2025 10

1 1
1.1 1
1.2 2
1.2.1 2
1.2.2 2
1.3 3
1.4 4
1.4.1 4
1.4.2 14
1.4.3“ ” 21
1.5 32
1.6 33
2 34
2.1 34
2.1.1 34
2.1.2 36
2.1.3 37
2.1.4 38
2.1.5 38
2.2 39
2.3 41
2.3.1 41
2.3.2 45
2.3.3 46
2.4 47
2.4.1 47
2.4.2 51

3.5.5 98
3.6 98
3.6.1 98
3.6.2 99
3.7 102
3.8 104
3.8.2 “ ”..... !
4 106
4.1 106
4.1.1 106
4.1.2 106
4.1.3 127
4.2 130
4.2.1 130
4.2.2 130
4.2.3 132
4.3 133
4.3.1 133
4.3.2 134
4.4 136
4.4.1 136
4.5 138
4.5.1 138
4.5.2 138
4.5.3 139
4.5.4 139
4.6 140
4.6.1 140

4.6.2 143
4.6.3 149
4.6.4 149
4.7 151
4.7.1 151
4.7.2 151
4.7.3 151
4.7.4 151
4.8 151
5 154
5.1 154
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5.2 164
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5.2.2 164
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5.3.5 201
5.3.5 206
5.4 214
6 221
6.1 221
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6.1.4 221
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6.1.7 226
6.1.8 226
6.2 227
6.2.1 227
6.2.2 232
6.2.3 234
6.2.4 234
6.2.5 235
6.3 237
6.4 247
6.4.1 247
6.4.2 252
6.4.3 257
6.4.4 257
6.5 263
6.5.1 263
6.6 266
6.6.1 266
6.6.2 267
6.6.3 267
6.7 268
6.7.1 268
6.7.2 269
6.7.3 270
6.8 273

6.9 276
6.9.1 276
6.9.2 277
6.9.3 277
6.10 277
6.10.1 277
6.10.2 278
6.10.3 280
6.10.4 284
6.10.5 285
6.10.6 288
6.10.7 289
6.10.8 290
7 293
7.1 293
7.1.1 293
7.1.2 293
7.1.3 293
7.1.4 293
7.1.5 294
7.1.6 294
7.2 295
7.2.1 295
7.2.2 295
7.2.3 296
7.2.3.1 296
7.3 297
7.3.1 297

7.3.2 297
7.3.3 298
7.3.4 298
7.3.4 298
7.4 299
7.4.1 299
7.4.2 299
7.4.3 300
7.5 300
7.6 301
7.7 302
7.7.1 302
7.7.2 302
7.7.3 302
7.8 303
7.8.1 303
7.8.2 304
8 304
8.1 304
8.2 305
8.3 305
8.3.1 305
8.3.2 307
8.4 308
9 309
9.1 309
9.1.1 309
9.1.2 309

9.1.3 309
9.1.4 311
9.2 312
9.2.1 312
9.2.2 313
9.2.3 313
9.3 314
9.3.1 314
9.3.2 315
9.3.3 315
9.4 316
9.4.1 316
9.4.2 316
9.4.3 317
9.4.4 318
9.4.5 318
9.4.6 319
9.4.7 320
9.5 320
9.6 321
9.7 “ ” 323
10 324
10.1 324
10.2 324
10.3 326
10.4 327
10.4.1 327
10.4.2 327

10.4.3 327
10.4.4 327
10.4.5 327
10.4.6 328
10.4.7 328
10.4.8 328
10.5 328
10.6 328
10.7 329
10.8 329
10.9 330

1

1.1

“ ” 2005 11 30

55

“ ”

1.6 150

2025 338

2023 5 10

C

A B A B C 1#

2#

3#

C

14.7 m³ C

27.2

GB/T4754-2017

C2750 2021

“ ”103

” “

”

1.2

1.2.1

I C

14.7 m³ 27.2

1.2.2

1

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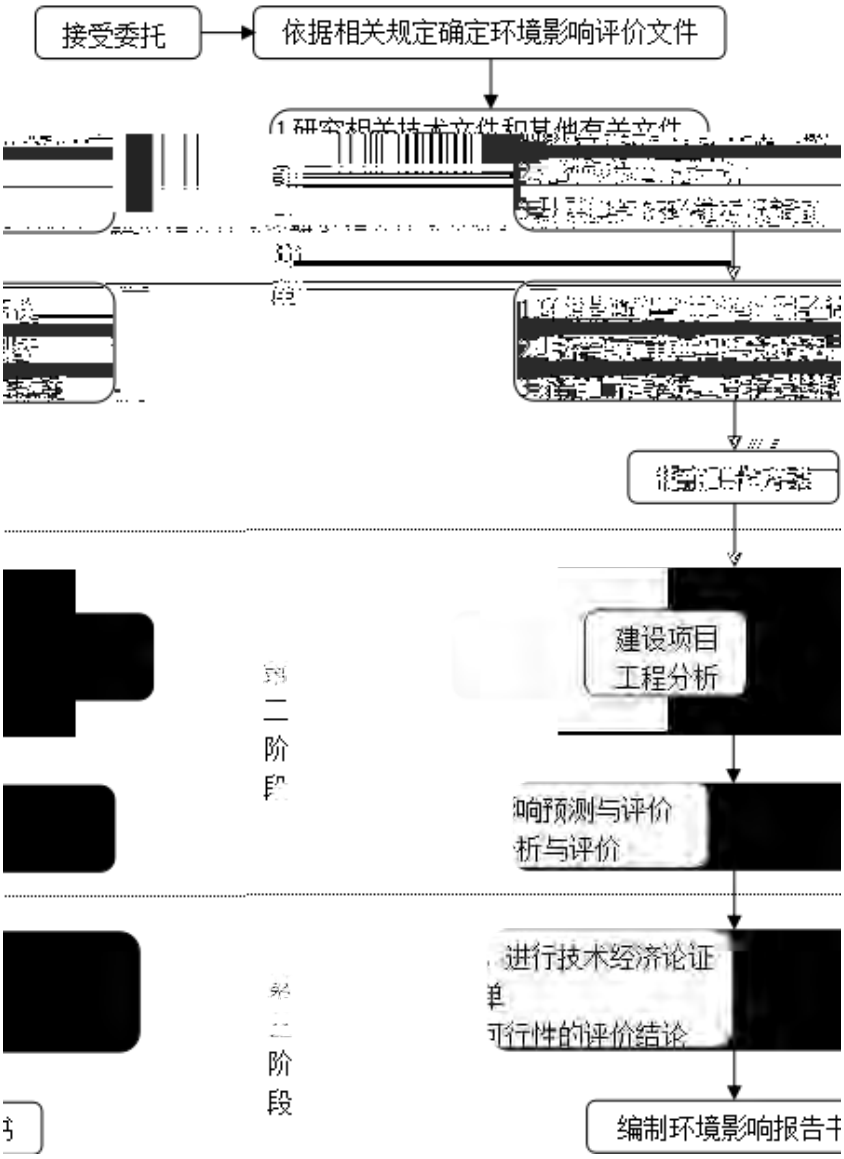
3

4

5

1.3



1.3.1-1

1.4

HJ2.1-2016

1.4.1

1.4.1.1

1 2024

2024

“ ” “3.

”

2

2012 2013

2015 118 “

”

3

2012 2012

2013 2013

2025 4 25

2025 338

1.4.1.2 < >

[2024]16

( ) (2021 82)

(DB15/T

2763—2022)

1.4.1.3

[2019]36

1.4.1-1 [2019]36

	1	2015-2025 [2017]86	
[2016]150	3	2024 $PM_{2.5}$ PM_{10} SO_2 NO_2 35 / 51 / 6 / 27 / 0.8 / 165 / GB3095-2012 < 2024 > [2024]36 “ ” VOCs 534	
2018	1 10	1	

24			
2018 74			
2018 91		4	
	7 1	1	-
	8 9		

89

	15cm	
5%	2cm	
	HDPE 3m	
GB16889	HDPE	
	5	
	1.0×10-5cm/s	
	0.75m	
	6	

5.6.3.3.2

90%

5.6.3.3.3

5.6.3.3.4 (

)

5.6.3.4

5.6.3.4.1

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( )

5.6.3.4.2 GB/T50326

5.6.3.4.3

5.6.3.5

5.6.3.5.1

5.4.3.5.2 ÙÀ)" _• ! ò ”4 -!L@ Añ$Vßæ•p@bS_• ! ò ”4 -@,€

› 0:$5tMc1•ÃàÈ ãt LL H'LA™ÈÄ Añ$G @ P3

GB15618		

1.4.1.6

1.4.1.7

1.4.1-4 **2020 12**

2018 122		

1

“ ”

1.4.2.2 2021-2035

2021-2035

1.4.2.3 2015-2025

[2017]86

1

“ ”

1.4.2-1

1.4.2-1

1			
2	2.6-2		

2015-2025

2

2015-2025

[2017]86 1.4.2-2

1.4.2-2

1			
2			
3	( ) 500	3500m	

	( ) “ ”		
4		2024 2024 PM2.5 PM10 SO_2 NO_2 35 / 51 / 6 / 27 / 0.8 / 165 / GB 3095-2012 SO2 20.0% PM2.5 PM10 NO2 5.4% 10.5% 6.9% 11.1% 5.2% 2024 2024 10 GB 3838-2002 100% 60% 45 100% 71.1%	-

		20 24.4 2024 2024 56.8 0.2 HJ 640-2012 “ ” 2024 61 > 58.7 > 56.8 > 54.9 71.9% 22.0% 5.9% 0.2%	
5			
6			

1.4.2.4 **2021-2035**

1.4.3“ ”

1.4.3.1

1 [2018]74

[2020]1

[2018]74

3000m

[2020]1

1400m

2

2023

2023 1.4.3-1

2.

3.

#q è4ï 1

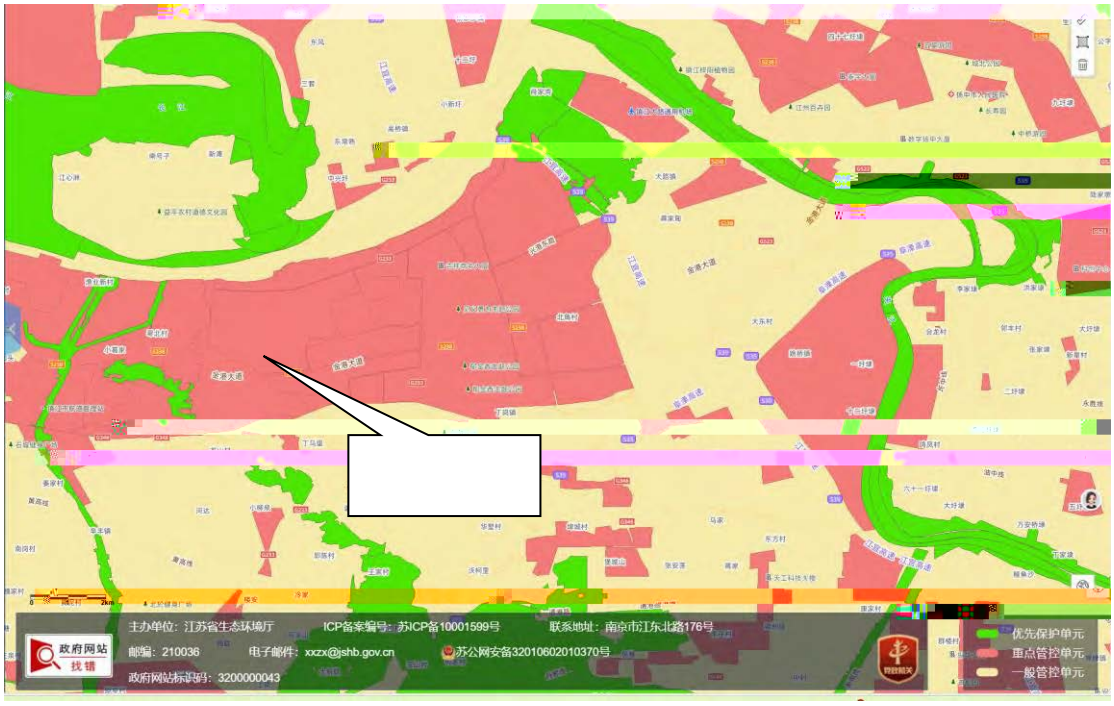
4.

	2 3 2019 29 2019 [2019]622 2022 2022 4 [2023]38 5 2018-2035 1-2 “ ” [2021]86 < > 6 [2021]20 7 2023 1 9	(2023) [2020]1 2022	
	1 “ ” [2021]86 2025 20% 2 “ ”		

	[2021]86 PM2.5 $PM_{2.5}$ O_3 “ ” 3 “ ” [2021]86 4 “ ” [2021]86 2025 5 “ ” [2021]86 “ ” [2022]224 2020 2025 4913 / 3092 / 6800 / 360 / 804 / 91 / 6 [2021]56 7 [2021]56		
	1 “ ” [2020]49 3 “ ” 2 [2020]34 [2020]81		

	3 [2023]145 4 “ ” [2021]86 5 “ ” [2021]86 “ ” “ ” [2022]83 6 [2023]38 7 “ ” [2021]86 8 2018- 2035 9 9 “ ” [2021]86		
	1 2021 10 14 2025 34.22 2 2021-2035 2025 10.556667 9.515533		

	3 “ ” [2022]30 2025 370 15 11.9% 4 5 2018-2035 2025		
	1 2 2019	2021-2035 2024	
	1 2		



1.4.3-1

1.4.3.2

2024

$PM_{2.5}$ PM_{10} SO_2 NO_2

35 / 51 / 6 / 27 /

0.8 / 165 /

GB3095-2012

< 2024 >

2024 36 “ ”

VOCs 534

4			
5			
6			
7	1	1	
8			
9			
10			

1.4.3-3 < >

	3		

1.5 **M**

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1.6

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2.1.1

1 2015 1 1

2 2018 1 1

3 2018 10 26

4 (2020) 2020 4 29 2020 9 1

5 2018 12 29

6 2012 2 29

7 2018 12 29

8 2020 12

9 2017 682 2017 10 1

10 2021 2021 1 1

11 4 2018 7 16

12 2024 2024 2 1

13 2018

14 2025 15 2025 1 1

15

2.1.2

1 2018 11 23

2 2018 3 28

3 2018 3 28

4 [2006]98

5 [1997]122

6 [2003]29

7 2018 3 28

8 2012 2013

9

[2007]115

10

2018 11 23

11

2009 3 12

12

2020 1

13

2018 74 2018 6 9

14

2014 148

15 2014 1

2014 1 6

16 2015 175

17 2016 169

18 “ ” 2016 47

19 “ ”

[2017]30

20 2016

185

21 2024 11 28

22 2023

23

2015 118

24

2018 122

25

[2019]36

26 “ ”

(2020 49)

27 2020

101

2.1.3

1 2007 2007 4

2 2014 24

2014 8 4

3 2016 28

2016 6 21

4 “ ” 2017 40

2017 3 1

5 2014 9

6 2016 72 2016 12 2

2017 3 1

2.1.4

1 HJ2.1-2016

2 HJ2.2-2018

3 HJ/T2.3-2018

4 HJ2.4-2009

5 HJ 19-2011

6 HJ610-2016

7 HJ964-2018

8 HJ 169-2018

9 GB 18218-2018

10 HJ884-2018

11

HJ1033-2019

12 18

HJ1200-2021

13 HJ819-2017

14

HJ1250-2022

15 HJ1209-2021

16

DB34/T4541-2023

2.1.5

1

2017 7

2

3

4

5

2.2

2.2-1

2.2-1

2.3.1-4

2.3.1-4

1	pH	6.5 8.5			5.5 6.5 8.5 9	5.5 9
2	mg/L	≤150	≤300	≤450	≤550	550
3	mg/L	≤300	≤500	≤1000	≤2000	2000
4	mg/L	≤50	≤150	≤250	≤350	350
5	mg/L	≤1.0	≤2.0	≤3.0	≤10	10
6	mg/L	≤0.02	≤0.02	≤0.2	≤0.5	0.5
7	mg/L	≤1.0	≤1.0	≤1.0	≤2.0	2.0
8	mg/L	≤0.001	≤0.01	≤0.05	≤0.1	0.1
9	mg/L	≤50	≤150	≤250	≤350	350
10	mg/L	≤0.01	≤0.05	≤1.0	≤1.5	1.5
11	mg/L	≤0.05	≤0.5	≤1.0	≤5.0	5.0
12	( ) mg/L	≤0.005	≤0.01	≤0.05	≤0.1	0.1
13	mg/L	≤0.005	≤0.05	≤0.05	≤0.1	0.1
14	mg/L	≤0.005	≤0.01	≤0.05	≤0.1	0.1
15	mg/L	≤0.0001	≤0.001	≤0.01	≤0.01	0.01
16	mg/L	≤0.05	≤0.05	≤0.1	≤1.0	1.0
17	mg/L	≤0.1	≤0.2	≤0.3	≤1.5	1.5

5

GB36600-2018 1 2.3.1-5

2.3.1-5 mg/kg

1		60	140
2		65	172
3		5.7	78
4		18000	36000
5		800	2500
6		38	82
7		900	2000

8		2.8	36
9		0.9	10
10		37	120
11	1 1-	9	100
12	1 2-	5	21
13	1 1-	66	200
14	-1 2-	596	2000
15	-1 2-	54	163
16		616	2000
17	1 2-	5	47
18	1 1 1 2-	10	100
19	1 1 2 2-	6.8	50
20		53	183
21	1 1 1-	840	840
22	1 1 2-	2.8	15
23		2.8	20
24	1 2 3-	0.5	5
25		0.43	4.3
26		4	40
27		270	1000
28	1 2-	560	560
29	1 4-	20	200
30		28	280
31		1290	1290
32		1200	1200
33	+	570	570
34		640	640

35		76	790
36		260	663
37	2-	2256	4500
38	[a]	15	151
39	[a]	1.5	

46		752	1500

2.3.2

1

GB8978-1996 1

GB/T 31962-2015 B

A		3	65( ) 55( )	dB(A)

3

2.3-9

GB 16297-1996 2

DB32/3560-2019 4

2.3.1-9 GB 16297-1996 2

		mg/m³	1.0

2.3.3

(1) (GB12523-2011)

2.3.1-10 dB(A)

70dB(A)	55dB(A)

2

157 2015 5 4 24

3

(GB18599-2020)

4 GB

18597-2023 HJ2025-2012

(2024 16)

2.4

2.4.1

2.4.1.1

HJ2.3-2018

B 2.4.1-1

2.4.1-1

		Q/ m³/d **W/**
		Q≥20000 W≥600000
A		Q 200 W 6000
B		-

2.4.1.2

- HJ2.2-2018 5.3

A

P_{max} $D_{10\%}$

HJ2.2-2008

P

$$= \frac{}{0} \times 100\%$$

—— i %

—— i 1h

μg/m³

$_{0}$ —— i μg/m³

2.4.1-2

	P_{max}≥10%
	1%≤P_{max} 10%
	P_{max} 1%

P_{max} $D_{10\%}$

2.4.1-3 P_{max} $D_{10\%}$

		(μg/m³)	C_{max}(μg/m³)	P_{max}(%)	$D_{10\%}$(m)
	TSP	900.0	0.1329	0.0148	/

P_{max} 8.142% 10% C_{max} 0.8142μg/m³

2.4.1.3

GB3096-2008 3

—— HJ/T2.4-1995

2.4.1.4

HJ169-2018

I

SS

B C 1

Q 1

2.4.1.5

HJ610-2016 A

U

-152

2.4.1-4

2.4.1-5

2.4.1-4

2.4.1-5

2.4.1.6

HJ964-2018 “ 6.2.2 ”

2.4.1-6

2.4.1-6

									/
								/	/

HJ964-2018

A“ A.1 ”

5~50hm^2 “ ”

2.4.1.7

HJ19-2022

2.4.1-7

2.4.1-7

a		/
b		/
c		/
d HJ 2.3		/

e HJ 610 HJ 964		/
f 20km2	20km2	/
g a b c d e f	a b c d e f	

a b c d e f

2.4.2

2.5

2.5.1

2.5.1-1

	2.5km
	200m
	6km^2
	50
	200m

2.5.2

2.5.2-1

2.5.2-1~2.5.2-3

2.5.2-1

		/m						/m
		X	Y					
1		-356	1515.5					960

2.5.2-2

			(m)		
			1~200	-	GB3096-2008 3
			3189		GB3838-2002
			1000		GB3838-2002
			1400	4.18km^2	

2.5.2-3

			(m)		
			3500	1.36km^2	
			6400	2.15km^2	
			4600	4.79km^2	
			4000	4.60km^2	
			4300	37.12km^2	
			6900	2.18km^2	
			7400	3.81km^2	

			8200	8.97km^2	
			7000	57.30km^2	
			8700	1.57km^2	

2.6

2.6.1 2014 34

2014 9 17

2014 34

1

2

2014 34

2.6.2 2015-2025

2.6.2.1

1992

1993 1998 6

“ ”

4.

20

-

338

“ ” “ ”

“ ” “ ” “ ” “ ”

5.

7291.98hm^2 2.6-1 2.6-2

1

891.45hm2 13.12% 681.32hm2

“L” —

8 210.13hm2

3

2

201.33hm2

45.21ha 3.74ha

2.83ha 5.94ha

1 2 2 6 1

3

61.03ha 19.92ha

10.3ha 8.89ha

12.28ha 5.71ha

0.91ha

50 23.57ha

3

560.02hm^2

147.15ha 88.56ha

“L”

“L”

77.97ha 64.5ha

4.64ha

2.27ha

1.59ha

4

“

”

3

2704.77ha

98.38ha 1167.6ha 1438.79ha

278.28ha

72.08ha 206.2ha

2.6.2-1

2.6.2-1

			ha	**%**	**%**
			19 .89	0.67	0.29
			256.37	8.59	3.77
			803.80	26.95	11.83
			78.49	2.63	1.16
			911.23	30.55	13.41
			634.99	21.29	9.35
			72.08	2.42	1.06
			206.20	6.94	3.04
			2983.05	100	43.91

5

501.84ha 7.39%

6

988.81hm2

7

59.12hm2

8

607.94hm2 8.95% “

” “ ”

“ ”

“ ”

“ ”

72.6ha 3.3

39.87ha 5.7

338 50

20

20 20

15 10

395.13ha 82.02ha

12.42ha

5.90ha

9

2.6.2-2

2.6.2-3

2.6.2-3

2.6.2-3

		5 t/d	2 t/d	1.54 t/d	338	/ + + A^2/O+ + +	[2009]132 [2011]253	2012 12		GB18918-2002 A
		12 t/d	4 t/d	2.67 t/d	318 140km^2	+ A2/O + + +	[2012]99			GB18918-2002 A
		8 t/d	4 t/d	1.32 t/d		+UCT+ +	[2008]55	2011 8		GB18918-2002 A
		1 t/d	5000t/d	0.25 t/d			[2007]157 [2009]158	2010 12		GB21900-2008 2

						+ /Fenton + +				GB8978-1996

2

280t/h 6 330MW

2 1000MW 3980MW 2 DN400

180t/h 2.6.2-4

2.6.2-4

			2×6MW +2×75t/h	[2002]231	2005 9		
	66		1×15MW +1×130t/h	[2006]600	2011		
			1×25MW +1×130t/h	1992	1999		
			2×50MW +2×200t/h				
			3×100MW +3×410t/h				
			2×300MW +2×1000t/h				
			2×300MW +2×1000t/h				
			2×330MW +2×1025t/h	[2003]121	2006		
			2×1000MW +2×2953t/h	[2006]373			

4

2.6.2-5

2.6.2.3

1

1

GDP

2

90%

VOCs “ ” VOCs

2

2024 2012

2018

2.6.2-6 2.6.2-7

2.6.2-6

	1

1

2

3

500

ɖ F

4

5

6

7

8

9

2.6.3

1

2020 1

2020 1

15

10 2.6.3-1

“ ”

3500

2020 1

2.6.3-1 10

					(m)
1					3500
2					6400
3					4500
					4000

4					7500
5					7900
6					8500
7					8300
8					8500
9					10000

2

18150.34

13.14% 8474.27

8.21% 9676.07

27.83% 2.6.3-2

2.6.3-2

					( )
					57.30

500

500 500

4000m

3

3500

2.6.3-1 2.6.3-3

2.6.3-3 10

					m
1					3500
2					6400
3					6300
					3300
4					4500
					4000
5					8000
					7500
6					7900
7					8500
8					9000
					8300
9					10000
					8500
10					10000

2.6.4

2.6.4.1

[2016]96

1

2016 “ ” 2017 “ ”

[2016]96

2.6.4.2

2.6.5

2007

3

2.7

2.7.1

1 “ ”

“ ” “ ”

2

3

2.7.2

1

2

3

4

3

3.1

3.1.1

3.1.1.1

2012 10

2014 2019 2024

6.89 t/a 7

t/a 10 t/a 21.97 t/a 31.39

t/a

2000 6 25 /

2005 7 10

[2005] 150 2006 12 21

[2006] 312 2005

3.1.1-1

1		3.3 t/a 8 t/a 3.3 t/a 4.7 t/a 3.64 t/a 8 t/a 1.4 t/a 1.82 t/a		2011 10 25 2011 210	2012 9 3 [2012]28	
2				2012 8 1 2012 101		
3	40kt/a	4 t/a		2014 2 27 2014 23	2017 1 24 [2017]4	
4		3.2		2019 7 8 2019 64	2020 9 30 2021 12 1	
5				2021 5 31 20213211000100000073	/	
6				2021 5 31	/	

				20213211000100000074		
7		5		2022 4 27 20223211000100000110	/	
8		2		2022 4 27 20223211000100000111	/	
9	512	2 2		2022 4 27 20223211000100000112	/	
10		1		2022 4 27 20223211000100000113	/	
11	518	518 3 518		2022 10 13 20223211000100000290	/	
12		4		2022 10 13 20223211000100000293	/	

10 6.89 t/a 7 t/a

13 10 t/a 21.97 t/a 31.39 t/a

15		10 4.5 180 m3 72.3 m3 48.25 0.36t/a SO2 0.36t/a NOx 1.255t/a 0.084t/a		2025 5		/

3.1.1.2

2015 8 “ ”

2015 8 24

2015 53 2015 10 8

2015 19

2023 5 10

A B

C A B C

2023 7

2023 8

GB 36600-2018

GB/T

14848-2017

2024 5

2024 5

30 2024 6

2024

6 27 2024 11 15

3.1.1-2

1				2010 7 2010 75	2015 10 8 [2015]19	
2				2015 8 24 2015 53		

3.1.2

3.1.2-1

			t/a		**h/a**
		≥91% ≥98%	6.89	6.5 t/a 0.39 t/a	8000
			7.0	0.5 t/a	
		/	10		
		/	21.97		
		≥11.0%	31.39		

3.1.2-2

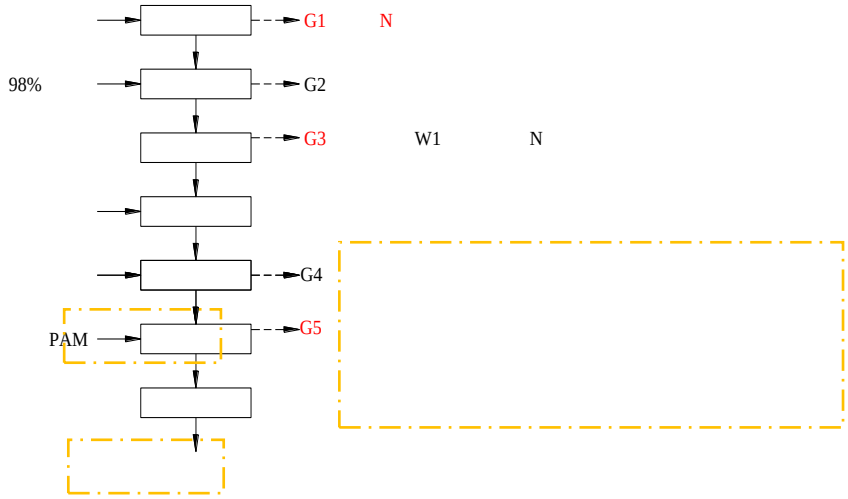
			m³	

		t/a		**h/a**
	/	60	450	8760

				40m DA0012

3.3

3.3.1



3.3.1-1

1

2

3

4

TiO2

8h

TiOSO4 FeSO4

9 3

5

6

	1	1 2#	22KW 2900rpm	/	1	
	2	3 4#	22KW 2900rpm	/	1	
	3	1-4#	Q=50m3/h H=30mH2O 65mm 50mm	/	1	
	4	5#	22KW 2900rpm	/	1	
	5	5#	Q=50m3/h H=30mH2O 65mm 50mm	/	1	
	6	1#	V=3000L DN=1400mm	/	1	
	7		N=5.5kw 11.6A 69Kg	/	1	
	8	2#	V=3000L DN=1600mm	/	1	
	9		35m 20m3/h	/	1	
	10		Φ1800×2000mm	/	1	
	11		25m 5m3/h	/	1	
	12	1#	Φ1800×2000mm FRP	/	1	
	13		Φ2600×2600mm FRP	/	1	
	14		Φ2600×2800mm FRP	/	1	
	15		V=430m3	/	5	
	16		V=430m3	/	1	
	17		6500×16000×3800+2500480m3	/	1	
	18		150m3/h 20m	/	1	
	19		10000×2000×1400 4.4m3	/	1	
	20		80m3/h 20m	/	1	
	21		φ4000×5000 62.5m3	/	3	
	1		Y2-132M-4 4 7.5KW	/	1	
	2		BLD4-43-Y7.5 NO.H13061197 2013 7	/	1	
	3		UOK-71-2 2000	/	1	
	4		100WLX-F-60-40 60m3 40M	/	1	
	5		YP2-200L1-2 30KW 2	/	1	
	6		100WLX-M-60-20 60m3 20M	/	1	
	7		100WLX-F-60-40 30m3 20M	/	1	
	8		100WLX-F-60-40 100m3 50M	/	2	

9

	12			/	1	
	13		BLY45-35-37-6P H075 2012 12	/	1	
	14		/	/	1	
	15		/	/	1	
	16		SR-NX1200*2000Q 8.6kw 90-150T/D 380VAC	/	1	
	17	1# 2#	XZ250/1500-UK 7400MM 250m2 6kg/cm2 20MPA	/	2	
	18	3# 4#	XZGF180/1500-UK 5900MM 180m2 6kg/cm2 20MPA	/	2	
	19		XZGF180/1500-UK 5900MM 180m2 6kg/cm2 20MPA	/	1	
	20		250m2		5	
	21		φ3000×2500 17.6m3	Q235B+	3	
	22		φ3000×3000 21m3	FRP	1	
	23		80m 20m3/h		2	
	24		15L/min H=215m 4.5min-1 6MPa 50mm	304	1	
	25		250m2		2	
	1		V=63m3	/	2	
	2		HDZP-T30	/	1	
	3		100WLX-UF-M-60-35	/	4	
	4		65UHB-UF-30-25	/	1	
	5		2BEC50	/	1	
	6		65UHB-UF-30-25	/	1	
	7		65UHB-UF-30-25	/	1	
	8			/	2	
	9		65UHB-UF-15-30	/	2	
	10		JDG65-250A/11	/	1	
	11		V=85m3	/	2	
	12		/	/	1	
	13	1#	XM80/1000-UB	/	1	
	14	2#	XM80/1000-UB	/	1	
	15	3#	XM80/1001-UB	/	1	

	16	4#	XM80/1002-UB	/	1	
	17	5#	XM80/1003-UB	/	1	
	18	6#	XM80/1004-UB	/	1	
	19		V=83m3	/	3	
	20		45m2		1	
	21		φ1200×1800	FRP	3	
	22		φ2000×3000	FRP	1	
	23		1800×1400×1400	FRP	1	
	24		φ2000×2000	FRP	1	
	25		10m3/h 30m	/	1	
	26		10m3/h 30m	/	1	
	27		10m3/h 20m	/	1	
	28		2BEC60	/	1	
	29		HR630-N	/	2	
	30		0.5m3 φ800×1000	/	1	
	31		2BEA-203A-O		4	
	32		Q=60m3/h H=40m		3	
	33		200m2		3	
	34		50m3/h 30m		1	
	35		15L/min H=215m 4.5min-1 6MPa 50mm	304	1	

3.3.4

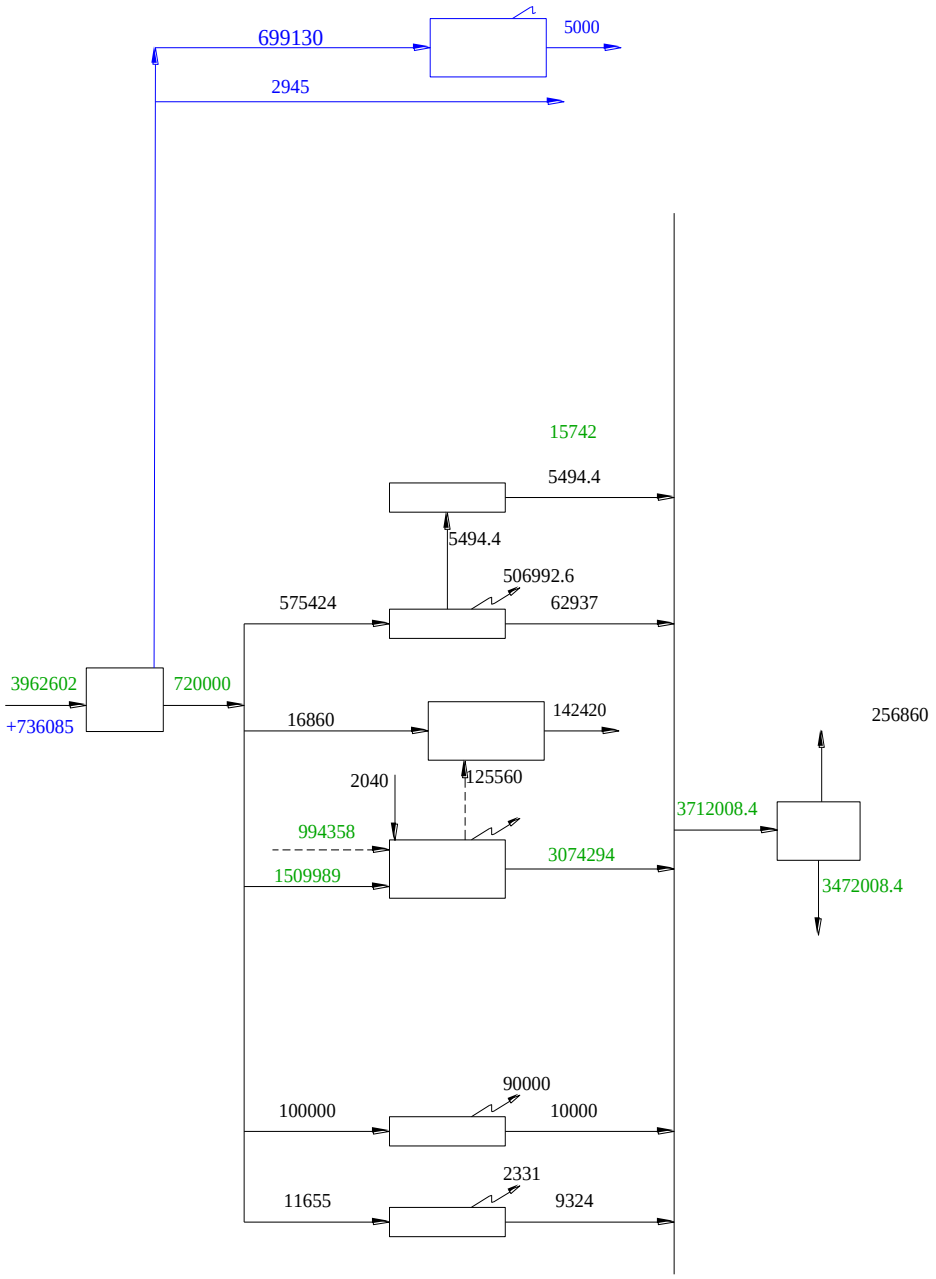
(mg/kg)	5.21	40	0.010
(mg/kg)	17.2	100	1.4
(mg/kg)	21.6	100	0.4
(mg/kg)	46.4	150	0.5
(mg/kg)	89.8	500	1.2
(mg/kg)	315	600	3.1
(mg/kg)	0.3	1.5	0.1
(mg/kg)	20.0	100	0.4

3.3.4-2 ( )

	2025.06.24		
	6 10		
	JIF355001A001		
(mg/L)	ND	0.1	1.0×10^{-4}
(mg/L)	ND	0.3	0.03
(mg/L)	ND	1	0.01
(mg/L)	ND	0.2	0.02
(mg/L)	0.14	1	0.01
(mg/L)	0.16	1	0.01
(mg/L)	ND	0.03	0.01
(mg/L)	ND	0.2	0.02

3.4

3.4-1


699130
5000
2945
15742
5494.4
5494.4
506992.6
575424
62937
3962602
720000
+736085
16860
142420
256860
2040
125560
3712008.4
994358
3074294
1509989
3472008.4
90000
100000
10000
2331
11655
9324

3.4-1

3.5-1

3.5.1-1

				m	m
			DA012	40	2.2
			DA013	45	2.3
			DA008	40	1.248
，			DA007	34	0.4
		+	DA005	15	0.346
			DA004	24	0.3
	NOx	+ + + +	DA002	40	2

2024 11 18 ~19

3.5.1-2

3.5.1-2

			203	185	190	203		
2024 11	TSP	1	195	180	197	192		
18		2	203					

500μg/m3

		8	0.01	mg/L	0.17	0.16	0.17	0.18	0.17	
		70	0.05	mg/L	2.28	2.19	2.27	2.26	2.25	
		45	0.025	mg/L	0.161	0.026	0.101	0.055	0.0858	
		20	0.06	mg/L	ND	ND	ND	ND	/	
		64	2		2	2	2	2	2	
		1.5	0.03	mg/L	ND	ND	ND	ND	/	
		500	0.3	μg/L	31.8	22.3	37.8	26.6	29.625	
		50	0.04	μg/L	ND	0.29	ND	0.11	0.1	
		1	0.07	mg/L	ND	ND	ND	ND	/	
		2	0.006	mg/L	ND	ND	ND	ND	/	
		0.1	0.005	mg/L	ND	ND	ND	ND	/	
		5	0.004	mg/L	0.02	0.033	0.032	0.15	0.0588	
		1	0.02	mg/L	ND	ND	ND	ND	/	
		0.5	0.004	mg/L	ND	ND	ND	ND	/	
		1	0.01	mg/L	ND	ND	ND	ND	/	
		100	0.06	mg/L	0.08	0.07	0.08	ND	0.0575	
		20	0.05	mg/L	0.84	0.84	0.82	0.86	0.84	
		15002	5	mg/L	1170	1160	1170	1260	1190	
	pH	6~9	/		7	7.2	7.1	7	7.075	
	COD	500	4	mg/L	8	7	7	8	7.5	
2024	BOD_5	300	0.5	mg/L	1.8	1.5	1.6	1.6	1.625	
11		400	/	mg/L	5	5	5	4	4.75	
28		8	0.01	mg/L	0.21	0.2	0.21	0.22		

		20	0.06	mg/L	ND	ND	ND	ND	/	
		64	2		2	2	2	2	2	
		1.5	0.03	mg/L	ND	ND	ND	ND	/	
		500	0.3	μg/L	46	35.5	38.8	40.8	40.275	
		50	0.04	μg/L	0.2	0.27	0.31	0.17	0.2375	
		1	0.07	mg/L	ND	ND	ND	ND	/	
		2	0.006	mg/L	ND	ND	ND	ND	/	
		0.1	0.005	mg/L	ND	ND	ND	ND	/	
		5	0.004	mg/L	0.024	0.021	0.027	0.014	0.0215	
		1	0.02	mg/L	ND	ND	ND	ND	/	
		0.5	0.004	mg/L	ND	ND	ND	ND	/	
		1	0.01	mg/L	ND	ND	ND	ND	/	
		100	0.06	mg/L	ND	ND	ND	ND	/	
		20	0.05	mg/L	0.86	0.97	0.99	0.97	0.948	

3.5.3

3.5.3.1

1

2

3.5.3.2

3.5.4

135.3m^2 1664m^2

GB

18599-2020 GB 18597-2023

HJ 1276-2022 HJ

2025-2012 GB 15562.2-1995

2024 16

3.5.4-1

									t/a		**t/a**
1						/	SW11	261-003-S11	50		50
2						/	SW59	900-008-S59	10		10
3						/	SW17	900-003-S17	18		18
4						/	SW17	900-099-S17	5		5
5						T/In	HW49	900-041	10		10

-49

5		25%
6		36%
		32%
		92.5%
		98%
7		
8		
9		
10		
11		

3.6.2

3.6.2-1

	“ ”
	DCS
	DCS SIS

1

	1# 2# 3# 4# 1 4# 4#
	1 “ ” 2

		18.431)		32.34)	16.291)	16.049)	16.049)
		51.156 (3.108/ 54.264)	54.264	47.064 (48.047/ 95.111)	3.046 (44.939/ 47.985)	44.018 (3.108/ 47.126)	44.018 (3.108/ 47.126)
		1.137 (0.069/ 1.206)	1.206	1.062 (1.067/ 2.129)	0.069 (0.998/ 1.067)	0.993 (0.069/ 1.062)	0.993 (0.069/ 1.062)
		15.893	/	15.893	9.536	6.357	6.357
		324.96	/	342.061	17.101	324.96	324.96
[2]		12947 (1438.6/ 14385.6)	/	12947 (1438.6/ 14385.6)	0 (0/ 0)	12947 (1438.6/ 14385.6)	12947 (1438.6/ 14385.6)
	COD	3.108 (0.345/ 3.453)	/	3.884 (0.432/ 4.316)	0.776 (0.087/ 0.863)	3.108 (0.345/ 3.453)	3.108 (0.345/ 3.453)
	SS	1.036 (0.115/ 1.151)	/	1.942 (0.216/ 2.158)	0.906 (0.101/ 1.007)	1.036 (0.115/ 1.151)	1.036 (0.115/ 1.151)
		0.194 (0.022/ 0.216)	/	0.324 (0.036/ 0.36)	0.13 (0.014/ 0.144)	0.194 (0.022/ 0.216)	0.194 (0.022/ 0.216)
		0.389 (0.043/ 0.432)	/	0.517 (0.058/ 0.575)	0.128 (0.015/ 0.143)	0.389 (0.043/ 0.432)	0.389 (0.043/ 0.432)
		0.052 (0.006/ 0.058)	/	0.065 (0.007/ 0.072)	0.013 (0.001/ 0.014)	0.052 (0.006/ 0.058)	0.052 (0.006/ 0.058)
			61.137	61.137	5945.34	5884.563	60.777	60.777

			37.231	37.231	82.716	46.741	35.975	35.975
			42.443	42.443	209.304	167.221	42.083	42.083
			12.268	21.747	621.738	600.006	21.732	21.732
		NOx	0.046	/	/	/	0.046	0.046
		SO2	2.9738	/	/	/	2.9738	2.9738
			4.703	/	/	/	4.619	4.619
			0.5541	/	/	/	0.5541	0.4851
		HCl	0.0632	/	/	/	0.0632	0.0632
			0	0	0	0	0	0
			0	0	550000	550000	0	0
			0	0	0	0	0	0

[1] “()” “/” “/” +

[2]

3.8

2024 10

C

3.8.1-11

4

4.1

4.1.1

N7723

2511-321171-89-01-403172

18133m^2

5

14.7 m³

4.1.2

4.1.2.1

4.1.1-1

4.1.1-1

		C 14.7 m³	
		1	

		2	
		350kPa	
		50cm 1221m2 HDPE 1.5m 2.0m 16mm 45mm 300mm 8mm 15cm 2cm HDPE 3m HDPE	
		: HDPE 11433m2 HDPE 4695m2	
		: HDPE 1.0mm HDPE 1.5mm HDPE 400g/m2 HDPE HDPE HDPE	
		+29.6m C 5.4m 50cm	
		3 34560m³	
		209m 82m 2.0 3.0% 127m 6.0% 0.5m 1.5m 400g/m2	

		DN75PE 1.3×10-5cm/s 0.20m3/h 0.013m3/h 0.004m3/h	
		20m 5 30m 4 1 MY150 150mm 80mm 400g/m2 1.3×10-6cm/s 0.0004m3/h	
		13.5m 1 7m 2 6.5m 150kPa 15cm C15 1.0m 2.0m 0.6m 3.2m 0.6m 12 1.0m 1.0m 0.3m C35 20cm 9.7m 0.208m3/h 0.138m3/h 6.6m3/h 11.5m3/h 0.860m3/h 9m3/h 22m 0.75kW 220/380V 33mm DN50PE 300m	
		1 4	/

		3	
		0.5m 0.5m 18133	
		1 50cm 2	
			/
		2	
		100	
		GB50015-2019 C30 P6 UPVC UPVC 24h	

		GB50015-2019 GB8978-1996 ≤30mg/L 1 ≤±50mm	
		10 30	
		8m 5.0m GBJ 22-1987 15cm 5% 20cm C30 6m 20mm 10~30mm	
		14.7 m³ 27.2 18133	
		24m 65m 0.3% 0.7m 0.7m 24m 3.8% 0.6m 0.6m + 112m 0.5 9.0% 263m 0.5 8.0% 0.6m 0.6m 0.7	
		+	

		10	

4.1.2.2 p f © ª 0A

1

1

C

HDPE

2

3

2

350kPa

3

50cm 1221m2

HDPE

1.5m 2.0m 16mm 45mm

300mm 8mm 15cm 2cm

HDPE 3m HDPE

4.1.2-1

1		/	/	/	**86.37**
1.1		/	/	/	**41.41**
1.1.1		m^3	18363.27	7.00	12.85
1.1.2		m^3	1945.00	68.00	13.23
1.1.3		m^3	28.00	550.00	1.54
1.1.4		m^2	1270.00	35.00	4.45
1.2					**4.67**
1.2.1		m^2	2920.00	16.00	4.67
					29
					90
					90

HDPE HDPE

4.1.2-2

1		/	/	/	**34.02**
1.1		m^2	5000.00	18.00	9.00
1.2		m^2	5000.00	38.00	19.00
1.3		m^2	2920.00	9.00	2.63
1.4		m^3	529.60	18.00	0.95
1.5		m^3	105.92	136.00	1.44
1.6		m^2	2000.00	5.00	1.00

4.1.2-1

4.1.2.4

1

24m

65m 0.3% 0.7m 0.7m

24m 3.8% 0.6m 0.6m

112m 0.5 9.0%

263m 0.5 8.0% 0.6m

0.6m 0.7m

2

1

GB18599-2020

50

2

0.022km2

3

2006

4.1.2-3

$\overline{24}$	120	mm	24h
$\overline{6}$	80	mm	6h
$\overline{1}$	50	mm	1h
$\overline{1/6}$	20	mm	1/6h
C_{v24}	0.6		24h
C_{v6}	0.5		6h
C_{v1}	0.4		1h
$C_{v1/6}$	0.4		1/6h
C_S	3.5Cv		

4

P

4.1.2-4

			50

1	24 Kp		4.05
2	6 Kp		4.05
3	1 Kp		3.72
4	1/6 Kp		3.53
5	24	mm	486.0
6	6	mm	324.0
7	1	mm	186.0
8	1/6	mm	70.6
9	1		0.46
10	1 6		0.69
11	6 24		0.71
12	p	mm/h	157.4

4

$_{P}$ $0.278 D_{24}$ (1) 4.4-1

—— P m3/s

—— P 157.4mm/h

—— km2

α24—— 0.88

4.1.2-5

	km^2	m^3/s
	0.013	0.50
	0.014	0.54
	0.005	0.19
	0.008	0.31

3

$Z \sim \sqrt{\quad \sim}$ (5.5-2)

$$C = \frac{1}{n} R^{1/6} \quad (5.5\text{-}3)$$

$$Q = \frac{Z}{F} \quad (5.5\text{-}4)$$

Q—— m^3/s

Z—— m^2

——

——

—— m

F—— m

——

5.5-4

4.1.2-6

m	0.7	0.6	0.6	0.6
m	0.7	0.6	0.6	0.7
	0.015	0.015	0.015	0.015
	0.3%	3.8%	0.5%	0.5%
m	0.1	0.3	0.3	0.3
m^3/s	0.56	0.66	1.68	0.35
m^3/s	0.50	0.54	0.19	0.31

4.1.2-7

1		/	/	/	**17.79**
1.1		m	24.00	380.00	0.91
1.2		m	112.00	380.00	4.26
1.3		m	263.00	480.00	12.62

4.1.2-2

4.1.2.5

1

+29.6m C

5.4m

50cm

2

3 34560m³

3

209m

82m 2.0 3.0% 127m 6.0%

0.5m 1.5m

400g/m2 DN75PE

1.3×10-5cm/s 0.20m3/h

0.013m3/h 0.004m3/h

4

20m 5 30m

4 1

MY150

150mm 80mm

400g/m2

1.3×10-6cm/s

0.0004m3/h

5

3.0m +22.0m 15.3m

1.4m 12

10cm

0.208m3/h 0.138m3/h

6.6m3/h 11.5m3/h

0.446m3/h 9m3/h

22m 0.75kW 220/380V 33mm

DN50PE 300m

4.1.2-8

3					18.86
3.1					9.86
3.1.1	C25	m3	4.50	380.00	0.17
3.1.2		t	2.65	4850.00	1.29
3.1.3		m3	27.00	680.00	1.84
3.1.4		m3	100.00	48.00	0.48
3.1.5		m2	600.00	18.00	1.08
3.1.6		m3	48.76	168.00	0.82
3.1.7		m3	1.39	2000.00	0.28
3.1.8			1.00	1200.00	0.12
3.1.9		m	800.00	35.00	2.80
3.1.10	DN50 PE	m	300.00	25.00	0.75
3.1.11		m	13.50	180.00	0.24
3.2					5.28
3.2.1		m2	1463.00	18.00	2.63
3.2.2		m3	112.86	168.00	1.90
3.2.3	DN75 PE	m	209.00	36.00	0.75
3.3					1.31
3.3.1	MY150	m	256.00	35.00	0.90
3.3.2	DN75PE	m	147.00	28.00	0.41
3.4					2.41
3.4.1		m	5.00	865.00	0.43
3.4.2					

4.1.2-3

4.1.2.7

1

1

4

4.1.2-9

	X	Y	m	
CJ01	3560729.89	40461918.63	+35.3	
SJ01	3560665.57	40461883.65	+37.0	
HJ01	3560851.55	40462272.33	+33.0	
HJ02	3560778.17	40462087.49	+31.4	
HJ03	3560707.94	40462314.67	+33.5	
HJ04	3560527.38	40462151.63	+33.5	
HJ05	3560624.42	40461862.64	+26.4	

2000

3

4.1.2-4

4.1.2.8

1

1 50cm

2

2

3

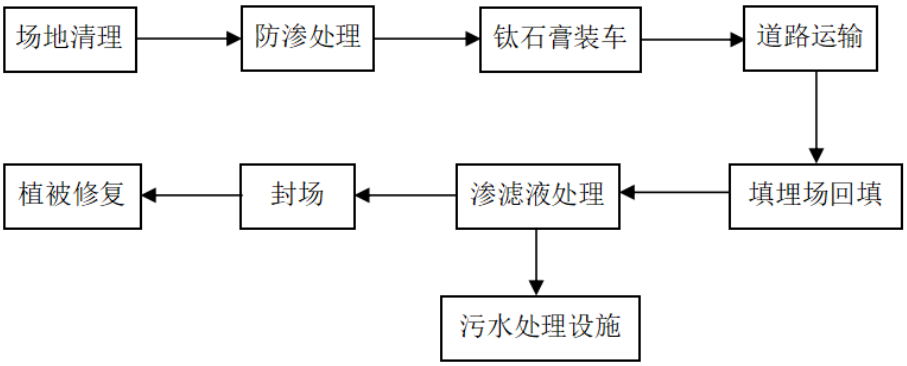
2

4.1.2-4

4.1.2.9

1

1



4.1.2-5

2

2

1

2

50cm HDPE

3

4.1.2-6

2

1 +44m

4.5m 500m

2

4.1.2-7

4.1.2-4

Km/h	15
	-30t
m	4.5
m	5.5

m	20
m	40
	11%

3

20cm C30 15cm 5%

20cm

4

a. 15cm 5%

20cm

b. C30

6m

c. 20mm

d. 10~30mm

4.1.2-8

4.1.3

1

2

3

1

GB15562.1-1995

2

GB15562.2-1995 “ ”

5.10-1 5.10-2

5.10-1

1				/
2				

3				

5.10-2

4

1 20

2 B ,10000

3 20

4 8 50kg

5 5000m

6 20

7 25

8 20

9 1

10 50 1

5

100lx LED

2500W 300lx LED 1500W

6

800m 1

7

4.2

4.2.1

4.2-1

4.2.1-1

			/ /	
	1		1	
	2		1	
	3		2	/
	4		30	
	5		1	
	6		1	
	7		1	
	8		1	
	9		3	
	10		6	

4.2.2

4.2.2.1

C 14.7 m3

C

14.7 m3 1.35g/cm3

27.2

4.2.2.2

2025 5

4.2.2-1 4.2.2-2

4.2.2-1

	2025.06.24			
	6 10			
	JIF355001A001			
(mg/kg)	5.21	40	0.01	GB 15618-2018
(mg/kg)	17.2	70	1.4	
(mg/kg)	21.6	50	0.4	
(mg/kg)	46.4	150	0.5	
(mg/kg)	89.8	200	1.2	
(mg/kg)	315	/	3.1	
(mg/kg)	0.3	0.3	0.1	
(mg/kg)	20	60	0.4	

4.2.2-2

	2025.06.24			
	6 10			
	JIF355001A001			
(mg/L)	ND	0.5	0.0001	GB 8978-1996 1 2
(mg/L)	ND	1	0.03	
(mg/L)	ND	0.5	0.01	
(mg/L)	ND	1.5	0.02	
(mg/L)	0.14	2	0.01	

(mg/L)	0.16	2	0.01	
(mg/L)	ND	0.1	0.01	
(mg/L)	ND	1	0.02	

4.2.3

I

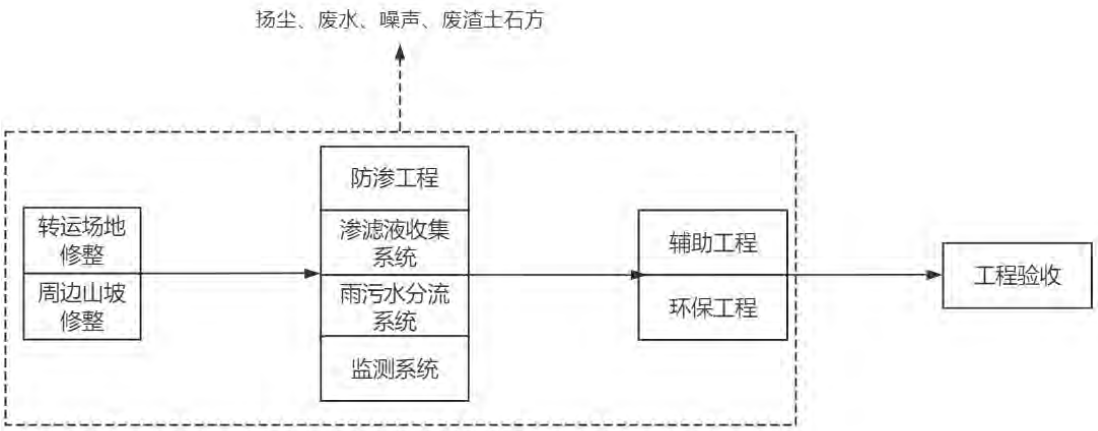
GB18599-2020

1

2

4.3

4.3.1



4.3.1-1

1

1

350kPa

2

50cm 1221m2

HDPE

1.5m 2.0m 16mm 45mm

300mm 8mm 15cm 2cm

HDPE 3m HDPE

2

3

20m

5.0m GBJ22-1987

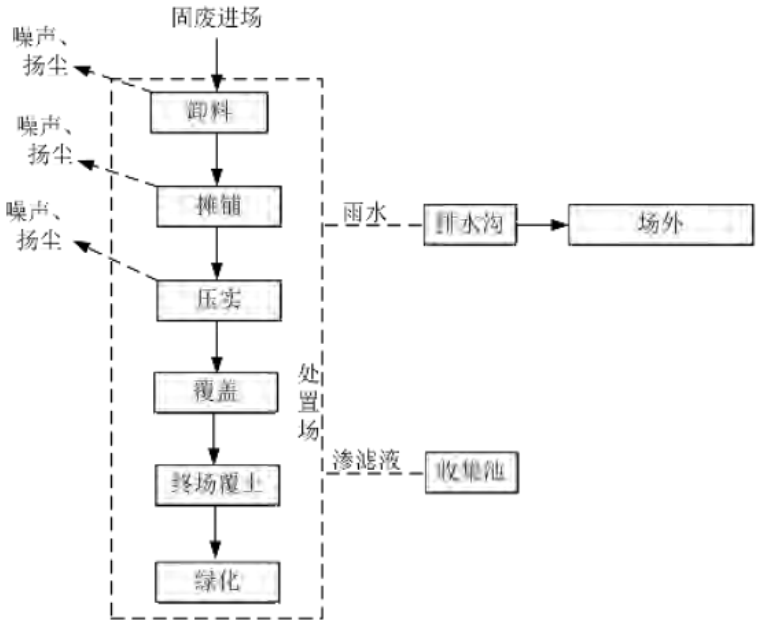
15cm 5%

20cm C30

6m 20mm

10~30mm

4.3.2



4.3.2-1

1

4.5m 11%

2

0.92 +33.0m 50cm

30cm 200m2

1 9.5 2.0%

3

3~4 1/3

4

200m2

HDPE

HDPE

5

6

“ + ”

18133m2 15kg 22g/m2

7

4.4

4.4.1

1

400m 4.5m 30m³/hm2·d

5.4m³/d 10L/m2·d

200m2 2m³/d 0.1m³/

0.9m³/d 2490m³/a

8.3m³/d

(2019) 2020 5

0.09m³/ · 1.62m³/d

486t/a SS

+

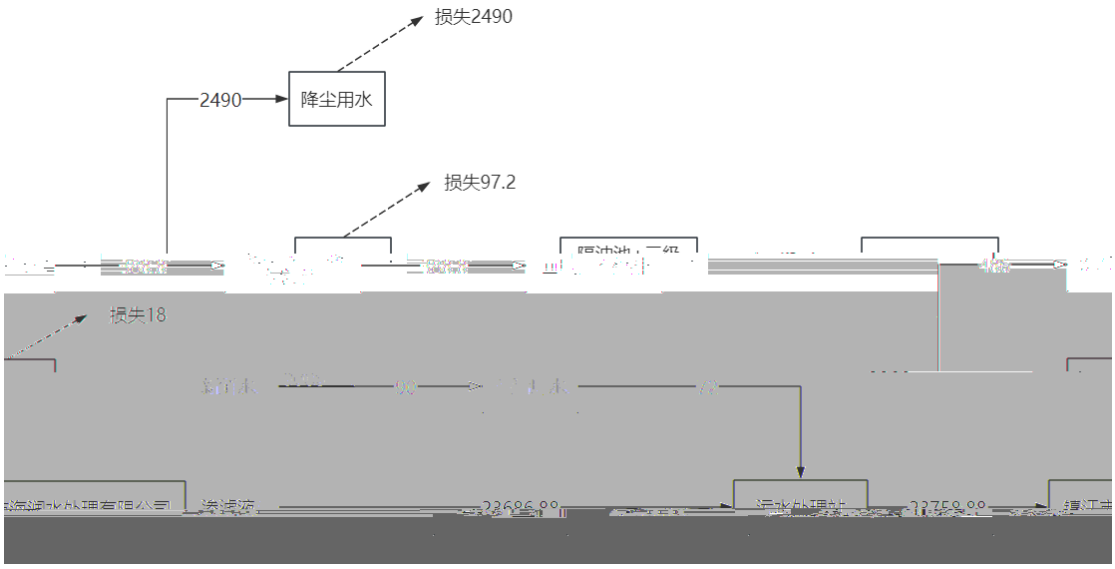
80% 388.8m³/a 1.296m³/d

23686.88m³/a 64.89m³/d

60L/ d 5 0.3m³/d

90t/a 80% 72m³/a

0.24m³/d 4.4.1-1



4.4.1-1 m³/d

4.5

4.5.1

1

2

CO NOx

4.5.2

1

6 30 /d

50L/ *d 1.5m³/d

0.8 1.2m³/d

2

pH

+

4.5.3

HJ2034-2013 A A.2

5m 80-90dB A

4.5-1

	/ dB A /m
	83/5
	80/5
	82/5
	85/5
	85/5

4.5.4

4.5-2

529.6m³ 0.5m

7364.5m

4.6

4.6.1

I

1

1400m

2010.9

$$Q=0.0079\times v\times w^{0.85}\times p^{0.72}$$

Qi-- kg/km

V-- km/h 15km/h

W-- t 10t 30t

P-- kg/m2 0.2

Qi =0.764kg/km Qi =0.263kg/km.

2.1km 1.82 t/a 20t/ 300d

3 /d 3 /d 1.444t/a

4.8132kg/d 0.497t/a 1.6569kg/d

1.941t/a 6.47kg/d

70% 300

16

4.6.1-1

		kg/h	t/a		kg/h	t/a
		6.47	1.941		1.941	0.5823

0.5823t/a

2

1

$$E_h = k_i \times 0.0016 \times \frac{\left(\frac{u}{2.2}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \times (1-\eta)$$

Eh kg/t

ki

u m/s

M % 40%

η %

4.6.1-2

	TSP	PM10	PM2.5
/	0.74	0.35	0.053

TSP

4.6.1-3

	TSP	PM10	PM2.5
	74%	62%	52%
50%	90%	75%	63%

TSP 74%

2

Ki 3.3-4

TSP 0.74 u 2.2m/s

TSP Eh=4.65×10-6kg/t

20t 120s

4.65×10-6kg TSP 0.0028kg/h

4.6.1-4

		kg/h	t/a		kg/h	t/a
		0.0028	0.0135	/	0.0028	0.0135

0.0135t/a

3

14.7 m³ 27.2 m³ 15

1.82 t/a 200m2

Q—— mg/s

U—— 2.2

Ap—— m2 200

4.029mg/s 0.0145kg/h

300d 16h 0.07t/a

70% 300

16

4.6.1-

GB18599-2020

GB/T50869-2013

$$Q = \frac{I}{1000} \times (C_1 A_1 + C_2 A_2 + C_3 A_3 \boxed{+ C_4 A_4}) + \frac{M_d \times (W_c - F_c)}{\rho_w} \quad (B.0.1)$$

Q m³/d

A1 m2 200m2

A2 m2 18133m2

A3 m2 18133m2

B.0.1-1 40%

XF—— (%)

B.0.1-2

40%

ρw (t/m³) 1

B.0.1 **C_1**

(mm)	≥800	400≤ <800	<400
>70%	0.85 1.00	0.75 0.95	0.50 0.75
≤70%	0.70 0.80	0.50 0.70	0.40 0.55

200m2

18133m2

200m2 18133m2

23686.88m³ 365

64.89m³/d

28

1# (2# (

10 / 40kt/a

2 /

4.6.2-1 mg/L pH

1	pH	7.2-7.4
2	COD	32-38.8
3		10-13
4		16.8-19.4
5		0.01L
6		0.00064-0.00083
7		0.01-0.03
8		0.05L
9		0.01-0.02
10		0.004L

64.89m³/d

34560m³

532

2

5 t/a 300d 9 /d

9 /d 18

(2019) 2020 5

0.09m³/ · 1.62m³/d

SS

+ 80%

388.8m³/a 1.296m³/d

3

5 60L/ d

0.3m³/d 80%

72m³/a 0.24m³/d

COD500mg/L SS400mg/L

45mg/L TN70mg/L TP8mg/L 100mg/L

pH +

10t/a PAM5t/a PAC5t/a

4.6.2-1

4.6.2-2

	m³/a		**mg/L**	**t/a**		**mg/L**	**t/a**
	23686.88	pH	7.4	/		/	/
		COD	38.8	0.92		38.8	0.92
			13	0.308		13	0.308
			19.4	0.46		19.4	0.46
			0.01L	/		0.01L	/
		μg/L	0.83	0.0197		0.83	0.0197
			0.03	0.000711		0.03	0.000711

			0.05L	/		0.05L	/
			0.02	0.000474		0.02	0.000474
			0.004L	/		0.004L	/
	388.8	SS	500	0.3456	+	0	0
			20	0.013824		0	0
	72	COD	500	0.036		500	0.036
		SS	400	0.0288		400	0.0288
			45	0.00324		45	0.00324
			8	0.000576		8	0.000576
			70	0.00504		70	0.00504
			100	0.0072		100	0.0072

4.6.3

4.6.3-1

4.6.3-1

			/m					
			X	**Y**	**Z**	**dB(A)**		
1		/	-52.8	60.9	1.2	86		
2		/	-32.8	38.7	1.2	83		
3		/	13.3	-19.5	1.2	84		
4		/	-35.9	-35.6	1.2	89		
5		/	-66.6	-19.5	1.2	85		

4.6.4

1 5 1.0kg/ d

1.5t/a 5kg/d

2 5t/a

3 0.5t/a

2021 HW08

900-210-08

4 1t/a

2021 HW08

900-217-08

4.6.4-1 4.6.4-2

4.6.4-1

						t/a			**t/a**
						1.5			1.5
						5			5
					T I	0.5			0.5
					T I	1			1

4.6.4-2

4.7

2

0.5m 0.5m

18133m2 18133m³

4.7.1

4.7.2

1422.4m³/a 3.897m³/d

4.7.3

200m

4.7.4

1.5t/a

4.8

4.8-1

4.8-1

			t/a		**t/a**	**t/a**	
			1.941		1.3587	0.5823	
			0.0135		0	0.0135	
			0.07		0.049	0.021	
			0.118	/	0	0.118	
		SO2	1.6			1.6	
		NOx	1.065			1.065	
		*	23686.88		/	23686.88	
		pH	7.4		/	/	
		COD					

				0.00504		/	0.00504	
				0.0072		/	0.0072	
				1.5		1.5	0	
				5		5	0	
				0.5		0.5	0	
				1		1	0	
			*	1422.4		1422.4	0	
				1.5		1.5	0	

5

5.1

5.1.1

31°37′~32°19′

118°58′~119°58′ 95.5 76.9

3847 3.7% 1082 1047

1387 331

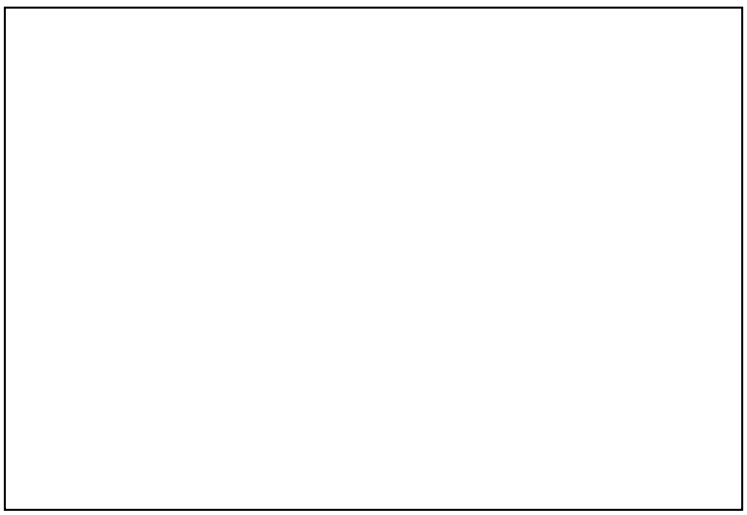
1992

1993

1998 6

218.9 21.7

5.1.1-1



5.1.1-1

5.1.2

5.1.2.1

5.1.1-1

5.1.1-1

	km	**m**		
	22	1400-4000		
	11.4	20-40		
	14.0	4-7		
	3.5	5-8		
	3	5-20		
	17.3	5-8		
	3.3	5-8		

1

57km

2m 0.1m 1.0m

3 9

5-9

4.5-6.5m 4.0-5.0m 10 4

2.5-4.4m 2.0-3.5m

92600m³/s 4620m³/s 1979

1 31 29300m³/s

1.33m/s 0.51m/s 3.6m

45000m³/s 4.9m 6.69m 1996 8 1

6.48m 1954 8 17 5.2m -0.66m

2

11.4km 4.0-6.0m

11.8km

3.5m 8-16m 1:2.5 8.5-9.5m 4m

4km 4.2m 8m 1:3

8.5-9.5m 4m 1.5km 3.6m

8m 1:2.5 9.6-11m

5.1.2.2

10~30m 126.5m

209.7m 258.5m

5.1.2.5

5.1.2-1

5.1.2-1

5.1.2-2

		Q4 Q3		
		Q4 Q2-3 Q1		
		T1 T2Z C11-4 O1-3 3 Zb1-2		~ ~
		K21-2 J32 J1-2 T3 P21-2		

		P12 D1-3 S2-3 Za1-2		
		N22		

1

5

10 /

a

10

10~100 /

b

40~60 ~ 80~90

10~20

2~6 50 0.5~1.0

2.65 1000

/ 3012 / 100~1000 /

2

~ ~

~ ~ ~

~

~ ~

1000 / 3916 /

1 /

1~3 /

~

300~1000 /

2000 / 0.3~0.6 /

~

100 / 100~2000 /

0.3~0.6 /

~

~ ~

~ 40

1000~2000 / 5000 /

400~700 / 0.26~0.41 /

3

100~500 /

100 / 0.27~0.41 /

100 /

300 /

0.5 /

100 /

4

~ ~ ~ ~

5.1.2-2

5.2

5.2.1

5.2.2

8 141 169 107 75

33 73 11 21 114

36 47 18 6

3 6 7 2 11 43 3 22 25

63 55.3% 9 7.9% 6

5.3% 4 3.5% 3 2.6% 16 29

25.4%

1

Baiji Lipotesvexillifer

100

2-3

FinlessPorpois Neophocaenoides

1992 2700 2000

10 11

7km 330hm

4 5

2

4 6

6 7

9 10

2 3

2

3

11 2

2 4 6 5

2 3

5 6

1695km 1981

5.2.2-1 5.2.2-3

5.2.2-1 : /

				500m		**1000m**	
	Cyclopyxis	/	/	/	/	/	688
	Difflugia	804	588	990	1509	1347	458
	Acanthocystis	402	392	594	/	168	/
	Vorticella	603	784	594	253	253	688
	Tintinnidium	402	/	/	/	168	/
	Tintinnidium	5631	1175	1782	1179	1179	2979
	Lacrymaria	/	196	/	/	/	/
	Arceklla	/	/	/	/	1179	/
	Tintinnopsiswangi	402	/	/	/	/	/

	Didinium	603	/	594	/	/	/
	Trachelophyllum	/	/	396	/	/	/
	/	/	/	/	/	/	458
	Brachionusangularis	40	/	/	/	/	/
	Brachionusbudapestiensis	60	/	59	/	/	/
	Brachionusdiversicornis	/	39	/	/	/	/
	Brachionuscalyciflorus	40	59	40	/	/	/
	Keratellacochlearis	/	/	/	/	38	46
	Asplanchna	/	/	40	/	/	/
	Polyarthra	/	/	40	65	/	/
	Trichocerca	/	/	/	43	/	/
	Daphniopsis	1	/	/	/	/	/
		8988	3233	5129	3049	4332	5317

5.2.2-2 : /m²

			500m	**1000m**
	Nephthyssp.	16	32	48
		16	32	48

5.2.2-3 /

			500m	**1000m**

	Euglena	2.02E+03	3.93E+03	2.64E+03	2.16E+03	9.47E+02	1.83E+03
	Cyclotella	1.15E+05	1.06E+05	6.34E+04	5.61E+04	1.26E+05	1.75E+05
	Nitzschialinearis	2.02E+03	/	/	/	/	/
	Cymbella	/	1.96E+03	/	/	9.47E+02	9.16E+02
	Melosira	1.45E+05	1.69E+05	1.76E+05	2.16E+05	6.63E+04	1.22E+05
	Gomphonema	/	/	2.64E+03	/	/	/
	Diatoma	/	/	/	/	9.47E+02	
	Navicula	1.01E+04	7.85E+03	5.28E+03	8.63E+03	2.84E+03	
	Synedraamphicephala	1.61E+04	1.18E+04	6.60E+03	4.32E+03	5.68E+03	6.41E+03
	Closterium	/	1.96E+03	/	/	/	1.83E+03
	Actinastrumfluviatile	/	/	/	/	2.84E+03	/
	Ankistrodesmus	4.04E+03	/	3.96E+03	2.16E+03	9.47E+02	2.75E+03
	Crucigeniatetrapedia	/	/	5.28E+03	/	/	/
	Crucigeniaquadrata	/	/	5.28E+03	/	/	/
	Kirchneriellalunaris	/	1.96E+03	/	/	1.89E+03	9.16E+02
	Oocystis	4.04E+03	3.93E+03	3.96E+03	4.32E+03	1.51E+04	9.16E+02
	Asteriomella	3.43E+04	5.30E+04	2.11E+04	5.18E+04	2.93E+04	4.85E+04
	Selenastrum	2.02E+03	/	2.64E+03	6.47E+03	/	/
	Chlorellavulgaris	/	/	/	/	1.04E+04	6.41E+03
	Dictyosphaeriumehrenbergianum	/	/	1.85E+04	/	3.79E+03	3.30E+04
	Chlamydomonas	2.02E+	3.93E+	1.06E+	4.32E+	3.79E+	1.83E+

		03	03	04	03	03	03
	Schroederiasetigera	/	/	5.28E+03	2.16E+03	/	/
	Pediastrumduplex	3.23E+04	/	/	/	/	/
	Tetrastrumglabrum	8.07E+03	3.14E+04	5.28E+03	/	/	/
	Scenedesmusquadricauda	8.07E+03	3.93E+03	/	/	3.79E+03	/
	Scenedesmusacuminatus	8.07E+03	/	/	/	/	/
	Scenedesmus	/	/	/	/	/	3.66E+03
		4.97E+05	4.47E+05	4.65E+05	3.97E+		

5.3

5.3.1

5.3.1.1

HJ2.2-2018 6.2.1

2023

2024 2024

PM2.5 PM10 SO2

NO2 35 / 51 / 6 / 27 /

0.8 / 165 /

GB 3095-2012

SO2 20.0% PM2.5

PM10 NO2 5.4% 10.5%

6.9% 11.1% 5.2%

8 PM2.5 32~36 /

1.5%~11.1% 8

78.1%~82.5%

0.3 2.2~10.7

5.3.1-1

		(μg/m³	**(μg/m³**	**/%**	
SO2		60	6	/	
NO2		40	27	/	
PM10	24 95	70	51	/	
PM2.5	8 90	35	35	/	

CO		4000	800	/	
O3		160	165	3.125	

2025 2025 19 “

VOCs

”

313

4.3.1.2

5.65km 119.671E 32.188N

2024

5.3.1-2

5.3.1-2 2024

			/ **(μg/m³**	/ **(μg/m³**	**/%**	
SO2			6	60	10.0	
	24	98	12	150	8.0	
NO2			31	40	77.5	
	24	98	72	80	90.0	
PM10			54	70	77.1	
	24	95	124	150	82.7	

PM2.5			33	35	94.3	
	24	95	75	75	100.0	
CO	24	95	900	4000	22.5	
O3	8h	90	121	160	75.6	

4.2.1.3

MST20231229007-1

4.2-3

HJ2.2-2008 6.2.2.2 “…… 3

”

1

2 5.3.1-3 5.3.1-1 2

5.3.1-1

5.3.1-2

5.3.1-3

			m							
G1		/	/		2025	8	4	~8	11	

G2

2025.8.8~2025.8.9	29.7	100.57	51.6

5.3.1-6

5.3.1-6

			mg/m³	**mg/m³**	**mg/m³**	**%**	**%**	
G1	TSP		0.3	0.074	0.096	32	0	
G2	TSP		0.3	0.178	0.197	65.67	0	

TSP GB3095-2012

5.3.2

4

1

5

500m W1

1000m W2 1000m W3

500m W4 W5

5.3.2-1 5.3.2-1

5.3.2-1

W1 pH

500m

pH

3

2025 8 5 8 7 3

1

4

HJ91.2-2022

HJ2.3-2018

5.3.2-8

5.3.2-2

pH		HJ1147-2020	/
		GB 13195-91	/
		HJ828-2017	4mg/L
		HJ505-2009	0.5mg/L
		GB11901-1989	/
		HJ535-2009	0.025mg/L
		GB11893-1989	0.01mg/L
		HJ506-2009	/
		HJ970-2018	0.01mg/L
		HJ488-2009	0.025mg/L
		HJ 1226-2021	0.01mg/L
		GB/T 7467-1987	0.004mg/L
		HJ 694-2014	0.3mg/L
		HJ 700-2014	0.09mg/L
		HJ 700-2014	0.08mg/L
		HJ 700-2014	0.067mg/L
		HJ 700-2014	0.05mg/L

5

$$S_{ij} = C_{ij} / C_{sj}$$

S_{ij}— i j

C_{ij}— i j

C_{Sj}— i mg/L

$S_{DO\ j}$—

DO_j— j

DO_s— mg/L

DO_f— mg/L DOf 6+T)

DOf = (4)/(33.5+T) 2.5

S—

T_j— j

6

2022

2023 1 ~2025 3

LW1 2022 1 2024 12 LW2

GB3838-2002 1

5.3.2-3 LW1 2023

	2023												GB3838-2002	
	1	2	3	4	5	6	7	8	9	10	11	12		(%)
( )	6.8	10.5	17	19	25.8	31.8	28.3	30	31	26	16.6	10.8	/	/
pH( )	7.4	7.4	7.3	7.4	7.7	8.8	7.5	7.6	7.6	7.8	7.5	7.5	6~9	100
(mg/L)	5.43	5.75	7.1	7.84	6.12	10.76	5.84	5.1	5.32	5.48	5.37	7.13	5	100
(mg/L)	4.4	4.7	5.2	3.8	4.2	3	2.4	2.4	4.4	2.7	3.5	2.9	6	100
(mg/L)	20	18	15	8	12	9	14	8	18	12	7	8	20	100
(mg/L)	2.7	2.8	3.2	3.5	3.7	3.4	0.8	2.1	3.2	1.3	1.1	2.1	4	100
(mg/L)	0.904	0.912	0.898	0.676	1.36	0.078	0.028	0.228	0.339	0.044	0.347	0.586	1	92
(mg/L)	0.17	0.19	0.07	0.16	0.28	0.26	0.09	0.1	0.06	0.08	0.19	0.16	2	10

														0
(mg/L)	ND(0.006)	ND(0.006)	0.032	0.146	ND(0.006)	0.01	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.006)	1	100
(mg/L)	0.024	0.024	0.103	0.04	0.023	0.006	0.082	0.004L	0.028	0.064	0.07	0.015	1	100
(mg/L)	0.5	0.53	0.45	0.41	0.44	0.49	0.36	0.26	0.79	0.2	0.75	0.33	1	100
(mg/L)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	0.0004	ND(0.0004)	ND(0.0004)	0.0007	0.0005	0.0006	0.0004	0.6	0.01	92
(mg/L)	0.0006	ND(0.0003)	0.0007	0.001	0.0004	0.0018	0.0022	0.0013	0.0018	0.0017	0.0013	1.6	0.05	92
(mg/L)	0.00006	ND(0.00004)	0.00008	0.00008	0.00006	0.00008	0.00008	0.00005						

(mg/L)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	0.0014	ND(0.004)	ND(0.004)	0.2	100
(mg/L)	0.0027	0.0025	0.0011	0.0036	0.0025	0.0014	0.0003L	ND(0.0003)	0.0018	0.001	0.0006	0.0012	0.005	100
(mg/L)	0.06	ND(0.01)	0.01	ND(0.01)	0.04	0.01	0.01	ND(0.01)	0.02	ND(0.01)	0.03	0.05	0.05	92
(mg/L)	0.166	0.101	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	0.146	ND(0.05)	0.2	100
(mg/L)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.2	100

5.3.2-4 LW1 **2024**

	2024												GB3838-2002	(%)
	1	2	3	4	5	6	7	8	9	10	11	12		
( )	8	8	11.8	17.3	20.4	18	24.8	36	31.8	24.6	17.6	11.2	/	/
pH(	7.3	7.3	7.6	7.5	7.2	8.1	8	7.7	7.9	7.5	7.7	7.8	6~9	10

)														0
(mg/L)	7.96	7.78	6.82	6.15	5.47	5.7	5.1	5.1	5.1	5.1	5.1	6.6	5	100
(mg/L)	4	3.4	2.8	4.2	3	3	3.8	3.8	3.3	3	3.6	4	6	100
(mg/L)	12	19	13	18	12	17	14	14	10	11	13	12	20	100
(mg/L)	3.3	2.7	2.4	3.2	2.6	3.6	3	1.2	2.4	2	4	3.2	4	100

(mg/L)	0.938	0.694	0.798	0.589	0.252	0.2	0.658	0.754	0.588	0.25	0.983	0.867	1	100
(mg/L)	0.04	0.06	0.18	0.11	0.1	0.14	0.18	0.15	0.1	0.17	0.06	0.12	2	100

(mg/L ND(0.006)

)

)														
(mg/L)	0.00006	0.00007	0.00007	ND(0.00004)	0.00008	ND(0.00004)	0.00006	0.00006	0.00008	0.00009	0.00004	0.00004	0.0001	100
(mg/L)	0.000146	ND(0.000005)	ND(0.000005)	ND(0.000005)	ND(0.000005)	ND(0.000005)	0.000142	ND(0.000005)	ND(0.000005)	ND(0.000005)	ND(0.000005)	ND(0.000005)	0.005	100
(mg/L)	ND(0.004)	ND(0.004)	0.004	0.007	0.004	0.005	ND(0.004)	ND(0.004)	0.006	0.004	ND(0.004)	ND(0.004)	0.05	100
(mg/L)	0.001	ND(0.0008)	ND(0.0008)	ND(0.0008)	0.00184	ND(0.0008)	ND(0.0008)	ND(0.0008)	ND(0.0008)	ND(0.0008)	ND(0.0008)	ND(0.0008)	0.05	100

)														
(mg/L)	0.03	0.02	0.01	0.03	0.01L	ND(0.01)	ND(0.01)	0.05	0.02	ND(0.01)	0.05	0.02	0.05	100
(mg/L)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	0.2	100
(mg/L)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.2	100

5.3.2-5 LW1 **2025 1 ~3**

				GB3838-2002	(%)
	2025				
	1	2	3	III	
( )	11.4	11.4	11.8	/	/

pH( )	7.6	7.7	7.5	6~9	100
(mg/L)	6.46	6.56	6.42	5	100
(mg/L)	3.6	3.5	5	6	100
(mg/L)	14	16	19	20	100
(mg/L)	2.9	2.9	3.2	4	100
(mg/L)	0.504	0.823	0.957	1	100
(mg/L)	0.11	0.1	0.18	2	100
(mg/L)	ND(0.006)	ND(0.006)	0.01	1	100
(mg/L)	0.106	0.08	0.023	1	100
(mg/L)	0.49	0.56	0.68	1	100
(mg/L)	ND(0.0004)	ND(0.0004)	ND(0.0004)	0.01	100
(mg/L)	0.0008	0.0007	0.0007	0.05	100
(mg/L)	0.00004	0.00004	0.00004	0.0001	100
(mg/L)	0.000148	0.000258	ND(0.000005)	0.005	100
(mg/L)	0.005	0.005	ND(0.004)	0.05	100
(mg/L)	ND(0.0008)	ND(0.0008)	ND(0.0008)	0.05	100
(mg/L)	ND(0.004)	ND(0.004)	ND(0.004)	0.2	100
(mg/L)	ND(0.0003)	ND(0.0003)	ND(0.0003)	0.005	100
(mg/L)	0.01	0.01	0.01	0.05	100
(mg/L)	ND(0.05)	ND(0.05)	ND(0.05)	0.2	100
(mg/L)	ND(0.01)	ND(0.01)	ND(0.01)	0.2	100

5.3.2-6 LW2 2022

	2022												GB3838-2002	
	1	2	3	4	5	6	7	8	9	10	11	12		(%)
( )	7.2	7.4	14.1	18.6	20.1	24.6	30.3	32.4	29.0	23.0	19.6	14.3	/	/
pH( )	8.2	7.3	8.0	8.0	8.0	8.1	7.0	8.2	8.3	8.0	8.4	7.8	6~9	100
(mg/L)	10.06	11.23	9.97	9.20	8.70	7.06	6.20	6.18	7.49	7.93	8.80	9.59	6	100
(mg/L)	2.0	2.0	1.9	2.4	2.2	2.3	2.1	2.1	2.0	1.6	1.8	2.4	4	100
	6	15	13	13	6	10	9	6	13	6	7	8	15	100

(mg/L)														
(mg/L)	1.2	1.2	0.9	0.7	0.6	0.8	1.3	1.3	1.3	0.9	1.0	1.0	3	100
(mg/L)	0.060	0.107	0.080	0.067	0.020	0.060	0.020	0.063	0.067	0.057	0.045	0.030	0.5	100
(mg/L)	0.09	0.05	0.07	0.09	0.06	0.06	0.06	0.07	0.07	0.09	0.07			

(mg/L)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	0.0005	100
(mg/L)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	0.005	100
(mg/L)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	0.05	100
(mg/L)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	0.01	100
(mg/L)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	0.05	100
(mg/L)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.002	100
(mg/L)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	ND(0.01)	ND(0.01)	0.05	100

(mg/L)														
(mg/L)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.010	ND(0.02)	0.010	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.1	100

5.3.2-7 LW2 2023

													GB3838-2002	
	2023													
	1	2	3	4	5	6	7	8	9	10	11	12		
( )	10.4	10.3	14.4	19.0	21.3	27.2	29.8	30.9	26.7	23.2	21.7	15.3	/	/
pH( )	8.0	8.1	8.2	8.2	7.8	7.5	8.1	8.5	7.9	8.0	8.0	7.5	6~9	100
(mg/L)	10.63	11.10	10.77	8.40	7.90	7.27	7.20	7.87	6.90	7.90	8.07	9.33	6	100
(mg/L)	1.9	1.7	1.9	2.4	2.0	2.0	2.5	2.3	1.9	2.4	2.2	2.2	4	100
(mg/L)	6	6	7	8	9	7	8	8	6	6	5	6	15	100
	1.1	1.9	0.8	1.2	0.7	0.7	1.2	1.7	1.3	1.1	1.2	0.8	3	100

(mg/L)														
(mg/L)	0.123	0.093	0.217	0.043	0.040	0.043	0.022	0.020	0.020	0.050	0.053	0.045	0.5	100
(mg/L)	0.09	0.08	0.08	0.07	0.07	0.06	0.08	0.09	0.08	0.10	0.07	0.06	0.1	100
(mg/L)	ND(0.04)	0.0016	0.0018	0.0023	ND(0.04)	0.0013	0.0015	0.0021	0.0016	0.0014	0.0014	0.0019	1	100
(mg/L)	ND(0.009)	ND(0.009)	0.01017	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	0.01027	1	100
(mg/L)	0.28	0.24	0.24	0.26	0.20	0.27	0.22	0.23	0.25	0.23	0.20	0.21	1	100
(mg/L)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	0.01	100
(mg/L)	0.0020	0.0018	0.0016	0.0014	0.0014	0.0014	0.0015	0.0019	0.0018	0.0018	0.0016	0.0019	0.05	100
(mg/L)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	0.0005	100
(mg/L)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	0.005	100
(mg/L)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	0.05	100
(mg/L)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	0.000123	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	0.01	100
(mg/L)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	0.05	100

(mg/L)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.002	100

(mg/L)	1.5	0.9	1.8	0.9	1.3	1.2	1.2	1.4	1.4	1.2	1.2	1.1	3	100
(mg/L)	0.113	0.193	0.183	0.193	0.053	0.080	0.137	0.113	0.207	0.030	0.040	0.110	0.5	100
(mg/L)	0.03	0.08	0.08	0.06	0.03	0.06	0.08	0.07	0.06	0.05	0.05	0.10	0.1	100
(mg/L)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	1	100
(mg/L)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	ND(0.009)	0.02000	0.01200	0.00600	1	100
(mg/L)	0.22	0.23	0.17	0.21	0.16	0.14	0.18	0.18	0.19	0.17	0.21	0.22	1	100
(mg/L)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	0.0004	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	ND(0.0004)	0.01	100
(mg/L)	0.0016	0.0017	0.0014	0.0012	0.0014	0.0025	0.0021	0.0018	0.0023	0.0021	0.0020	0.0020	0.05	100
(mg/L)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	ND(0.00004)	0.0005	100
(mg/L)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	0.005	100
(mg/L)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	0.05	100
(mg/L)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	ND(0.00009)	0.0009	0.00195	0.00064	0.01	100
	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	ND(0.004)	0.05	100

(mg/L)							

5.3.2-9 **mg/L pH**

pH

bod

			/	/	/	0.35	0.65	/	0.115	0.4	0.6	0.49	0.1	/	/	/	/	/	/
		%	/	/	/	0	0	/	0	0	0	0	0	0	0	0	0	0	0
	W5		7.5	27	7.8	11	2.7	13	0.267	0.05	0.03	0.64	0.02	ND	ND	ND	ND	ND	ND
			7.5	28	7.9	13	2.8	13	0.279	0.07	0.03	0.71	0.02	ND	ND	ND	ND	ND	ND
			/	/	/	12	2.75	13	0.273	0.06	0.03	0.675	0.02	ND	ND	ND	ND	ND	ND
			/	/	/	0.6	0.6875	/	0.273	0.3	0.6	0.675	0.1	/	/	/	/	/	/
		%	/	/	/	0	0	/	0	0	0	0	0	0	0	0	0	0	0
2025.8.6	W1		7.6	27	7.9	15	2.5	13	0.23	0.05	0.03	0.47	0.03	ND	ND	ND	ND	ND	ND
			7.8	29.4	8.1	15	2.7	14	0.255	0.07	0.03	0.6	0.03	ND	ND	ND	ND	ND	ND
			/	/	/	15	2.6	13.5	0.2425	0.06	0.03	0.535	0.03	ND	ND	ND	ND	ND	ND
			/	/	/	0.75	0.65	/	0.2425	0.3	0.6	0.535	0.15	/	/	/	/	/	/
		%	/	/	/	0	0	/	0	0	0	0	0	0	0	0	0	0	0
	W2		7.6	27.2	8.1	8	2.3	11	0.194	0.08	0.03	0.46	0.02	ND	ND	ND	ND	ND	ND
			7.7	29.4	8.4	9	2.5	12	0.397	0.09	0.03	0.57	0.02	ND	ND	ND	ND	ND	ND
			/	/	/	8.5	2.4	11.5	0.2955	0.085	0.03	0.515	0.02	ND	ND	ND	ND	ND	ND
			/	/	/	0.425	0.6	/	0.2955	0.425	0.6	0.515	0.1	/	/	/	/	/	/
		%	/	/	/	0	0	/	0	0	0	0	0	0	0	0	0	0	0
	W3		7.5	27.4	8.4	10	2.4	13	0.176	0.05	0.03	0.65	0.04	ND	ND	ND	ND	ND	ND
			7.7	29.2	8.5	11	2.6	14	0.212	0.08	0.03	0.67	0.04	ND	ND	ND	ND	ND	ND
			/	/	/	10.5	2.5	13.5	0.194	0.065	0.03	0.66	0.04	ND	ND	ND	ND	ND	ND
			/	/	/	0.525	0.625	/	0.194	0.325	0.6	0.66	0.2	/	/	/	/	/	/

	%	/	/	/	0	0	/	0	0	0	0	0	0	0	0	0	0	0
W4		7.4	27.4	8.4	6	2.4	13	0.194	0.05	0.03	0.59	0.2	ND	ND	ND	ND	ND	ND
		7.5	29	8.6	7	2.9	13	0.212	0.07	0.03	0.61	0.2	ND	ND	ND	ND	ND	ND
		/	/	/	6.5	2.65	13	0.203	0.06	0.03	0.6	0.2	ND	ND	ND	ND	ND	ND
		/	/	/	0.325	0.6625	/	0.203	0.3	0.6	0.6	1	/	/	/	/	/	/
	%	/	/	/	0	0	/	0	0	0	0	0	0	0	0	0	0	0
W5		7.5	27.6	7.8	11	2.8	13	0.418	0.04	0.03	0.51	0.02	ND	ND	ND	ND	ND	ND
		7.5	29	7.9	13	2.9	14	0.439	0.06									

3		7.5	27.4	8.2	7	2.5	12	0.227	0.04	0.03	0.65	0.04	ND	ND	ND	ND	ND	ND
		/	/	/	7	2.45	11.5	0.221	0.04	0.03	0.605	0.035	ND	ND	ND	ND	ND	ND
		/	/	/	0.35	0.6125	/	0.221	0.2	0.6	0.605	0.175	/	/	/	/	/	/
	%	/	/	/	0	0	/	0	0	0	0	0	0	0	0	0	0	0
W4		7.3	27.2	8.6	10	2.6	14	0.155	0.07	0.3	0.46	0.02	ND	ND	ND	ND	ND	ND
		7.4	27.6	8.7	16	2.8	15	0.179	0.07	0.3	0.61	0.02	ND	ND	ND	ND	ND	ND
		/	/	/	13	2.7	14.5	0.167	0.07	0.3	0.535	0.02	ND	ND	ND	ND	ND	ND
		/	/	/	0.65	0.675	/	0.167	0.35	6	0.535	0.1	/	/	/	/	/	/
	%	/	/	/	0	0	/	0	0	0	0	0	0	0	0	0	0	0
W5		7.1	26.8	8.3	12	2.7	12	0.397	0.05	0.03	0.51	0.02	ND	ND	ND	ND	ND	ND
		7.2	28	8.4	14	2.8	12	0.424	0.07	0.03	0.55	0.02	ND	ND	ND	ND	ND	ND
		/	/															

GB 3838-2002 1

GB 3838-2002

5.3.3

5.3.3.1

2025 8 4 5

HR25073145

GB12348-2008 3 ≤65dB(A)

≤55dB(A)

5.3.3-1 [dB(A)]

		dB(A)					
1	2025.8.4	53.9	65	42.2	55		1
1		54.4	65	43.5	55		1
1		51.0	65	44.3	55		1
1		56.6	70	46.4	55		1
		dB(A)					
1	2025.8.5	53.9	65	42.5	55		1
1		54.3	65	44.2	55		1
1		52.4	65	43.5	55		1
1		57.2	65	45.6	55		1

5.3.3.2

GB3096-2008 3

5.3.3-1

5.3.5

2025 8 4 5

HR25073145

1

3 6

5.3.5-1

5.3.5-1

			m	
D1		/	/	K+ Na+ Ca2+ Mg2+ CO32- HCO3- Cl- SO42- pH
D2		SE	280	
D3		W	450	
D4		N	160	
D5		S	50	

D6		E	760	

HJ610-2016 8.3.3.3 “

3

1~2

1 ” “

2 ” 3 6

1

2

2025 8 8 1

3

HJ164-2020

5.3.5-2

5.3.5-2

pH		HJ1147-2020	/
		HJ776-2015	0.05mg/L
		HJ776-2015	0.12mg/L
		HJ776-2015	0.02mg/L
		HJ776-2015	0.003mg/L
		DZ/T0064.49-2021	5mg/L
		DZ/T0064.49-2021	5mg/L
		HJ84-2016	0.018mg/L
		HJ84-2016	0.007mg/L
		HJ535-2009	0.025mg/L
		HJ/T346-2007	0.08mg/L
		GB/T7493-1987	0.001mg/L
	4-	HJ503-2009	0.0003mg/L

	-	DZ/T0064.52-2021	0.002mg/L
	EDTA	GB/T7477-1987	0.05mol/L
		DZ/T0064.9-2021	/
		DZ/T0064.68-2021	0.4mg/L
		HJ/T342-2007	8mg/L
		GB/T11896-1989	10mg/L
		GB/T7484-1987	0.05mg/L
		DZ/T0064.17-2021	0.004mg/L
		HJ694-2014	0.3μg/L
		HJ694-2014	0.04μg/L
			1μg/L
			0.1μg/L
		GB/T11911-1989	0.03mg/L
		GB/T11911-1989	0.01mg/L
		HJ1001-2018	20MPN/L
		HJ1000-2018	/
			0.01mg/L
		HJ 1226-2021	0.003mg/L
		GB/T 11899-1989	10mg/L
		GB/T 11896-1989	10mg/L

4

5.3.5-3

5.3.5-4 5.3.5-5 5.3.5-6

5.3.5-3

	m
D1	2.35

D2	2.48
D3	2.21
D4	2.51
D5	2.43
D6	2.36

5.3.5-4

		D1	D2	D3
K+	mg/L	2.37	2.37	2.69
Na+	mg/L	27.3	25.6	22.8
Ca2+	mg/L	53	50	49
Mg2+	mg/L	12.3	11.1	10.9
HCO3-	mg/L	95	78	73
CO32-	mg/L	ND	ND	ND
Cl-	mg/L	51.2	49.8	47.5
SO42-	mg/L	90	88	87.2

5.3.5-5

			D1	D2	D3
pH		/	7.6	7.6	7.1
	mg/L	0.05	2.37	2.37	2.69
			/	/	/
	mg/L	0.01	27.3	25.6	22.8
	mg/L	0.02	53	50	49
			/	/	/
	mg/L	0.002	12.3	11.1	10.9
			/	/	/
	μg/L	0.04	ND	ND	ND
	μg/L	0.3	ND	ND	ND

	µg/L	0.09	1.4	0.39	0.53
	µg/L	0.05	ND	ND	ND
	µg/L	0.82	1.31	1.15	1.21
	µg/L	0.01	0.39	0.23	0.22

	mg/L	0.004	ND	ND	ND
	mg/L	10	56	51	48
	mg/L	0.004	ND	ND	ND
	mg/L	0.003	ND	ND	ND
			/	/	/
	mg/L	0.01	0.05	0.11	0.16
C10-C40			/	/	/
	μg/L	0.67	41.6	37.7	40.5
	μg/L	0.06	1.52	1.32	1.42
	μg/L	1.15	45.5	38.3	22.6
	μg/L	0.08	6.52	6.93	5.03

GB/T14848-2017

5.3.5

2025 8 4

HR25073145

1

4 3 3

1 1 T1

8 5.3.6-1 5.3.6-1

5.3.6-1

5.3.6-1

T1			0-0.2m	1 1- 1 2-
T2	1		0-0.2m	1 1- -1 2- -1 2- 1 2-
T3	1		0-0.2m	1 1 1 2- 1 1 2 2-
				1 1 1- 1 1 2-
T5			0-0.2m	1 2 3- 1 2- 1 4- + 2- a a b k a h 1 2 3-cd

3 T1-T3

1 T4

HJ964-2018 7.4.3

HJ964-2018 7.4.2

	/ -	HJ605-2011	1.5μg/kg
1 2-	/ -	HJ605-2011	1.1μg/kg
1 1 1 2-	/ -	HJ605-2011	1.2μg/kg
1 1 2 2-	/ -	HJ605-2011	1.2μg/kg
	/ -	HJ605-2011	1.4μg/kg
1 1 1-	/ -	HJ605-2011	1.3μg/kg
1 1 2-	/ -	HJ605-2011	1.2μg/kg
	/ -	HJ605-2011	1.2μg/kg
1 2 3-	/ -	HJ605-2011	1.2μg/kg
	/ -	HJ605-2011	1μg/kg
	/ -	HJ605-2011	1.9μg/kg
	/ -	HJ605-2011	1.2μg/kg
1 2-	/ -	HJ605-2011	1.5μg/kg
1 4-	/ -	HJ605-2011	1.5μg/kg
	/ -	HJ605-2011	1.2μg/kg
	/ -	HJ605-2011	1.1μg/kg
	/ -	HJ605-2011	1.3μg/kg
+	/ -	HJ605-2011	1.2μg/kg
	/ -	HJ605-2011	1.2μg/kg
	-	HJ834-2017	0.09mg/kg
	-	MSTZZ003-2019	0.04mg/kg
2-	-	HJ834-2017	0.06mg/kg
[a]	-	HJ834-2017	0.10mg/kg
[a]	-	HJ834-2017	0.10mg/kg
[b]	-	HJ834-2017	0.20mg/kg
[k]	-	HJ834-2017	0.10mg/kg
	-	HJ834-2017	0.10mg/kg
[a h]	-	HJ834-2017	0.10mg/kg
[1 2 3-cd]	-	HJ834-2017	0.10mg/kg
	-	HJ834-2017	0.09mg/kg

	-	HJ889-2017	0.8cmol+/kg
		LY/T1218-1999	/
		NY/T1121.4-2006	/
		LY/T1215-1999	/
	-	HJ889-2017	0.8cmol+/kg

4

5.3.6-3

5.3.6-3 **a**

&L$

	ND	ND	ND	ND	2.8
	ND	ND	ND	ND	0.9
	ND	ND	ND	ND	37
1 1-	ND	ND	ND	ND	9
1 2-	ND	ND	ND	ND	5
1 1-	ND	ND	ND	ND	66
-1 2-	ND	ND	ND	ND	596
-1 2-	ND	ND	ND	ND	54
	ND	ND	ND	ND	616
1 2-	ND	ND	ND	ND	5
1 1 1 2-	ND	ND	ND	ND	10

1

2-	ND	ND	ND	ND	2256
a	ND	ND	ND	ND	15
a	ND	ND	ND	ND	1.5
b	ND	ND	ND	ND	15
k	ND	ND	ND	ND	151
	ND	ND	ND	ND	1293
a h	ND	ND	ND	ND	1.5
1 2 3-cd	ND	ND	ND	ND	15
	ND	ND	ND	ND	70
	ND	ND	ND	ND	260
	9.72	8.4	9.96	8.61	60
	0.041	0.042	0.043	0.061	38
	0.11	0.54	0.02	0.11	65
	20.8	21.2	24.2	21.4	18000
	14	15	17	17	800
	27	34	31	28	900
	43.8	/	/	44.5	/
	ND	ND	ND	ND	5.7

5.3.6-5 **mg/kg**

	4	9.96	8.4	9.2	0.68	100%	0	/

	4	ND	ND	ND	0	0	0	/
1 1-	4	ND	ND	ND	0	0	0	/
1 2-	4	ND	ND	ND	0	0	0	/
1 1-	4	ND	ND	ND	0	0	0	/
-1 2-	4	ND	ND	ND	0	0	0	/
-1 2-	4	ND	ND	ND	0	0	0	/
	4	ND	ND	ND	0	0	0	/
1 2-	4	ND	ND	ND	0	0	0	/
1 1 1 2-	4	ND	ND	ND	0	0	0	/
1 1 2 2-	4							

	4	ND	ND	ND	0	0	0	/
	4	ND	ND	ND	0	0	0	/

GB36600-2018

5.4

5.4-1

5.4-2 SO2 NOx

92.5%

61.24% 14.005%

11.562% 5.697%

2

VOCs4483.163t/a

HCl49.035t/a 12.357t/a

5.4-1 **t/a**

		SO2	NOx	
1		0.003	0.017	0
2		0	0	0.290
3		0.680	0	3.200
4		798.790	665.570	107.110
5		2.040	0.800	0
6		0.191	0.100	0.271
7		0.594	3.240	0.240
8		120.800	10.000	72.000
9		0	0	58.290
10		0.130	7.603	3.600

11		65.900	0	4.700
12		34.600	12	16.800
13		0.940	0	0.044
14		0.012	0.038	0.950
15		34.210	0	15.440
16		15.250	10.000	91.500
17		0	0	2.030
18		5.400	0.410	0.080
19		0.365	0.080	1.000
20		0	0	0.016
21		0.150	0	2.600
22		0.060	0.07	1.653
23		1.458	2.200	0.230
24		11.040	1.600	0.240
25	( )	0.357	0	0.777
26		0	0	0.290
27		0.011	0.57	0.073
28		1.555	15.55	3.888
29		0	0	0.043
30		4.548	7.665	2.874
31		99.770	380.260	49.030
32		0	0	5.600
33		0.045	2.26	0.810
34		0.150	1.17	0.010
35		0	0	6.520
36		7.200	3.100	6.357
37		0.170	0.073	0.005
38		0	0	2.400
39		0.108	0.384	0.700
40		0.162	0.576	0.030
41		0.383	0.781	0

42		15.031	5.300	5.610
43		0.200	0.100	0
44		0	0	0.015
45		0.800	0.600	1.600
46		0	0	0.290
47		0.005	1.373	0.2247
48		0	0	0.500
49		0.064	0.149	5.800
50				0.0774
51		2.230	2.100	3.551
52		0.001	0.063	0.008
53				10.000
54		350.600	731.500	38.800
55		65.000	33.000	14.000
56		0.047	0.825	1.000
57		4541.208	2305.282	614.028
58		0	0	14.400
59		0	0	1.000
60		0	0	0.500
61		0.370	0.140	1.614
62		0.163	0.761	0.697
63		0.779	0.137	0.050
64		0	0	0.014
65		0.120	0.210	0
66		0.640	0.300	0.030
67		4.074	0	4.887
68		0	0.100	0.900
69		0.730	0.430	0.050
70		0.030	0.120	0.010
71		0	0	0.100
72		0	0	12500
73		0	0	0.800

5.4-2

	SO2	NOx	( )	Pn(%)	Ki(%)	
	9082.42	9221.13	1364.51	19668.05	61.240	1
	1597.58	2662.28	238.02	4497.88	14.005	2
	701.20	2926.00	86.22	3713.42	11.562	3
	199.54	1521.04	108.96	1829.54	5.697	4
	241.60	40.00	160.00	441.60	1.375	5
	130.00	132.00	31.11	293.11	0.913	6
	30.50	40.00	203.33	273.83	0.853	7
	69.20	48.00	37.33	154.53	0.481	9
	131.80	0	10.44	142.24	0.443	10
	0	0	129.53	129.53	0.403	11
	68.42	0	34.31	102.73	0.320	12
	3.11	62.20	8.64	73.95	0.230	13
	30.06	21.20	12.47	63.73	0.198	14
	9.10	30.66	6.39	46.14	0.144	15
	14.40	12.40	14.13	40.93	0.127	16
	0.26	30.41	8.00	38.67	0.120	17
	0	0	32.00	32.00	0.100	18
	22.08	6.40	0.53	29.01	0.090	19
	0	0	27.78	27.78	0.086	20
	0	0	22.22	22.22	0.069	21
	4.46	8.40	7.89	20.75	0.065	22
	8.15	0	10.86	19.01	0.059	23
( )	1.19	12.96	0.53	14.68	0.046	24
	0	0	14.49	14.49	0.045	25
	0.13	0.60	12.89	13.61	0.042	26
	10.80	1.64	0.18	12.62	0.039	27
	0	0	12.44	12.44	0.039	28

	2.92	8.80	0.51	12.23	0.038	29
	0.09	9.04	1.80	10.93	0.034	30
	1.36	0	7.11	8.47	0.026	31
	1.60	2.40	3.56	7.56	0.024	33
	4.08	3.20	0	7.28	0.023	34
	0.30	0	5.78	6.08	0.019	35
	0.01	5.49	0.50	6.00	0.019	36
	0.09	3.30	2.22	5.62	0.017	37
	0	0	5.33	5.33	0.017	38
	0.30	4.68	0.02	5.00	0.016	39
	0.33	3.04	1.55	4.92	0.015	40
	0.74	0.56	3.59	4.89	0.015	41
	0	0	4.51	4.51	0.014	42
	0.12	0.28	3.67	4.07	0.013	43
	0.77	3.12	0	3.89	0.012	44
	0.22	1.54	1.56	3.31	0.010	45
	1.46	1.72	0.11	3.29	0.010	46
	0.73	0.32	2.22	3.27	0.010	47
	0.32	2.30	0.07	2.69	0.0084	48
	1.28	1.20	0.07	2.55	0.0079	49
	0.02	2.28	0.16	2.46	0.0077	50
)	0.71	0	1.73	2.44	0.0076	51
	0	0.40	2.00	2.40	0.0075	52
( )	0.02	0.15	2.11	2.29	0.0071	53
	0	0	2.22	2.22	0.0069	54
( )	1.56	0.55	0.11	2.22	0.0069	55
	1.88	0	0.10	1.98	0.0062	56
	0	0	1.78	1.78	0.0055	57
( )	0.38	0.40	0.60	1.38	0.0043	58
	0	0	1.11	1.11	0.0035	59
	0	0	1.11	1.11	0.0035	60

	0.24	0.84	0	1.08	0.0034	61
	0.40	0.40	0	0.80	0.0025	62
	0	0	0.64	0.64	0.0020	63
	0	0	0.64	0.64	0.0020	64
	0	0	0.64	0.64	0.0020	65
	0.34	0.29	0.01	0.64	0.0020	66
	0.06	0.48	0.02	0.56	0.0018	67
	0.002	0.25	0.02	0.27	0.00085	69
	0	0	0.22	0.22	0.00069	70
	0	0	0.17	0.17	0.00054	71
	0	0	0.10	0.10	0.00030	72
	0.006	0.068	0	0.07	0.00023	73
	0	0	0.04	0.04	0.00011	74
	0	0	0.03	0.03	0.00010	75
	0	0	0.03	0.03	0.00010	76
	12583.31	16874.51	2658.60	32116.42	100	

5.4-3

1		1.589t/a
2		HCl1.213t/a
3		HCl0.119t/a
4		0.7t/a HCl2.4t/a 0.022t/a 0.01t/a VOCs0.0007t/a
5		Pb0.008t/a 0.550t/a 1.414t/a
6		9.9t/a
7		2.238 HCl6.083t/a 0.631t/a 1.390t/a 2.31t/a 5.837t/a
8		0.765t/a 0.406t/a HCl1.32t/a 1.869t/a VOCs2051.476t/a
9		0.22t/a 3.54t/a

10		0.184t/a 0.022t/a 82.46t/a
11		HCl0.011t/a 2.24t/a 0.4t/a VOCs84.927t/a
12		HCl0.007t/a 0.094t/a Pb0.034t/a Cd0.005t/a 0.29t/a 0.78t/a VOCs3.9t/a
13		0.45t/a HCl0.117t/a
14		VOCs245.97t/a
15		1.707t/a VOCs12.19t/a
16		29.568t/a
17		3.691t/a VOCs98.67t/a
18		0.08t/a
19		0.028t/a 1.793t/a 0.017t/a VOCs6.89t/a
20		0.704t/a HCl0.77t/a 3.097t/a 1.832t/a 0.637t/a
21		0.78t/a
22		0.275t/a 0.055t/a HCl0.619t/a 4.23t/a 11.694t/a 0.18t/a VOCs30.71t/a
23		0.015t/a 0.054t/a VOCs
		42.35t/a
24		VOCs3t/a
25		HCl0.08t/a 31.79t/a
26		HCl1.0t/a 0.10t/a 0.44t/a 3.05t/a 1.5t/a 0.05t/a VOCs1.889t/a
27		TVOCs33.48t/a
28		HCl3.698t/a 0.78t/a 0.0005t/a

2010.9

$$Q=0.0079\times v\times w^{0.85}\times p^{0.72}$$

Qi-- kg/km

V-- km/h

W-- t

P-- kg/m2

10t 1km

6.1-1

6.1.4-1 kg/ .km

	0.1kg/m2	**0.2kg/m2**	**0.3kg/m2**	**0.4kg/m2**	**0.5kg/m2**	**0.6kg/m2**
5km/h	0.05328					

6 1 100% 2
100% 3 100% 4 100%
5 100% 6 100%

6.1.4.2

CO

NO NO2 THC

6.1.5

6.1.5.1

+

6.1.5.2

30 50L/ *d 1.5m³/d
0.8 1.2m³/d

6.1.6

1

80 90dB(A)

HJ2034-2013 A A2

6.2.1-1

6.2.1-1

			5m dB A	
1		1	83/5	
2		1	80/5	
3		1	82/5	
4		1	85/5	
5		4	85/5	

A [LA r]

$$L_A(\mathrm{r}) = 10\lg(\sum_{i=1}^{8} 10^{0.1(L_{pi}(r)-\Delta L_i)}) \quad 2$$

Lpi(r)—— (r) i dB

ΔLi—— i A dB

3

HJ2.4-2021

4

6.2.1-2

6.2.1-2 dB A

		X	**Y**					
N1		305	0	53.9	42.2	35.9	58.03	49.37
N2		0	-186	54.4	43.5	30.5	57.01	50.33
N3		-227	0	51	44.3	38.9	54.12	49.88
N4		0	113	56.6	46.4	29.1	53.02	51.6
						0 0		

5.1-2 5.1-1

GB12523-2011

5

960m

6:00~12:00　14:00~22:00

GB12523-2011

6.1.7

6.1.8

1

2

3

6.2

6.2.1

2024

6.2.1-1~6.2.1-2

50km

6.2.1-1

			(°)		/km	/m		
	58252		119.497	32.151	12.34	18.0	2024	

6.2.1-2

/m		/km			
119.496	32.230	12.42	2024		WRF

2024

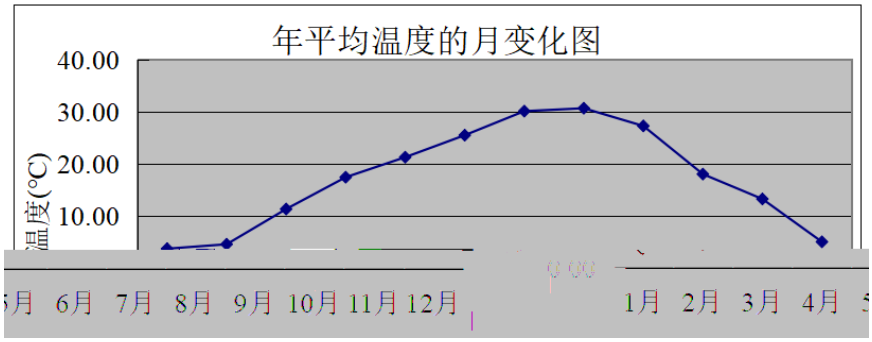
6.2.1-3~ 6.2.1-5 6.2.1-1~ 6.2.1-4

6.2.1-3

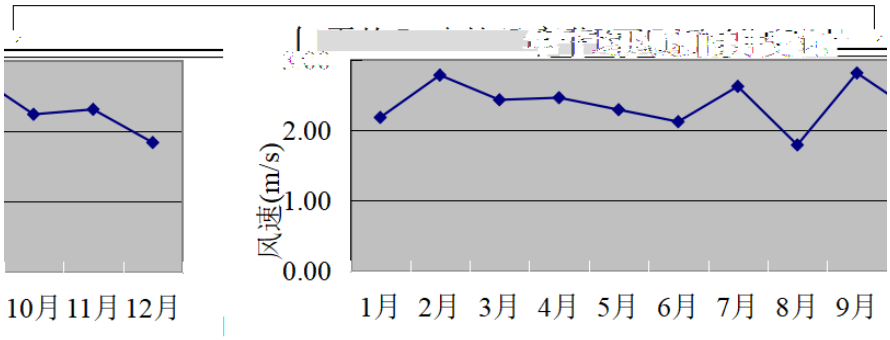
	1	2	3	4	5	6	7	8	9	10	11	12
	3.64	4.49	11.26	17.37	21.22	25.44	30.06	30.62	27.22	17.97	13.19	4.96

6.2.1-4

1 2 3 4 5



6.2.1-1

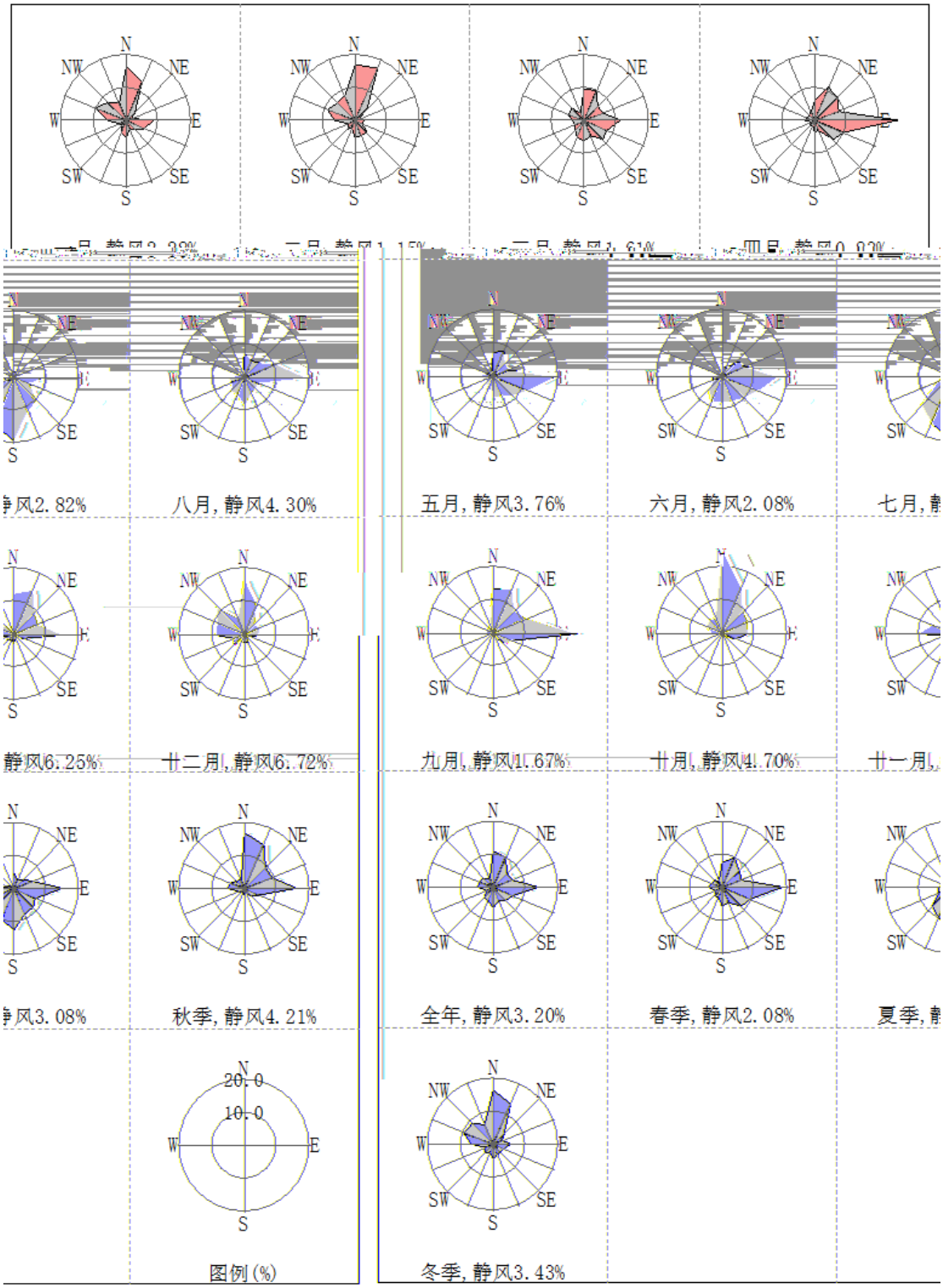


6.2.1-2

6.2.1-3

6.2.1-6

%	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	C
	16.53	12.63	3.36	1.88	8.33	5.91	3.63	2.55	5.11	3.90	2.15	2.15	5.78	10.08	7.93	5.78	2.28
	16.81	17.39	5.46	1.29	2.44	2.30	4.89	4.60	5.03	2.16	3.16	2.01	6.32	9.05	7.61	8.33	1.15
	9.81	10.08	6.18	6.32	11.16	7.12	7.93	4.97	5.91	5.24	3.90	3.09	3.49	5.24	5.51	2	b



6.2.1-4 **20** **2005-2024**

6.2.2

6.2.2.1

6.2.2-1

/	/	
	( )	/
		40.6
		-12.0
	(m)	90
	/m	/
	/°	/

6.2.2.2

TSP

6.2.2-2

		(μg/m³)	
TSP	1	900	GB3095-2012 2018

6.2.2.3

6.2.2-3

		/m									
				/m	**/m**	**/m**	**/ (°)**	**/m**	**/h**		**kg/h**
1	TSP	119.598335	32.169511	36	10	20	95.4	3	4800		0.009

6.2.2.4

EIAProA2018 AERSCREEN AERSCREEN

HJ2.2 A 6.2.2-4

6.2.2-4

m		
	TSP /(μg/m³	**TSP /%**
50.0	39.2800	4.3644
100.0	20.3400	2.2600
200.0	8.9655	0.9962
300.0	5.3661	0.5962
400.0	3.6871	0.4097
500.0	2.7465	0.3052
600.0	2.1555	0.2395
700.0	1.7547	0.1950
800.0	1.4674	0.1630
900.0	1.2529	0.1392
1000.0	1.0874	0.1208
1200.0	0.8507	0.0945
1400.0	0.6909	0.0768

	12.0	12.0
D10%	/	/

6.2.2-5

6.2.2-4 -

3	/				4041—2021 2		0.021
4	/			/	/	/	0.118
			SO2				1.6
			NOx				1.065

		0.7348
	SO2	1.6
	NOx	1.065

		=50km□	5 50km□		=5km
	SO_2+NOx	≥2000t/a□	500~2000t/a□		<500t/a
		TSP)			PM2.5□ PM2.5
			□	D□	□
		□			□
		2024			
		□			
		□			
		□ □	□	□	□
		AERMOD	ADMS□	AUSTAL2000□	EDMS/AEDT□	CALPUFF□	□	□
		≥50km	5 50km□		=5km□
		TSP			$PM_{2.5}$□ $PM_{2.5}$
		≤100%			C 100%□
			≤10%□		10%□
			≤30%□		30%
	1h	/ h	≤100%□		100%□
				□	
		k≤-20%		k -20%□	
				□	□
				1	□
		□			
		/ / m			

		SO_2 1.6 t/a NOx 1.065 t/a 0.7348 t/a VOCs / t/a
“□” “√” “()”		

6.3

2 5

0.24m³/d 3m³/d 0.24m³

300m³/d

21.5m³/d

3 “pH +

”

6.3-2

1		COD			TW001		pH +	DW001		
2		COD SS								
3		SS		/	TW002	+	+	/	/	/

6.3-3

	□	
	□ □ □ □ □ □ □ □ □	
	□	□ □ □
	□ □ pH □ □	□ □ □ □ □
	□ □ A□ B	□ □ □

	□ □ □ □	□	□ □ □ □ □ □ □
	□ □ □ □ □ □ □ □		□ □ □
		40 % □ 40% □	

		□ □ □ □ □ □	□ □ □
	□ □ □	pH	5
		/ km	/ km2
		/	
		I □ II	□ □

□ □ □ □ /

□ □ □ □ □ □

□ □
□
□
□
□ □
□
□ □
□
□

1.6 km / km2

/

□ □ □ □ □ □ □ □ □

		□ □ □ □ □ □ □
		□ □ □ □ □
		□

□ □ □

□ □

□ □

□

	/ t/a	/ mg/L
	/	/
	23758.88	/
COD	0.956	40.2
SS	0.337	14.18
	0.463	19.48
	0.000576	0.0243
	0.00504	0.213
	0.0072	0.303
	0.0000197	0.000829
	0.0000169	0.000709
	0.0000113	0.000473

				/ t/a	/ mg/L

		/	/	/	/	/
		/ m³/s	/ m³/s	/ m³/s	/ m	/ m / m
		□	□	□	□	□
		□ □	□	□		
		/				
		/	pH			
		3.8				

		□
	“□” “√” “()” “ ”	

6.4

6.4.1

6.4.1.1

12000m

130m

( )

--

2

70~100

20~60m

6.4.1-1

			/		

6.4.1.2

1

—

“ ” —

—

— — —

— ——

—

2

6.4.1-1

6.4.2

6.4.2.1

1

1

Q4 5m

Q2-3

10m³/d

2

10m

10~100m³/d

6.4.2-1 **1 50000**

6.4.2.2

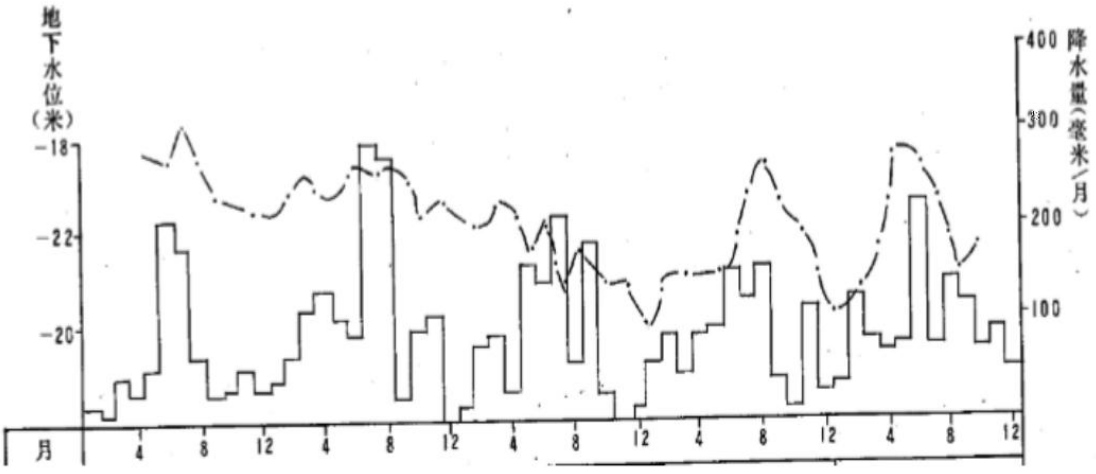
6.4.2-2

6.4.2.3

“ — — ”

6~7 10

6.4.2-4



6.4.2-4

6.4.2.4

6.4.3

1

0.6-1.5m

2 - 0.4-1.7m

3

6.9-9.6m

4

15m 35 15m

35.1 13.0m

5 -

4.8m

1.0m

±1.0m

6.4.4

6.4.4.1

+

6.4.4.2

HJ610-2016

1

2

COD NH_3-N

6.4.4-1

6.4.4-1

		COD mg/L	**NH_3-N mg/L**
		38.8	19.4

CODcr≈kCOD_{Mn} 1.5 k 4 k 1.5 COD_{Mn} 25.9mg/L

3

HJ 610-2016

HJ610-2016

$$\frac{C}{C_0}=\frac{1}{2}\mathrm{erfc}(\frac{x-ut}{2\sqrt{D_L t}})+\frac{1}{2}e^{\frac{ux}{D_L}}\mathrm{erfc}(\frac{x+ut}{2\sqrt{D_L t}})$$

x—— m

t—— d

C——t x g/L

C_0—— g/L

u—— m/d

D_L—— m^2/d

erfc——

1

k 0.5m/d

2

0.1~3‰ 3‰

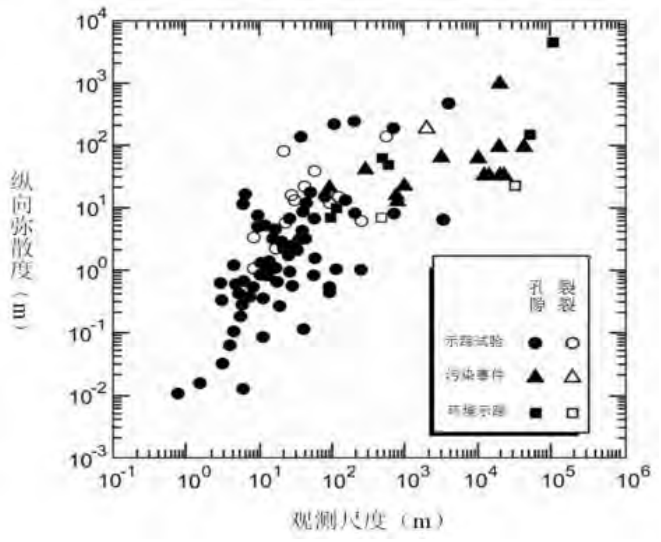
3

0.3085

4

Ls=1000m

αL=10m



6.4.4-1

u K×I/n

DL=αL×um

u— m/d

K— m/d

I—

n—

D_L— m^2/d

α_L—

m— 1.1

6.4.4-2

K m/d	I(‰)		U m/d	D_L m^2/d
0.5	3	0.3085	0.00486	0.0535

0.00486m/d D_L 0.0535m^2/d

6.4.4-3

6.4.4-3

K m/d	I(‰)	aL m	u m/d	n	DL m^2/d	C_0 mg/L	
						COD_{Mn}	NH_3-N
0.5	3	0.0535	0.00486	0.3085	10	38.8	19.4

4

COD_{Mn} 6.4.4-3

6.4.4-4 COD_{Mn}

/	100	1	10
0	38.80	38.80	38.80
5	35.54	36.78	38.12
10	32.15	34.23	37.34
15	28.56	31.45	36.56
20	24.87	28.56	35.78
25	21.02	25.67	34.95
30	17.05	22.78	34.12
35	12.98	19 .87	33.25
40	8.92	16.95	32.34
45	4.87	13.98	31.42
50	2.95	11.02	30.51
55	1.52	8.05	29.56

60	0.87	5.02	28.62
65	0.45	3.01	27.65
70	0.23	1.52	26.67
75	0.12	0.76	25.65
80	0.06	0.38	24.62
85	0.03	0.19	23.58
90	0.01	0.09	22.53
95	0.00	0.05	21.47
100	0.00	0.02	20.41

100 COD

45m 75m 1 COD 65m

85m 10 COD 340m 580m

NH_3-N 6.4.4-5

6.4.4-5 NH_3-N

/ m	100	1	10
0	19.40	19.40	19.40
5	17.77	18.39	19.06
10	16.08	17.15	18.65
15	14.34	15.85	18.19
20	12.56	14.50	17.68
25	10.75	13.10	17.12
30	8.92	11.65	16.51
35	7.08	10.17	15.85
40	5.24	8.66	15.15
45	3.42	7.14	14.41
50	1.65	5.61	13.63
55	0.68	4.10	12.82
60	0.28	2.64	11.98
65	0.12	1.30	11.12
70	0.05	0.63	10.24
75	0.02	0.31	9.35

80	0.01	0.15	8.46
85	0.00	0.07	7.57
90	0.00	0.03	6.69
95	0.00	0.01	5.82
100	0.00	0.00	4.96

100 NH_3-N

55m 65m 1 COD 70m

80m 10 COD 120m 180m

6.5

GB3096-2008 3

+50m +50m

200m 3dB

A

6.5.1

6.5.1.1

HJ2.4-2021

6.5.1.2

2

1 1

6.5.1-1

6.5.1-1

			X	**Y**	**Z**	**/ / dB(A)/m**		
1		/	-110.6	40.4	1.2	86/1		
2		/	-90.5	61.1	1.2	83/1		
3		/	-106.3	44.4	1.2	84/1		
4		/	-86.5	65.4	23	89/1		
5		/	-82.5	61.6	23	85/1		

119.60252188 32.16747868

8 1

Lp(r)=Lp(r0)-(Adiv+Aatm+Agr+Abar+Amisc) 1

b A 2 8

A [LA(r)]

$$L_A(r) = 10\lg\left(\sum_{i=1}^{8} 10^{0.1(L_{pi}(r)-\Delta L_i)}\right)$$

2

Lpi(r)—— (r) i dB

ΔLi—— i A dB

2

HJ2.4-2021

6.5.1.4

6.5.1-2

6.5.1-2 dB A

		X	**Y**					
N1		115	0	53.9	42.5	22.9	58.	44.5
N2		20	-132	54.4	44.2	38.2	57.06	46.4
N3		-86	0	52.4	44.3	41.4	54.23	45.2
N4		0	123	57.2	46.4	21.5	53.00	48.8
					0 0			

6.5.1-2 6.5.1-1

GB12523-2011

GB12348-2008 3 65dB A

55dB A

6.5.1-3

		□ □
		200m 200m□ 200m□
		A A □ □
		□ □

6.6.1-1

6.6.1-1

1			
2			
3			

6.6.1.2

GB18597-2023

1m

≤10-7cm/s 2mm 2mm

≤10-10cm/s

6.6.2

6.6.2.1

2021

6.6.1-2

			t/a				
1		HW08 900-210-08	0.5		10		3
2		HW08 900-217-08	1				3

6.6.2.2

6.6.3

6.7

6.7.1

6.7.1.1

HJ964-2018 A.1

“ ” “

”

6.7.1.2

+

6.7.1-1

6.7.1-1

			√					

6.7.1-1

“ ”

6.7.1.3

6.7.1-2

6.7.1-2

	/				

6.7.2

6.7.2.1

HJ964-2018

0.05km

6.7.2.2

( ) HJ964-2018

0.05km

6.7.2.3

6.7.2.4

6.7.2-1

6.7.2-1

6.7.3

- S— g/kg

Is— g

Ls— g

0

Rs— g

0

ρb— kg/m³ 1400kg/m³

A— m2 18133m2

D— 0.2m

n— a 15

23686.88m³/a 64.89m³/d

0.000615mg/L 0.000823mg/L 0.0298mg/L 0.0199mg/L

10.0176mg/kg 26.285mg/kg

GB36600-2018

6.7.3-2

		□ □	
		□ □	
		1.8109 hm2	
		/ / /	
		□ □ □ ()	

1 1- 1 2- 1 1-
-1 2- -1

		GB36600-2018			
		E F□ /			
		a b □ c □ a □ b □			
		/			
		4	pH		
		/			
		(GB36600-2018)			

1 “□” √ “()” “ ”

2

6.8

1

2

3

4

5

6

1

2

3

6.9

6.9.1

6.9.2

6.9.3

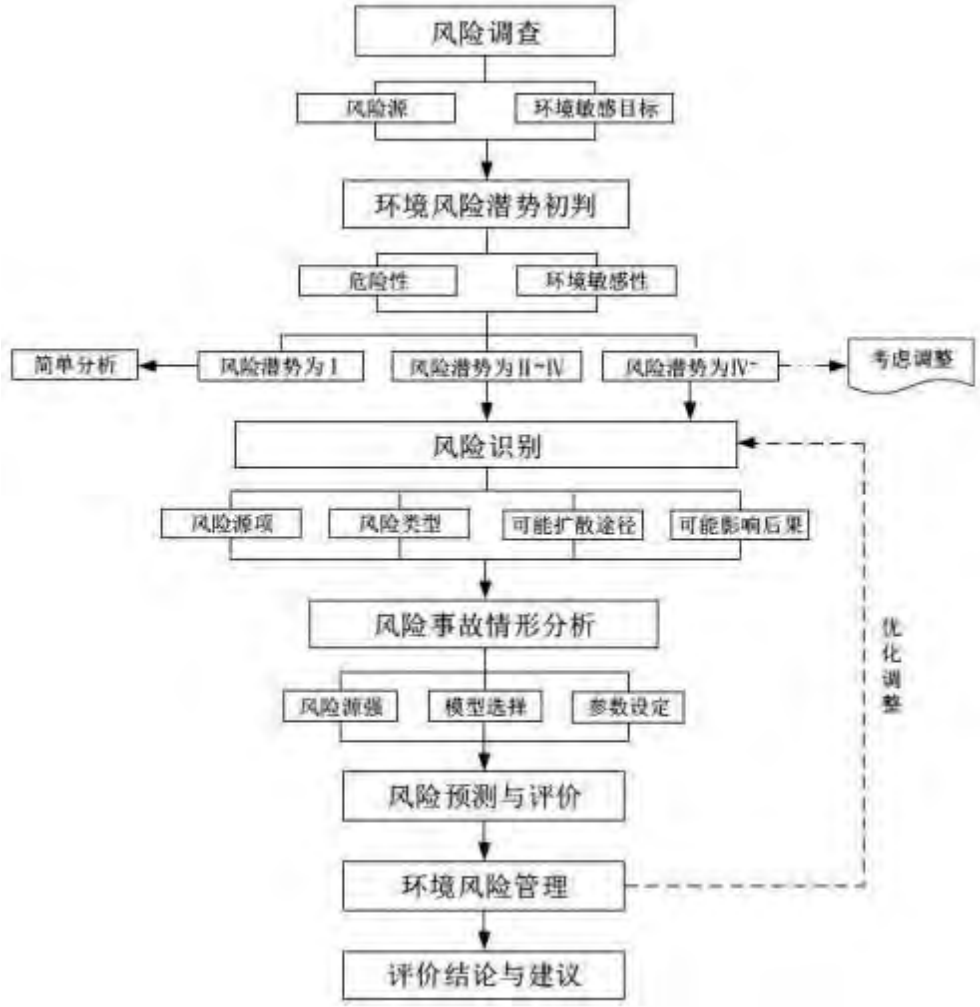
6.10

6.10.1

6.10.1.1

HJ169-2018

6.10.1.2



6.10.1-1

6.10.2

6.10.2.1

1

1

2

3 17.0m 250m

4

5

6.10.2.2

6.10.2-1

6.10.2-1

			/ **m**			
			2068.9	800		(GB3095-2012)
			2439.9	35000		
			2515.8	800		
			2605.5	800		
			2919	800		
			3039.6	800		
			3398.1	1500		

			3630.8	2500		
			4011	10000		
			4174	800		
			4343.3	2000		
			4674.1	800		
				5660	/	

6.9-1

6.10.3

6.10.3.1 E

1

E1 E2 E3

6.10.3-1

6.10.3-1

E1

GB3838-2002 III

F2

6.10.3-4

S1	10km
S2	10km
S3	10km 1 2

10km

S1

F1 S1

6.10.3-2 E1

3

E1

E2 E3 6.10.3-5

6.10.3-6

6.10.3-7 G D

6.10.3-5

	G1	**G2**	**G3**
D1	E1	E1	E2
D2	E1	E2	E3

D3	E2	E3	E3

6.10.3-6

G1	
G2	a
G3	

a“ ”

HJ169-2018 D D.6 G3

6.10.3-7

D3	Mb≥1.0m K≤1.0×10^{-6}cm/s
D2	0.5≤Mb 1.0m K≤1.0×10^{-6}cm/s Mb≥1.0m 1.0×10^{-6}cm/s K≤1.0×10^{-4}cm/s
D1	“D2” “D3”
	Mb K

D2

0.5≤Mb 1.0m HJ169-2018 D

D.7 D2

6.10.3-5 E2

6.10.3.2 **P**

HJ169-2018

P Q

M

1 Q

HJ169-2018 C Q

$$Q = \frac{q_1}{Q_1} + \frac{q_2}{Q_2} + \cdots \frac{q_n}{Q_n}$$

q1 q2 … qn— t

Q1 Q2 … Qn— t

Q 1

Q≥1 Q 1 1≤Q 10 2 10≤Q 100 3 Q≥100

HJ169-2018 C

6.10.3-9

6.10.3-8 **Q**

		CAS	**qn/t**	**Qn/t**	**Q**
1		7439-97-6	0.000004871	0.25	0.000019484
2		7440-38-2	0.000006521	0.25	0.000026084
3		/	0.000236	0.5	0.000472
4		/	0.5	50	0.01
5		/	1	50	0.02
6		/	2	200	0.01
7	PAM PAC	/	2	200	0.01
					0.050517568

Q 1 I

6.10.4

HJ169-2018

6.10.4-1

6.10.4-1

	+			

700 11 41

33

73 4 17 3

14 33 24 3

6 90 4630

GB/T6721-1986

4 7

6 30

3

“ ”

2019 10 21

“ ” “

” “ ” 2020 7 3

HJ169-2018

B

COD NH3-N SS B

1

2

6.10.5.3

HJ169-2018

6.10.5-1

1							/
2							/

6.10.6

“ ”

6.10.7

1

1

2

1m

3

4

5 1.5mmHDPE

HDPE

2

6.10.8

6.10.8-1

								PAM	
		/t	0.000004871	0.000006521	0.000236	0.5	1	1	2
			500m		0		5km	53000	
			200m			( )			/
					F1		F2□		F3□
					S1		S2□		S3□
					G1□		G2□		G3
					D1		D2□		D3□
		Q	Q 1		1≤Q 10□		10≤Q 100□		Q 100□
		M	M1		M2□		m^3□		M4□
		P	P1□		P2□		P3□		P4□
			E1		E2□			E3□	
			E1		E2□			E3□	
			E1□		E2			E3□	
		+□		□	□		□		I
		□			□		□		
						□			
						/		□	
				□	□			□	
				SLAB□	AFTOX□			□	
				-1			/m		
				-2			/m		

/

7

7.1

7.1.1

70-80% 90%

4~5 TSP

20-50m

7.1.2

+

7.1.3

7.1.4

7.1.5

7.1.6

1

“ ”

“

”

“ ”

7.2.3

7.2.3.1

1

2

3 4 4.5m

4 15km/h

5

6

7.2.3.2

1

2

3

7.2.3.3

1

2

HDPE

3

4 HDPE

HDPE

7.2.3.4

HJ1033-2019 C C.1“

”

“

”

7.3

7.3.1

7.3.2

+35m

7.3.3

1

64.89m3/d

34560m³ 1307.2m3

26.4

2

1.296m³/d +

3

0.16m3/d

7.3.4

1

1

500m³/d

64.89m³/d 64.89m³/d

2

“pH + ”

3

399m

7.3.4

7.4.2-1

		/ 1.0×10-5cm/s 0.75m	
			0.5m +0.5m

7.4.3

GB18599-2020

3 1 2

I

7.5

1

2

15km/h

3

7.6

7.7

“ ”

7.7.1

7.7.2

7.7.3

HJ964-2018

HJ964-2018 GB18599-2020

7.7.3-1

7.7.3-1

1	1#	pH		
2	2#			
3	3#			

4	4#			GB36600-2018

2

1

2

7.8

7.8.1

1

2

3

4

7.8.2

1

2

3

4

5

6

8

8.1

1056.34

8.2

1

2

8.3

8.3.1

1059.32 858.95 131.06

69.30 8.3.1-1~8.3.1-7

8.3.1-1

1					86.37
1.1					41.41
1.1.1		m^3	18363.27	7.00	12.85
1.1.2		m^3	1945.00	68.00	13.23
1.1.3		m^3	28.00	550.00	1.54
1.1.4		m^2	1270.00	35.00	4.45
1.2					4.67
1.2.1		m^2	2920.00	16.00	4.67

1.3

1.3.8		m^3	2041.00	18.00	3.67
1.3.9		m^2	2920.00	5.00	1.46

8.3.1-2

2					34.02
2.1		m2	5000.00	18.00	9.00
2.2		m2	5000.00	38.00	19.00
2.3		m2	2920.00	9.00	2.63
2.4		m3	529.60	18.00	0.95
2.5		m3	105.92	136.00	1.44
2.6		m2	2000.00	5.00	1.00

8.3.1-3

3					21.03
3.1					12.81
3.1.1	C25	m3	4.50	380.00	0.17
3.1.2		t	6.50	4850.00	3.15
3.1.3		m3	77.90	680.00	5.30
3.1.4		m3	1.39	2000.00	0.28
3.1.5			1.00	1200.00	0.12
3.1.6		m	800.00	35.00	2.80
3.1.7	DN50 PE	m	300.00	25.00	0.75
3.1.8		m	13.50	180.00	0.24
3.2					4.94
3.2.1		m2	1463.00	18.00	2.63
3.2.2		m3	112.86	138.00	1.56
3.2.3	DN75 PE	m	209.00	36.00	0.75
3.3					0.86
3.3.1	MY150	m	150.00	35.00	0.53
3.3.2	DN75PE	m	120.00	28.00	0.34
3.4					2.41
3.4.1		m	5.00	865.00	0.43

3.4.2			1.00	16000.00	1.60
3.4.3		m	56.00	68.00	0.38

8.3.1-4

4					17.79
4.1		m	24.00	380.00	0.91
4.2		m	112.00	380.00	4.26
4.3		m	263.00	480.00	12.62

8.3.1-5

5					7.08
5.1			1.00	60000	6.00
5.2			6.00	1800	1.08

8.3.1-6

6					583.44
6.1		m3	147000.00	26.00	382.20
6.2		m3	147000.00	12.00	176.40
6.3		m3	1380.00	180.00	24.84

8.3.1-7

7					38.30
7.1		m2	14729.00	5.00	7.36
7.2		m3	7364.50	28.00	20.62
7.3		m2	14729.00	7.00	10.31

8.3.2

1

2

3

8.4

9

9.1

9.1.1

5-6

9.1.2

1

2

3

4

5 TSP

9.1.3

1 “ ”

2

3

4

5

6

7

8

9.1.4

1

2

3

4

5

9.2

9.2.1

9.2-1

9.2.1-1

1	/							/	/
2	/							/	/
3	/							/	/

9.2.1-2

9.2.1-2

	COD SS			pH +		DW001		/
	COD			pH +				

	SS	+		+		/	/	/

9.2.2

9.2.2.1

9.2.2-1

9.2.2-1

								/
			(m)	**(m)**				**t/a**
						(mg/m³)	**kg/h**	
1			/	/	DB32 4041—2021	0.5	/	0.5823
2			/	/	DB32 4041—2021	0.5	/	0.0135
3			/	/	DB32 4041—2021	0.5	/	0.021

9.2.2.2

+

9.2.3

1

2

3

4

5

6

1

2

3

4

5

9.3

“ ”

9.3.1

9.3.2

2

3 “ ”

4

9.4

HJ819-2017

HJ1033-2019

HJ2.2-2018

HJ2.4-2021 HJ964-2018

HJ610-2016

18599-2020

DB34/T4541-2023

9.4.1

9.4.2

9.4.2-1 9.4.2-2

9.4.2-1

		1 /	DB32 4041—2021

9.4.2-2

		1 /	GB3095-2012

9.4.3

9.4.3-1

1		pH		/	/	/	/	4	1 /	pH HJ1147-2020
2				/	/	/	/	4	1 /	HJ828-2017
3				/	/	/	/	-Ü &G÷ g8# G÷ g8#		

DW001

										GB/T7485-1987
9				/	/	/	/	4	1 /	F^- Cl^- NO_2^- Br^- NO_3^- PO_4^{3-} SO_3^{2-} SO_4^{2-} HJ84-2016
10				/	/	/	/	4	1 /	HJ597-2011
11				/	/	/	/	4	1 /	HJ1226-2021
12				/	/	/	/	4	1 /	GB/T7471-1987
13				/	/	/	/	4	1 /	GB/T13896-92
14				/	/	/	/	4	1 /	- HJ908-2017

9.4.4

GB12348-2008

9.4.4-1

N1		LeqdB A	GB12348-2008
N2			
N3			
N4			

9.4.5

18599-2020

DB/T4541-2023

HJ610-2016 5

1 2

2

pH

1

2

1

2

9.4.5-1

#{77

9.4.6-1

1	1#	pH		
2	2#			
3	3#			
4	4#			GB36600-2018

9.4.7

1

2

3

4 TSP

9.5

“

”

9.5-1

103	772		/	/

[2021]7 “ ”

“ ”

9.6

--- ( )

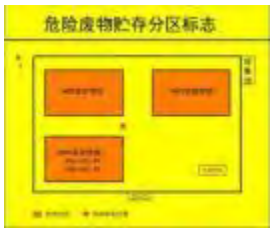
( ) “

”

1

2

3 ( )

		/	/

9.7 “ ”

“ ” 9.7-1

9.7-1 “ ”

			DB32 4041—2021	
		5		
		+		
		34560 m³		
			GB12348-2008	
			5	

10

10.1

N7723

2511-321171-89-01-403172

18133m2

5

14.7 m³

C

14.7 m3

10.2

2023-2025

2022-2024

GB3838-2002 2024

2023

GB3838-2002 2022 2024

2024 3 25

MST20240312049-1

pH COD BOD5

GB3838-2002 1

GB3838-2002 II

2023 2023

PM2.5 PM10

37 / 57 / 5 / 29 /

0.9 / 174 /

GB3095-2012 PM2.5

2024 1 3 ~1 9

MST20231229007-1

HJ2.2-2018

D

GB3095-2012

MST2023014Y

NOx

GB3095-2012

2024 1 6 ~1 7

MST20231229007-1

GB3096-2008 3

2024 1 9

MST20231229007-1

GB/T14848-2017

2024 1 9

MST20231229007-1

GB36600-2018

DB13/T5216-2020

DB4403/T67-2020

10.3

10.3-1

10.3-1 **t/a**

		23758.88	/	23758.88	0
	COD	0.956	/	0.956	

10.4

10.4.1

1 2024

2

4.83% 10%

3 0.7348t

1.6t 1.065t

4

10.4.2

10.4.3

10.4.4

10.4.5

10.4.6

10.4.7

10.4.8

10.5

10.6

“ ” 10.6-1

10.6-1 “ ”

			DB32
	5		4041—2021
		+	/
			/
		11520 m³	/
			GB12348-2008 2
			/
	/		/

10.7

1056.34 890.38 24%

10.9

GB18599-2020 “ ”

“ ”