





( )

1-1

13588872720

311261

1-1



1	.....	7
2	.....	9
2.1	.....	9
2.2	.....	9
2.3	( )        .....	9
2.4	.....	9
3	.....	10
3.1	.....	10
3.2	.....	14
3.3	.....	17
3.4	.....	21
3.5	.....	22
3.6	.....	29
4	.....	30
4.1	.....	30
4.2	.....	43
4.3	.....	44
5	.....	46
5.1	.....	46
5.2	.....	46
6	.....	47
6.1	.....	47
6.2	.....	48
6.3	.....	51
7	.....	52
7.1	.....	52
7.2	.....	52
7.3	.....	52
7.4	.....	53
7.5	.....	53
7.6	.....	53
8	.....	54
8.1	.....	54
8.2	.....	54
8.3	.....	

8.5	.....	56
8.6	.....	56
8.7	.....	56
9	.....	57
9.1	.....	57
9.2	.....	57
9.3	.....	62
10	.....	63
10.1	.....	63
10.2	.....	63
10.3	.....	63

1

1-1 2018 11

2024 6 )

13200

+ 2024 7 17

( [2024]8 ) 2024 7 22

(91330109MA2CFMH44N002X)

13200

300

300

16h/d

8h

4500

210

2024 7

18

2024 7 26

2024 7 29

2024

7 30 ~7 31

(HHJ-2407106)

13200

2024 8 23

13200



2

2.1

- (1) 2014.4.24 2015.1.1
- (2) 2017.6.27 2018.1.1
- (3) 2018.10.26
- (4) 2018.12.29
- (5) 2020 4 29
- (6) 2019 1 1
- (7) 2018.12.29
- (8) 682
- 2017.6.21 2017.10.1
- (9) 364

2018.3.1

2.2

- (1) [2017]4  
2017.11.20
- (2) 2018 9

2.3 ( )

- (1) 13200  
" + " (
- [2024]8 ) 2024.7.17

2.4

- (1) HHJ-2407106
- (2)

3

3.1

1-1

30661

120 11

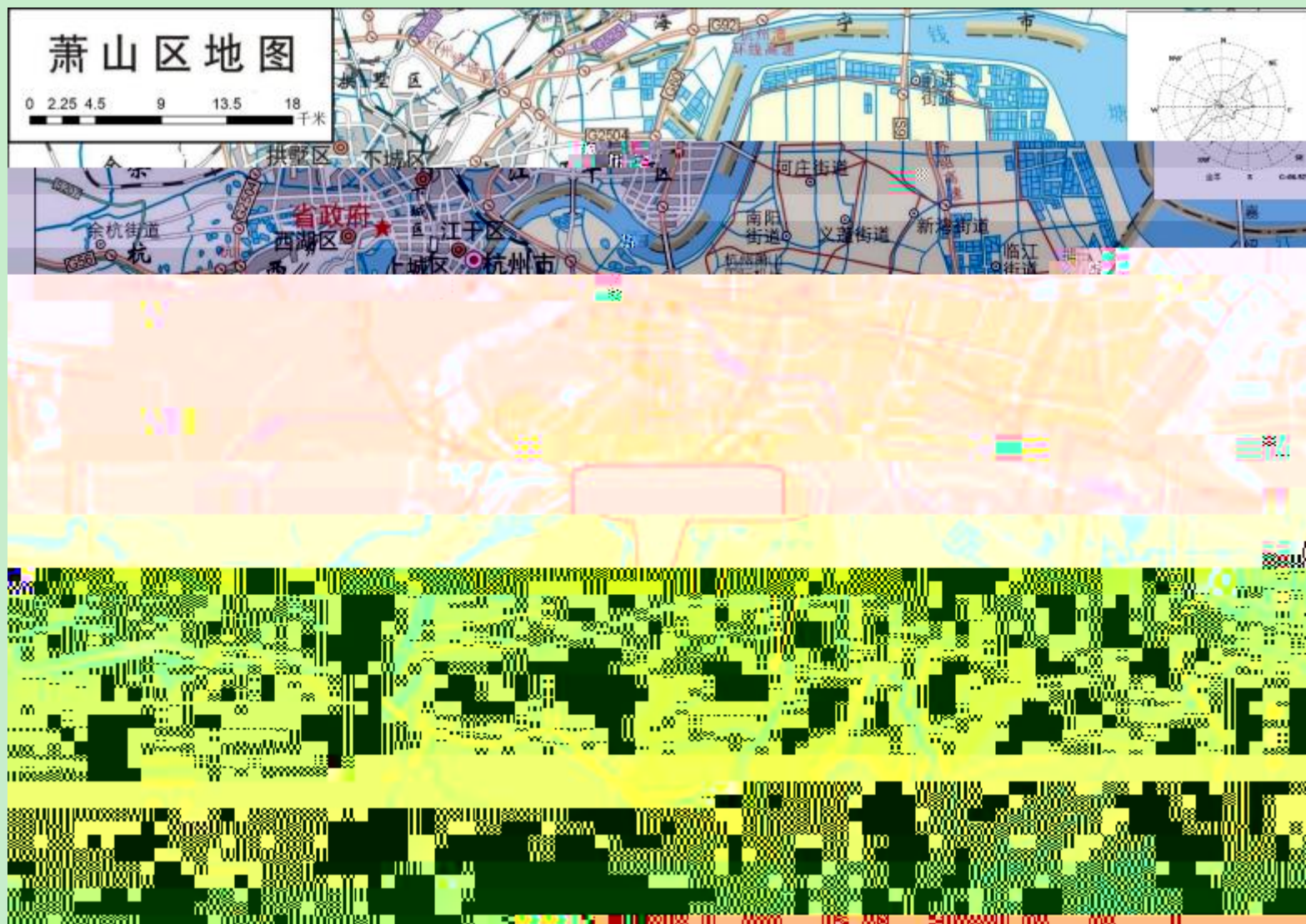
48.272 29 59 26.070

1 ( )

3-1

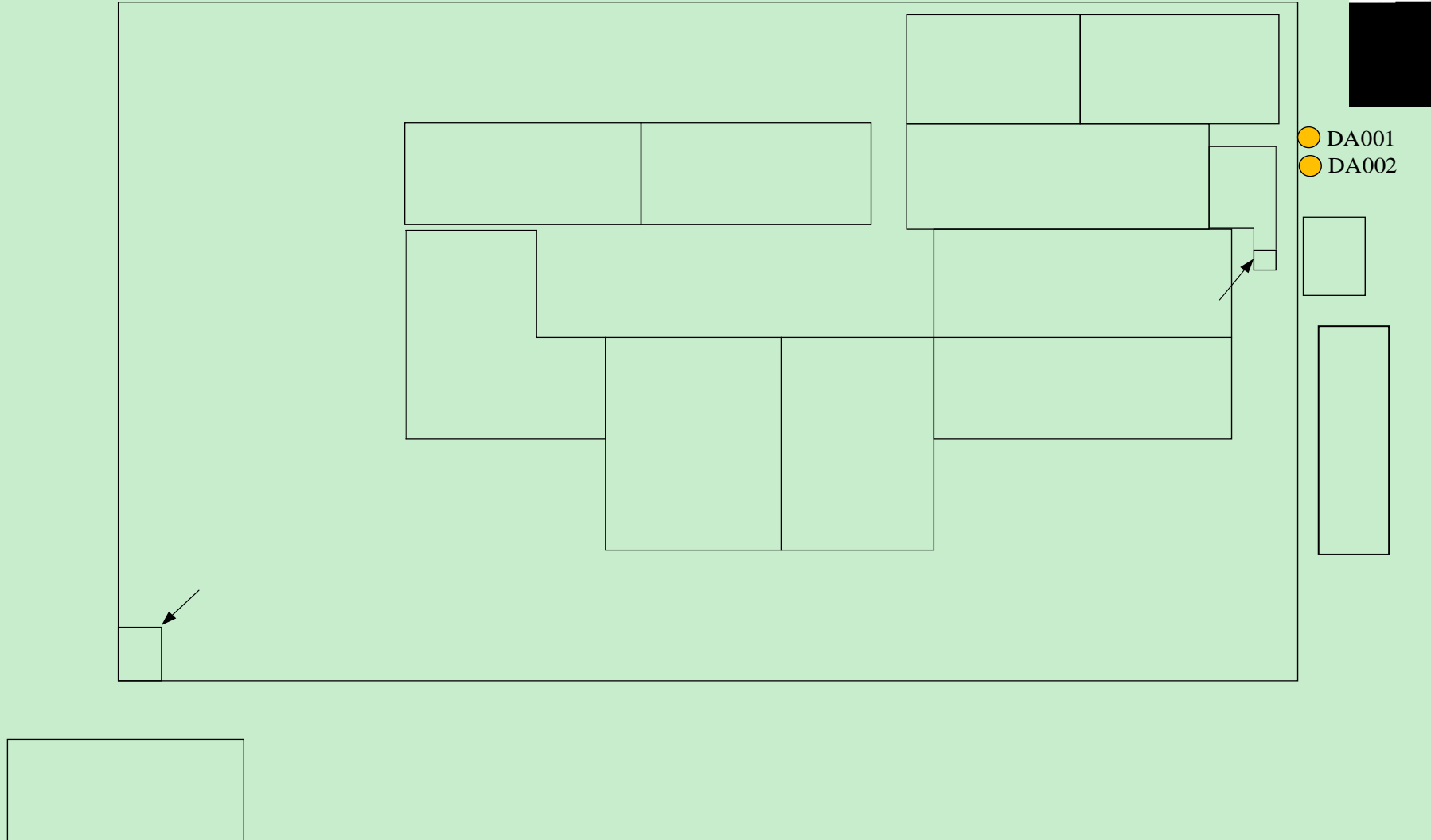
3-2

3-3



3-1





3-3

3.2

3.2.1

3.2-1

3.2-1

		( m <sup>2</sup> )	( m <sup>2</sup> )	( m <sup>2</sup> )	
1		200	200	0	
2		3000	3000	0	
3		10000	10000	0	
		132000	132000	0	/

3.2.2

3.2-2

3.2-2

1			30661	
2				
3		+ 15m DA001		
		/		
		+ 15m		
		DA002		

			GB8978-1996	
			1	
			1	
4				
5				

3.2.3

3.2-3

3.2-3

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---

21			/	1	1	0	/
----	--	--	---	---	---	---	---

21	CTP	30000	30000	3000	30 /	CTP
22		8t	8t	2t	200kg/ 15kg/	/
23		200t	200t	10t	20kg/	/
24		42t	42t	2t	20kg/	
25		0.1t	0.1t	0.1t	100 /	/
26		0.001t	0.001t	0.001t	1kg/	
27		28281.4t	25330t	/	/	/
28		600	590	/	/	/
29		18000t	18000t	/		

UV

VOCs

3.2-5

UV

MSDS VOCs

3.2-5

		%	%	VOCs
		90~97	93.5	239g/L
		3~10	6.5	
		40	40	61% MSDS
		25	25	
		18	18	
		5	5	
		4	4	
	3,5- -1- -3-	3	3	
		3	3	
		2	2	
		80~100	93.7	0.1% MSDS
		1~5	3	
		0.5~1.5	1.0	
		2	2	
		0~0.1	0.1	
	2,4,7,9- -5- -4,7- N- -N-	0~0.1	0.1	
	[( ) ] [2,1- ( )]	0~0.1	0.1	
		58	58	0.54%
		32	32	

			10	10	
UV	TPGDA		25~35	31.75	26g/L
	TMPTA		20~30	25	
			30~40	35	
			5~10	7.5	
			0.5~1	0.75	
			10~40	25	60% MSDS
			10~30	15	
			20~50	30	
			10~30	20	
			10	10	

5		C <sub>3</sub> H <sub>8</sub> O	0.7855g/cm <sup>3</sup>	-89.5	82.5	235			
		LD <sub>50</sub> 3600mg/kg							
6			2.4%	11.7%	0.1%	55.4%	30.3%		114
			1.2%~6.0%			0.1%	C <sub>5</sub> ~C <sub>7</sub>		
		650~750kg/m <sup>3</sup>			0.08%				
7		(CH <sub>2</sub> OH) <sub>2</sub>	0.06mmHg	20	418	372			
		7699 kPa	/	/	/	/	/	/	/
8		RO(CH <sub>2</sub> CH <sub>2</sub> O) <sub>n</sub> H							
		n=10~20							
9		C <sub>13</sub> H <sub>10</sub> O			1.11g/cm <sup>3</sup>	47-51			
		305	143	0.000823mmHg					

3.2-7

VOCs

		VOCs /t	VOCs	
	5000L	1.195	239g/L	
	160t	0.864	0.54%	
UV	1t	0.025	97.2g/L	UV
	0.08t	0.08		
	8t	4.8	60%	MSDS
	200t	2.01	1.005%	MSDS
	42t	/	/	VOCs
	1000L	0.875	875g/L	

VOCs

VOCs

GB38507-2020

VOCs

GB38508-2020

VOCs

GB 33372-2020

GB/T 38597-2020

3.2-8		VOC	
	VOC <sub>s</sub>	GB38507-2020	
	1.005%	-	-
	60%	-	
1	VOCs		VOCs
	3.1.1 VOCs		
		VOCs	VOCs
	1% VOCs		

**3.2-10**

	/	(m/min · )	(m/min · )	/m	<sup>1</sup> /h	m <sup>2</sup> /	/ m <sup>2</sup>	
	2	160-200	128-160	0.75-1.8	2400	2764.8-8294.4	3000	
	/	(	(	<sup>2</sup> (m <sup>2</sup> / )	1/h	m <sup>2</sup> /	/ m <sup>2</sup>	
	4	150	120	0.75-1.8	3600	129.6-311.04	200	
1	8h		3600h	2	1m			

3.3

13200

+

2024 7 17

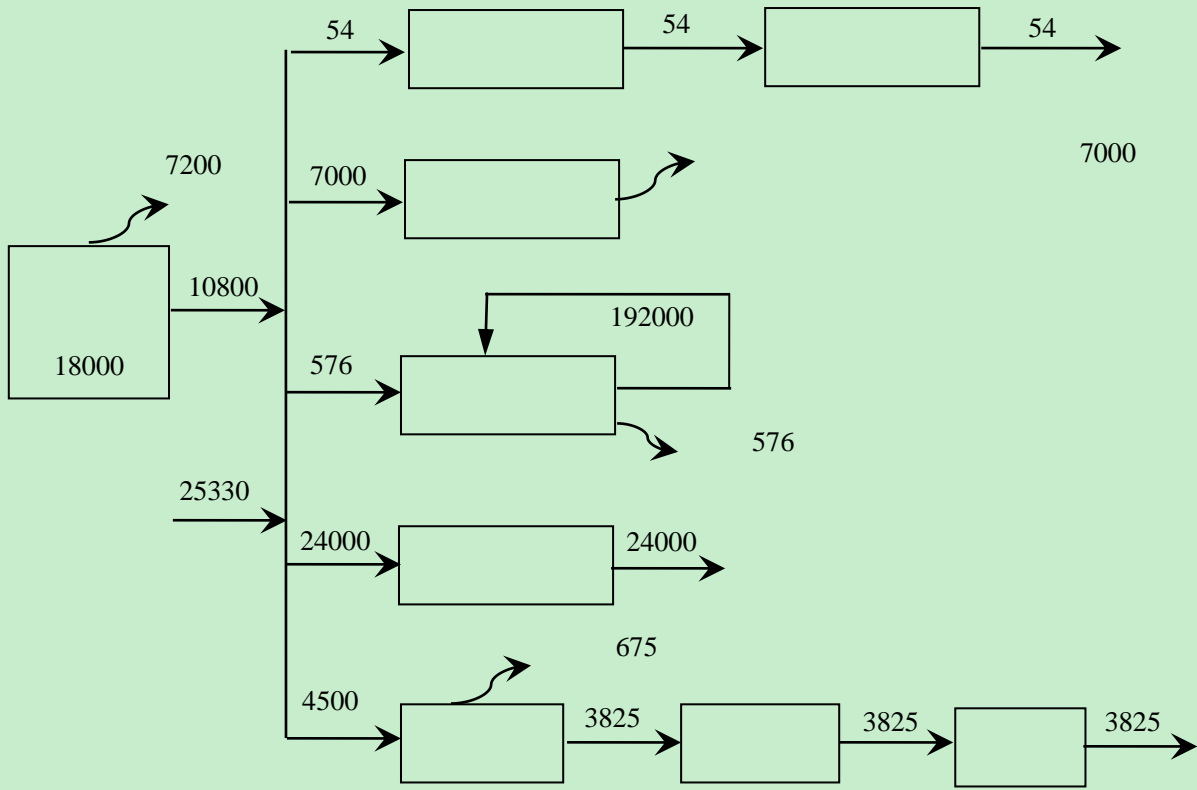
13200

+

( [2024]8 )

3.4

3.4-1



3.4-1

t/a

25330t/a

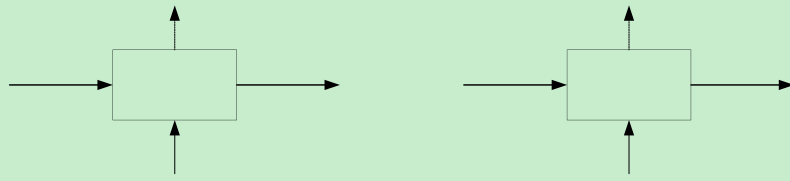
24000t/a

3825t/a

3.5

3.5.1

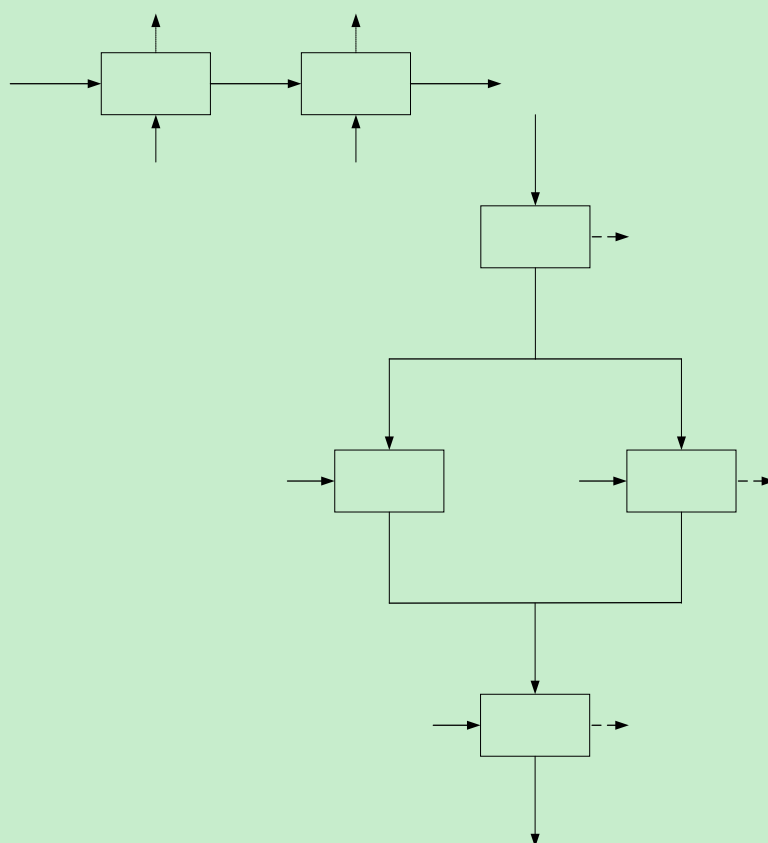
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**3.5-1**

1h

2

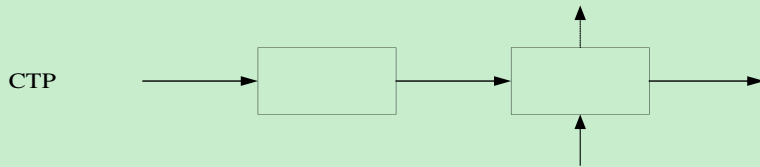


3.5-2

/

/

3



**3.5-3**

CTP

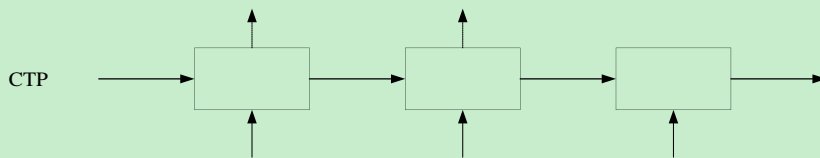
CTP

CTP

CTP

CTP

CTP



**3.5-4**



/

UV

UV

1:12.5

/

/

/

/

)

(

3.5.2

3.5-1

## 3.5-1

	/			
			15m + DA001	
			15m + DA002	
			15m + DA002	
UV	UV		UV + 15m DA002	
			15m + DA002	
		COD <sub>Cr</sub> BOD <sub>5</sub> SS	( )	
		COD <sub>Cr</sub>	(GB8978-1996)	

		#0%.Áq?6ñpìÑ •Žø% )F3,, J"ñ°< Vñ H"uP>â Áq? ðH Yø% )F3,, ††c8AŽ!i Vñ , uPF M	

4

4.1

4.1.1

(1)

27000t/a(90t/d)  
 80t/d(24000t/a)  
 ( )

(2)

300 300  
 50L/ . 4500t/a  
 0.85 3825t/a  
 COD<sub>Cr</sub>350mg/L 35mg/L  
 COD<sub>Cr</sub>1.101t/a 0.11t/a  
 4.1-1 4.1-2

4.1-1	( )
(t/a)	m <sup>3</sup> /a

			6.3	0.024	35		2	0.008	2
--	--	--	-----	-------	----	--	---	-------	---

(3)



## 4.1.2

(1)

4.1-3



4.1-1

TSP

(GB16297-1996) 2

VOCs

VOCs

1g/L

42t/a

33600L/a

1.25kg/L

0.034t/a

VOCs

VOCs

10% VOCs

0.034t/a

0.007kg/h

VOCs

VOCs

10%

GB 16297-1996

2

GB 37822-2019 A.1

100  
80% 20

GB14554-93

4.1-3

13200

4.1-3

/(t/a)   /(mg/m<sup>3</sup>)

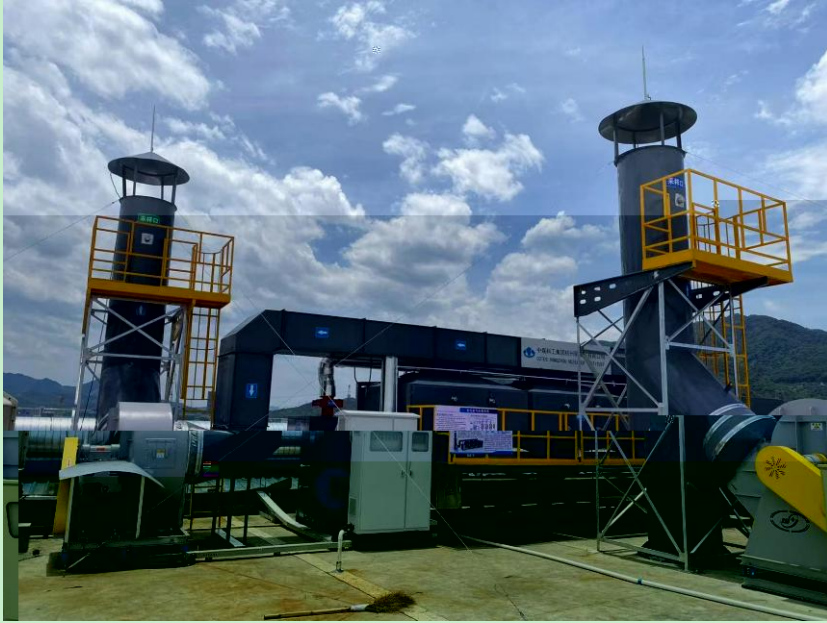
(2)

4.1-4

4.1-4

				+ +15mDA001
UV	UV		+ +15mDA002	+





+

+

+15mDA002

### 4.1.3

(1)

4.1-5 4.1-6

## 4.1-5 ( )

			/dB(A)	/m			/m	/dB(A)	/dB(A)		/dB(A)		
				X	Y	Z						/dB(A)	
	/	75		130	30	1.5	E97,S30, W130,N105	E47.7,S37.5, W50.3,N48.4	E27.3,S37.5, W24.7,N26.6		20	E12.3,S22.5, W9.7,N11.6	1m
	/	80		130	40	1.5	E97,S40, W130,N95	E47.7,S40.0, W50.3,N47.6	E32.3,S40, W29.7,N32.4		20	E17.3,S25, W14.7,N17.4	1m
	/	80		130	50	1.5	E97,S50, W130,N85	E47.7,S42.0, W50.3,N46.6	E32.3,S38, W29.7,N33.4		20	E17.3,S23, W14.7,N18.4	1m
	/	80		130	60	1.5	E97,S60, W130,N75	E47.7,S43.6, W50.3,N45.5	E32.3,S36.4, W29.7,N34.5		20	E17.3,S21.4, W14.7,N19.5	1m

							W100,N75	W48,N45.5	W27,N29.5			W12,N14.5	
CTP	/	75	100	65	1.5	E127,S65, W100,N70	E50.1,S44.3, W48,N44.9	E24.9,S30.7, W27,N30.1		20	E9.9,S15.7, W12,N15.1	1m	
	/	75	100	70	1.5	E127,S70, W100,N65	E50.1,S44.9, W48,N44.3	E24.9,S30.1, W27,N30.7		20	E9.9,S15.1, W12,N15.7	1m	
	/	75	100	75	1.5	E127,S75, W100,N60	E50.1,S45.5, W48,N43.6	E24.9,S29.5, W27,N31.4		20	E9.9,S14.5, W12,N16.4	1m	
	/	75	100	80	1.5	E127,S80, W100,N55	E50.1,S46.1, W48,N42.8	E24.9,S28.9, W27,N32.2		20	E9.9,S13.9, W12,N17.2	1m	
	/	75	100	85	1.5	E127,S85, W100,N50	E50.1,S46.6, W48,N42.0	E24.9,S28.4, W27,N33.0		20	E9.9,S13.4, W12,N18.0	1m	
	/	72	90	60	1.5	E137,S60, W90,N75	E50.7,S43.6, W47.1,N45.5	E21.3,S28.4, W24.9,N26.5		20	E6.3,S13.4, W9.9,N11.5	1m	
	/	72	90	65	1.5	E137,S65, W90,N70	E50.7,S44.3, W47.1,N44.9	E21.3,S27.7, W24.9,N27.1		20	E6.3,S12.7, W9.9,N12.1	1m	
	/	72	90	70	1.5	E137,S70, W90,N65	E50.7,S44.9, W47.1,N44.3	E21.3,S27.1, W24.9,N27.7		20	E6.3,S12.1, W9.9,N12.7	1m	
	/	75	90	40	1.5	E137,S40, W90,N95	E50.7,S40.0, W47.1,N47.6	E24.3,S35, W27.9,N27.4		20	E9.3,S20, W12.9,N12.4	1m	
	/	75	90	45	1.5	E137,S45, W90,N90	E50.7,S41.1, W47.1,N47.1	E24.3,S33.9, W27.9,N27.9		20	E9.3,S18.9, W12.9,N12.9	1m	
	/	75	90	50	1.5	E137,S50, W90,N85	E50.7,S42.0, W47.1,N46.6	E24.3,S33, W27.9,N28.4		20	E9.3,S18, W12.9,N13.4	1m	

		/	72		130	85	1.5	E97,S85, W130,N50	E47.7,S46.6, W50.3,N42.0	E24.3,S25.4, W21.7,N30		20	E9.3,S10.4, W6.7,N15	1m
					22.708			36.938	0m	0 0 0		X	Y	Z

**4.1-6**

			/m			/dB(A)			
			X	Y	Z				
1		/	230	100	15	88		73	
2		/	150	140	3	75		65	

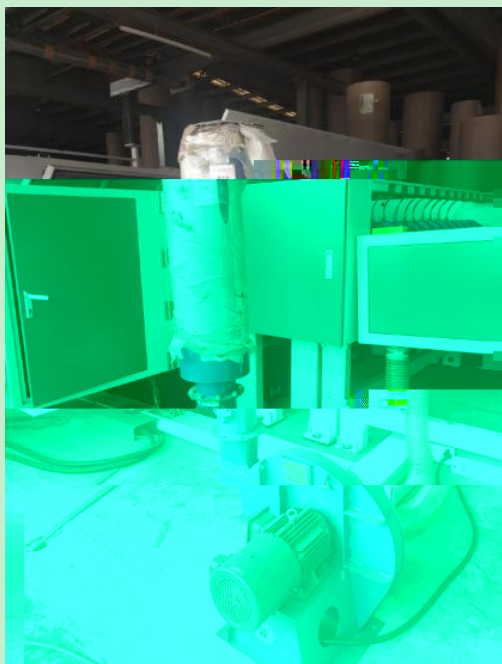
(GB 12348-2008) 2

(2)

A

B

C



## 4.1.4

(1)

/

4.1-7

4.1-7

						/
1		/	231-009-04	/		5000
2	/	/	231-009-07	/		0.662
3		/	231-009-06	/		0.36
4		/	231-009-06	/		0.5
5		T,In	HW49 900-041-49			30
6		T,In	HW49 900-041-49			17.5
7		T,In	HW49 900-041-49			2.324
8		T,In	HW49 772-006-49			54
9		T,In	HW16 231-002-16			6.234
10		T,In	HW49 772-006-49			0.125
11		T,In	HW49 772-006-49			1.591
12		T,In	HW49 900-041-49			2.5
13		T	HW49 900-039-49			18.632
14		T,In	HW49 900-041-49			0.8
15		T,In	HW49 900-041-49			0.05
16		/	/	/		45

(2)

A

B

C

(GB18597-2023)

“ ” ( )  
 ( 2017 43 )  
 ( )

4.1-8

**4.1-8** ( )

							t	m <sup>2</sup>	
1		HW49 900-041-49	T,In	3	30	60			
		HW49 772-006-49	T,In						
		HW49 900-041-49	T,In						
		HW16 231-002-16	T,In						
		HW49 772-006-49	T,In						
		HW49 772-006-49	T,In						
		HW49 900-039-49	T						
		HW49 900-041-49	T,In						
		HW49 900-041-49	T,In						

			HW49 900-041-49	T,In					
			HW49 900-041-49	T,In					
2			231-009-04	/	3	300	80		
	/	231-009-07	/						
		231-009-06	/						
		231-009-06	/						
	/	/	/						



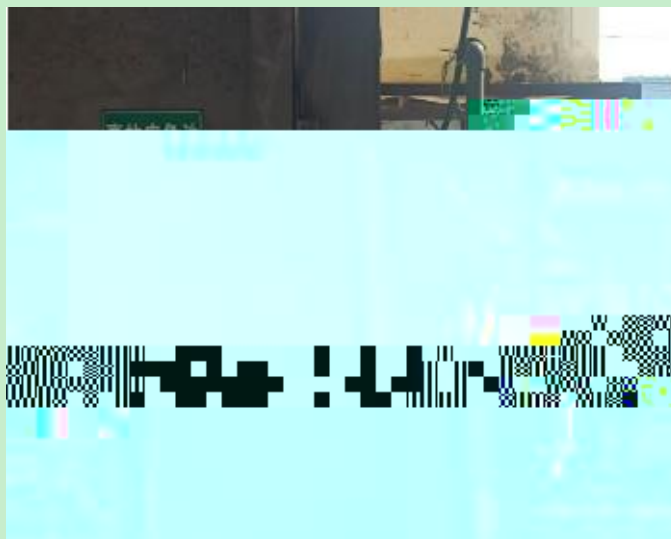
4.2

4.2.1

"

"

125m<sup>3</sup>



4.2.2

4.2.3

(1)

"

"

(2)

(3)

	UV					
		COD SS	1		/	
		COD <sub>Cr</sub> BOD <sub>5</sub> SS	( )		/	
					5	
					20	
		/				
					5	

5

5.1

5.1.1

13200

5.1.2

(1)

(2)

(3)

ISO14001

(4)

5.2

13200

" + "

2024 7 17

13200

"

"

( [2024]8 )

6

6.1

(1)

(2015.06)

(GB3838-2002)

6.1-1

6.1-1

(GB3838-2002)

pH

mg/L

1	pH( )	6 9	6 9
2		5	3
3		20	30
4	BOD <sub>5</sub>	4	6
5		1.0	1.5
6	( P	0.2	0.3
7		0.05	0.5

(2)

SO<sub>2</sub> PM<sub>10</sub> PM<sub>2.5</sub> NO<sub>2</sub> CO O<sub>3</sub>

(GB3095-2012)

6.1-2

6.1-2

(GB3095-2012)

	(mg/m <sup>3</sup> )			
(SO <sub>2</sub> )	0.06	0.15	0.50	(GB3095-2012)
(NO <sub>2</sub> )	0.04	0.08	0.20	
(PM <sub>10</sub> )	0.07	0.15	/	
(PM <sub>2.5</sub> )	0.035	0.075	/	
(TSP)	0.2	0.3	/	
(CO)	/	4	10	
(O <sub>3</sub> )	/	8 0.16	0.2	
	/	/	2.0 mg/m <sup>3</sup>	

(4)

(GB/T15190-2014)

2

(GB18918-2002) A 6.2-2

6.2-2		mg/L	pH
pH	6~10		6~9
COD <sub>Cr</sub>	500		<b>40</b>
BOD <sub>5</sub>	300		10
SS	400		10
NH <sub>3</sub> -N	35		<b>2</b>
	100		1.0
	8.0		0.5
COD <sub>Cr</sub>		(DB33/2169-2018)	

(2)

(GB37824-2019)

(GB16297-1996) 2

GB16297-1996

2

6.2-3

1			1.0
2			4.0

GB

41616-2022 1

(GB14554-93) 2

6.2-4 6.2-5

6.2-4		(GB 41616-2022)		mg/m <sup>3</sup>
1	NMHC		70	

6.2-5

	(m)	( )
	15	2000

(GB 41616-2022)

(GB16297-1996) 2

(GB14554-93) 1

6.2-6

6.2-6

mg/m<sup>3</sup>

1			4.0
2	( )	/	20

VOCs

(GB41616-2022) A.1

6.2-7

6.2-7

VOCs

mg/m<sup>3</sup>

NMHC	10	1h	
	30		

(3)

(GB12348-2008) 2

6.2-8

6.2-8

(GB12348-2008)

dB(A)

2	60	50
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(4)

"

"

(2021 )

(GB18597-2023)

(HJ 2025-2012)

6.3

VOCs3.137t/a

COD<sub>Cr</sub>1.233t/a

0.062t/a

7

7.1

7.1-1

7.1-1

	pH	CODcr	BOD <sub>5</sub>	SS	2024.07.30~2024.07.31
					1 4

7.2

7.2.1

7.2-1

7.2-1

	+				2024.07.30~2024.07.31
					1 3
	/		+		2024.07.30~2024.07.31
					1 3

7.2.2

(1)

7.2-2

7.2-2

			TSP		2024.07.30~2024.07.31
					1 3

7.3

7.3-1

7.3-1

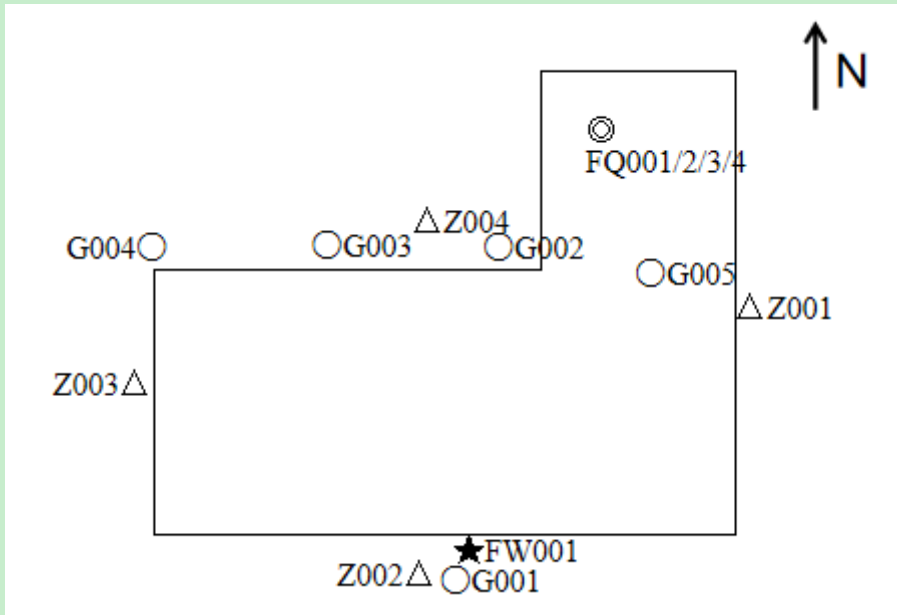
1		LAeq(dB)	2024.07.30~2024.07.31	1	AWA6228+ DBYX-065
2		LAeq(dB)			
3		LAeq(dB)			

4#		LAeq(dB)		
----	--	----------	--	--

7.4

7.5

7.5-1



7.5-1

7.6



		DBYS-034	
		/	
		GC9790- DBYS-034	
		AP135W DBYS-005	
		/	
	pH	pH /PHBJ-261L DBYX-066	
		/AUY220 DBYS-004	
		COD /JC-101C DBYS-025	
		UV-2100 DBYS-001	
		/SPX-250B-Z DBYS-017 /JPSJ-605 DBYS-009	
		AWA6228+ DBYX-065 AWA6021A DBYX-006	

8.3

8.4

( )

2~3

8.5

8.6

1m      1.2m

AWA6228+ DBYX-065

1min

8.7

9

9.1

86%

9.1

## 9.2.1.2

(1)

9.2-2

## 9.2.2

		2024 7 30								
		0.7853 m <sup>2</sup>				15 m 0.7853 m <sup>2</sup>				
		FQ001				FQ002				
		1	2	3		1	2	3		
		46.2	46.4	46.2	46.3	48.5	48.5	48.4	48.5	
	%	3.5	3.5	3.4	3.5	3.7	3.6	3.5	3.6	
	m/s	8.1	8.4	8.5	8.3	9.5	9.3	9.2	9.3	
	m <sup>3</sup> /h	18717	19350	19575	19214	21779	21256	21102	21379	
	mg/m <sup>3</sup>	13.1	11.2	11.7	12.0	3.62	3.44	4.36	3.81	
	kg/h	0.245	0.217	0.229	0.230	0.0788	0.0731	0.0920	0.0813	
		630	549	549	/	199	229	229	/	
		2024 7 31								
		0.2600 m <sup>2</sup>				15 m 0.1800 m <sup>2</sup>				
		FQ001				FQ002				

		FQ003				FQ004			
		1	2	3		1	2	3	
		38.6	38.4	38.6	38.5	42.8	42.8	42.8	42.8
	%	1.8	1.9	2.1	1.9	1.9	2.1	2.2	2.1
	m/s	10.5	9.7	10.2	10.1	9.2	9.8	9.2	9.4
	m <sup>3</sup> /h	16082	15000	15711	15598	21818	23176	21747	22247
	mg/m <sup>3</sup>	35.1	40.1	38.3	37.8	6.44	6.29	6.63	6.45
	kg/h	0.564	0.602	0.602	0.589	0.141	0.146	0.144	0.144
		724	851	724	/	269	269	309	/
		2024 7 31							
		+							
		0.5026 m <sup>2</sup>				15 m 0.7853 m <sup>2</sup>			
		FQ003				FQ004			
		1	2	3		1	2	3	
		39.3	37.1	36.7	37.7	50.5	50.5	50.4	50.5
	%	1.5	1.4	1.4	1.4	3.4	3.4	3.4	3.4
	m/s	11.3	11.3	11.4	11.3	9.8	10.7	10.1	10.2
	m <sup>3</sup> /h	17470	17603	17667	17580	22368	24463	23166	23332
	mg/m <sup>3</sup>	34.3	35.0	33.5	34.3	6.17	5.79	6.52	6.16
	kg/h	0.599	0.616	0.592	0.602	0.138	0.142	0.151	0.144
		851	977	724	/	309	309	354	/

GB 41616-2022 1

GB 14554-1993 2

(2) 9.2-3

9.2.3

				1	2	3	
	3	2024.07.30	G001		224	218	229
			G002		419	414	446
			G003		356	361	386
			G004		328	319	313

		2024.07.31	G001		217	232	225
			G002		329	323	321
			G003		457	461	456
			G004		370	393	392
	mg/m <sup>3</sup>	2024.07.30	G001		1.26	1.13	1.04
			G002		1.56	1.67	1.73
			G003		1.46	1.60	1.47
			G004		1.81	2.09	1.96
			G005		2.66	2.56	2.73
		2024.07.31	G001		0.98	1.12	1.21
			G002		1.54	1.67	1.57
			G003		1.93	2.13	1.89
			G004		1.87	1.64	1.80
			G005		2.44	2.70	2.54
		2024.07.30	G001		<10	<10	<10
			G002		<10	<10	<10
			G003		<10	<10	<10
			G004		<10	<10	<10
		2024.07.31	G001		<10	<10	<10
			G002		<10	<10	<10
			G003		<10	<10	<10
			G004		<10	<10	<10
		30	30.2~38.2	100.1~101.2kPa	41.0~42.1%RH		
1.7m/s	31	30.1~38.2	100.1~100.9kPa	40.9~41.2%RH			
1.8m/s							

(GB 16297-1996) 2

(GB 14554-93) 1

(GB41616-2022)

A.1

9.2.1.3

9.2-5



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	85%		VOCs	1.529t/a
		0.034t/a	VOCs	1.563t/a
	3.137t/a			
(2)		27825t/a(	24000t	)
CODcr	1.113t/a	1.233t/a	0.056t/a	
0.062t/a				





	( )		( )		( )
		13200		C2319	
		VOCs 10			( )
		13200		13200	)
				[2024]8	
		2024 7 18		2024 7 26	/
					/
					86%
		5000	( )	278	(%) 5.6
		4500	( )	210	(%) 4.7