
80

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30

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- 8
- 9
- 10

1~2

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- 7

	80			
	*			*
	2			
	*		—	210013
	2			
			2018-320115-14-03-5679376	
			[C1432]	
	400		800	
	300		30	10%
	—		2019 4	
1-1		1-3		
/	473.5	/	—	
/	30000	m ³ /	7200	
	—		—	
		212.5t/a		
		101t/a		
GB18918-2002	1	A		

1

1-1

1-1

1			300	t/a	
2		--	3	t/a	
3		E	15.12	t/a	
4			1.2	t/a	
5		--	6	t/a	

1-2

1-2

1		1465 35.9g NaCl	801		/

2

1-3

1-3

1				2018	7	
		300				
	2	800				2019
2			80			
	1					
682						80
2						
		80				
	[C1432]					
						2
			80			
	10					
		1	8		252	
			1-4			

1-4			
		27 t/a	2016
		27 t/a	
		26 t/a	

3

1

473.5t/a

212.5/a

101t/a

GB18918-2002 1 A

2

3 kWh

3

4

1-5

1-5

		800m ²	
		36m ²	
		30m ²	
		24m ²	
		473.5t/a	
		313.5t/a	
		3 kWh/a	

			3t/d	
			5t/d	
			20~30dB(A)	-
			5m ²	

4

(2011)

(2011)

(2012)

2012

[2015]118

5

2

2012

2012

2013

2013

6

2

1

2

7

3

8 “ ”

8

8

15

3000m

1-6

1-6

1		W	3000	22.41km ² 33.3km ²	
2		W	3200	10.48km ²	

HJ2.2-2018

2017

2016

(GB3838-2002) IV

(GB3096-2008)

2

2
[2015]251

9 “ “ ” “ ”
“ ”

10
2018 1 24

11
1

HJ2.2-2018

ARESCREEN
1-8

1-7

1-7

/	/	
		952000
		-13.3
		40.4
		/m
		/km
		/°

1-8

/m	1#			
	/ mg/m ³	/%	/ mg/m ³	/% 0
1	1.40E-03	0.03	9.37E-04	0.02
25	1.36E-03	0.03	5.81E-04	0.01
50	1.08E-03	0.02	3.36E-04	0.01
75	8.27E-04	0.02	2.99E-04	0.01
100	6.42E-04	0.01	2.62E-04	0.01
125	5.13E-04	0.01	2.28E-04	0.01
150	4.21E-04	0.01	2.03E-04	0
175	3.53E-04	0.01	1.81E-04	0
200	3.01E-04	0.01	1.63E-04	0
225	2.61E-04	0.01	1.47E-04	0
	2.29E-04	0.01		

>>BD.mq 371.88

750	5.49E-05	0	7.51E-05	0
775	5.25E-05	0	7.34E-05	0
800	5.03E-05	0	7.17E-05	0
825	4.83E-05	0	7.01E-05	0
850	4.64E-05	0	6.85E-05	0
875	4.46E-05	0	6.70E-05	0
900	4.30E-05	0	6.56E-05	0
925	4.14E-05	0	6.45E-05	0
950	4.00E-05	0	6.34E-05	0
975	3.86E-05	0	6.23E-05	0
1000	3.73E-05	0	6.13E-05	0
1025	3.61E-05	0	6.03E-05	0
1050	3.49E-05	0	5.93E-05	0
1075	3.38E-05	0	5.83E-05	0
1100	3.28E-05	0	5.74E-05	0
1125	3.18E-05	0	5.65E-05	0
1150	3.09E-05	0	5.56E-05	0
1175	3.00E-05	0	5.48E-05	0
1200	2.92E-05	0	5.40E-05	0
1225	2.84E-05	0	5.32E-05	0
1250	2.76E-05	0	5.25E-05	0
1275	2.69E-05	0	5.17E-05	0
1300	2.62E-05	0	5.10E-05	0
1325	2.55E-05	0	5.04E-05	0
1350	2.49E-05	0	4.97E-05	0
1375	2.43E-05	0	4.91E-05	0
1400	2.37E-05	0	4.85E-05	0
1425	2.31E-05	0	4.79E-05	0
1450	2.26E-05	0	4.73E-05	0
1475	2.21E-05	0	4.67E-05	0
1500	2.16E-05	0	4.62E-05	0
1525	2.11E-05	0	4.57E-05	0
1550	2.06E-05	0	4.51E-05	0
1575	2.02E-05	0	4.46E-05	0
1600	1.98E-05	0	4.41E-05	0
1625	1.94E-05	0	4.36E-05	0
1650	1.90E-05	0	4.31E-05	0
1675	1.86E-05	0	4.27E-05	0
1700	1.82E-05	0	4.22E-05	0
1725	1.79E-05	0	4.17E-05	0
1750	1.75E-05	0	4.13E-05	0
1775	1.72E-05	0	4.08E-05	0
1800	1.69E-05	0	4.04E-05	0
1825	1.65E-05	0	4.00E-05	0
1850	1.62E-05	0	3.95E-05	0
1875	1.59E-05	0	3.91E-05	0
1900	1.57E-05	0	3.87E-05	0
1925	1.54E-05	0	3.83E-05	0
1950	1.51E-05	0	3.79E-05	0
1975	1.49E-05	0	3.75E-05	0
2000	1.46E-05	0	3.72E-05	0
2025	1.44E-05	0	3.68E-05	0

2050	1.41E-05	0	3.64E-05	0	
2075	1.39E-05	0	3.61E-05	0	
2100	1.37E-05	0	3.57E-05	0	
2125	1.35E-05	0	3.54E-05	0	
2150	1.32E-05	0	3.50E-05	0	
2175	1.30E-05	0	3.47E-05	0	
2200	1.28E-05	0	3.43E-05	0	
2225	1.26E-05	0	3.40E-05	0	
2250	1.25E-05	0	3.37E-05	0	
2275	1.23E-05	0	3.34E-05	0	
2300	1.21E-05	0	3.30E-05	0	
2325	1.19E-05	0	3.27E-05	0	
2350	1.17E-05	0	3.24E-05	0	
2375	1.16E-05	0	3.21E-05	0	
2400	1.14E-05	0	3.18E-05	0	
2425	1.12E-05	0	3.16E-05	0	
2450	1.11E-05	0	3.13E-05	0	
2475	1.09E-05	0	3.10E-05	0	
2500	1.08E-05	0	3.07E-05	0	
	/%	2.29E-03	0.05	1.49E-03	0.03
D10%	/m	/	/	/	/

/m	1#			
	/ mg/m ³	/%	/ mg/m ³	/%
1	1.87E-03	0.04	5.63E-03	0.28
25	1.16E-03	0.02	3.49E-03	0.17
50	6.72E-04	0.01	2.02E-03	0.1
75	5.98E-04	0.01	1.80E-03	0.09
100	5.24E-04	0.01	1.57E-03	0.08
125	4.55E-04	0.01	1.37E-03	0.07
150	4.06E-04	0.01	1.22E-03	0.06
175	3.63E-04	0.01	1.09E-03	0.05
200	3.25E-04	0.01	9.78E-04	0.05
225	2.93E-04	0.01	8.82E-04	0.04
250	2.66E-04	0.01	7.99E-04	0.04
275	2.56E-04	0.01	7.70E-04	0.04
300	2.48E-04	0	7.45E-04	0.04
325	2.40E-04	0	7.22E-04	0.04
350	2.33E-04	0	7.00E-04	0.03
375	2.26E-04	0	6.79E-04	0.03
400	2.19E-04	0	6.59E-04	0.03
425	2.13E-04	0	6.40E-04	0.03
450	2.07E-04	0	6.21E-04	0.03
475	2.01E-04	0	6.03E-04	0.03
500	1.95E-04	0	5.87E-04	0.03
525	1.90E-04	0	5.70E-04	0.03
550	1.85E-04	0	5.55E-04	0.03
575	1.80E-04	0	5.40E-04	0.03

600	1.75E-04	0	5.26E-04	0.03
625	1.70E-04	0	5.12E-04	0.03
650	1.66E-04	0	4.99E-04	0.02
675	1.62E-04	0	4.86E-04	0.02
700	1.58E-04	0	4.74E-04	0.02
725	1.54E-04	0	4.62E-04	0.02
750	1.50E-04	0	4.51E-04	0.02
775	1.47E-04	0	4.41E-04	0.02
800	1.43E-04	0	4.31E-04	0.02
825	1.40E-04	0	4.21E-04	0.02
850	1.37E-04	0	4.12E-04	0.02
875	1.34E-04	0	4.03E-04	0.02
900	1.31E-04	0	3.94E-04	0.02
925	1.29E-04	0	3.87E-04	0.02
950	1.27E-04	0	3.81E-04	0.02
975	1.25E-04	0	3.74E-04	0.02
1000	1.22E-04	0	3.68E-04	0.02
1025	1.20E-04	0	3.62E-04	0.02
1050	1.18E-04	0	3.56E-04	0.02
1075	1.17E-04	0	3.50E-04	0.02
1100	1.15E-04	0	3.45E-04	0.02
1125	1.13E-04	0	3.39E-04	0.02
1150	1.11E-04	0	3.34E-04	0.02
1175	1.10E-04	0	3.29E-04	0.02
1200	1.08E-04	0	3.24E-04	0.02
1225	1.06E-04	0	3.20E-04	0.02
1250	1.05E-04	0	3.15E-04	0.02
1275	1.03E-04	0	3.11E-04	0.02
1300	1.02E-04	0	3.07E-04	0.02
1325	1.01E-04	0	3.03E-04	0.02
1350	9.94E-05	0	2.99E-04	0.01
1375	9.81E-05	0	2.95E-04	0.01
1400	9.69E-05	0	2.91E-04	0.01
1425	9.57E-05	0	2.88E-04	0.01
1450	9.45E-05	0	2.84E-04	0.01
1475	9.34E-05	0	2.81E-04	0.01
1500	9.23E-05	0	2.78E-04	0.01
1525	9.13E-05	0	2.74E-04	0.01
1550	9.02E-05	0	2.71E-04	0.01
1575	8.92E-05	0	2.68E-04	0.01
1600	8.82E-05	0	2.65E-04	0.01
1625	8.72E-05	0	2.62E-04	0.01
1650	8.62E-05	0		

1900	7.74E-05	0	2.33E-04	0.01	
1925	7.66E-05	0	2.30E-04	0.01	
1950	7.58E-05	0	2.28E-04	0.01	
1975	7.50E-05	0	2.26E-04	0.01	
2000	7.43E-05	0	2.23E-04	0.01	
2025	7.35E-05	0	2.21E-04	0.01	
2050	7.28E-05	0	2.19E-04	0.01	
2075	7.21E-05	0	2.17E-04	0.01	
2100	7.14E-05	0	2.14E-04	0.01	
2125	7.07E-05	0	2.12E-04	0.01	
2150	7.00E-05	0	2.10E-04	0.01	
2175	6.93E-05	0	2.08E-04	0.01	
2200	6.86E-05	0	2.06E-04	0.01	
2225	6.80E-05	0	2.04E-04	0.01	
2250	6.73E-05	0	2.02E-04	0.01	
2275	6.67E-05	0	2.00E-04	0.01	
2300	6.61E-05	0	1.99E-04	0.01	
2325	6.54E-05	0	1.97E-04	0.01	
2350	6.48E-05	0	1.95E-04	0.01	
2375	6.42E-05	0	1.93E-04	0.01	
2400	6.36E-05	0	1.91E-04	0.01	
2425	6.31E-05	0	1.90E-04	0.01	
2450	6.25E-05	0	1.88E-04	0.01	
2475	6.19E-05	0	1.86E-04	0.01	
2500	6.14E-05	0	1.84E-04	0.01	
	/%	2.98E-03	0.06	8.95E-03	0.45
D10%	/m	/	/	/	/

0.45% <1%

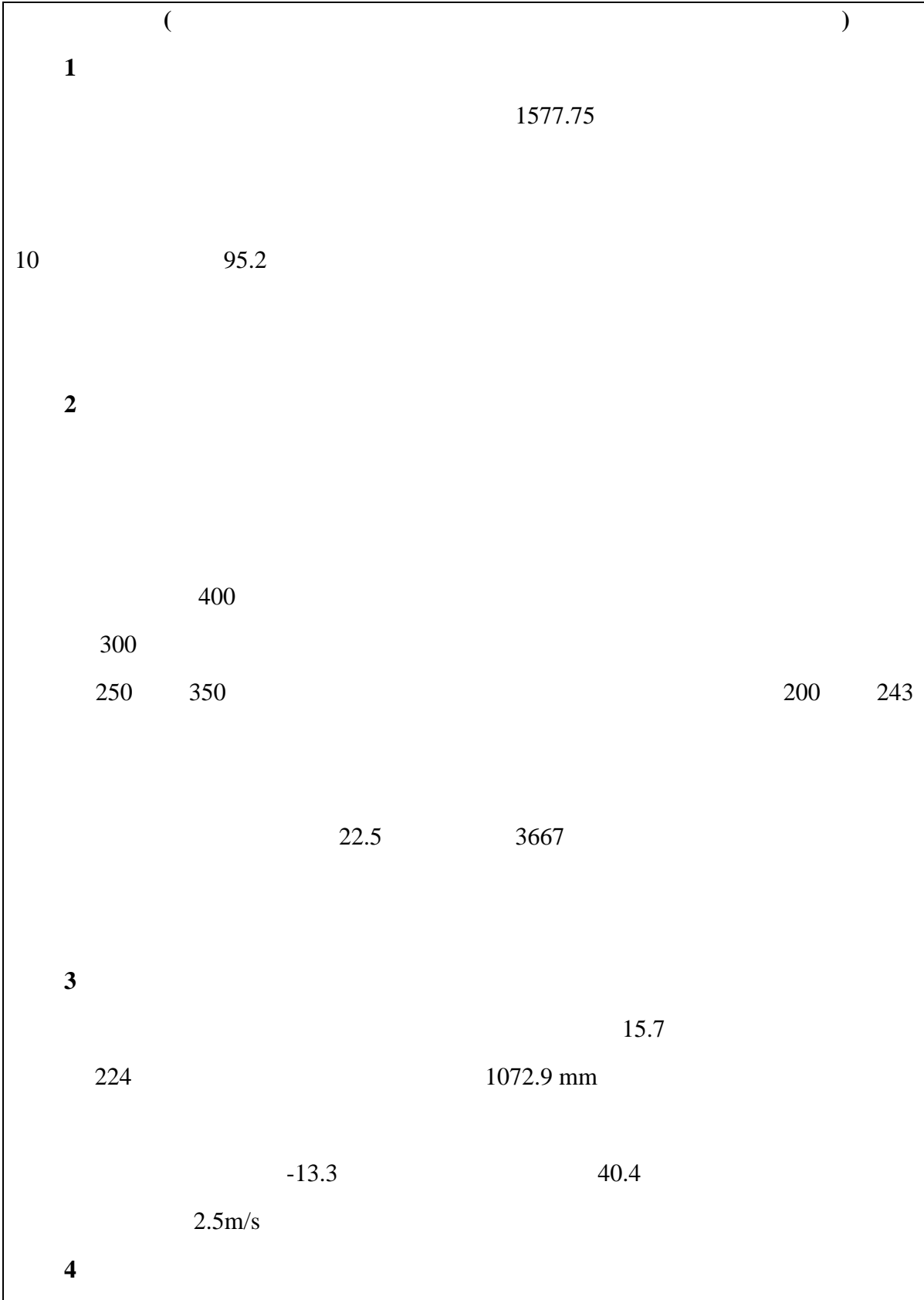
(HJ2.2-2018)

2

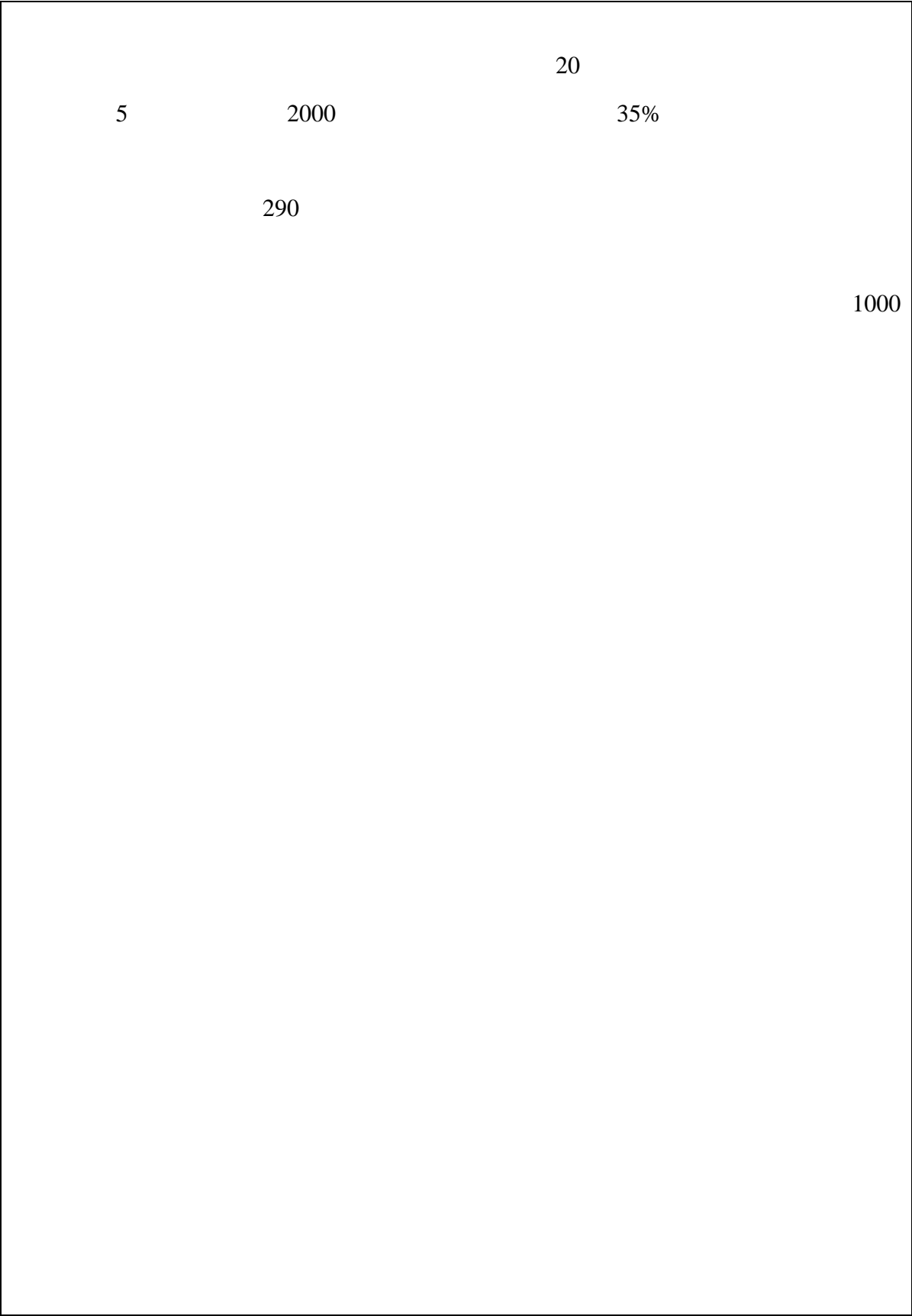
3

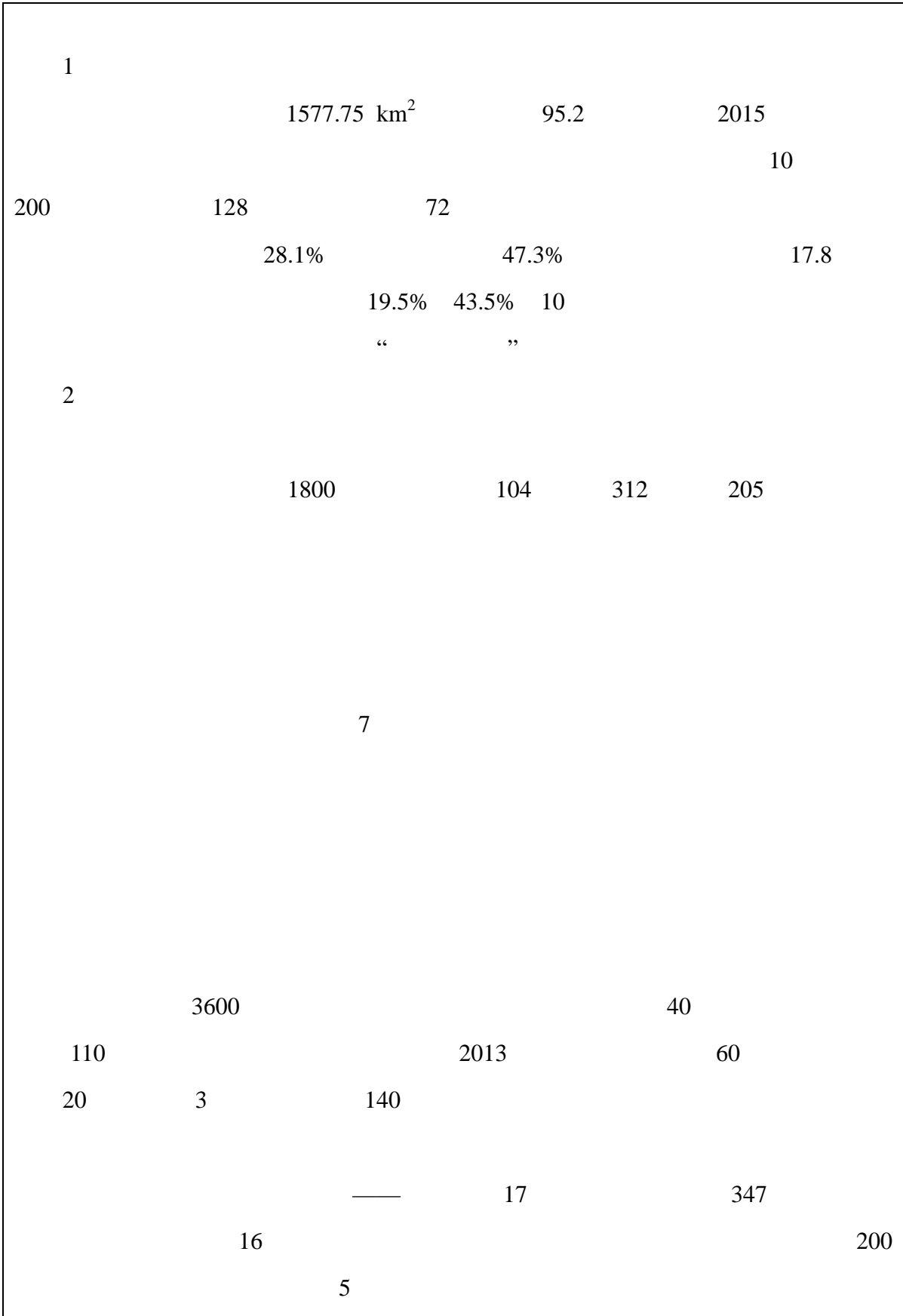
2

2016 7



		22.5		3667	
					3
5					
9730				2.3	
		50	60		
	2				
1.5		20 /		150	500
		15.73		11.03	5.85
0.25		2.41		2.52	3.65
		3.09		0.31	
0.36		1.05		0.35	
0.70					
			6	25	
		3		41%	





1

2017

GB3095-2012

SO₂ O₃ CO 3

NO₂ PM₁₀ PM_{2.5} 3

3-1

3-3-

GB3096-2008 2

2

3-2

3-2

			m		
		N	150		GB3095-2012
		SW	180	30	
		SW	460	200	
		SW	1900		GB3838-2002
		N	150		GB3096-2008 2
		SW	180	30	
	200				GB3096-2008 2
		W	3200	10.48km ²	
		W	3000	22.41km ² 33.3km ²	

1			
PM _{2.5}	PM ₁₀	SO ₂	NO ₂ CO O ₃
		GB3095-2012	
HJ2.2-2018		D	8
		4-1	
4-1		mg/m³	
SO ₂		60	GB3095-2012
	24	150	
	1	500	
NO ₂		40	
	24	80	
	1	200	
CO	24	4	
	1	10	
O ₃	8	160	
	1	200	
PM ₁₀		70	
	24	150	
PM _{2.5}		35	
	24	75	
TVOC	8	600	HJ2.2-2018 D
2			
GB3838-2002		1	SS
SL63-94		4-2	
4-2		mg/L pH	
pH		6~9	
COD		30	
NH ₃ -N		1.5	
TN	N	1.5	
TP	P	0.3	0.025
SS		60	
		GB3838-2002 1	
		SL63-94	
3			

[2014]34

GB3096-2008 2

4-3

4-3

dB(A)

1

GB18483-2001 SO₂ NO_x

GB16297-1996

4-4

4-5

4-4

		mg/m ³	%
	3 6	2.0	75
	6		85

4-5

	mg/m ³	kg/h		mg/m ³	GB16297-1996
		m			
		SO ₂	550		
NO _x	240	15	0.77	0.12	
	120	15	3.5	1.0	

2

GB8978-1996 4

GB/T31962-2015 B

GB18918-2002 1 A

4-6

4-6

mg/L

COD	500	50
BOD ₅	300	10
SS	400	10
NH ₃ -N	45	5
TN	70	15
TP	8	0.5
	100	1

3

GB12348-2008

2

4-7

4-7

	dB A	dB A	
2	60	50	GB12348-2008

4

GB18599-2001 2013

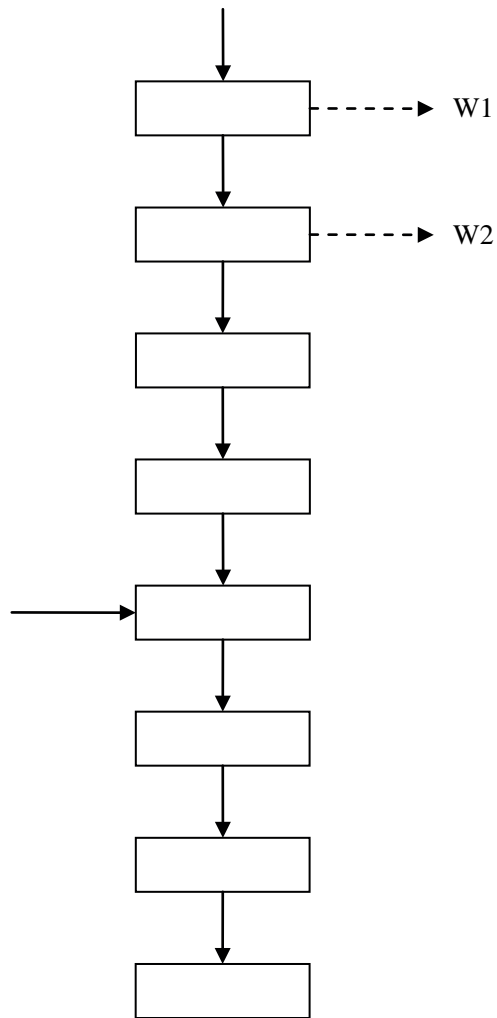
GB18597-2001 (2013 36)

4-8

4-8		t/a			
		0.3024	0.272	/	0.030
		0.008	0	/	0.008
	SO ₂	0.003	0	/	0.003

5-1

1

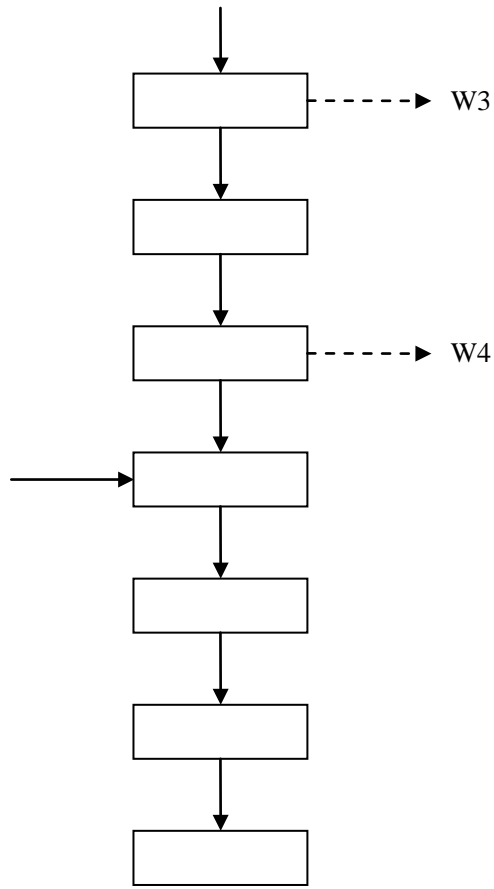


5-1

2

W1

W2

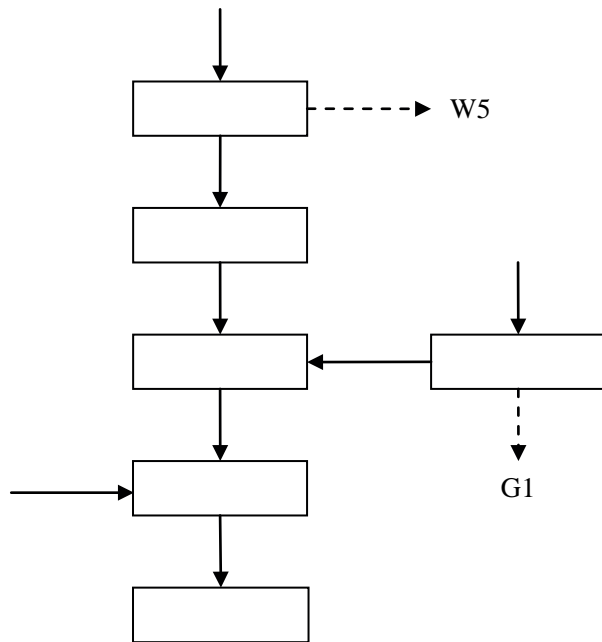


5-2

W3

W4

3

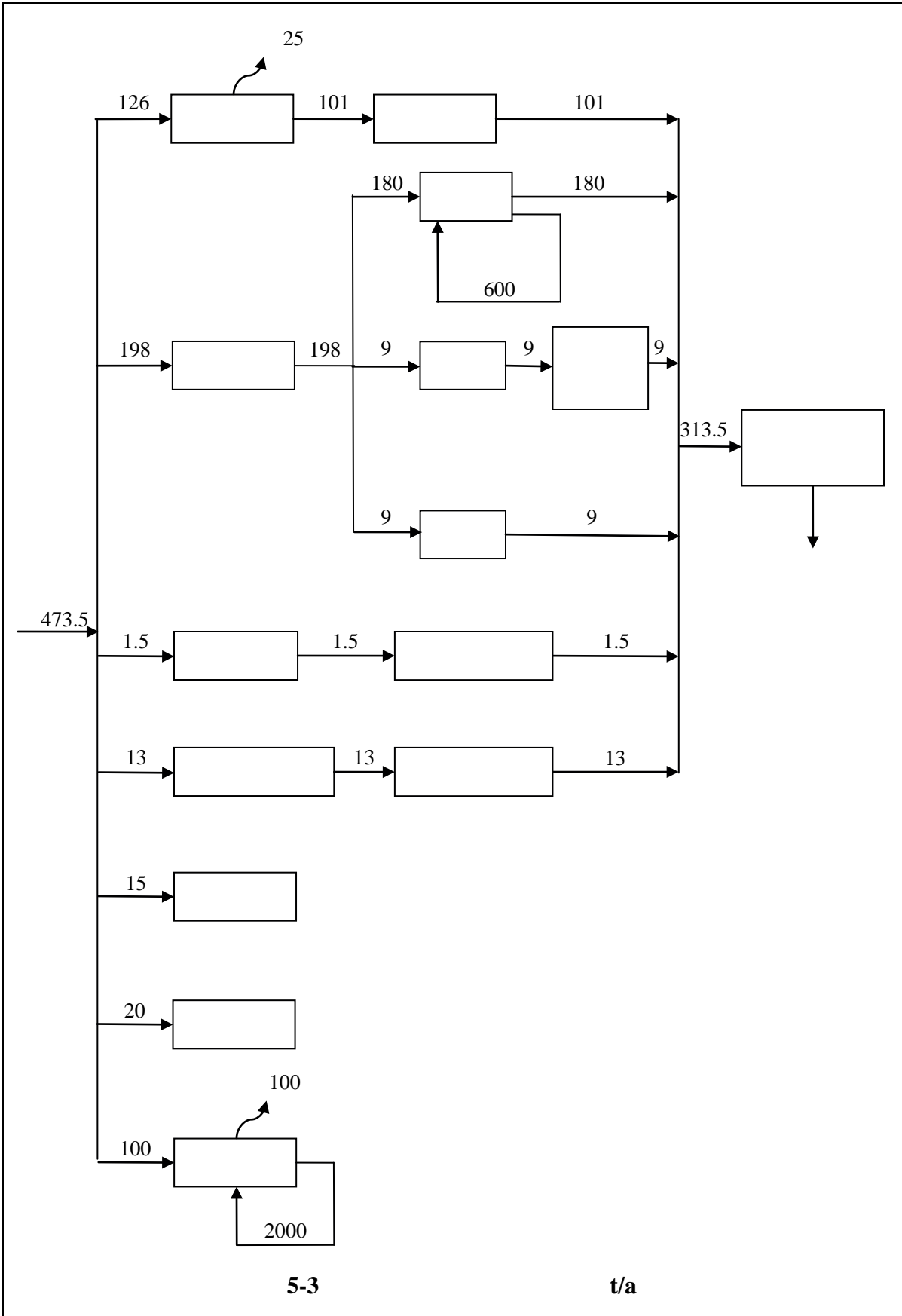


5-3

W5

1				
1		15.12t		2%
	0.3024t/a		90%	
			GB18483-2001	
	2.0mg/m ³			
2			7200m ³ /a	
			1 Nm ³	
	136259.17Nm ³		98106.6m ³ /a	
			GB17820-1999	
	200mg/m ³	SO ₂	4.0kg/ m ³	
NOx	18.71 kg/ m ³			
	2.4kg/ m ³			
	5-5			
	5-5			
		SO ₂	NOx	
	kg/ m ³	4	18.71	2.4
	t/a	0.003	0.013	0.002
		S		S

2													/					
0.006t/a													0.1%		6t/a			
5-4													5-4					
5-4													/m		kg/h			
		X	Y	/m	/m	/m	/°	/m	/h			SO ₂	NO _x					
1		655403.63	3527145.05	22	9	8	60	5	2016		0.003	/	/					
2		655402.91	3527150.73	22	5	4	120	5	2016		0.001	0.002	0.006					
2													10		GB50015-2009			
1													50L/(·)					
252													126t/a		0.8			
101t/a																		
2													0.5t		3t		1.5t/a	
3																	2	
600t/a													70%		180t/a			
3													9t/a		9t/a			



5-2

	t/a		(mg/L)	(t/a)		(mg/L)	(t/a)
	101	COD	350	0.035		280	0.028
		SS	250	0.025		200	0.020
		NH ₃ -N	20	0.002		20	0.002
		TN	45	0.005		45	0.005
		TP	4	0.0004		4	0.0004
	212.5	COD	400	0.085		350	0.074
		SS	250	0.053		200	0.043
			100	0.021		20	0.004

3

60~80 dB A

8

3t/a										
3										
0.2t/a										
4										
0.15t/a										
2017										
5-4										
5-4										
										/
1										1.26
2										3
3										0.2
4										0.15
										-
										-
										-
										-
										2017
5-5										
5-5										
										/
1		--								99
2										99
3										57
4										0.15
										1.26
										3
										0.2
										0.15
										HW08900-249-08
2016										
5										

5-7

5-7

		m³/h					
				kg/h	t/a	kg/h	t/a
		--	--	0.15	0.3024	0.01	0.030
		--	--	0.004	0.008	0.004	0.008
	SO ₂	--	--	0.001	0.003	0.001	0.003
	NO _x	--	--	0.01	0.013	0.01	0.013
		t/a		mg/L	t/a	mg/L	t/a
	COD	101		350	0.035	280	0.028
	SS			250	0.025	200	0.020
	NH ₃ -N			20	0.002	20	0.002
	TN			45	0.005	45	0.005
	TP			4	0.0004	4	0.0004
	COD	212.5		350	0.085	350	0.074
	SS			250	0.053	250	0.043
				100	0.021	20	0.004
				t/a	t/a	t/a	t/a
				1.26	1.26	0	0
				3	3	0	0
				0.2	0.2	0	0
				0.15	0.15	0	0

			mg/m₃	t/a	mg/m³	(kg/h)	(t/a)		
			--	0.3024	--	0.01	0.030		
			--	0.008	--	0.004	0.008		
		SO ₂	--	0.003	--	0.001	0.003		
		NOx	--	0.013	--	0.01	0.013		
			(t/a)	(mg/L)	(t/a)	(mg/L)	(t/a)		
		COD	101	350	0.035	280	0.028		
		SS		250	0.025	200	0.020		
		NH ₃ -N		20	0.002	20	0.002		
		TN		45	0.005	45	0.005		
		TP		4	0.0004	4	0.0004		
		COD	212.5	350	0.085	350	0.074		
		SS		250	0.053	250	0.043		
				100	0.021	20	0.004		
			(t/a)	(t/a)	(t/a)		(t/a)		
			1.26	1.26	0		0		
			3	3	0		0		
			0.2	0.2	20		0		
			0.15	0.15	0.2		0		
			60~80 dB A						
		GB12348-2008	2						
		2							

1

7-1

7-1

	mg/m ³	kg/h	mg/m ³	kg/h	
	/	0.01	2.0	/	GB18483-2001
	/	0.004	0.4	/	GB16297-1996
SO ₂	/	0.001	0.12	/	
NO _x	/	0.01	1.0	/	

7-2 7-3 7-4

7-2

			μg/m ³ /	kg/h /	t/a /
/	/	/	/	/	/
			SO ₂		/
			NO _x		/
					/
1	1#	/	/	/	/
			/		/
			/		/

7-3

					μg/m ³ /	t/a /
1					2000	0.030

					GB18483-2001		
2			SO ₂		GB16297-1996	120000	0.002
			NO _x			550000	0.003
3						240000	0.013
						120000	0.006
						0.030	
						0.008	
						SO ₂	0.003
						NO _x	0.013

7-4

		t/a
1		0.030
2		0.008
3	SO ₂	0.003
4	NO _x	0.013

2

212.5t/a

101t/a

1

COD SS

2

1t/d

3

3

1

10

0.5kg

252

1.26t/a

2

3t/a

3

0.2t/a

4

0.15t/a

GB18599-2001

GB18597-2001

7-3

7-3

				t/a		
1			99	1.26		
2			99	3		
3			57	0.2		
4			900-249-08	0.15		

0.15t/a

20kg/

$5m^2$ 8 $0.5m^2/$ $4m^2$

7-4		dB A	
	59.4	60	
	53.1	60	
	42.9	60	
	41.2	60	

GB12348-2008 2

6
 0.030t/a 0.008t/a SO₂ 0.003t/a NO_x 0.013
 t/a
 313.5t/a COD 0.102t/a SS 0.063t/a NH₃-N
 0.002t/a TN 0.005t/a TP 0.0004t/a 0.004t/a

7 “ ”
 “ ”

7-5

7-5 “ ”

80						
		COD SS NH ₃ -N TN TP			10	
		COD SS				
			1 90%	GB18483-2001	5	
		SO ₂ NO _x		GB16297-1996		

		—		GB12348-2008 2 60dB 50dB	—
					5
				—	—
		1			10
“ ”					—
		0.003t/a NOx 0.013 t/a 0.063t/a NH ₃ -N 0.002t/a TN 0.005t/a TP 0.0004t/a 0.004t/a	0.030t/a 313.5t/a	0.008t/a SO ₂ COD 0.102t/a SS	—
					—
					30

8

1

2

“ ”

()

7-6~7-7

7-6

			GB16297-1996
	SO ₂		
	NO _x		

7-7

		pH	COD	
		NH ₃ -N		
		SS	TP	
		COD	SS	
	1			

				GB18483-2001
			SO ₂	GB16297-1996 2
			NO _x	
		COD SS NH ₃ -N TN TP		GB18918-2002 A
		COD SS		
				60~80 dB A
				GB12348-2008 2

1				2018	7	
		300				
	2	800				2018
12				80		
	1					
2						
					(2011)	
				(2011)		
					(2012)	
				2012		
		[2015]118				
3						2
						2012
		2012				2013
			2013			
4						
		“	”			
5						
1				2017		
	GB3095-2012	SO ₂	O ₃	CO		NO ₂ PM ₁₀

PM_{2.5}

2

pH COD NH₃-N TN TP

(GB3838-2002) 1

SS

SL63-94

3

GB3096—2008 2

6

1

0.030t/a

0.008t/a SO₂ 0.003t/a NO_x 0.013 t/a

2

101t/a COD 0.028t/a SS 0.02t/a NH₃-N 0.002t/a TN 0.005t/a TP 0.0004t/a

212.5t/a COD

0.074t/a SS 0.043t/a 0.004t/a

GB18918-2002 A

3

60~80 dB A

GB12348-2008 2

4

7

0.030t/a

0.008t/a SO₂ 0.003t/a NO_x 0.013

t/a

0.002t/a TN 0.005t/a TP 0.0004t/a 313.5t/a COD 0.102t/a SS 0.063t/a NH₃-N
0.004t/a

1

2

3

4

