2.98	0.10	1.40	/
		2	8.17	85	337	13.1	29.3	2.80	0.07	1.15	/
		3	8.19	88	345	12.1	27.2	3.10	0.08	1.23	/
		4	8.06	80	375	13.9	28..8	2.88	0.07	1.08	/
			/	84	355	13.1	28.3	2.94	0.08	1.22	/
	2020.	1	8.10	86	346	13.6	28.2	2.82	0.08	1.22	/

	12.01	2	8.06	81	330	12.4	29.2	2.77	0.06	1.08	/
		3	8.15	94	371	12.8	26.7	2.81	0.07	1.14	/
		4	8.09	84	363	12.1	28.8	2.73	0.09	1.29	/
			/	86	353	12.7	28.2	2.78	0.08	1.18	/
		1	7.10	16	27	0.059	0.271	0.051	0.08	/	/
		2	7.06	19	24	0.074	0.281	0.046	0.07	/	/
			/	18	26	0.067	0.276	0.049	0.08	/	/
		1	7.14	15	23	0.074	0.251	0.040	0.07	/	/
		2	7.11	17	20	0.069	0.321	0.052	0.07	/	/
			/	16	22	0.072	0.286	0.046	0.07	/	/

7-4 **mg/L** **pH**

		2020.11.30	2020.12.01		
	pH	8.06~8.19	8.06~8.15	6~9	
		84	86	400	
		355	353	500	
		13.1	12.7	35	
		28.3	28.2	70	
		2.94	2.78	8.0	
		1.22	1.18	100	
		0.08	0.08	20	

pH

GB8978-1996 DB33/887-2013

2

1

7-5

7-6

7-5

	1#	2#	1#	2#
	2020.11.30		2020.12.01	
m	20		20	
	21	17	20	16
m^2	0.2827	0.1963	0.2827	0.1963

	m^3/h	1.34×10^4	1.60×10^4	1.35×10^4	1.62×10^4
mg/m^3	1	28.9	1.9	28.8	2.1
	2	30.7	2.0	31.8	1.9
	3	27.1	2.1	24.6	2.0
	4	25.8	1.9	27.0	2.2
		28.1	2.0	28.1	2.1
mg/m^3		/	**30**	/	**30**
		/		/	
(kg/h)		0.377	0.032	0.379	0.034
%		91.5		91.0	
mg/m^3	1	2.42	1.02	2.13	0.58
	2	2.07	0.86	2.39	0.53
	3	2.34	0.81	2.30	0.63
	4	2.22	0.83	2.29	0.47
		2.26	0.88	2.28	0.55
mg/m^3		/	**120**	/	**120**
(kg/h)		0.030	0.014	0.031	8.91×10^{-3}
(kg/h)		/	**17**	/	**17**
		/		/	
%		53.3		71.3	
mg/m^3	1	5.34	2.82	4.84	2.64
	2	4.89	2.34	4.58	2.86
	3	5.03	1.79	5.23	1.93
	4	4.84	1.66	5.13	1.44
		5.03	2.15	4.95	2.22
mg/m^3		/	**190**	/	**190**
(kg/h)		0.067	0.034	0.067	0.036
(kg/h)		/	**8.6**	/	**8.6**
		/		/	
%		49.3		46.3	
		/	0	/	0
		/	**1**	/	**1**
		/		/	

7-6

	3#	3#
	2020.11.30	2020.12.01
m	20	20
	20.4	20.8

m^2		0.0707	0.0707
m^3/h		1.12×10^3	1.12×10^3
mg/m^3	1	15.7	16.0
	2	16.8	15.0
	3	14.4	14.8
	4	15.1	15.6
		15.4	15.4
mg/m^3		**120**	**120**
(kg/h)		0.017	0.017
(kg/h)		**5.9**	**5.9**

GB9078-1996

GB16297-1996

GB16297-1996

2

7-7

	2020 11 30	2020 12 1
	13.0	14.0
	2.1 m/s	1.6 m/s
	103.0 Kpa	102.8 Kpa

7-8 **mg/m^3**

2020.11.30		1	0.146	0.56
		2		0.38
		3		0.36
		4		0.37
		1	0.138	0.34
		2		0.35
		3		0.40
		4		0.38
		1	0.154	0.38
		2		0.33
		3		0.35

		4		0.34
		1	0.158	0.33
		2		0.36
		3		0.31
		4		0.16
2020.12.01		1	0.171	0.45
		2		0.51
		3		0.49
		4		0.45
		1	0.158	0.48
		2		0.47
		3		0.46
		4		0.44
		1	0.179	0.46
		2		0.09
		3		0.50
		4		0.47
		1	0.175	0.46
		2		0.53
		3		0.47
		4		0.50
			1.0	4.0

GB16297-1996

7-9 **mg/m³**

		2020.11.30	2020.12.01
mg/m³	1	0.30	0.17
	2	0.31	0.45
	3	0.40	0.41
	4	0.35	0.45
mg/m³		**20**	**20**

GB 37822-2019

3

7-10

7-10

				dB A		dB A
2020.11.30	1#	4	10:27	63	22:09	53
	2#		10:29	69	22:11	53
	3#		10:31	72	22:13	52
	4#		10:33	66	22:15	52
2020.12.01	1#		14:35	65	22:09	51
	2#		14:37	71	22:11	52
	3#		14:38	72	22:12	52
	4#		14:40	67	22:14	52
			65		55	

GB12348-2008

3

4

7-11

7-11

				t/a	8 ~10 t	t		
1			/	615	141.5	615.22		
2			/	6.534	1.5	6.522		
3			/	0.54	0.12	0.52		
4			/	2	0.47	2.04		
5			/	2	0.46	2		
6			/	0.05	0.012	0.0522		

7			/	12	2.9	11.6		
8			HW08 900-200-08	0.3	0.07	0.3		
9			HW09 900-006-09	3.83	0.88	3.826		
10			HW08 900-216-08	0.375	0.086	0.374		
11			HW49 900-041-49	0.1	0.023	0.1		
12			HW17 336-064-17	4.5	1.03	4.48		

2020 8 -10 46

2

14m^2 16m^2

4

4176t/a

30mg/L 1.5mg/L 12mg/L

7-12

	t/a	t/a	t/a	t/a
	4176	0.209	0.021	0.063
	/	0.209	0.021	0.063
	4176	0.125	6.26×10^{-3}	0.050
	/			

0.125t/a 6.26×10^{-3}t/a 0.050t/a 0.209t/a 0.021t/a 0.063t/a

7-13

						* t/a	t/a
			kg/h	h	t/a		
2020.11.30~12.01			/			0.075	0.752
			0.011	7200	0.079	0.356	
			0.033	7200	0.24	0.377	0.776
			0.017	2400	0.041	/	

*

VOCs 0.51t/a 0.658t/a

VOCs 0.752t/a 0.776t/a

5

7-5 91.5% 91.0% 53.3% 71.3% 49.3% 46.3%

1

1

pH

GB8978-1996

DB33/887-2013

2

GB9078-1996

GB16297-1996

GB16297-1996

GB16297-1996

GB 37822-2019

3

GB12348-2008

3

4

GB18599-2020

(GB18597-2001) 2013 36

5

0.125t/a 6.26×10^{-3}t/a 0.050t/a

VOCs 0.51t/a 0.658t/a

0.209t/a 0.021t/a 0.063t/a VOCs0.752t/a 0.776t/a

6

91.5% 91.0%

53.3% 71.3% 49.3% 46.3%

2

200

“ ”

3

1

2

3

“ ”

		200					799						
	69			☑	□	□	/	E121.497325° N28.657454°					
	200			200									
				[2020]65									
	/						/						
	300				45		%	13.2					
	296				43		%	14.5					
	15		18		3		7		/		/		
	15 /				/			7200h					

	1	2	3	4	5	6	7	“ ” 8	9	10	11	12
						0.125	0.209					
						6.26×10^{-3}	0.021					
						0.050	0.063					
						0.658	0.776					
VOCs						0.51	0.752					
						0						

1 + - 2 12 = 6 - 8 - 11 9 = 4 - 5 - 8 - 11 + 1 3 —— /

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1

2

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2	; GB18599-2020 “ ”	“ ”
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4		
5		

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1.1

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296 43

1.2

1.3

2020 6

2020 7 24

[2020]65 2020 11

2020 11 30 12 1

2021 3 19

[2017]4

200

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2

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GB18599-2020

“ ”

3

4

5

2

2.1

2.2

1

2

2.3

3

“ ”