2

2020 1

1

30

2018-2020

6

213344 320

2

45000 87338 131

2

GB/T4754-2017 C3511

C3521

682

1

70

10

1 2019 12 18

2

3

4

5

6

3

1

2015 33

2015 23

2019

2

4

2019

2019-410822-35-03-067008

3

7

1

2

3

4

a.

1#

2#

1#

“ ” “

+ ”

“ + ”

20m 1#

20m 2#

2#

2#

20m 3# 4# 2#

20m 5#

“

” “ + ”

“

+ ”

20m 6# 2#

20m

7#

20m 8#

(GB16297-1996) 2 2019

[2019]76

GB16297-1996 2

[2017]162 1

GB14554-93 2

100m

b.

COD SS NH_3-N

c.

150m^2

50m^2

d.

GB12348-2008 3

5

a.

HJ2.2-2018

b.

HJ/T2.3-93

B

c.

HJ610-2016

d.

HJ2.4-2009

e.

HJ169-2018

6

7

8

9

10

1.1

1.1.1

1 2015 1 1

2 2016 9 1

3 2018 10 26

4 2018 1 1

5 2016 11 7

6 2018 12 29

7 2018 12 29

8 2011 3 1

9 2004 8 28

10 682

11 2016 3 29

12 1999 10 1

13 2005

39

14 1996 31

15 44

16 1

17 2011 2013

18

2012 77

19

2012 98

20 2007 5 1

21 4

22 2016

23 1999 10 1

24

2015 33

25

2015 23

26 2019

[2019]76

27

28 2018 2020

29 2019

30

2019 3

1.1.2

1 HJ2.1-2016

2 HJ2.2-2018

3 HJ2.3-2018

4 HJ2.4-2009

5 HJ610-2016

6 HJ 169-2018

7 HJ2042-2014

8

GB36600-2018

9 (GB 34330 2017)

10 - GB5058.7-2007

11 GB15603-1995

12 2016 8 1

13 GB/T13201-91

14 GB3839-83

15 GB18598-2001

16 GB18597-2001

1.1.3

1 2

2 2

3 2

。

4 2

1.2

2

1.3

1.3.1

1.3.2

1

2

3

4

5

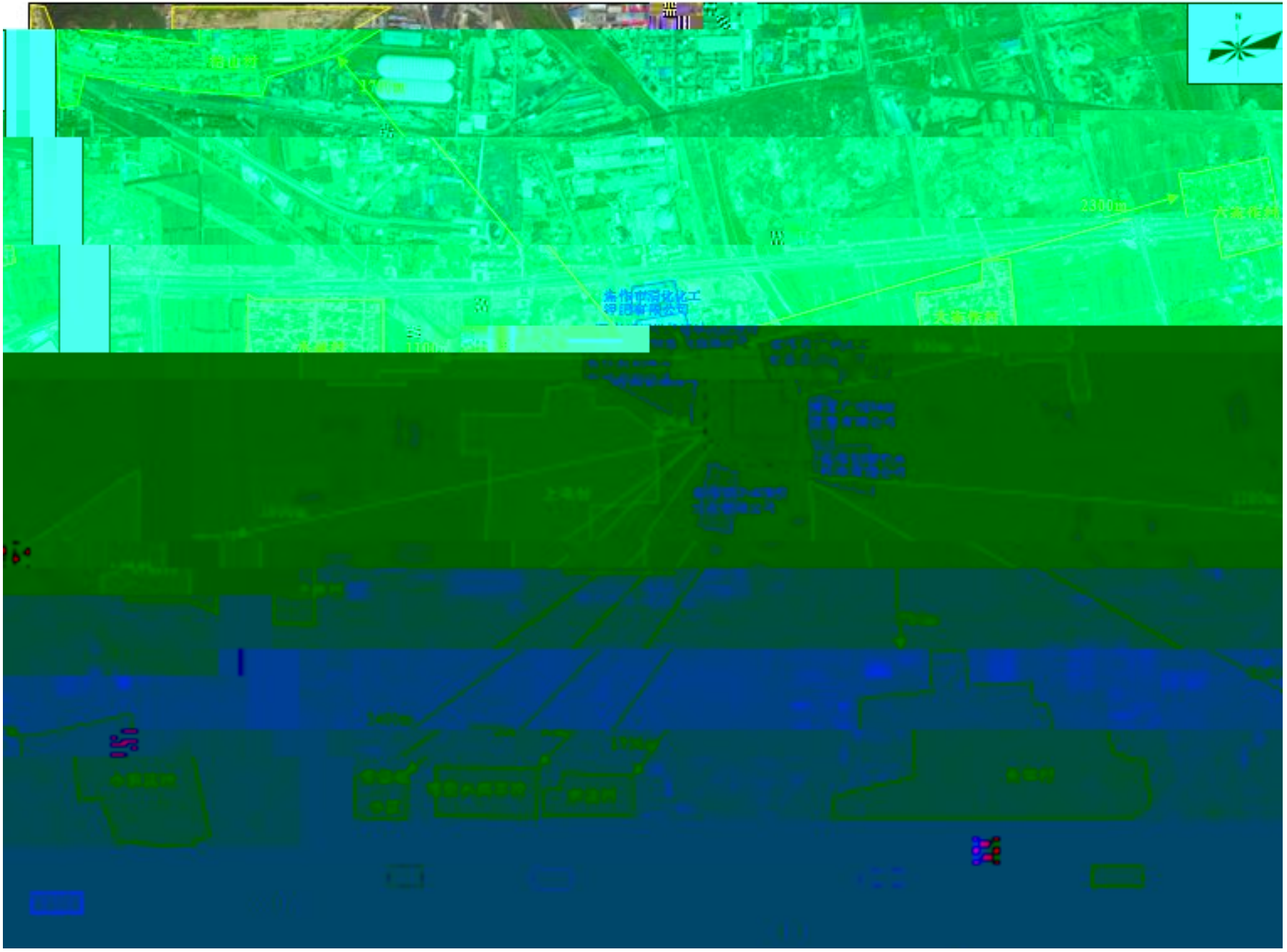
6

7

1.4

200m

1


N
2300m

1.5

1.5.1

1-1

1-1

		-1SP	-1SP		-1LP			-1LP	-1SP
		-1SP		-1LP					-1SP
				-1LP		-1LP			-1SP
		-1SP	-1SP				-1LP	-1LP	
		-1SP			-1LP				-1SP
		-1SP		-1LP	-1LP				-1SP
		-1SP							

+ - S— L— P— 1—

2— 3—

1.5.2

1-2

1-2

	PM_{10} $PM_{2.5}$ SO_2 NO_2 CO O_3	PM_{10}	PM_{10} VOCs
	pH COD SS NH_3-N	COD SS NH_3-N	COD NH_3-N
	K^+ Na^+ Ca^{2+} Mg^{2+} CO_3^{2-} HCO_3^- Cl^- SO_4^{2-} pH		/

	A	A	/
	/		/

1.6

1.6.1

HJ2.2-2018

5km

1.6.2

HJ2.3-2018

B

1-4

1-4

		Q/ m^3/d W/
		Q 2000 W 600000

A		Q<200 W<6000
B		-
	B	

1.6.3

HJ610-2016

1-5

1-5

	“K 71	
	1 500m 3100 140m HJ 610-2016 6.2.1.2 1 “ ”	

1.6.4

HJ2.4-2009

1-6

1-6

3	<3dB A		

1.6.5

II

1.7

1.7.1

1-7

1-7

	5km 25km^2
	200m
	3km

1.7.2

1-8

1-8

m

113.105418 35.197542

	113.085056	35. 193814		SW	2000		
	113.137606	35. 193921		SE	2200		
	113.136082	35. 206023		NE	2300		
	113.085614	35. 184437		SW	2400		
				SW	5470		GB/T14848-2017
				SW	5440		
				SE	5300		GB3838-2002

1.8

1.8.1

1-9

1-9

GB3095-2012	PM_{10}	24	$\mu g/m^3$	150
				70
	$PM_{2.5}$	24	$\mu g/m^3$	70
				35
	SO_2	1	$\mu g/m^3$	500
		24		150
				60
	NO_2	1	$\mu g/m^3$	200
		24		80
				40
	CO	1	mg/m^3	10.0
		24		4.0
	O_3	1	$\mu g/m^3$	200
		8		160
		1	mg/m^3	2.0
HJ2.2-2018 D		1	$\mu g/m^3$	200
		1	$\mu g/m^3$	200
		1	$\mu g/m^3$	10

GB3838-2002	pH	/		6-9
	COD	≤	mg/L	30
	NH_3-N	≤	mg/L	1.5
GB/T14848-2017	pH	/		6.5-8.5
	COD_{Mn}	≤	mg/L	3.0
	N	≤	mg/L	0.5
	$CaCO_3$	≤	mg/L	450
		≤	mg/L	1000
		≤	mg/L	250
	N	≤	mg/L	20
		≤	mg/L	0.002
	N	≤	mg/L	1.0
		≤	mg/L	1.0
		≤	mg/L	0.05
		≤	mg/L	250
		≤	mg/L	0.3
		≤	mg/L	0.1
		≤	mg/L	0.01
		≤	mg/L	0.001
		≤	mg/L	0.05
		≤	mg/L	0.01
		≤	mg/L	0.005
		≤	CFU/100 ml	3.0
		≤	CFU/100 ml	100
		≤	μg /L	700
		≤	μg /L	500
		≤	μg /L	20.0
GB5749-2006		≤	mg/L	0.3
GB3096-2008 3	Leq		dB(A)	65
			dB(A)	55

1.8.2

1-10

1-10

			20m	kg/h	5.9
				mg/m^3	1.0
	(GB16297-1996) 2		20m	kg/h	5.2
			20m	kg/h	1.7
			20m	kg/h	17
	2019 [2019]76			mg/m^3	10
	[2017]162			mg/m^3	60
				%	70
				mg/m^3	2.0
				mg/m^3	20
				mg/m^3	0.6
				mg/m^3	0.2
	GB14554-93 2 1		20m	kg/h	12
				mg/m^3	5.0
		COD		≤390mg/L	
		SS		≤200mg/L	
		NH_3-N		≤35mg/L	
	GB18599-2001 2013				
	GB18597-2001 2013				
	(GB12348-2008)3	Leq		65dB(A)	

1.8.3

1

2

3

4 GB/T13201-91

5 GB/T3839-83

1.9

1.9.1

1.9.1.1

1

2

3

4

5

6

7

8

9

10

11

12

1.9.1.2

1

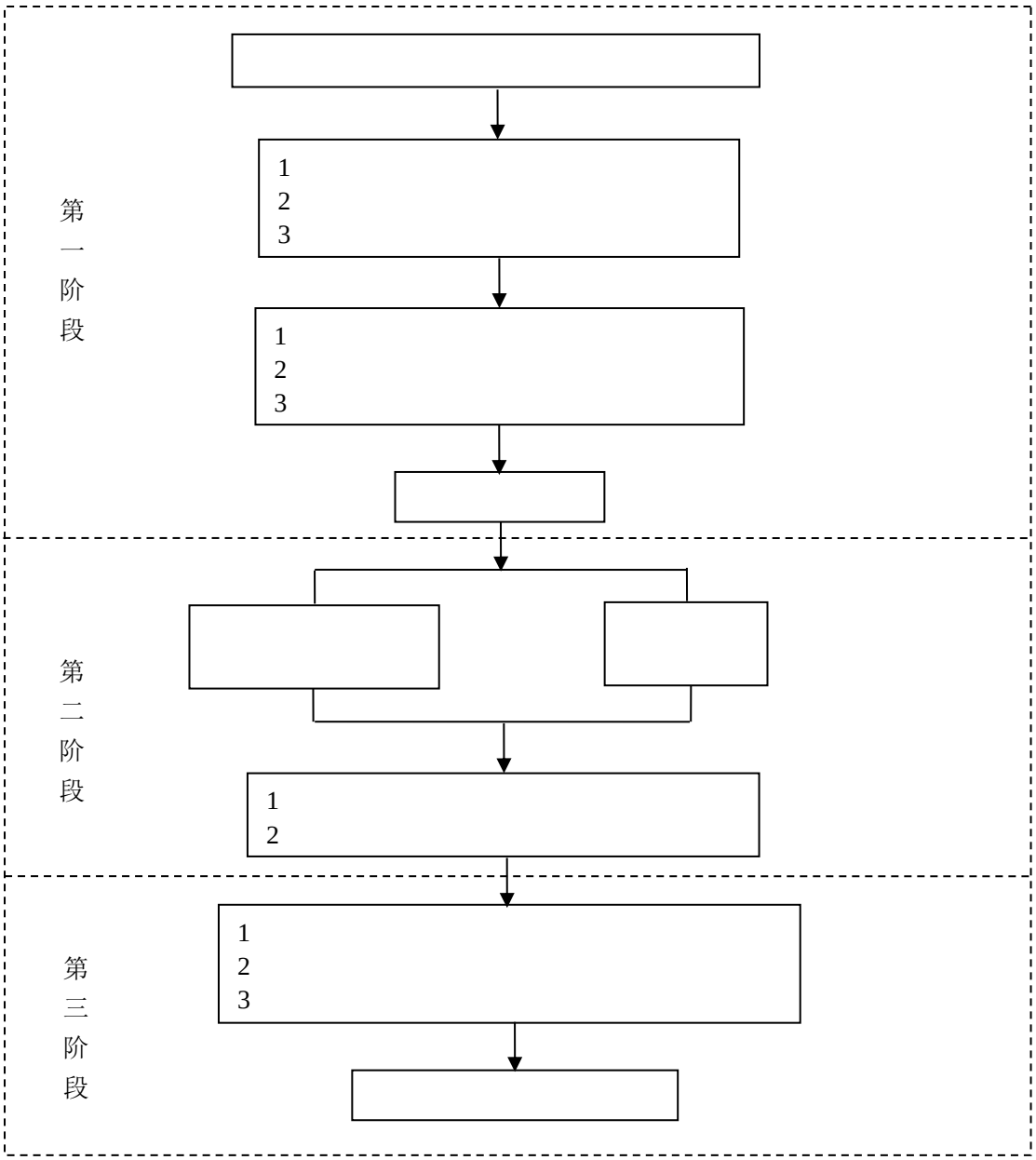
2

3

4

1.9.2

1-1



1-1

2.1

2.1.1

35°02′~ 35°21′ 112°57′~113°12′

435km^2 169.5km^2 39%

265.5km^2 61%

113.109961 35.198706

2.1.2

152

7

-- 800-1000m

7

2.1.4

3 6

19 44

5m

2.1.5

1.9m/s

ENE 2-1

2-1

	2432.6h		30m/s
	14.1		597.1mm
	-17.8		1850.5mm
	43.3		216d
	1.9m/s		ENE

2.1.5

1

20

92 18.84%

8 385.70

79%

20.93 1500 2000 200 20

100 800 1000 4000

11.28 2000 7

639m3/s

162

35

5 7

8 10 1500 2000 3.09

1988 6 28 471m^3/s 1995 6 3

405m^3/s 1998 5 31 642m^3/s

115.5 30 100 500

400

800

0.3 0.5 11

27 25 7

18 15 55

40

22

7 30

16.6

5 15 0.5 1.5 / 0.3 0.8

10 15

14.9 10 3

11

11 2.6

3 70

2

4

5

“ ”

2008~2020

2.2.3

2019 8

2019

12 2 [2019]64

1

174.21 2613

2

3

66.81 38.35%

5.67 3.26%

28.60 16.24%

2.03

1.17%

7.87 4.52%

52.96

30.40%

70

[2015]33 6

4

1

1.2 1.0

0.6 1.0

60% 40%

30% 35%

5%

10%

2

50m 80m

15m

80m

3

20% 20%

25%

5

1

5868.342 /

DN800 DN900

2

4988 /

DN600

3

2-DN800

4

110kV

19479.94

10kV

10kV

5

6

D160

7

DN500

8

120

3.6 7

160

9

2.2.2 2015-2020

2017

2015-2020 2017 6 27

[2017]18

19.7km^2 -

1

2015-2020 2015-2017 2018-2020

2

- - -

7.07

600

18.35

3

4

[2016]14

2015-2020

2-2

2-3

[2015]33 6

2.3

2.3.1

1

3

8

3152km^2 3.09 m^3

5 m^3/d

0.7 /

2

2014 1

[2013]107

3 1 1

a

1000 100 50

50

5 / 50

50 30 5 /

50 30

b

2000 200

c

359

5470m 5440m

2.3.2

25.545km

40

260~265m³⁄s 310~320m³⁄s 260m³⁄s

310m³⁄s 4293.83 m^3 3950.28

m^3 255.79 m^3 47.76 m^3 2.47

40.01 m^3 350169.39

243402.25 48 2008 12 26

2018 56

HZ019+447.4~HZ028+486.1 9038.7m

100m 1000m

5300m

2.4

2-4

2-4

	t/a		
	COD	NH_3-N	SO_2
	457	13.7	393
	1.35	0.4	52.24
	0.09	0.01	9.1
	0.77	0.1	/
	0.1	0.02	/
	13	0.3	1.1
	0.3	0.05	5.8
	180	10	8

3.1

3.1.1

213344 320 6

3-2 3-3

3-2

		/	t/a	/a
		PE600×900-PE1500×1800	0.3	220
		φ3.0m -φ6.0m	0.6	50
		φ3.6m -φ5.5m	0.5	20
		φ1.0m -φ3.6m	0.2	60
		φ1.0m -φ3.6m	0.3	80
		φ1.0m -φ3.6m	0.1	10
		-	2	440

3-3

	/		-
			-
		-	
			-
			-
		-	
		-	

3.1.3

3.1.3.1

1# 1# 2# 2#

3#

3-4

3-4

					m^2	
	1#		1	1	38840	
	2#		1	1	26450	
	1#		1	1	104	1#
	2#		1	1	104	1#
	3#		1	1	104	2#
			1	1	163	2#
		-	2	-	5750	1# 2#
			1	5	6829	
			1	4	1296	
			1	3	1090	
			1	1	200	
			1	1	148	O_2 CO_2
			1	1	68	

1

3.1.4

3-5

3-5

/

1#		
1	X52K	3
2	X53K	1
3	-	1
4	CNC1B	1
5	TK6922A	1

18		B5032K	1	
19		B5050K	1	
20		DVT630x35/63	1	
21		C1550	1	
22		CQ5250A	1	
23		C5235	1	
24		DVT350x25/32	1	
25	50	CW61100	1	
26	40	CW6810C	1	
27	30	CA6163B	3	
28		C6140	2	
29		C5116A	1	
30		-	1	
31		C5225x16/10	1	
32		C5225	1	
33		C5225-H2.2	1	
34		CW61800	1	
35		QTC5000	1	
36		C5116A	1	
37		CK5250	1	
38		CCK61250	1	
39		M1450A	1	
40		M1350A	1	
41		M920	1	
42		M7130	1	
43		M131W	1	
44		M6450	1	
45		Y3150E	2	

46		Y3180H	1	
47		YN31125	1	
48		Y31800C	1	
49		Y31500A	1	
50		Y31315	1	
51		MYQ31315A	1	
52		CT3X15	1	
53		Z3080	6	
54		Z3050	4	
55		Z3040	1	
56		Z310	1	
57		Z3540	1	
58		-	10	
59		-	2	
60		100t	2	
61		75t	2	
62		50t	2	
63		32t	2	
64		20t	1	
65		10t	1	
66		-	2	
2#				
67		XB-12000	1	
68		6.3X2000	1	
69		-	4	
70		KDW11-30x2500	1	
71		WLL-50X3000	1	
72		G4240	2	

73		QC112Y-12X6000	1	
74		MZ-1000	1	
75		ME-1000	1	
76		HT-1	1	
77		CZ4x7	1	
78		-	10	
79		-	3	
80		-	15	
81		-	5	
82		-	4	
83		ZXG-630	2	
84		CNC-CG4000A	1	
85		-	3	
86		-	26	
87		-	3	
88		-	1	
89		JR-250	1	
90		-	1	
91		RT3-45	1	
92		DRZ-12	1	
93		RT-75	1	
94		75t	2	
95		50t	2	
96		32t	2	
97		20t	1	
98		10t	1	
99		-	1	
100		-	1	

3.1.5

3-6 3-7

3-8 3-9 3-10

3-6

			t/a	11000	
			t/a	1500	
			t/a	500	
			t/a	2000	
			t/a	4000	
			/a	290	
			/a	290	
			/a	290	
			/a	290	
			/a	290	
			/a	290	
			/a	290	
			/a	290	
			/a	150	
			/a	150	
			/a	150	
			/a	150	
			/a	150	
			t/a	5.81	

			t/a	2.64	
			t/a	1.72	
			t/a	5.15	
			t/a	3.83	
			t/a	1.5	100:5
			t/a	1.5	
			t/a	1.5	1:5
			t/a	5	
			t/a	1	
			t/a	3	
			t/a	80	
			t/a	5	
			t/a	400	
			t/a	108	
			t/a	280	
			t/a	0.1	
			t/a	8	
			t/a	0.5	
			m^3/a	6080.43	
			kWh/a	20	

3-7

		%
		60
		5
	200#	30
		2
		3

			55
			5
		200#	35
			2
			3
		200#	85
			5
			10
			30
			30
			20
			20
			30
			15
			30
		200#	25
100:5			30 4
			65
			3
			2
			49
			49
			2

3-8

		0.866 -95 110.6 1.4967 4.4 5000mg/kg
		0.86

		20/4 27.2 46.1
	200#	140 -200 20 0.79g/m3 33
		789kg/m 20 46.07 -114 78 13
		100 1.5 3
		0.05%
		0.8 PH 7.0 173-357 52 198 UFL 6.0% LFL 1.3% 2mmHg 20
		1.429g/L( ) 1.149g/cm^3( ) 1.426g/cm^3( ) -218.4 -182.962 4.89mg/100 (0)
		0.5005 0 -187.6 85.5K -42.09 231.1K 450 2217.8KJ/mol 96.8 4.20mPa -104 450
		1.977 0 5.07MPa 50 1.101 -37 -78.5 -56.5 5.2×10^{5}Pa -21.1 0.415 MPa CO_2
		39.95 202.64kPa(-179) -189.2 -185.7 “ ”

3-9

m^2 /a

3

1

3.1.7

300 50

300 8

3.2

3.2.1

3.2.1.1

/

1 /

/

625 2h

10~20min

40~60 1-2

2

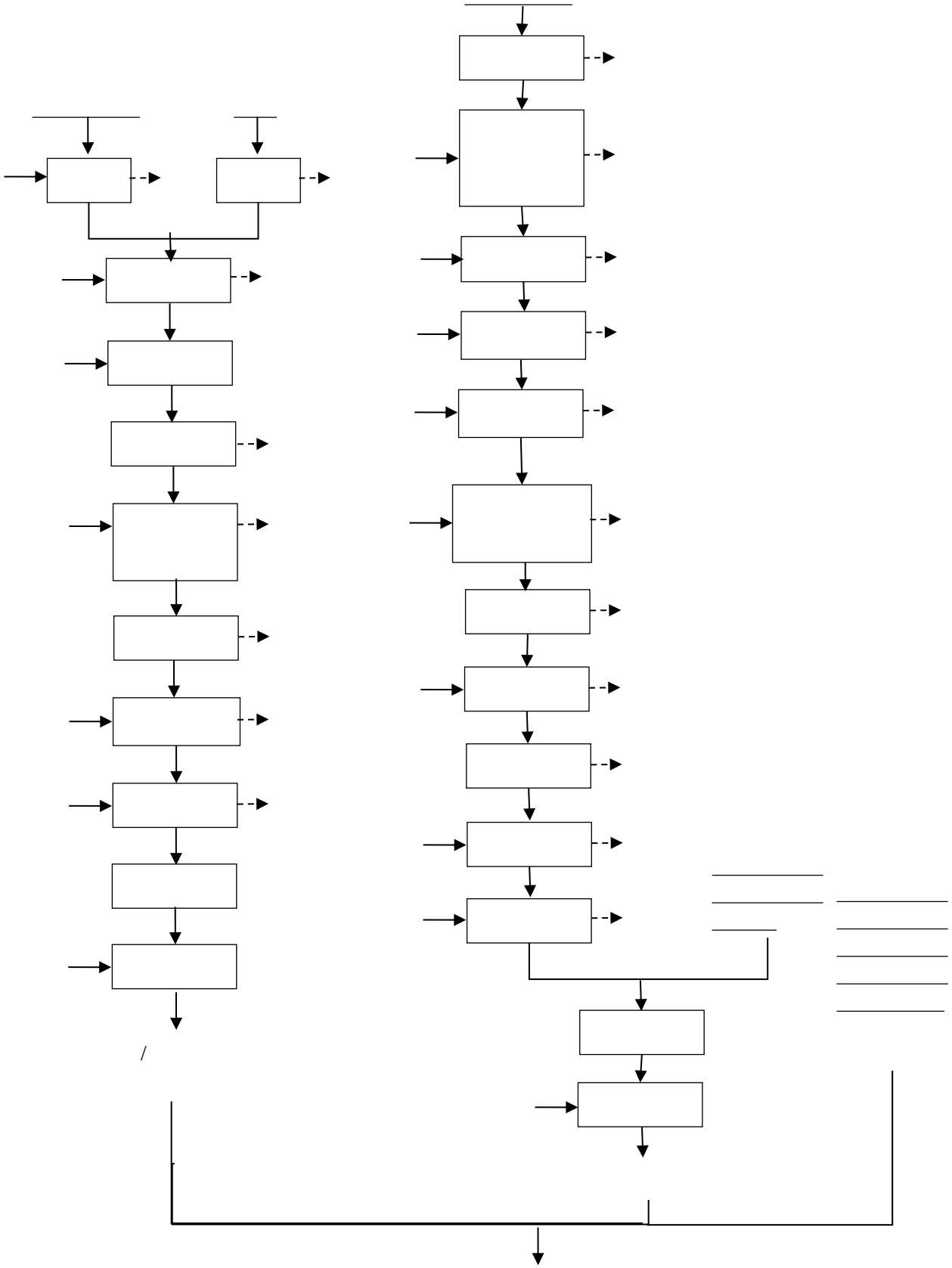
1 1

110

/

3

3-1



/

3-1

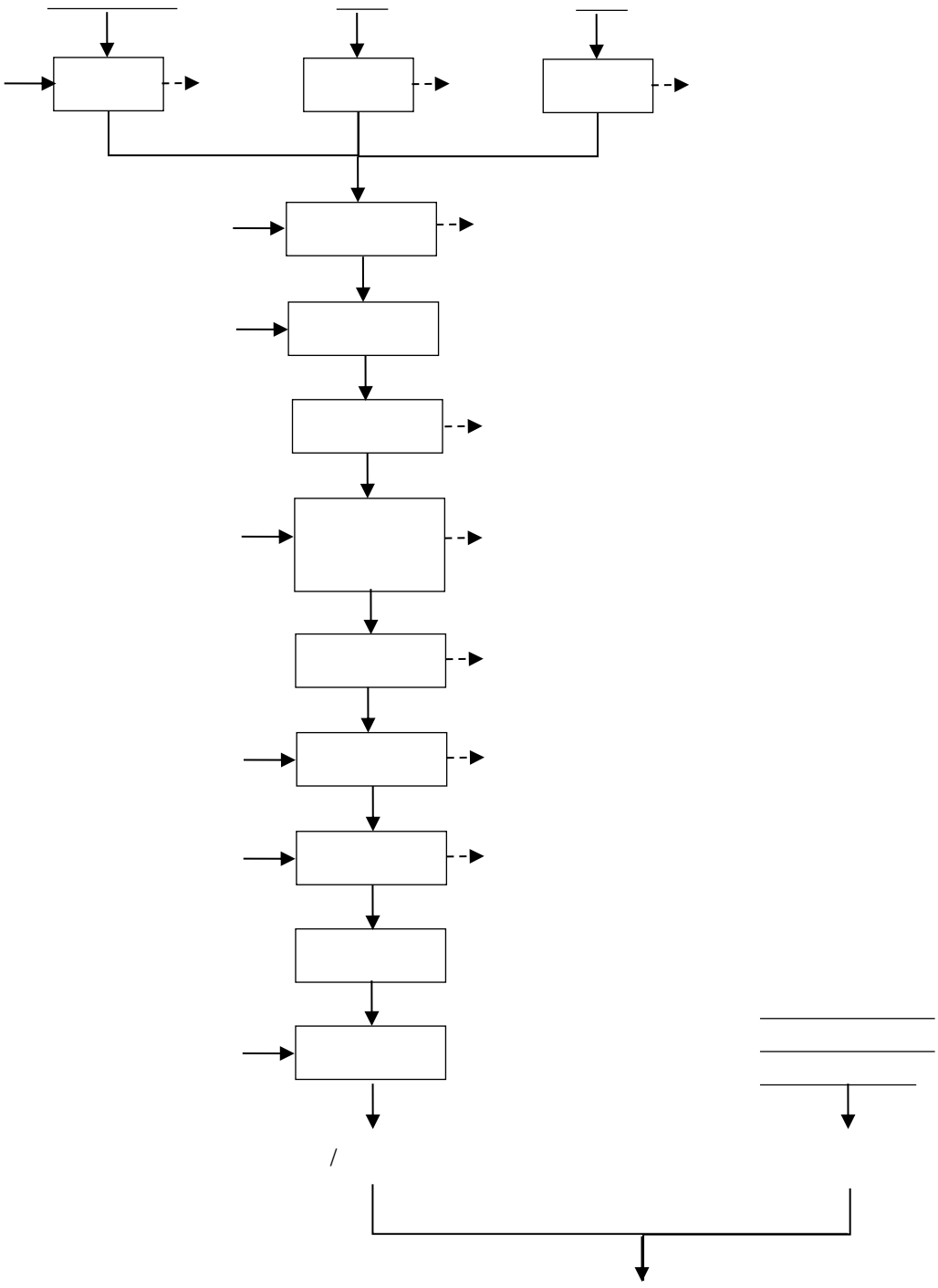
3.2.1.2

1

2

3

3-2



/

3-2

3.2.2

3.2.2.1

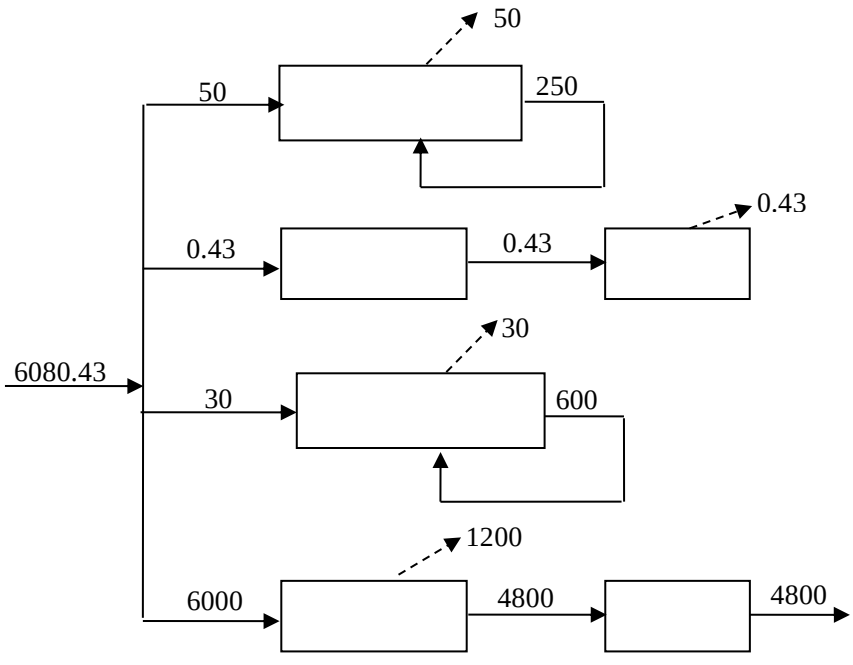
6930.43m^3/a 6080.43m^3/a

850m^3/a

3-11 3-3

3-11 **m^3/a**

		0.43	0.43	0	0.43	0
		300	50	250	50	0
		630	30	600	30	0
		6000	6000	0	1200	4800
		6930.43	6080.43	850	1280.43	4800



3-3 **m^3/a**

3.2.2.2

1

3-12

3-12

		( )						( )			
	t	%	t	%	t	%	t	%	t	%	t
	5.8	65	3.77	2	0.116	3	0.174	30	1.74		
1# 2#											
	2.64	60	1.584	2	0.053	3	0.079	35	0.924		
	1.72	50	0.86					20	0.344	30	0.516
	2.11			5	0.105	10	0.211	85	1.794		
	0.43										

5%

35% 10% 40%

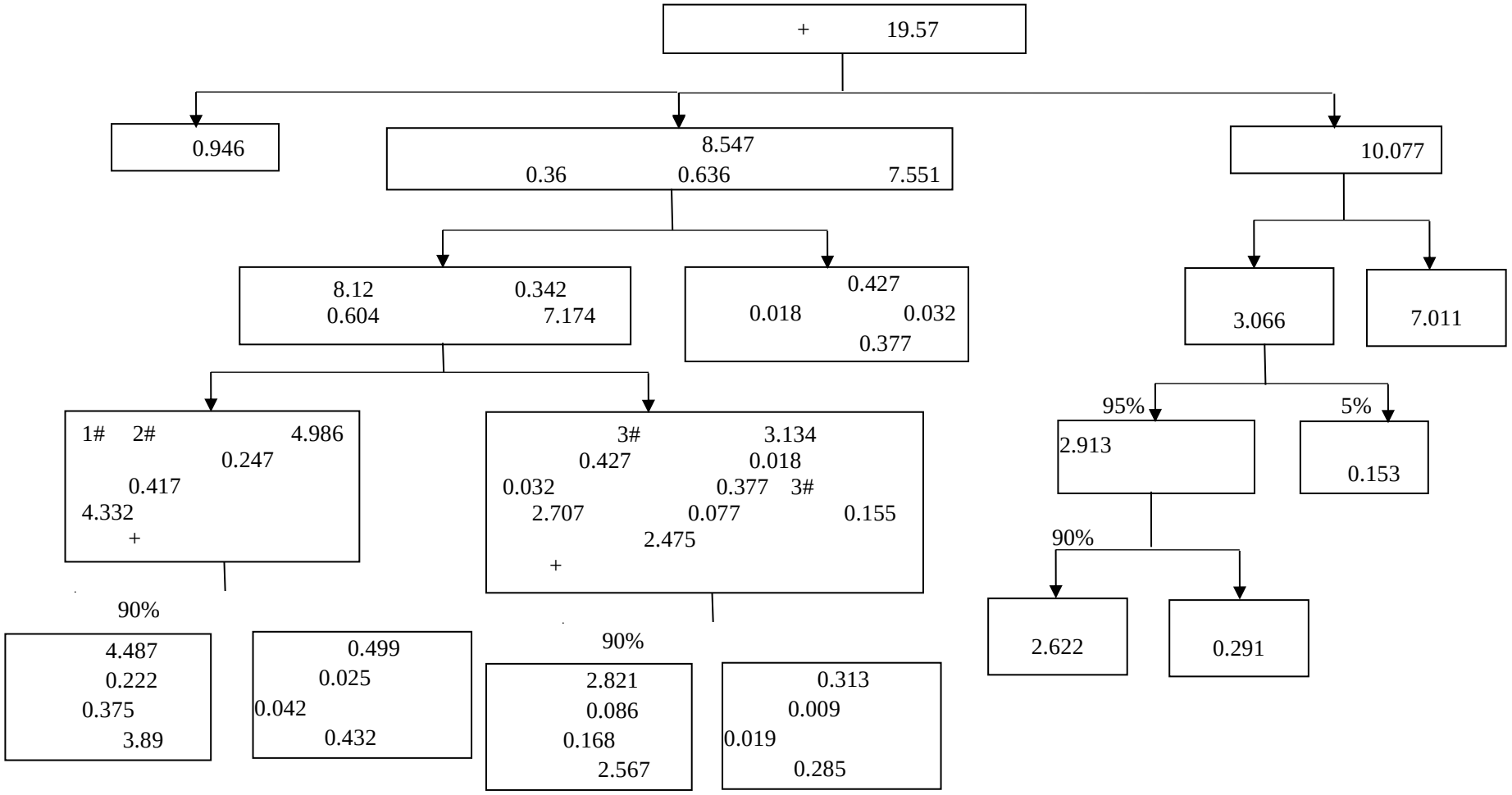
5%

5%

30% 35% 1# 2#

3#

3-4


+ 19.57
0.946
8.547
0.36 0.636 7.551
10.077
8.12 0.342
0.604 7.174
0.427
0.018 0.032
0.377
3.066
7.011
95%
5%
2.913
0.153
90%
2.622
0.291
1# 2# 4.986
0.247
0.417
4.332
+
3# 3.134
0.427 0.018
0.032 0.377 3#
2.707 0.077 0.155
2.475
+
90%
4.487
0.222
0.375
3.89
0.499
0.025
0.042
0.432
90%
2.821
0.086
0.168
2.567
0.313
0.009
0.019
0.285

3-4 **t/a**

3.3

3.3.1

1

2019

100%

24

2

5.0m^3/d

SS

2.0m^3/d

3

3-13

3-13 **dB A**

			10m
1		95~105	87
2		90~100	83
3		80~90	76
4		75~80	70
5		85~100	80
6		95~110	85
7		80~95	79

296

4

3.3.2

		COD SS NH_3-N

3.3.2.2

1# 2#

1

1 1#

1# 1# 2#

1#　2#　　1#　　2　　1#　2#

1#　2#

1.812t/a　0.247t/a

0.417t/a　4.322t/a

2　“

”　　1

“　　+　　”

16000m^3/h　　1200h　　1.51kg/h

94mg/m^3　　0.21kg/h　　13mg/m^3

0.35kg/h　　22mg/m^3　　3.6kg/h

225mg/m^3

1#　　1

4.7% 3.8% 1.5t/a

0.07t/a 0.057t/a

“ + ”

90% 0.064t/a

0.051t/a 3000m^3/h 600h

0.11kg/h 36mg/m^3 0.09kg/h

28mg/m^3

1# 15m

20m “ ”

90% “ + ”

90% 0.181t/a 0.151kg/h

7.947mg/m^3 0.025t/a 0.021kg/h

1.083mg/m^3 0.042t/a 0.035kg/h

1.829mg/m^3 0.439t/a 0.371kg/h

19.518mg/m^3 0.005t/a 0.009kg/h

0.447mg/m^3 GB16297-1996 2

2019

[2019]76

[2017]162 1

GB14554-93 2

1# 1

12%

1.5t/a 0.18t/a

1000t/a 0.3% 3t/a

3.18t/a 12

1 20m 2#

90% 2.862t/a

6000m^3/h 1200h

2.39kg/h 398mg/m^3 98%

0.057t/a 0.048kg/h 7.95mg/m^3

(GB16297-1996) 2 2019

[2019]76

2 2#

2# 3#

2#

2#

A 2# 18

0.1 0.6kg/t 0.6kg/t

3000t/a 1.8t/a

1

20m 3# 90%

1.62t/a 15000m^3/h 1000h

1.62kg/h 108mg/m^3 92%

0.13t/a 0.13kg/h 8.64mg/m^3

(GB16297-1996) 2 2019

[2019]76

B 2# 25

45t/a 5t/a

5-8g 8g/kg 0.4t/a

1 20m 4# 90%

0.32t/a 15000m^3/h

300h 1.07kg/h 71mg/m^3

92% 0.026t/a 0.085kg/h

5.689mg/m^3 (GB16297-1996) 2

2019

[2019]76

2#

2# 3#

A

2# 8

15t/a 0.12t/a

90% 0.096t/a

4800m^3/h 280h

0.34kg/h 71mg/m^3

2# 1

500t/a

1.5t/a 3

90%

1.35t/a 3000m^3/h

1200h 1.13kg/h 375mg/m^3

20m 5#

98% 0.029t/a 0.029kg/h

3.764mg/m^3 (GB16297-1996) 2

2019

[2019]76

B 3#

3# 2# 1 3#

3#

1.101t/a 0.077t/a 0.155t/a

2.475t/a

1 “ ” 1 “ +

“ +

” 90%

1.8t/a 0.27t/a 5000m^3/h

1500h 1.2kg/h 240mg/m^3

6000m^3/h 1500h 0.18kg/h

30mg/m^3

20m 6# “

” 90% “ + ”

90%

0.11t/a 0.092kg/h 4.476mg/m^3 0.009t/a

0.008kg/h 0.386mg/m^3 0.019t/a

0.016kg/h 0.76mg/m^3 0.492t/a

0.376kg/h 18.325mg/m^3

GB16297-1996 2 2019

2

3-15

			(m^3/h)						%	h/a						
				mg/m^3	kg/h	t/a						mg/m^3	kg/h	t/a	mg/m^3	kg/h
1#	1# 2#		16000	94	1.51	1.812		+	90	1200		7.947	0.151	0.181	10	5.9
				13	0.21	0.247	-		90	1200		1.083	0.021	0.025	20	5.2
				22	0.35	0.417	-	+	90	1200		1.829	0.035	0.042		1.7
				225	3.6	4.322	-	+20m	90	1200		19.518	0.371	0.439	60	17
			3000	36	0.11	0.064	-	1#	90	600						
				28	0.09	0.051	-		90	600		0.447	0.009	0.005	/	12
			6000	398	2.39	2.862	/ + +20m 2#		98	1200		7.95	0.048	0.057	10	5.9
2#			15000	108	1.62	1.62	+ +20m 3#		92	1000		8.64	0.13	0.13	10	5.9
			15000	71	1.07	0.32	+ +20m 4#		92	300		5.689	0.085	0.026	10	5.9
			4800	71	0.34	0.096	/ + +20m 5#		98	280		3.764	0.029	0.029	10	5.9
			3000	375	1.13	1.35			98	1200						
		3#	8000	115	0.92	1.101		+	90	1200		4.476	0.092	0.11	10	5.9
				85	0.06	0.077	-	+20m	90	1200		0.386	0.008	0.009	20	5.2
				16	0.13	0.155	-		90	1200		0.76	0.016	0.019		1.7

					258	2.06	2.475	-	6#	90	1200		18.325	0.376	0.492	60	17
				1500	10	0.015	0.018	-		90	1200						
					18	0.027	0.032	-		90	1200						
					209	0.31	0.377	-		90	1200						
				5000	240	1.2	1.8	-		90	1500						
				6000	30	0.18	0.27	-		90	1500						
				9600	113	1.08	1.08	+ +20m	7#	92	1000		7.648	0.119	0.098	10	5.9
				6000	69	0.41	0.144			92	350						
				3000	4000	12	12	+ + +20m 8#		99.8	1000		8	0.024	0.024	10	5.9
					-	-	1.041			-	-	-	-	-	1.041	1.0	/
					-	-	0.018			-	-	-	-	-	0.018	0.6	/
					-	-	0.032		4	-	-	-	-	-	0.032	0.2	/
					-	-	0.629			-	-	-	-	-	0.629	2.0	/
					-	-	0.006			-	-	-	-	-	0.006	5.0	/

3

1

3-16

3-16

			mg/m^3	kg/h	t/a
1	1#		7.947	0.151	0.181
			1.083	0.021	0.025
			1.829	0.035	0.042
			19.518	0.371	0.439
			0.447	0.009	0.005
2	2#		7.95	0.048	0.057
3	3#		8.64	0.13	0.13
4	4#		5.689	0.085	0.026
5	5#		3.764	0.029	0.029
6	6#		4.476	0.092	0.11
			0.386	0.008	0.009
			0.76	0.016	0.019
			18.325	0.376	0.492
7	7#		7.648	0.119	0.098
8	8#		8	0.024	0.024
					0.655
		201			0.034
					0.061
					0.931
					0.005

2

3-17

3-17

				mg/m^3	t/a
1			4	1.0	1.041
				0.6	0.018
				0.2	0.032
				2.0	0.629
				5.0	0.006
					1.041
					0.018
					0.032
					0.629
					0.006

3

3-18

3-18

		t/a
1		1.696
2		0.052
3		0.093
4		1.56
5		0.011

1

1

1# 1 20m³

30m³/a

600m /a

2

2# 1 280m³

50m³/a

250m /a

3

300 50

150L/ ·d 50L/ ·d

6000m³/a 80%

4800m³/a COD SS NH_3-N

250mg/L 250mg/L 30mg/L

2

20m³ 40m³ 20m³

3-19

3-19

	m^3/a							
			mg/L	t/a		mg/L	t/a	mg/L
	4800	COD	250	1.2		125	0.6	390
		SS	250	1.2		125	0.6	200
		NH_3-N	30	0.144		21	0.101	35

COD SS NH_3-N

GB18918-2002 A

1

19000t/a 1900t/a

0.5t/a 8t/a

19.108t/a

0.1t/a

150

2

1:5 1.5t/a

2.7t/a 39

HW09 900-006-09

1

0.75t/a 39

HW08 900-218-08

4t/a

39 HW08

900-249-08

2t/a

39 HW08

900-203-08

3t/a

39 HW49 900-041-49

1~3kg

0.42t

60 1 2.1t/a 39

HW12 900-252-12

	HW08	900-203-08	2							
	HW12	900-252-12	2.1					60		
	HW49	900-041-49	3					-		

80-95dB(A)

80-95dB(A)

GB12348-2008 3

3-22

3-232 **dB(A)**

		80 95		-20
		80 95		-30

3.3.3

4

3-23

3-23 **t/a**

			21.284	20.629	0.655
			0.342	0.308	0.034

			0.604	0.543	0.061
			9.308	8.377	0.931
			0.051	0.046	0.005
			1.041	0	1.041
			0.018	0	0.018
			0.032	0	0.032
			0.629	0	0.629
			0.006	0	0.006
		COD	1.2	0.6	0.6
		SS	1.2	0.6	0.6
		NH_3-N	0.144	0.043	0.101
			1900	1900	0
			0.5	0.5	0
			8	8	0
			19.108	19.108	0
			0.1	0.1	0
			2.7	2.7	0
			0.75	0.75	0
			4	4	0
			2	2	0
			2.1	2.1	0
			3	3	0

3.4

+

4.1

4.1.1

1

	1h	45	7
	1h	45	7
	1h	45	7
	1h	45	7

2

4-4

4-5

		24	
$PM_{2.5}$	/	75μg/m^3	GB3095-2012
PM_{10}	/	150μg/m^3	
SO_2	500μg/m^3	150μg/m^3	
NO_2	200μg/m^3	80μg/m^3	
CO	10.0mg/m^3	4.0mg/m^3	
O_3	200μg/m^3	160μg/m^3 8	
	2.0mg/m^3	/	
	200μg/m^3	/	HJ2.2-2018 D
	200μg/m^3	/	
	10μg/m^3	/	

2

2018

4-1

4-1

PM_{10} $PM_{2.5}$ NO_2 O_3 90

GB3095-2012

4-6

4-6

	μg/Nm^3	μg/Nm^3	%

		1h	<0.0005	10	-	0	0
		1h	210~390	2000	0.105~0.195	0	0
		1h	<0.0005	200	-	0	0
		1h	<0.0005	200	-	0	0
		1h	<0.0005	10	-	0	0

4-6 1h

1

HJ2.2-2018 D

4.2

4.2.1

HJ619-2016

1

HJ610-2016

5

2-4

4-7

4-7

1		NW	K^+ Na^+ Ca^{2+} Mg^{2+} CO_3^{2-} HCO_3^- Cl^- SO_4^{2-} pH	2019 12 4 5
2		-		
3		SE		

4		W		
5		E		
6		SE		

2

K^+ Na^+ Ca^{2+} Mg^{2+} CO_3^{2-} HCO_3^- Cl^- SO_4^{2-} pH

33

3

4-8

4-8

1	K^+	GB/T 11904-1989	TAS-990AFG KCYQ-019-1	0.05mg/L
2	Na^+	GB/T 11904-1989	TAS-990AFG KCYQ-019-1	0.01mg/L
3	Ca^{2+}	EDTA GB/T 7476-1987	50mL	2mg/L
4	Mg^{2+}	GB/T 11905-1989	TAS-990AFG KCYQ-019-1	0.002mg/L
5	CO_3^{2-}	DZ/T 0064.49-1993		/
6	HCO_3^-	DZ/T 0064.49-1993		/
7	Cl^-	2.1 GB/T 5750.5-2006	25mL	1.0mg/L

8	SO_4^{2-}	1.3 GB/T 5750.5-2006	TU-1810PC KCYQ-007	5mg/L
9	pH	5.1 pH GB/T 5750.4-2006	pH PHS-3C KCYQ-003-1	/
10		9.1 GB/T 5750.5-2006	TU-1810PC KCYQ-007	0.02mg/L
11		5.1 GB/T 5750.5-2006	TU-1810PC KCYQ-007	0.5mg/L
12		10.1 GB/T 5750.5-2006	TU-1810PC KCYQ-007	0.001mg/L
13		4- HJ 503-2009	TU-1810PC KCYQ-007	0.0003mg/L
14		4.1 - GB/T 5750.5-2006	TU-1810PC KCYQ-007	0.002mg/L
15		6.1 GB/T 5750.6-2006	AFS-8510 KCYQ-018	1.0μg/L
16		8.1 GB/T 5750.6-2006	AFS-8510 KCYQ-018	0.1μg/L
17		10.1 GB/T 5750.6-2006	TU-1810PC KCYQ-007	0.004mg/L
18		7.1 GB/T 5750.4-2006	25mL	1.0mg/L

19		11.1 GB/T 5750.6-2006	TAS-990AFG KCYQ-019-1	2.5μg/L
20		3.2 GB/T 5750.5-2006	CIC-D100 KCYQ-020	0.1mg/L
21		9.1 GB/T 5750.6-2006	TAS-990AFG KCYQ-019-1	0.5μg/L
22		GB/T		

19		≤	mg/L	0.005	
20		≤	CFU/100ml	3.0	
21		≤	CFU/100ml	100	
22		≤	μg /L	700	
23		≤	μg /L	500	
24		≤	μg /L	20.0	
25		≤	mg/L	0.3	GB5749-2006

2

$$S_I=C_I/ C_{I,S}$$

S_I - i

C_I - i mg/L

$C_{I,S}$ - i mg/L

PH

$S_{PH}=7.0-pH/7.0-pH_{sd}$ PH≤7.0

$S_{PH}=pH-7.0/pH_{su}-7.0$ pH 7.0

PH- pH_{sd}-pH pH_{sd}-pH

1

3

4-10 4-11

4-10

2019.12.04	K^+	mg/L	21.3	29.4	21.4
	Na^+	mg/L	35.9	49.6	26.7
	Ca^{2+}	mg/L	68	65	71

	Mg^{2+}	mg/L	40.1	38.0	40.7
	CO_3^{2-}	mg/L	0	0	0
	HCO_3^-	mg/L	323	342	317
	Cl^-	mg/L	56.1	48.6	52.6
	SO_4^{2-}	mg/L	84	86	76
	pH	/	7.15	7.20	7.18
		mg/L	0.10	0.18	0.11
		mg/L	8.5	15.5	10.8
		mg/L	<0.001	0.039	<0.001
		mg/L	<0.0003	<0.0003	<0.0003
		mg/L	<0.002	<0.002	<0.002
		μg/L	<1.0	<1.0	<1.0
		μg/L	<0.1	<0.1	<0.1
		mg/L	<0.004	0.006	0.011
		mg/L	337	321	347
		μg/L	3.1	3.8	4.1
		mg/L	0.2	0.4	0.3
		μg/L	<0.5	<0.5	<0.5
		mg/L	<0.03	<0.03	<0.03
		mg/L	<0.01	<0.01	<0.01
		mg/L	589	654	582
		mg/L	1.3	<0.5	0.9
		mg/L	84	86	76
		mg/L	56.1	48.6	52.6
		CFU/100mL			

		CFU/mL	64	74	81
		mg/L	<0.01	<0.01	<0.01
		mg/L	<0.01	<0.01	<0.01
		mg/L	<0.01	<0.01	<0.01
		mg/L	<0.01	<0.01	<0.01
		m	130	100	80
		m	81	89	44
2019.12.05	K^+	mg/L	23.5	31.4	21.5
	Na^+	mg/L	29.2	42.8	25.4
	Ca^{2+}	mg/L	72	61	68
	Mg^{2+}	mg/L	39.6	39.7	44.6
	CO_3^{2-}	mg/L	0	0	0
	HCO_3^-	mg/L	329	335	323
	Cl^-	mg/L	54.3	46.5	48.9
	SO_4^{2-}	mg/L	81	83	79
	pH	/	7.09	7.12	7.08
		mg/L	0.08	0.14	0.08
		mg/L	8.1	14.8	11.7
		mg/L	<0.001	0.032	<0.001
		mg/L	<0.0003	<0.0003	<0.0003
		mg/L	<0.002	<0.002	<0.002
		μg/L	<1.0	<1.0	<1.0
		μg/L	<0.1	<0.1	<0.1
		mg/L	<0.004	0.008	0.009

		mg/L	345	318	345
		μg/L	2.8	3.3	4.3
		mg/L	0.3	0.5	0.2
		μg/L	<0.5	<0.5	<0.5
		mg/L	<0.03	<0.03	<0.03
		mg/L	<0.01	<0.01	<0.01
		mg/L	582	632	579
		mg/L	1.1	<0.5	0.8
		mg/L	81	83	79
		mg/L	54.3	46.5	48.9
		CFU/100mL			
		CFU/mL	68	79	86
		mg/L	<0.01	<0.01	<0.01
		mg/L	<0.01	<0.01	<0.01
		mg/L	<0.01	<0.01	<0.01
		mg/L	<0.01	<0.01	<0.01

4-11

		m	m
2019.12.04		140	51
		200	43
		130	33
		130	81
		100	89
		80	44

GB/T 14848-2017

4.3

4.3.1

1

2

2018

2017 4-12

4-12

1#			
2#			

2

COD NH_3-N

4.2.2

1

GB3838-2002 4-13

4-13

		GB3838-2002
1	pH	6~9

2	COD	≤30mg/L
3	NH_3-N	≤1.5mg/L

2

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

S_{ij}--

C_{ij}-- mg/L

C_{sj}-- mg/L

pH

$$S_{pHj}=\frac{7.0-pH_j}{7.0-pH_{sd}} \quad pH_j \le 7.0 \qquad S_{pHj}=\frac{pH_j-7.0}{pH_{su}-7.0} \quad pH_j \quad 7.0$$

S_{pHj}--pH j

pH_j--j pH

pH_{sd} pH_{su} -- pH

3

4-14

4-14

	COD	18.7~23.6	21.2	0.62~0.79	
		3.76~4.56	4.12	2.51~3.04	
		0.32~0.37	0.35	/	/
	COD	11~43	/	0.37~1.43	
		0.1~12.6	/	0.067~8.4	

COD

COD

1

“ ”

2020

2020

96% 90%

95% 85%

2

“ ” 2020

“ ”

2020

95%

80%

5

2020

4.4

4.4.1

1

1m 4 1

2

2019 12 4 2019 12 5

2

3

Ld Ln

4

4-15

4-15

1 AWA5688 / GB 12348-2008 KCYQ-047-3

2		GB 3096-2008	AWA5688 KCYQ-047-3	/

4.4.2

1

2

4-16

4-16 **dB(A)**

2019.12.04		52	43	(GB3096-2008)3 65dB(A) 55dB(A)
		55	45	
		54	44	
		51	42	
		53	41	
2019.12.05		52	44	
		54	46	
		55	43	
		52	42	
		51	42	

GB3096-2008 3

5.1

1# 2#

1# 1#

0.181t/a

0.151kg/h 7.947mg/m^3 0.025t/a

0.021kg/h 1.083mg/m^3 0.042t/a 0.035kg/h

1.829mg/m^3 0.439t/a 0.371kg/h

19.518mg/m^3 0.005t/a 0.009kg/h

0.447mg/m^3 2#

0.057t/a 0.048kg/h 7.95mg/m^3 2#

3# 0.13t/a

0.13kg/h 8.64mg/m^3 4#

0.026t/a 0.085kg/h 5.689mg/m^3

5#

0.029t/a 0.029kg/h 3.764mg/m^3 3#

6#

0.11t/a 0.092kg/h

4.476mg/m^3 0.009t/a 0.008kg/h

0.386mg/m^3 0.019t/a 0.016kg/h

0.76mg/m^3 0.492t/a 0.376kg/h

18.325mg/m^3 7#

0.098t/a 0.119kg/h 7.648mg/m^3

8# 0.024t/a

0.024kg/h 8mg/m^3

1.041t/a 0.018t/a 0.032t/a

0.629t/a 0.006t/a

10%

100m

5-1

5-1

				☑			
		=50km		=5~50km		=5km☑	
	SO2+NOx	2000t/a		500~2000t/a		<500t/a☑	
						PM2.5 PM2.5☑	
		☑		☑		D☑	☑
				☑			
		2018					
		☑					☑
						☑	
		☑					
		AERMOD	ADMS	AUSTAL2000	EDMS/AEDT	CALPUFF		
		50km			5~50km		=5km	
						PM2.5 PM2.5	
		C	100%			C	>100%

			C 10%	C	>10%
			C 30%	C	>30%
	1h	h	C 100%		C >100%
		C		C	
		k -20%		k>-20%	
		PM_{10}		☑ ☑	
		☑			
		) 0 m			
		SO2:(0)t/a	NOx:(0)t/a	:(0.655)t/a	VOCs:(1.031)t/a
“ ” “ ” “ ”					

5.2

5.2.1

4800m^3/a

HJ2.3-2018

B

5.2.2

1

COD 50mg/L NH_3-N 5mg/L

2

16m /d

5.2.3

GB18918-2002

A

5-2

5-2

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

		□ □ □ □ □ □ □ □		□ □ □
		□ 40% □ 40% □		
		□ □ □ □ □ □ □ □		□ □ □ □
		□ □ □ □ □ □ □ □		
		km	km^2	
		COD NH_3-N		
		□ □ □ □ □ □ □ □		
		□ □ □ □ □ □ □ □		

□ □

□ □ □

□ □ □ □

□ □ □; □;

□;

		□ □ □ □ □ □ □ □ □				
				/ t/a		/ mg/L
		COD NH_3-N		0.1 0.101		125 21
					/ t/a	/ mg/L
		m3/s m m		m3/s m		m3/s
		□		□	□	□ □
			□ □ □		□ □ □	
			2			
			9			
		□				

“ ”	“ ”	“ ”

5.3

HJ610-2016

$6km^2$

1km 2km 1km

HJ610-2016 GB16889

GB18597 GB18598 GB18599 GB/T50934

100d 1000d COD

780m

2000m

5.4

80-95dB(A)

80-95dB(A)

GB12348-2008 3

5.5

1

2

1

GB18597-2001 2013

GB18597-2001

2013

2

HJ2024-2012

[2012]18

30

a. :

b.

c.

d.

e. f.

b.

c.

10m

d.

5

（5）

2

“

”“ ”

（1）

（2）

25L/s 90m^3/h

1h 90m^3 90m^3/

100m^3

（3）

				G1 ☐	G2	G3 ☐
				D1 ☐	D2 √	D3 ☐
		Q	*Q* 1 ☐	1≤*Q* 10	10≤*Q* 100 ☐	*Q* 100 ☐
		M	M1 ☐	M2 ☐	M3 ☐	M4
		P	P1 ☐	P2 ☐	P3 ☐	P4
			E1 ☐	E2	E3 ☐	
			E1 ☐	E2 ☐	E3	
			E1 ☐	E2	E3 ☐	
		+ ☐	☐	☐		I ☐
		☐	☐		☐	
				/		
		√	√			
			☐	☐	☐	
			SLAB ☐	AFTOX ☐	☐	
			-1 __m			
			-2 __m			
		__ __h				
		___d				
		_____ __d				
		100m^3				
☐ “___”						

7.1

7.1.1

1# 2#

7.1.1.2

1

1

“

+ ”

“ + ”

-

10-20

300

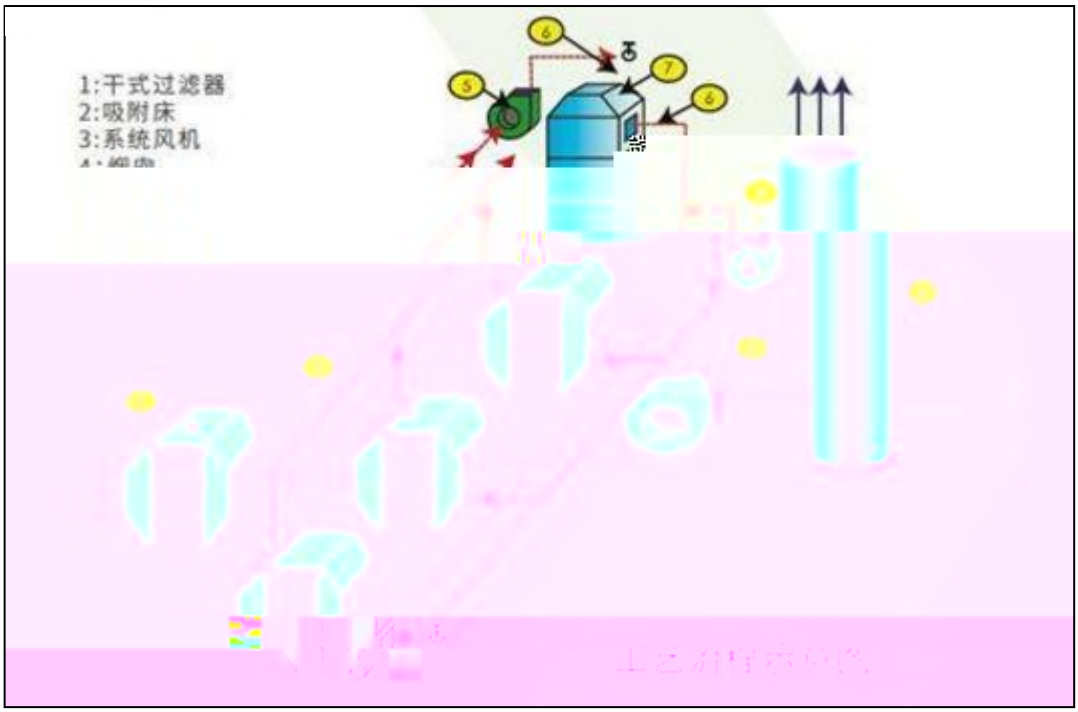
97% CO_2

H_2O

1

PLC

+ 7-1



7-1 “ + ”

+

90%

1# 2#

1#

+ 1

20m 90%

2#

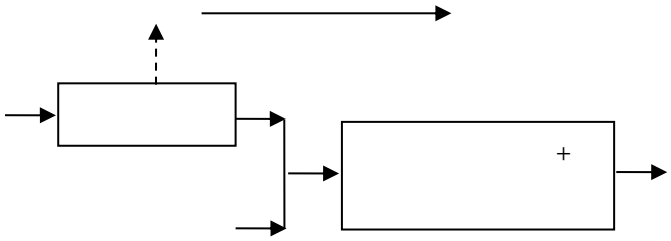
+

1 20m

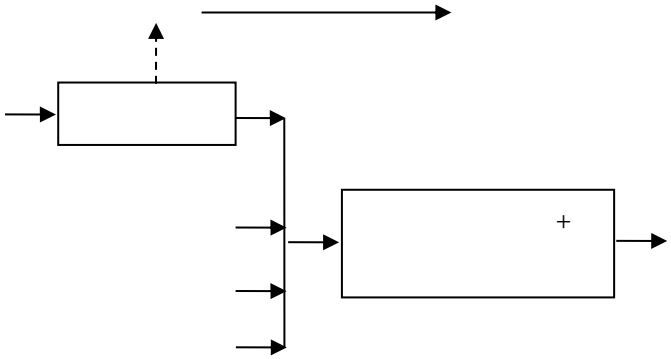
90%

1# 7-2 2#

7-3



7-2 1#



7-3 1#

2

1#

2#

1#

1 20m

90% 98%

2#

1 20m

90% 92%

1 20m

90% 92%

1 20m 90%

98%

1 20m

90% 92%

20m

120

99%

GB16297-1996　　2　　2019

[2019]76

7.1.1.2

4

24

7.1.2

7.1.2.1

1

30m³/a 600m /a

2

50m³/a 250m /a

3

4800m³/a

COD SS NH_3-N

7-2

7-2

	m³/a							
			mg/L	t/a		mg/L	t/a	mg/L
	4800	COD	250	1.2		125	0.6	390
		SS	250	1.2		125	0.6	200
		NH_3-N	30	0.144		21	0.101	35

COD SS NH_3-N

GB18918-2002 A

7.1.3

7.1.3.1

$150m^2$

Mb≥1.5m K≤10^{-7}cm/s

GB18599-2001 2013

7.1.3.2

$50m^2$

1

≤10^{-12}cm/s

7-3

7-3

			HW09	900-006-09				2.7	
			HW08	900-218-08				0.75	
			HW08	900-249-08				4	
			HW08	900-203-08				2	
			HW12	900-252-12				2.1	
			HW49	900-041-49				3	

2

HJ2025-2012

[2012]18

GB18597-2001

1 15

。

5

4				
5				
6				

(250mm)+ (1.0mm)

Mb 6.0m K 1 10^{-7}cm/s

(250mm)+ (1.0mm)

Mb 6.0m K 1 10^{-7}cm/s

200mm

10mm Mb 6.0m

K 1 10^{-7}cm/s

GB18599-2001

Mb 1.5m K 1 10^{-7}cm/s

3

7-5

7-5

1#		pH	1 /

7.2

7.3

7.3.1

“ ” 7-6

7-6 “ ”

		1#	1# 2#			+ +	+20m 1#	(GB16297-1996) 2 2019 [2019]76 [2017]162 1 GB14554-93 2 10mg/m^3 5.9kg/h 20mg/m^3 5.2kg/h 1.7kg/h 60mg/m^3 17kg/h 12kg/h
					-			
					-			
					-			
					-			
				/ +			+20m 2#	(GB16297-1996) 2 2019 [2019]76 [2017]162 1 GB14554-93 2 10mg/m^3 5.9kg/h 20mg/m^3 5.2kg/h 1.7kg/h
		2#			+		+20m 3#	
					+		+20m 4#	
					/ +		+20m 5#	
			3#			+ +	+20m 5#	
					-			

						-			60mg/m^3 17kg/h
						-			
						-			
						-			
						-			
						-			
						-			
						+		+20m 7#	
						+ +		+20m 8#	(GB16297-1996) 2 2019 [2019]76 10 mg/m^3 5.9kg/h

GB16297-1996

[2017]162

4

GB14554-93

1.0mg/m^3 0.6mg/m^3

0.2mg/m^3 2.0mg/m^3

5.0mg/m^3

COD 390mg/L

SS 200mg/L

NH3-N 35mg/L

150m^2

(GB18599-2001)(2013)

50m^2

GB18597-2001 2013

65dB A
55dB A

(
250mm)+ (1.0mm)
Mb 6.0m K 1 10^{-7}cm/s
(
250mm)+ (1.0mm)
Mb 6.0m K 1 10^{-7}cm/s

-

200mm
10mm Mb 6.0m
K 1 10^{-7}cm/s

7.3.2

582 7-7

7-7

		1#	1# 2#			+ +	+20m 1#	1	150
					-				
					-				
					-				
					-				
					-				
					/ +		+20m 2#	1	10
		2#			+		+20m 3#	1	10
					+		+20m 4#	1	10
					/ +		+20m 5#	1	10
			3#			+ +	+20m 5#	1	150
					-				

						-				
						-				
						-				
						-				
						-				
						-				
						-				
						+		+20m 7#	1	10
						+ +		+20m 8#	1	10
						4			-	50
									1	2
									1	2
									3	5
						$150m^2$			1	2

			-	30
			-	50
				553
				45000
				1.23%

8.1

8.1.1 2019

2019

2019-410822-35-03-067008

8.1.2 2015

33

2015 23

5

“ ”

8.1.3 **“ ”**

“ ”

+

90% “ ”

8.1.4 **2018—2020**

2018—2020 2018 20

8-1

8.1.5 2019

6

[2019]84 2019

8-2

8.1.6

2019 3

2019 3

8-3

8.1.7 **“ ”**

1

“ “

” 7

“ ”

2

GB12348-2008 3

3

“ ”

8.2

8.2.1

200m

8.2.2

8.2.2.1

2015-2020

1

[2015]33 6

2

8-4

8-5

	2008 24	

2015-2020

8.2.2.2

1

5470m 5440m

2

2018 56

HZ019+447.4~HZ028+486.1 9038.7m

100m 1000m

5300m

GB3095-2012

HJ2.2-2018

D

3

100m

8.2.2.3

1

PM_{10} $PM_{2.5}$ NO_2

O_3 90 GB3095-2012

1h

1

HJ2.2-2018 D

GB/T

14848-2017

COD GB3838-2002

COD

2

100m

2

A

3

GB12348-2008 3

4

5

6

9.1

9.2

2

45000

9-1

9-1

1			45000	/
2			50000	
3			4500	
4			10000	

9.3

9.3.1

9.3.1.1

Hz

Hz= EO/ER ×100%

EO

ER

50 50000

0.1%

9.3.1.2

1

2

9.4

50000 4500

10.1

10.1.1

“ ”

3-5

1

2

3

4

1

2

3

4

10.1.2

1

2

3

4

10.1.3

1

a.

b.

c.

d.

f. “ ” “

”

g.

“ ”

2

a.

b.

c.

d.

e.

10.1.4

1

10-1

10-1

		1#	1# 2#			+	+20m 1#	19000 m^3/h	7.947mg/m^3 0.151kg/h	(GB16297-1996) 2 2019 [2019]76
					-				1.083mg/m^3 0.021kg/h	
					-				1.829mg/m^3 0.035kg/h	[2017]162 1 GB14554-93 2 10mg/m^3 5.9kg/h 20mg/m^3 5.2kg/h 1.7kg/h 60mg/m^3 17kg/h 12kg/h
					-				19.518mg/m^3 0.371kg/h	
					-				0.447mg/m^3 0.009kg/h	
					/	+	+20m 2#	6000 m^3/h	7.95mg/m^3 0.048kg/h	(GB16297-1996) 2 2019 [2019]76
		2#			+		+20m 3#	15000 m^3/h	8.64mg/m^3 0.13kg/h	
					+		+20m 4#	15000 m^3/h	5.689mg/m^3 0.085kg/h	[2017]162 1 GB14554-93 2 10mg/m^3 5.9kg/h 20mg/m^3 5.2kg/h 1.7kg/h 60mg/m^3 17kg/h
					/	+	+20m 5#	7800 m^3/h	3.764mg/m^3 0.029kg/h	

				3#			+ +	+20m 5#	20500 m^3/h	4.476mg/m^3 0.092kg/h 0.386mg/m^3 0.008kg/h 0.76mg/m^3 0.016kg/h 18.325mg/m^3 0.376kg/h	
						-					
						-					
						-					
						-					
						-					
						-					
						-					
						+		+20m 7#	15600 m^3/h	7.648mg/m^3 0.119kg/h	
						+	+	+20m 8#	4000m $^3/h$	8mg/m^3 0.024kg/h	(GB16297-1996) 2 2019 [2019]76 10 mg/m^3 5.9kg/h

				4	-	-	GB16297-1996 [2017]162 GB14554-93 1.0mg/m^3 0.6mg/m^3 0.2mg/m^3 2.0mg/m^3 5.0mg/m^3
					20m	-	
					250m	-	
					2 20m 1 40m	COD 125mg/L SS 125mg/L NH_3-N 21mg/L	COD 390mg/L SS 200mg/L NH_3-N 35mg/L
				150m^2	150m^2	-	(GB18599-2001)(2013)
				50m^2	50m^2	-	GB18597-2001 2013

				-	-	65dB A 55dB A
				-	-	
			(250mm)+ (1.0mm) Mb 6.0m K 1 10^{-7}cm/s	-		-
			(250mm)+ (1.0mm) Mb 6.0m K 1 10^{-7}cm/s	-		
			200mm 10mm Mb 6.0m K 1 10^{-7}cm/s	-		
				-		

			-	-
			-	
			-	
			-	

2

< > ( )

[1996]463

[1999]24

“ ”

“ ”

( ) ([1996]463)

10-2

10-2

a.

b.

c.

d.

e.

a.

b.

4

10-3

10-3

			( )
1			3.0
		1.0m 1.0×10^{-10}cm/s	5.0
			0.5
2			2.0
3		“ ” 240mm 200mm P10 P10 1×10^{-12}cm/s	15.0

4		“ ” 240mm 200mm P10 P10 1×10^{-12}cm/s	15.0
5			5.0
		240mm 200mm P10 P10 1×10^{-12}cm/s	
		“ ”	
6		$550m^3$	12.0
7			0.5
8			1.0
		—	59.0

10.2

10.2.1

10.2.1

10.2.1.1

10-4

1			TSP	1 20
2			COD SS	
3				
4		4~6	dB(A)	

10.2.1.2

10.2.1.2.1

1

2

3

4

10.2.1.2.2

1

GB16297-1996

GB/T16157-1996

GB15562.1-1995

2

1

10m 1

1

COD NH_3-N

1

1m 1

A

1 2 2

3

2

COD

1

10-5

10-5

					1 2
			10m		
				COD NH_3-N	1 2
			1m 4	A	1 2 2

		/	1	COD	1

10.3

1

2

VOCs

COD NH_3-N

10-6

10-6 **t/a**

		0.655
	VOCs	1.031
	COD	0.6
	NH_3-N	0.101

11.1

11.1.1

45000

2

11.1.2

2019-410822-35-03-067008

11.1.3

11.1.4

1

PM_{10} $PM_{2.5}$ NO_2

O_3 90 GB3095-2012

1h

1

HJ2.2-2018 D

2

COD GB3838-2002

COD

3

GB/T

14848-2017

4

11.1.5

1

1# 2#

1#

“ ” “ +

”

“ + ”

20m 1#

20m 2#

2#

2#

20m 3# 4# 2#

20m 5#

“ ”

“ + ”

“ +

” 20m

6# 2#

20m 7#

20m 8#

(GB16297-1996) 2 2019

[2019]76

GB16297-1996

2

[2017]162 1

GB14554-93 2

100m

2

COD SS NH_3-N

3

GB12348-2008 3

4

150m^2

50m^2

5

11-1

11-1 “ ”

(GB16297-1996) 2
2019
[2019]76

1# 2#

+ + +20m 1# [2017]162 1
GB14554-93 2
1# 10mg/m^3 5.9kg/h

						-			60mg/m^3 17kg/h
						-			
						-			
						-			
						-			
						-			
						-			
						+		+20m 7#	
						+ +		+20m 8#	(GB16297-1996) 2 2019 [2019]76 10 mg/m^3 5.9kg/h

				4	GB16297-1996 [2017]162 GB14554-93 1.0mg/m^3 0.6mg/m^3 0.2mg/m^3 2.0mg/m^3 5.0mg/m^3
					COD 390mg/L SS 200mg/L NH3-N 35mg/L
				150m^2	(GB18599-2001)(2013)
				50m^2	GB18597-2001 2013

				65dB A 55dB A
			(250mm)+ (1.0mm) Mb 6.0m K 1 10^{-7}cm/s	-
			(250mm)+ (1.0mm) Mb 6.0m K 1 10^{-7}cm/s	
			200mm 10mm Mb 6.0m K 1 10^{-7}cm/s	
				-

11.1.6

11.1.6.1

1

100m

11.1.6.2

11.1.6.3

11.1.6.4

11.1.7

110kV

11.1.8

11.1.9

1

2

3

11.1.10

VOCs COD NH_3-N

11-3

11-3

11.2

1 “ ”

2 “

”

3

4

5

2