“ ”

“ + ”

58

6100 18279.67m² 27.42 11126.11m²

1300

3000

2021 5 28

2105-450109-04-01-581249 2

682

2018 12 29

2021

“ 13 18 135 ‘

10 1 15 1000 ’”

2021 6 21

1

108°49′42.87″ 22°37′33.01″ 108.82858,22.62584

“ + +A/O ”

8m 0.3m

15m

2

0.035%

2017

2017 10 1 HJ 2.1-2016

HJ 2.1-2016

2021 6 21

2021 7 1 ~7 7

1

2019

“ ” 26 “ ”

2

1

[2020]42

3

7

3.8km

2010 12 22

4 “ ”

“ ”

5

1

2

3

4

5

1 1
1.1 1
1.2 5
1.3 7
1.4 13
1.5 21
2

6.4 133
6.5 134
7 135
7.1 135
7.2 139
7.3 141
7.4 146
7.5 148
8 149
8.1 149
8.2 149
8.3 150
8.4 152
8.5 155
8.6 155
8.7 .....
8.8 156
8.9 156
8.10 156

1 2014 2015 1 1

2 2018 12 29 2018 12 29

3 2017 6 27 2018 1 1

4 2018 10 26 2018 10 26

5 2020 4 29 2020 9 1

6 2018 12 29 2018 12 29

7 2010 12 25 2011 3 1

8 2016 7

9 2019 8 26 2020 1 1

10 2016 5 16 2016 7 1

11 2018 1 1

12 2007 10 28 2008 4 1

13 2011 2 16 2011 12 1

14 2021 5 1

15 2015 4 24

16 2012 12 28

17 2013 6 29

1 2017 2017 10 1

2 2021

16 2021 1 1

3 2019 1 1

4 2015 6 5

5 2012 98

6 2014 56

7 2011 35

8 2012

77

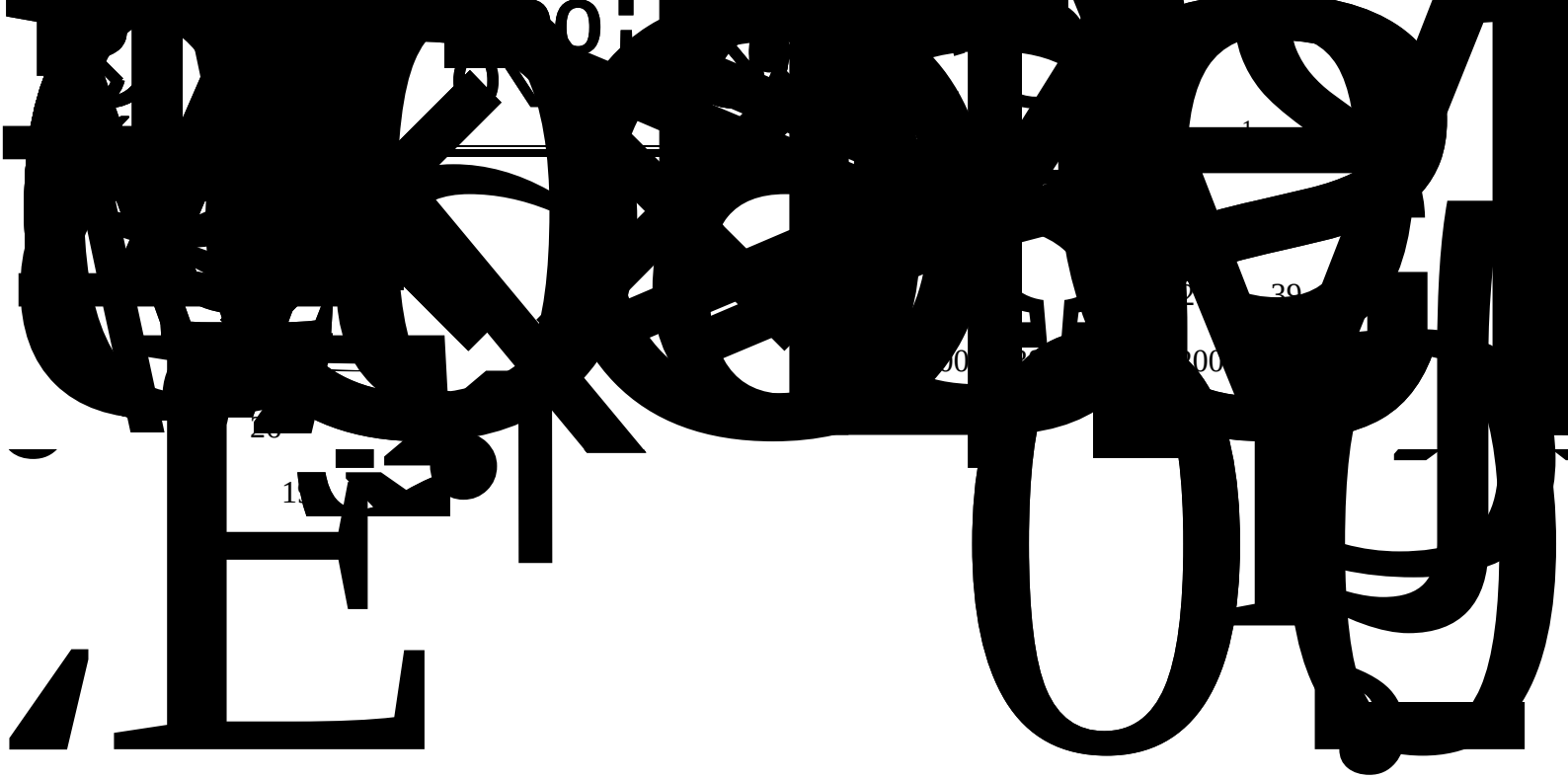
9 2021

15 2021 1 1

10

2016 150

11



7

2012 103

8 < >

2016 19

9 <

2019 > 16

1.2 -1

				√			√		√
				√			√		√
				√			√		√
				√			√		√
					√	√			√
				√		√			√
				√		√			√
				√		√			√
				√		√			√

1.2-2

	pH 13	
	K^+ Na^+ Ca^{2+} Mg^{2+} CO_3^{2-} HCO_3^- Cl^- pH 20	COD NH_3-N
	O_3 SO_2 NO_2 PM_{10} $PM_{2.5}$ CO TSP	NH_3 H_2S PM_{10}
	L_{Aeq}	L_{Aeq}

2008 ___ ___ “2-1

2-1-18 ”

2010 2-1

1.3-1

1.3-1

1		“2-1
2		GB3095-2012 2018 9 1
3		GB3838-2002
4		GB/T14848-2017
5		GB3096-2008 3 4a
6		
7		
8		
9		

1

GB 3095-2012 2018

NH_3 H_2S - HJ 2.2-2018

1.3-2

1	SO_2		60μg/m^3	GB 3095-2012 2018
		24	150μg/m^3	
		1	500μg/m^3	
2	NO_2		40μg/m^3	
		24	80μg/m^3	
		1	200μg/m^3	
3	TSP		200μg/m^3	
		24	300μg/m^3	
4	PM_{10}		70μg/m^3	
		24	150μg/m^3	
5	$PM_{2.5}$		35μg/m^3	
		24	75μg/m^3	
6	O_3	8	160μg/m^3	
		24	200μg/m^3	
7	CO	24	4mg/m^3	
		1	10mg/m^3	
8	NH_3		0.2mg/m^3	- HJ 2.2-2018 D
9	H_2S		0.01mg/m^3	

2

GB 3838-2002

1.3-3

1.3-3 mg/L

1		≤1	≤2
2	pH	6 9	
3		≥2	
4		≤15	

11		≤1.0
12	/L	≤40000

3

GB/T14848-2017

1.3-4

1.3-4 mg/L pH

1	pH	6.5≤pH≤8.5	11	HCO_3^-	/
2		≤450	12		≤0.005
3		≤3	13		≤1.0
4		≤0.50	14		/
5		≤250	15		≤200
6		≤20.0	16		/
7		≤1.00	17		/
8	Cr	≤0.05	18	Fe	≤0.3
9	Cl^-	≤250	19	Mn	≤1.0
10	CO_3^{2-}	/	20		≤3 MPN/100ml

4

GB 3096-2008 2 3 4a

GB3096-2008 3

4a

GB3096-2008 2 1.3-5

1.3-5 (GB 3096-2008) dB A

2	60	50
3	65	55
4a	70	60

1

GB16297-1996 2

1.3-6

1.3-6 2 mg/m^3

1			0.40
2			0.12
3			1.0

GB13271-2014 2 8m

GB14554-93 1

2

GB18483-2001 2

1.3-7 2 mg/m^3

1		50	
2		200	
3		20	

1.3-8

1		15m	4.9 kg/h	1.5 mg/m^3
2			0.33 kg/h	0.06 mg/m^3
3	( )		/	20

1.3-9 ( )

mg/m^3	2.0		
%	60	75	85

2

GB13457-92 3

1.3-10

1.3-10

1		300	5.4	150	150
2	BOD_5	250	4.5	110	110
3	COD_{Cr}	500	9.0	250	250
4		50	0.9	—	50
5		—	—	30	30
6		—	—	35	35
7		—	—	3	3
8	pH	6.0~8.8		/	—
9	m^3/t	18.0		—	—

3

GB 12523-2011

1.3-11

1.3-11 Leq[dB(A)]

	70	55

GB 12348-2008 3

GB 12348-2008 4 13-12

1.3-12 dB A

	65	55	3
	70	55	4

4

GB

18599-2020

GB 18597-2001

[2013]36

(HJ2.2-2018) 5.3

A

AERSCREEN

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

(HJ2.2-2018) P

$$P_i = \frac{C_i}{C_{0i}} \times 100\%$$

P_i—— i %

C_i—— i 1h μg/m^3

C_{0i}—— i μg/m^3 C_{0i}

GB3095-2012 1

SO_2 NO_2 GB3095-2012 1

PM_{10} GB3095-2012

NH_3 H_2S HJ2.2-2018 D

2

1.4-1

Pmax 10%

	Pmax<1%

2

1.4-2

4

1.4-5

1.4-5

/	/	
	( )	/
		40.4℃
		-2.1℃
	(m)	90
	/km	/
	/º	/

6

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

1.4-6 Pmax D10%

1#	SO_2	500		0.0003	0.0001	/
	NO_2	200		6.6810	3.34	/
		450		1.0279	0.23	/
2#	NH_3	200		0.4471	0.22	/
	H_2S	10		0.0033	0.03	/
3#	NH_3	200		1.4028	0.70	/
	H_2S	10		0.0533	0.53	/
	NH_3	200		2.0664	1.03	/
	H_2S	10		0.0209	0.21	/
	NH_3	200				/
	H_2S	10		0.2953	2.95	/

P_{max} NH_3 P_{max}

	a

a“ ”

1.7-9

HJ 610-2016 A “N ” “98 ” “ 10

100 ”

1.5-9

2

5dB

200m

HJ 964

2018 A

18279.67m^2 2km^2

HJ19-2011

1.5-10

	≤2km^2 50km		
	18279.67m^2≤2km^2		

200m

HJ169-2018

1

HJ169-2018

B Q

Q

Q

Q=∑qi/Qi

qi—— t

Qi—— t

Q 1

Q≥1 Q 1≤Q 10 10≤Q 100 Q≥100

(HJ 169—2018) B

1.125t 0.4t

5t 2500t

Q=1.125/5+0.4/2500=0.225 Q<1 I

2

HJ169-2018

1.5-11

1.5-11

	+			
				a
a				

1.5-12

1.5-12

HJ2.2-2018

NH_3

Pmax 4.28% 1%

1% P_{max} 10%

10%

HJ 2.3-2018

1.5-1

1.5-1

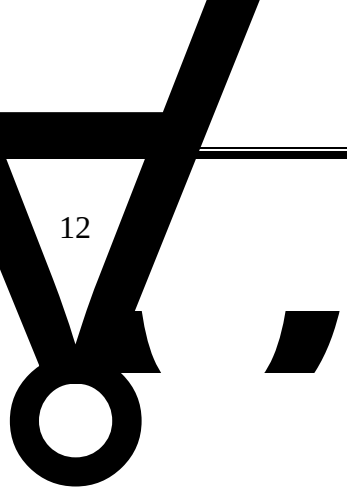
22.624897	108.494845	29900	35m
/	/	/	/

1

2

א

12



175 360

1573.20m^2 7.8m

	A05		1		
	A06		1		,38 4
	A07		2		
	A08		1		
	A09		1		
	A10		1		
	A11		2		
	A12		1		
	A13		1		
	B01		115		
			2		2.2KW
			2		
			2		3.7KW
			12		
+			2		30°
		B	2		
	B02		1		
	B03		2		
	B04		1		
	B10		1		
	B11		1		80
	B12		3		L=6.5
	C01		0		10
	C02		1		

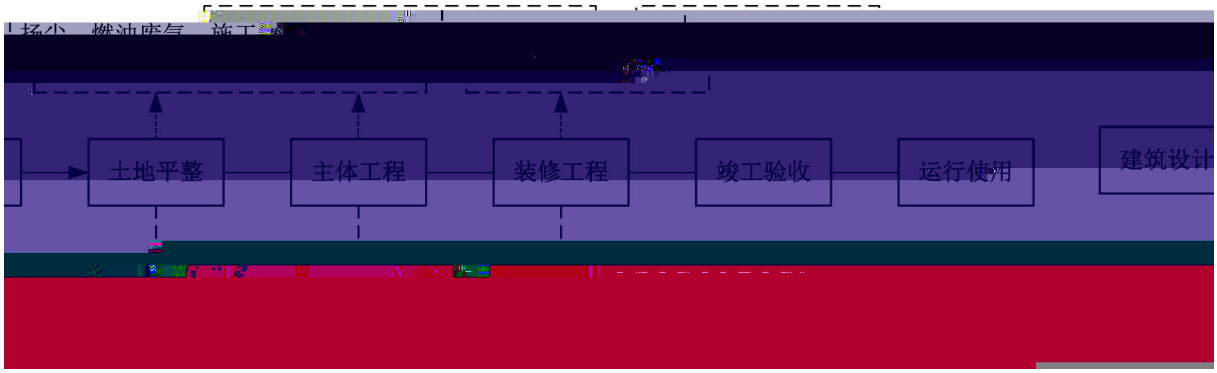
2.1-4

	t/a	/	1300
	20000	/	
	1.125	NaClO	
	120	CaO	
PAC	72		
PAM	12		
	0.5	R22	
	50		
	28 m^3/a	/	/
	1000 kWh/a	/	/
	10.08 m^3/a	CH4	

		pH 3~9	
R22	$CHClF_2$	CAS 75-45-6 200	5000mg/kg
	CH_4	CAS 74-82-8 25~30%	/
	/	70 70 100 8%~10%	/
	/	10~22	/

2

2.2-1



2.2-1

2.2-2

1

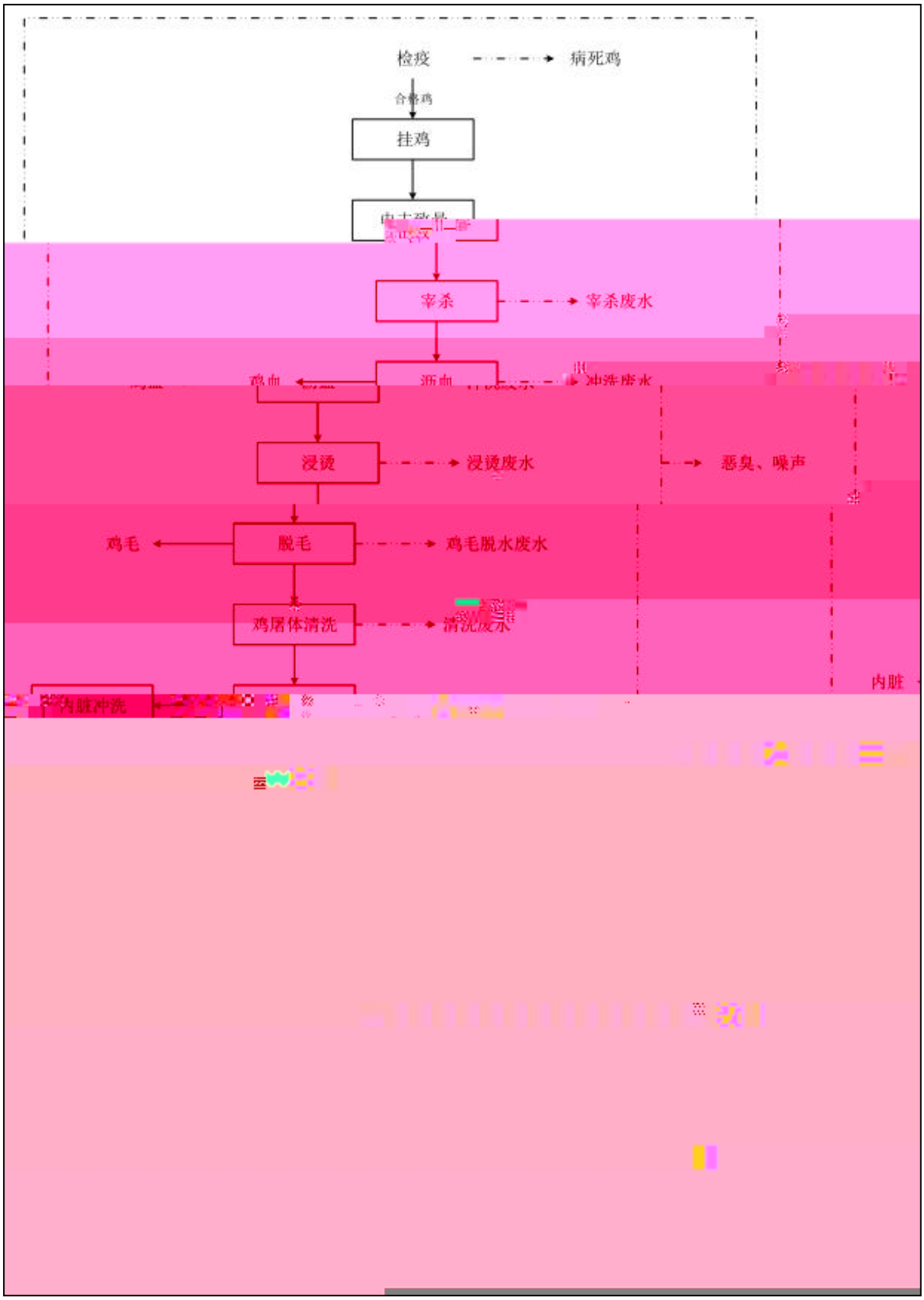
1

2~3

36~70V

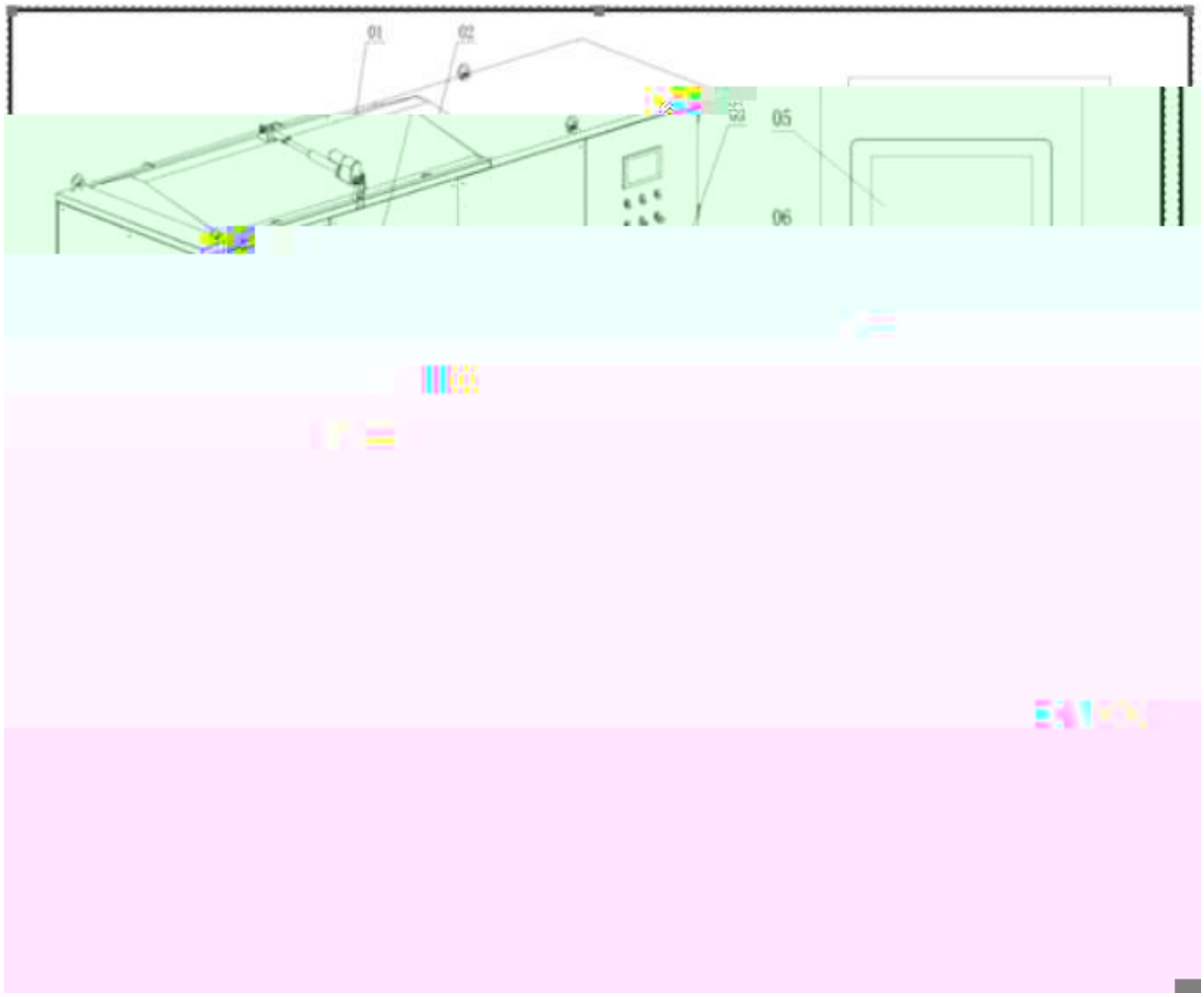
2.5~3min

59-61 40-90s

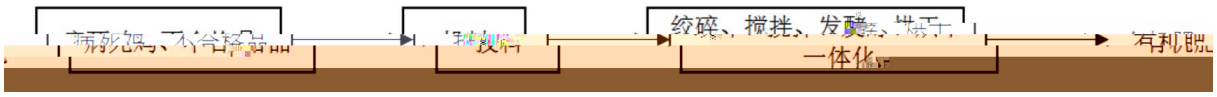


2.2-2

2



2.2-3



2.2-4

1

2 150kg 10~20min

3

15.5m^3/d 5580m ^{3}/a

4m ^{3}/d 1440m ^{3}/a

2m^3/d 720m^3 /a

175 30 145

360 8 GB50015-2010

50L/ ·d 200L/ ·d

13.25m^3/d 4770m ^{3}/a

2.2-2 2.2-6

0.006

35 12600

1

1

0.05~0.1m^3

0.07m^3/m^2 11126.11m^2

778.83m^3

2

12 20

50L/ ·d

1m^3/d 80% 0.8m^3/d

2.2-3

2.2-3

	0.8	350	0.280	200	0.160	250	0.200	30	0.024
	0.8	220	0.176	110	0.088	120	0.096	27	0.022

2

1

3

12 20

0.5kg/ ·d 10kg/d

5

1

2

2.2.1.4

690.496m^3/d 248578.56m^3/a

1

SS400mg/L 100mg/L COD_{Cr}300mg/L $BOD_5$250mg/L NH_3-N30mg/L

5

2.2.1.4

10.6m³/d 3816m³/a COD_{Cr} BOD_5 SS NH_3-N —

2007

2.2-6

m³/a	COD_{Cr}		BOD_5		SS		NH_3-N	
3816	mg/L	t/a	mg/L	t/a	mg/L	t/a	mg/L	t/a
	350	1.336	250	0.954	250	0.954	35	0.134
3816	220	0.840	190	0.725	120	0.458	30	0.114

GB18918-2002 A

1

0.5t/h

8h/d 360d/a 2880h 12 m^3

HJ991-2018

HJ953-2018

$$V_{gy}=0.285Qnet+0.343$$

V_{gy}—— Nm^3/m^3 Nm^3/kg

Q_{net}—— MJ/m^3

35.5MJ/Nm^3

10.461Nm^3/m^3 125.526 Nm^3/a

HJ991-2018

$$E_{SO_2} = 2R \times S_t \times (1 - \frac{\eta_s}{100}) \times K \times 10^{-5}$$

E_{SO2}—— t

R—— m^3

S_t—— mg/m^3

0.042mg/m^3

η_S—— % 0%

K—— K=1

$$E_{NO_x} = \rho_{NOx} \times Q \times \left(1 - \frac{\eta_{NOx}}{100}\right) \times 10^{-9}$$

E_{NOx}—— t

ρ_{NOx}—— mg/m^3 HJ 991 180mg/m^3

Q—— m^3

η_{NOx}—— % 0%

$$E_j = R \times \beta_j \times (1 - \frac{\eta}{100}) \times 10^{-3}$$

E_j—— t

R—— t m^3

β_j—— kg/t kg/ m^3 HJ 953 2.86kg/ m^3

η—— % 0%

125.526 Nm^3/a SO_2 0.0000101t/a 0.0000035kg/h NO_X 0.226t/a 0.078kg/h 0.0343t/a 0.012kg/h 3400m^3/h SO_2 NO_X 0.00103mg/m^3 23.075mg/m^3 3.505mg/m^3 8m 0.3m SO_2 NO_X GB13271-2014 2

2

NH_3 H_2S NH_3 H_2S

500

2020 7

2.2-8 2.2-9

2.2-8

500	500 / 1.38 /	
	1300 / 3.6 /	

2.2-9

			kg/h	kg/h
500	1.3 /	NH_3	4.73×10^{-3}~8.02×10^{-3}	6.05×10^{-3}
		H_2S	4.47×10^{-5}~1.08×10^{-4}	5.63×10^{-5}

90% 1

85% 1 15m 0.8m

6500m^3/h

10%

2.2-10 NH_3 H_2S

GB14554-93 2 15m

			(m^3/h)	(mg/m^3)	t/a		%	(kg/h)	(mg/m^3)	t/a
	NH_3		6500	2.7376	0.15374		85	0.00267	0.41063	0.02306
	H_2S			0.0255	0.00143			0.00002	0.00382	0.00021
	NH_3		/	/	0.01708		0	0.00198	/	0.01708
	H_2S			/	0.00016			0.00002	/	0.00016

3

NH_3 H_2S NH_3 H_2S

15000

		SO_2	NOx		CO	
g/L	12m^3/kg	4.00	2.56	0.714	1.52	1.49
t/a	489600m^3/a	0.194	0.124	0.035	0.074	0.072
kg/h	5100m^3/h	2.024	1.295	0.361	0.769	0.754
mg/m^3	/	264.550	169.312	47.222	100.529	98.545
mg/m^3	/	550	240	120		

6

3 4h/d

175 360d 2.0kg/100 ·d

3.50kg/d 1.26t/a 3%

0.105kg/d 0.0378t/a

2000m^3/h

75% 4.375mg/m^3

1.094mg/m^3

GB18483-2001 2 ≤2.0mg/m^3

0.026kg/d 0.009t/a

7

4

1

60~95dB A

2.2-14

		60~75		10~15	50~65
		70~80		10~20	60~70
		60~70		10~15	50~60
		70~80		10~15	60~70
		60~70		10~15	50~60
		70~80		10~15	60~70
		60~70		10~15	50~60
		60~70		10~15	50~60
		70~80		10~15	60~70
		80~90		10~20	65~75
		85~95		10~15	65~75
		65~75		10~20	55~65
		70~80		10~20	60~70
		65~75		10~20	55~65
		80~90		10~20	65~75
		60~75		10~20	55~65

2

60~75dB A 60~70dB A 75~80dB A

1

8

$BOD_5$162.8t/a

98% 226kg/d 81.4t/a

80% 22.6kg/d 8.14t/a

7

3~4

250kg 3

2 0.17t/a

8

1t/a 2021

HW08 900-214-08

“ ”

9

175

360 0.5kg/ ·d

87.5kg/d 31.5t/a

2.2-15

					t/a
					700
					680
					20
					18
					28.14
					0.17
					1
					31.5

1

50% 2.2-16

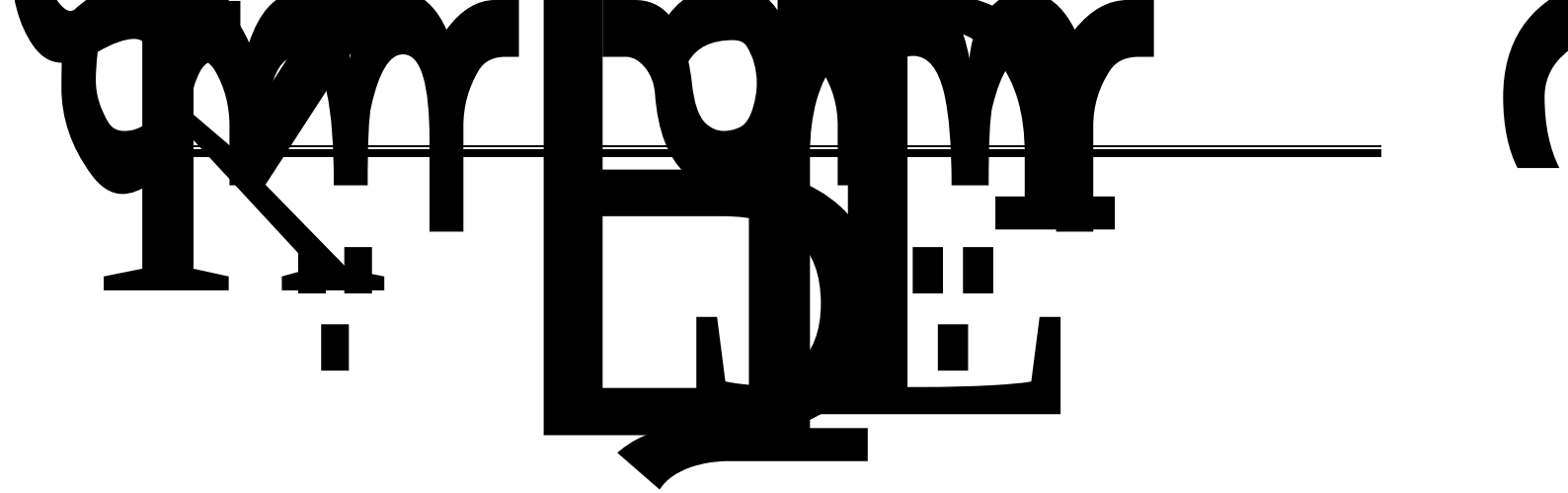
2

50%

			t/a		
			0.8m^3/d		0.8m^3/d
		COD_{Cr}	0.280kg/d		0.176kg/d
		BOD_5	0.160kg/d		0.088kg/d
		SS	0.200kg/d		0.096kg/d
		NH_3-N	0.024kg/d		0.022kg/d
					0
			27.82t		0
			10kg/d		0

2.2-19

	t/a				
SO_2	0.0000101				0.0000101
NO_X	0.226		+8m		0.226
	0.0343				0.0343
NH_3	0.15374			1 15m	0.02306
H_2S	0.00143	0.8m			0.00021
NH_3	0.01708				0.01708
H_2S	0.00016				0.00016
NH_3	0.4542			1 15m	0.0681
H_2S	0.0176	0.4m			0.0026
NH_3	0.0505				0.0505
H_2S	0.0020				0.0020
SO_2	0.194				0.194
NOx	0.124				0.124
	0.035				0.035
CO	0.074				0.074
HC	0.072				0.072
	0.0378				0.009



107°19′~109°38′

22°12′~24°2′

32

108°29′42.87″

22°37′33.01″ 1

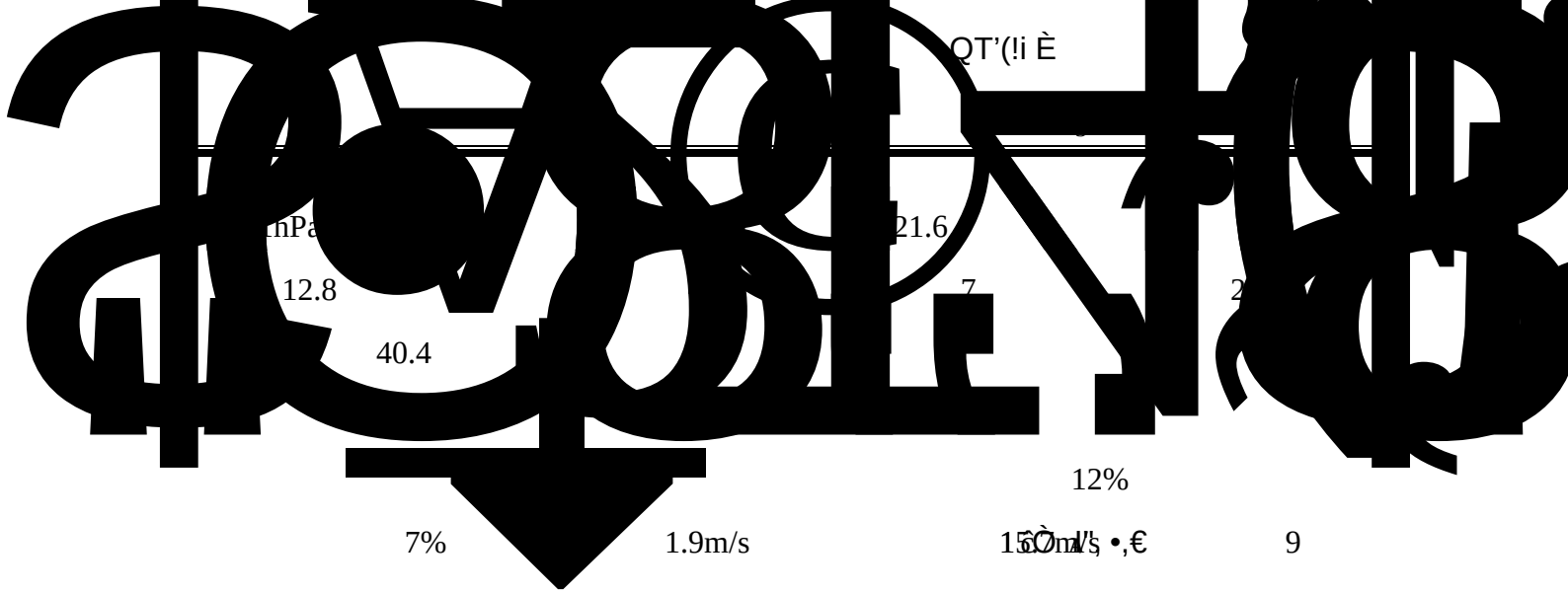
5 57.78%

4.6%

300m 600m 25° 40°

2.61%

300m 400m à 120m 160m


QT'(!i È
21.6
12.8
7
40.4
12%
7%
1.9m/s
9
39
12.2
28
764.5km2
116.4km

0.32m^3/s

2 3

2 3

10 30m 1.5 3m

796.8km2 5 10m

1 3m 10.8 m3/s 55.55 km 1.11km2 165.9m

600

3.8km 7

3.1-1 1.5-1

		3.8km	

HJ 2.2-2018

2020

2020 3.2-1

μg/m^3			
SO_2	8	60	13.33%

[redacted] “ 20

5km 1~2

NH [redacted] H_2S TSP [redacted] 7d

	HJ 533-2009	0.01mg/m^3
	2003	0.001mg/m^3
TSP	GB/T 15432-1995	1μg/m^3
	GB/T 14675-1993	10

HJ 2.2—2018 D

P_i C_i/C_{Oi}

P_i——

C_i—— mg/m^3

C_{Oi}—— mg/m^3

P_i>1

3.2-4 3.2-5

3.2-6 7

2021.07.01		29.1	99.59	78		0.3
		34.1	99.10	67		0.7
		30.7	99.40	78		0.5
		28.8	99.61	79		0.1
2021.07.02		30.6	99.30	73		0.8
		33.8	99.13	68		0.9
		31.0	99.37	75		2.1
		29.3	99.62	76		0.4
2021.07.03		29.7	99.30	74		0.3
		35.0	99.03	69		0.8
		30.4	99.38	70		0.4
		28.7	99.69	75		0.1
2021.07.04		29.0	99.32	70		1.0
		33.8	99.06	69		0.6
		30.0	99.29	75		0.9
		28.8	99.70	75		0.5
2021.07.05		28.6	99.40	76		1.3
		34.1	99.00	70		0.9
		30.0	99.33	68		0.4
		28.8	99.35	76		2.1
2021.07.06		29.4	99.32	77		1.4
		35.0	99.00	75		2.4
		30.2	99.34	69		0.7
		29.2	99.34	70		0.2
2021.07.07		29.4	99.31	78		0.6
		34.2	99.02	74		1.4
		30.4	99.31	75		0.2
		28.8	99.40	72		0.3

A2	2021.07.01		0.073	ND	ND	10
				ND	ND	
				ND	ND	
				ND	ND	
	2021.07.02		0.072	ND	ND	10
				ND	ND	
				ND	ND	
				ND	ND	
	2021.07.03		0.071	ND	ND	10
				ND	ND	
				ND	ND	
				ND	ND	
	2021.07.04		0.073	ND	ND	10
				ND	ND	
				ND	ND	
				ND	ND	
	2021.07.05		0.072	ND	ND	10
				ND	ND	
				ND	ND	
				ND	ND	
	2021.07.06		0.072	ND	ND	10
				ND	ND	
				ND	ND	
				ND	ND	
	2021.07.07		0.069	ND	ND	10
				ND	ND	
				ND	ND	
				ND	ND	

3.2-8

pH	pH HJ 1147-2020		--
	13195-1991	GB	--

, = , /

$S_{i,j}$——

$C_{i,j}$—— mg/L

C_{si}—— mg/L

◯ pH

, =(7.0−)/(7.0−) $pH_j \le 7.0$

, =(−7.0)/(−7.0) pH_j 7.0

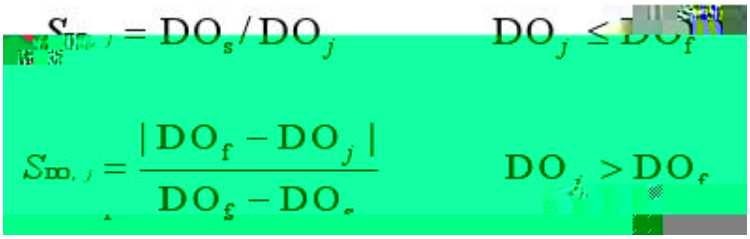
$S_{pH,j}$——pH

pH_j——pH

pH_{sd}——pH

pH_{su}——pH

◯ DO



$S_{DO,j}$—— j

DO_f—— mg/L

DO_j—— j mg/L

DO_s—— mg/L

T——

3.2-9 3.2-10

5

3.2-9 3.2-10

GB3838-2002

pH

pH 0.01

GB 6920-1986 ( )

EDTA

5.0mg/L

GB 7477-1987

1.1

0.05 mg/L

GB/T 5750.7-2006

HJ

0.025mg/L

5750.7-2006 HJ 535-2009

3 1

GB/T14848-2017

1

$_i=C_i/C_{si}$

$_i$— i

C_i— i

— HJ2.4-2009

6 3.2-15

N1		1m
N2		1m
N3		1m
N4		1m
N5		
N6		

A

GB 3096-2008

2021 7 1~7 2 2

3.2-16 7

3.2-16

GB3096-2008 3

GB3096-2008 4a

GB3096-2008 2

2.5km

10 7 85m 513 300m

1

1m

3mg/m^3 20m 1.303mg/m^3 50m 0.722mg/m^3 100m 0.402mg/m^3

100m

a.

b.

c.

d.

e.

f.

g.

29m

2

CO NO_2 THC

CO NO_2 THC

3

1

2

$$L_A(r) = L_A(r_0) - A$$

$$A = A_{div} + A_{atm} + A_{bar} + A_{gr} + A_{misc}$$

LA(r) —— dB

LA(r0) —— dB

r r0—— m

A—— dB

Adiv—— Adiv=20lg r/r0 dB

Aatm—— Aatm=a r-r0 /1000 dB

Abar—— dB

Agr—— dB

Amisc—— dB 0.025dB/m

$$L_{eqs} = 10\lg\left(\sum_{i=1}^{n} 10^{0.1Leqi}\right)$$

Leqs—— dB(A)

Leqi—— i dB(A)

4.1-1 dB(A)

			m								
			10	30	55	100	150	200	350		
		103	83.0	77.0	73.5	64.9	63.0	59.5	57.0		
		105	85.0	79.0	75.5	66.9	65.0	61.5	59.0		
		107	87.0	81.0	77.5	68.9	67.0	63.5	61.0		
		105	85.0	79.0	75.5	66.9	65.0	61.5	59.0		
		95	75.0	69.0	65.5	56.9	55.0	51.5	49.0	70	55
		105	85.0	79.0	75.5	66.9	65.0	61.5	59.0		
		105	85.0	79.0	75.5	66.9	65.0	61.5	59.0		
		105	85.0	79.0	75.5	66.9	65.0	61.5	59.0		
		105	85.0	79.0	75.5	66.9	65.0	61.5	59.0		
		100	80.0	70.5	65.2	65.2	56.5	54.0	49.1		

4.1-1

30~55m

200~350m

29m 35m

3m 35m

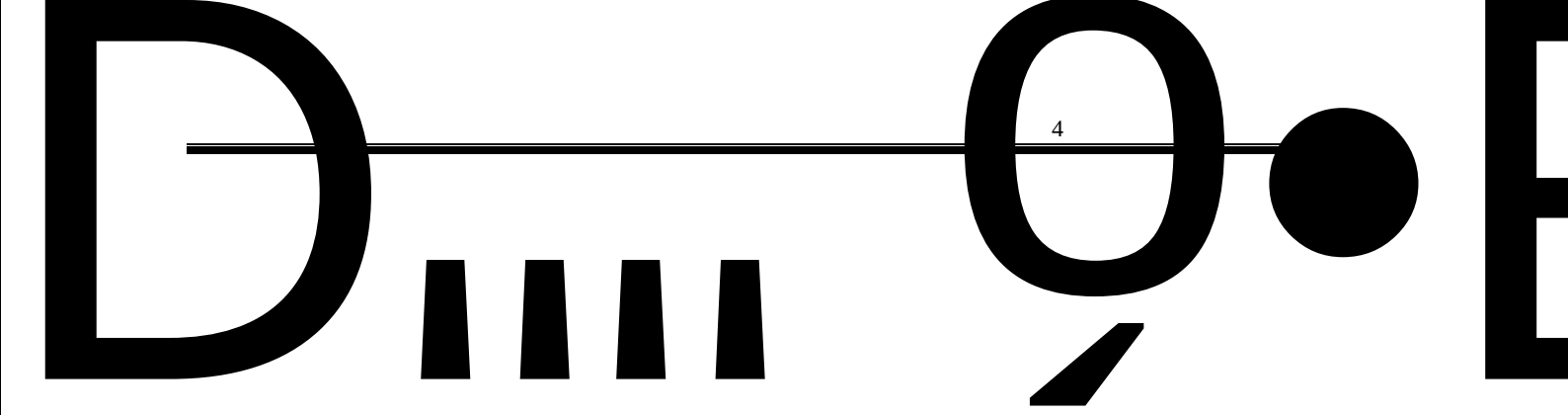
5~13dB A

“ ”

GB12523-2011

1

SCR 8m 0.3m SO_2 NO_X GB13271-2014 2



690.496m^3/d

pH COD BOD

GB18918-2002 A

1

2

3

HJ610-2016

100 1000

4

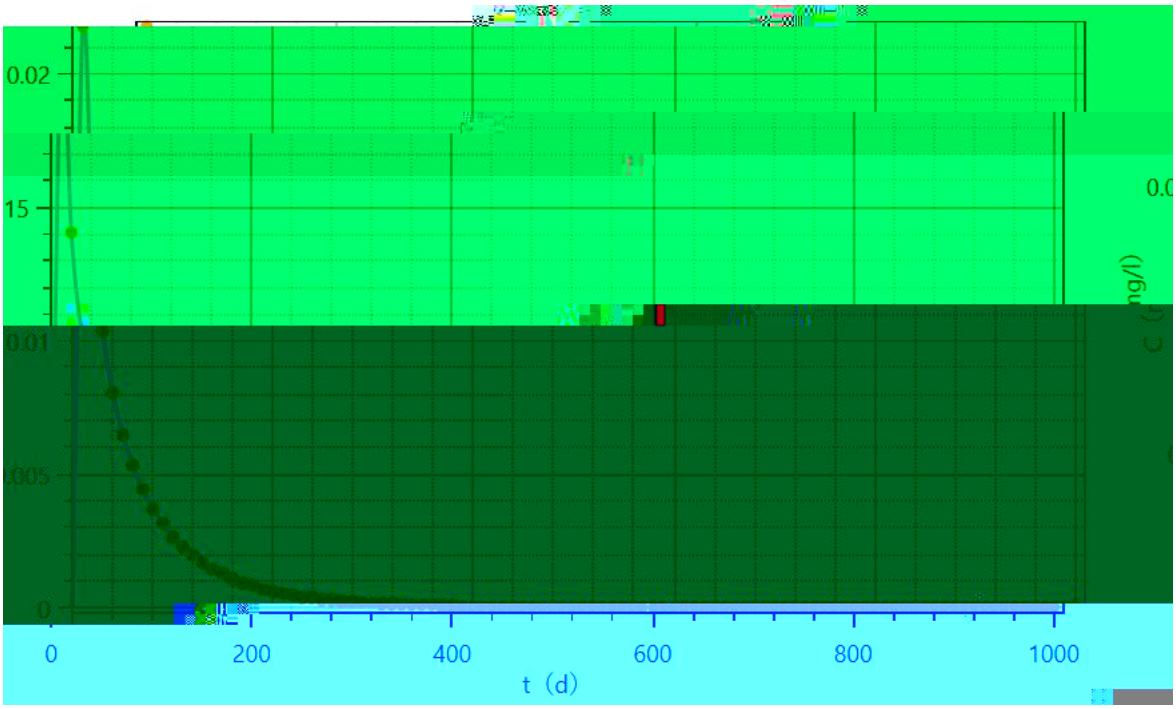
COD NH_3-N

$300m^3$

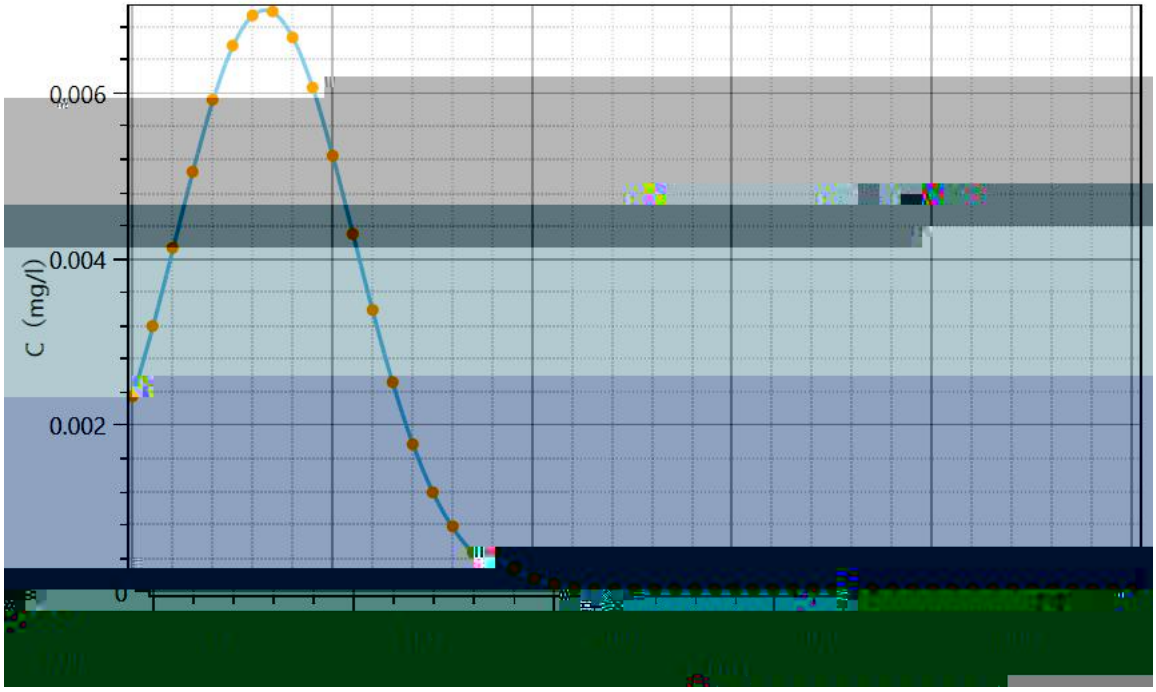
5%

4.2-3

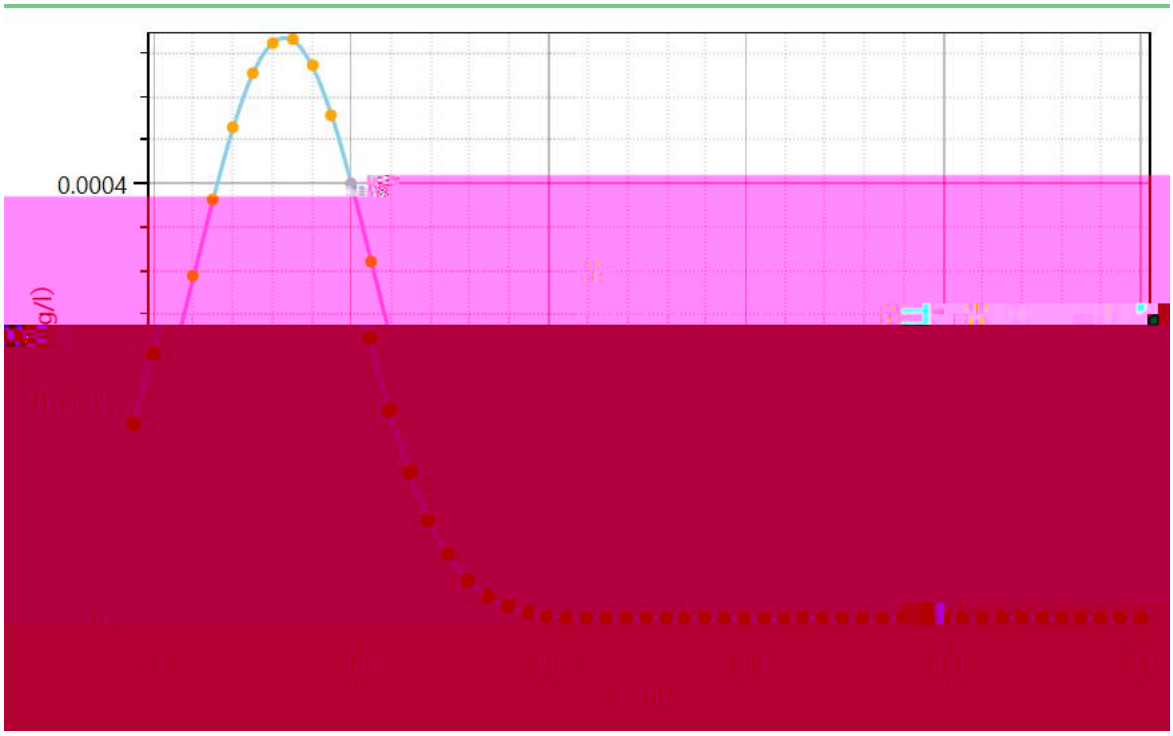
4.2-3 5%



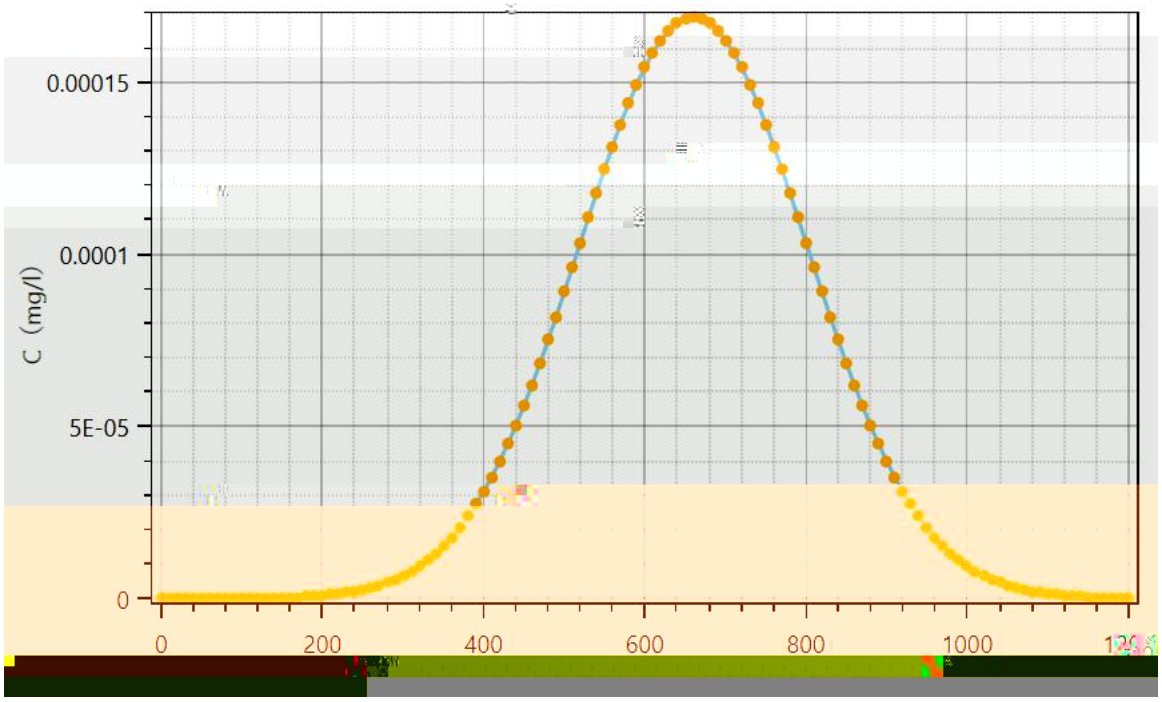
4.2-1 5% 4m COD



4.2-2 5% 100d COD



4.2-5 5% 100d NH_3-N



4.2-6 5% 1000d NH_3-N

K 1 10^{-7}cm/s

65 95dB(A)

2.2-14

200m

75dB(A)

$L_p = L_w - 20Logr - 8 -$ L

L_p— r dB(A)

L_w— dB(A)

r — m

L— dB(A) 0

$$= 10 \lg \left(\sum_{=1} 10^{0.1} \right)$$

L_1 L_2—— 1 2 dB(A)

r_1 r_2—— m

Δ —— dB(A)

Leqs—— dB(A)

Leqi—— dB(A)

4.2-4 4.2-1

1#	26.11	51.4	51.41	0
2#	25.62	50.6	50.61	0
GB3096 2008 2		60dB(A)		
1m	37.33	49.3	/	0
1m	32.67	50.5	/	0
1m	46.04	51.8	/	0
1m	32.47	49.9	/	0
GB12348—2008 3 4		3 4	65dB(A) 70dB(A)	55dB(A) 55dB(A)

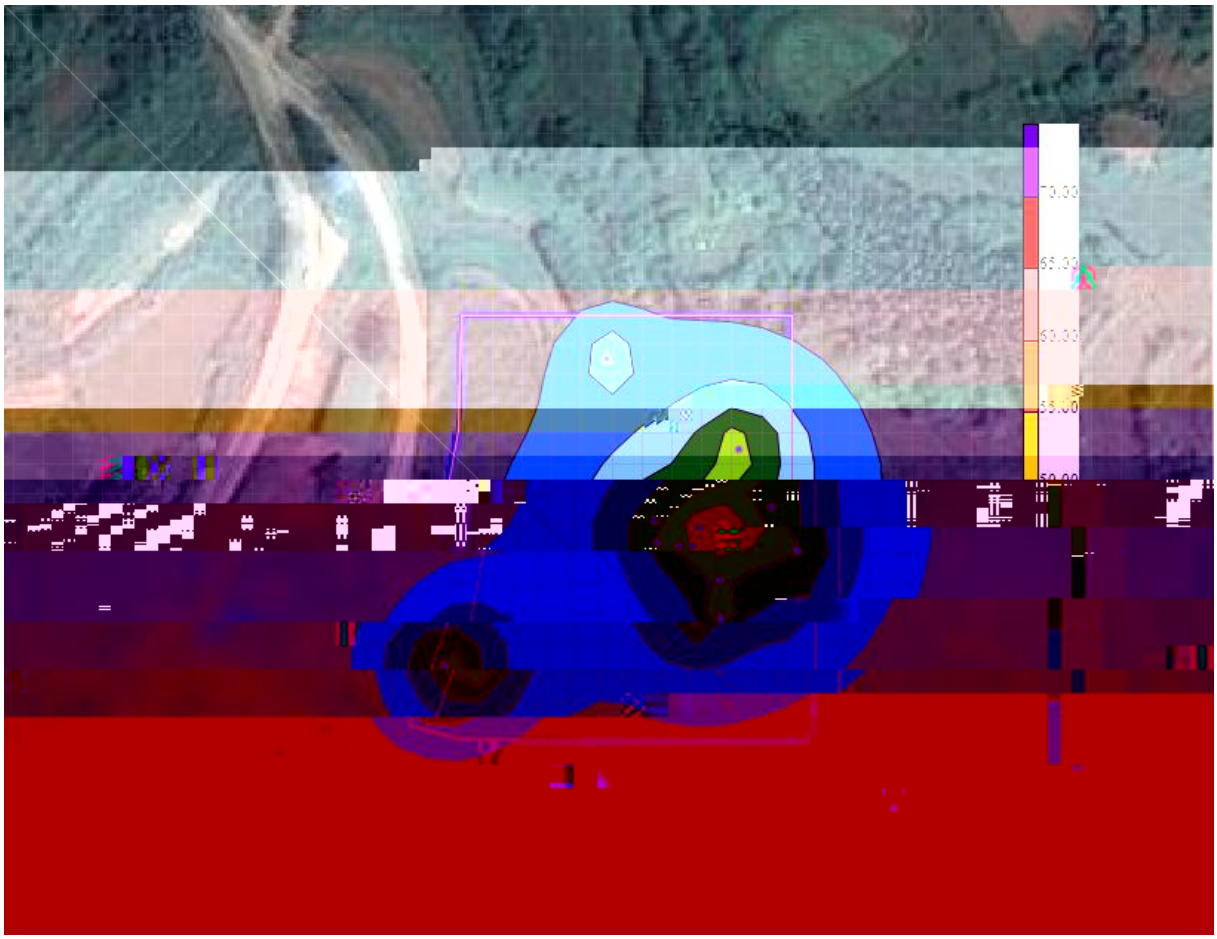
4.2-4

GB3096 2008 2

GB

12348-2008 3

GB 12348-2008 4



1

8

2

700t/a

3

680t/a

4

20t/a

5

18t/a

6

246t/a

7

0.17t/a

8

1t/a

GB18599-2001 2013

HJ169-2018

1

HJ169-2018

B Q

Q

Q

Q=∑qi/Qi

qi—— t

Qi—— t

Q 1

Q≥1 Q 1≤Q 10 10≤Q 100 Q≥100

HJ 169-2018 B

3

1.5-1 5

HJ 169-2018 B

1

74.44 (=1)1.1

-6 102.2 kPa /

2

16.04 (=1)0.55

-182.5 -161.5 -188 -82.6 538

4.59MPa

3

GB/T4016-83

70

70

100 8% 10%

3

1

1

2

50cm 10cm 50cm

GB/T13869-1992

2

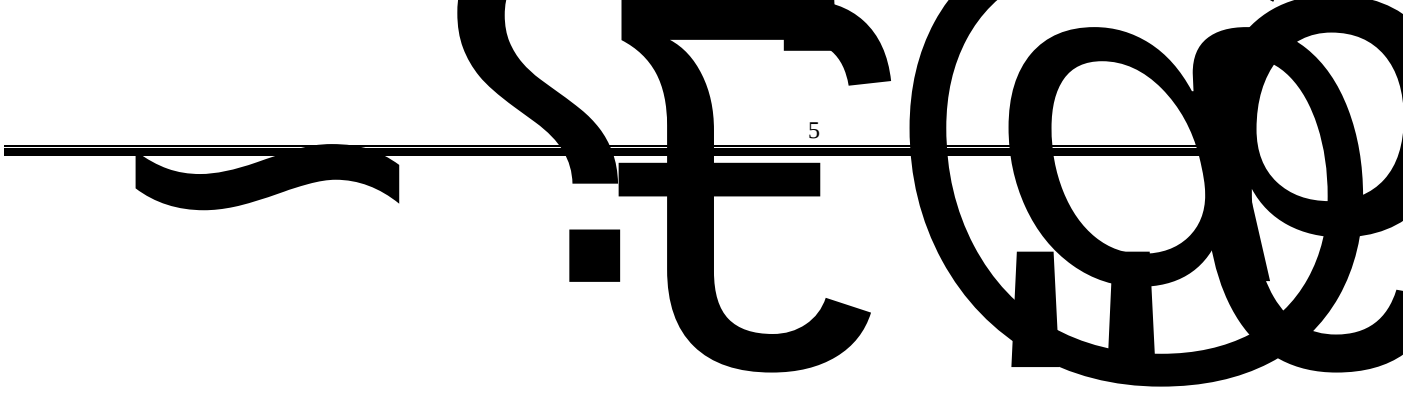
4.2-7

108°49′42.87″ 22°37′33.01″

100%

8

9



2

3

4

5

1

2

3

4

5

6

7

8

1 900m^3/d

“ +A/O+ ”

1 5.2-1

5.2-1

+ +A/O

A/O

PAM PAC

— HJ 860.3—2018

7 “

- ”

A/O PAM PAC

HJ 2004-2010

HJ 2004-2010

8

2300m³/d “ ø$+ P $a!"DB3+"d@G¨ +A/O + ¼ +.2%$! Ö 4ó@’

8

1		100	150	62
2	BOD_5	110	110	28
3				

5

400m³ 4000m³

400m³ 100m³

GB18597-2001

2mm

≤1.0×10-12cm/s

HDPE

3

a.

b.

c.

d.

1

1

a.

b.

4

HJ610-2016

1

2

3

4

GB12348 2008 3

à ˘

95 2013

24

75~90

M P K Ƨ à ≥7% ≥75% ≤30%

M 5Ƨ25-2011 ≥5% ≥45% ≤30%

—

5.2-3

	%	%	%		/t
	≥5	≥45	≤30		1200~1500

	≥7	≥75	≤30		800
	≥7	≥75	≤30		2000

NY525-2011

5

6

7

900-214-08

GB18597-2001

6100 650 10.66 %

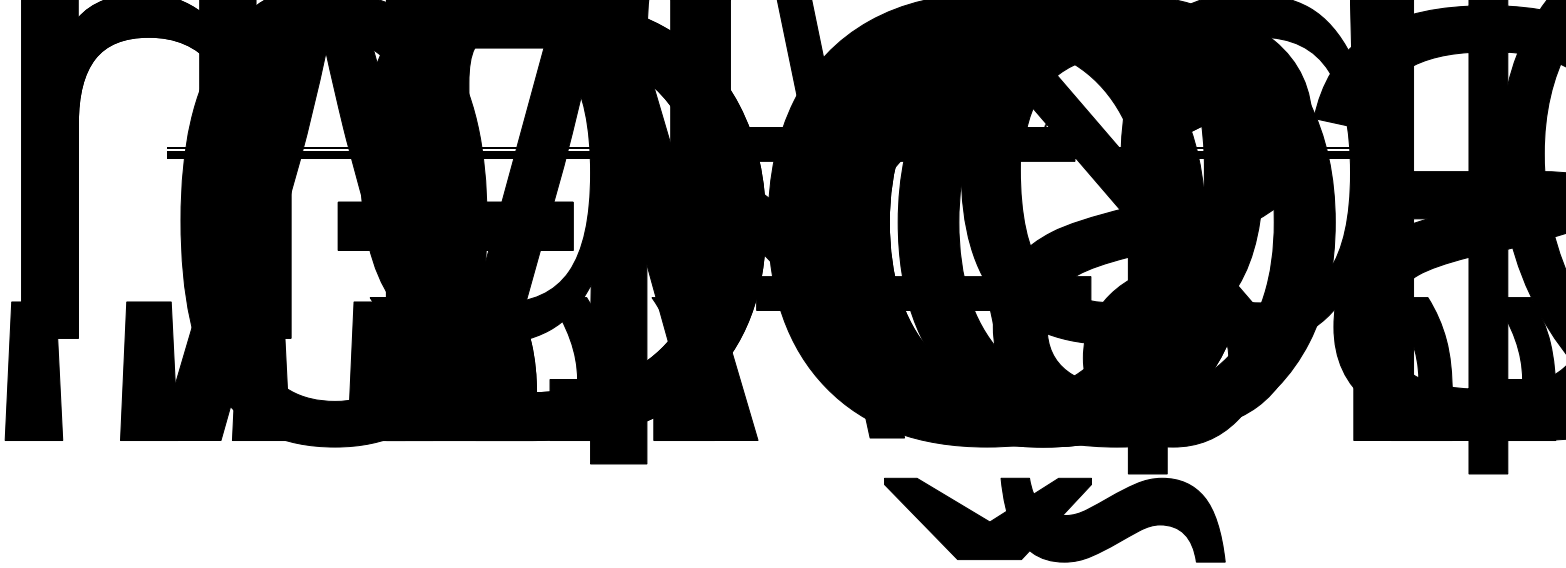
5.3-1

				6
				/
				/
				5
				3
				8
				0
				4
				2
				50
				60
				10
				5
				300
				10
				25
				70
				10
				/

10

10

10



6100 650 10.66 %

1

650 20 32.50

/

2 “ ”

2 /

3

2% 7.81

5.85 / 6.3-1

1		32.5
2	“ ”	2
3		13
		47.5

2

15m 2 8m

“ +A/O+ ”

2

3

4

7.1-1

1

2

682 < >

7.1-1 7.1-2

1
2
3 “ ”
4

1
“ ”
2

3
4

5
6
7
8 ÿÆ©Ê|`°

	t/a				
SO_2	0.0000101				0.0000101
NO_X	0.226	+8m			0.226
	0.0343				0.0343
NH_3	0.15374		1	15m	0.02306
H_2S	0.00143	0.8m			0.00021
NH_3	0.01708				0.01708
H_2S	0.00016				0.00016
NH_3	0.4542		1	15m	0.0681
H_2S	0.0176	0.4m			0.0026
NH_3	0.0505				0.0505
H_2S	0.0020				0.0020
SO_2	0.194				0.194
NOx	0.124				0.124
	0.035				0.035
CO	0.074				0.074
HC	0.072				0.072
	0.0378				0.009t/a
	248578.56m^3/a				248578.56m^3/a
COD_{Cr}	390.222				62.145
BOD_5	201.340				27.344
SS	209.903				37.287
NH_3-N	29.765				7.457

1

“ ”

2010 97 “ ” COD

NH_3 SO_2 NOx

2

COD

NH_3-N SO_2 NO_x COD

NH_3-N

SO_2 NO_X

0.194t/a 0.350t/a SO_2 0.194t/a NO_X

0.350t/a

HJ819-2017

HJ942—2018

HJ942—2018 —

HJ 860.3—2018 HJ 820-2017

1

2

3

5

4

1

2

3

2014 56

4

< >

682 2017 10 1

“

” [2017]4

“ ” 2017 10 1

2018 9

“ ” 7.4-1

7.5-1

6100 18279.67m² 27.42
11126.11m²

1300 3000
2021 5 28
2105-450109-04-01-581249
6100 650 10.66 %

2020
SO_2 NO_2 PM_{10} $PM_{2.5}$ CO O_3
GB3095-2012
2 TSP
NH_3 H_2S
TJ2.2-2018 D
TSP 24 (GB3095-2012)

GB3838-2002

GB3096-2008 3
GB3096-2008 4a
GB3096-2008

2

1# 2# 3#

GB/T14848-2017 III

1

2

3

(GB 12523-2011

4

4

2 1

1 15m

2

3

GB18483-2001

4

0.035%

5

“ +A/O+

”

GB18918-2002

A

6100	650	10.66 %