	8-9				
	88				
	135XXXXXXXX				411104
				[2016]97	
			P8441		
	2004.46			/	
( )	2596.44		2		0.08%
( )			2017 1		

1951 2000 6

1951

1978

“ ” 2007

2010 6 “ ”

2011 10 “

” 2013 “

” “ 2011 ” 2014 9

“ ” 2 108 50

1.398 134

“ ” “ ”

16 50 2.08 28

1123 746 322 590

1 2 2

2 3 9

10 “ 121 ” 18 52

45

5

8 “ ” 8 1

2 2 1

1 6

8 9 3

20800

178916 10 / 3

2

11422.06 1000

2016 9

1 8-9

2

3

4 2596.44 1620 852.8

123.64

5

2004.46 11422.06

2

1

1

1			2004.46	
2			11422.06	
3			11200.74	
			10584.5	
			616.24	
			221.32	

6

1

50mm PP-R

10.5 m^3

8.4 m^3

2

1 10KV 1

800KVA 10KV

4

221.32

0.40Mpa 2

120m 2m 5m PE

150m 18T

5

GB50352-2005 GB20763-2012

2.0m

0.5m

1.0m

6

GB50176-93

JGJ134-2010

6 Low-E +12 +6

7

6L

2

2

1		/	

2		/	
3		2	
		2	

1

1

3500 40.51m^3/d

32.41m^3/d 0.97 m^3/a

2

3500 3500

908 m^3/d 726.4m^3/d 21.79 m^3/a

2

5.1

m^3

1715kg/a 15mg/m^3

2mg/m^3 210kg/a

GB18483-2001 2

3

			262.5		
			/		

5

88

( )

1

1~6m 50~60% 1~3cm

6~7cm

GB1803 2001

0.05g 0.35s

17.5 42.2 1953 8 15 -8.5 1957 2

7 81% 1200-1450mm 2081mm

999.7mm 1359.1mm 2.4m/s 28m/s

NNW 345d 1262.9h

42km

400-800 m 2126m^3/s 21100m^3/s 1994 6 18

100m^3/s 1994 10 6 31.0m 41.26m

27.70m 0.65 m/s 2.9 m/s 0.03m/s

0.217 ‰ 4-7 12 1

346 46

340 45 490

5015 607.8 12.1% 965.4

19.3% 1607 32.0% 1406.8 28.1% 428.0

8.5

95.7%

4%

31.9% 17.6% 29.9% 13.9%

4% 2.7%

1

5006.5km^2 290 281km^2 65

2

=

1 2

3

“ ”

“ ” 107 320

4

222 8

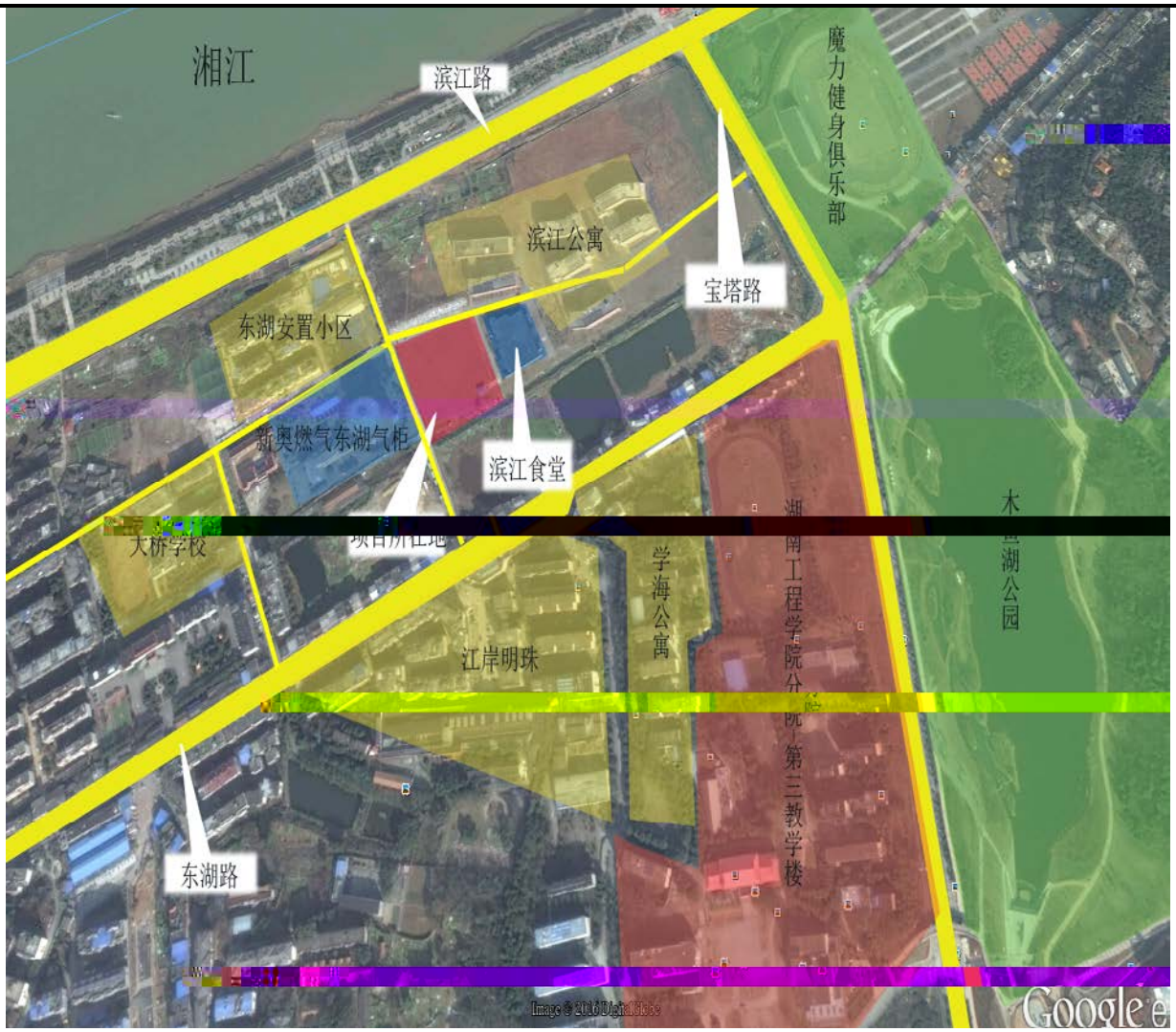
13

34

4

30m 90m

200m 280m


湘江
滨江路
滨江公寓
宝塔路
魔力健身俱乐部
东湖安置小区
新奥燃气东湖气柜
滨江食堂
大桥学校
学海公寓
湖南工程学院分院第三教学楼
木兰湖公园
江岸明珠
东湖路
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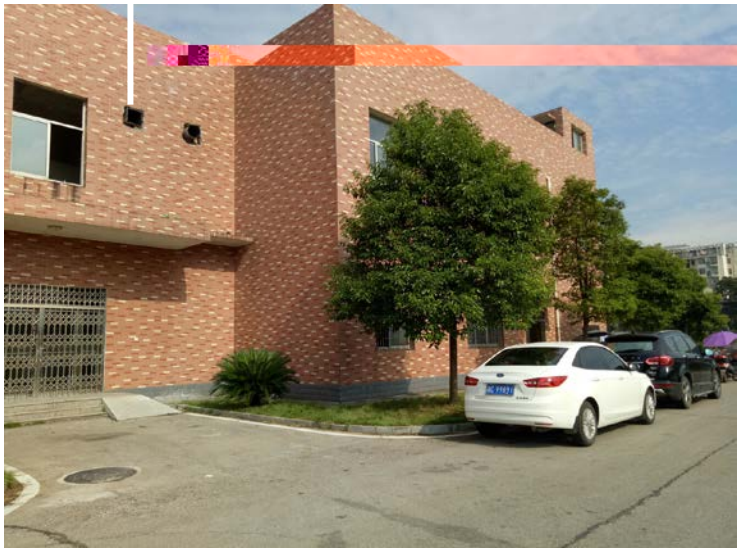
1

2km



3

4

5

GB3095-2012

2015

4

4 mg/m^3

				%		
	SO_2	0.002-0.121	0.023	0	/	0.15mg/m^3
	NO_2	0.008-0.109	0.037	1.1	0.36	0.08mg/m^3
	PM_{10}	0.012-0.220	0.083	9.4	0.47	0.15mg/m^3
	$PM_{2.5}$	0.008-0.194	0.054	19.9	1.59	0.075mg/m^3
	SO_2	0.003-0.089	0.022	0	/	0.15mg/m^3
	NO_2	0.010-0.089	0.043	1.4	0.11	0.08mg/m^3
	PM_{10}	0.015-0.311	0.098	18.2	1.07	0.15mg/m^3
	$PM_{2.5}$	0.008-0.212	0.055	22.4	1.83	0.075mg/m^3

NO_2 PM_{10}

$PM_{2.5}$ SO_2 GB3095-2012

PM_{10} $PM_{2.5}$

GB302Td (N)Tj 0.72 0 Td (O)Tj 8.04[(D (2012)43/)-2(023T /Span <</20AA9112 >>BD

		0.005	0.005	0.0050	0	/	0.05
		0.04	0.01	0.02	0	/	0.2
		0.01	0.01	0.01	0	/	0.2
		92000	2300	12868	52.8	8.2	10000

GB3838-2002

GB3096-2008 1 GB3096-2008

2 6

6 Leq dB A

1#	49.5	55	41.3	45
2#	51.2	60	43.8	50
3#	53.7	60	44.2	50
4#	50.5	55	41.9	45

GB3096-2008

	280m	GB3838-2002
	200m	
	90m	2
		1

GB3095-2012

GB3838-2002

GB3096-2008 1

GB3096-2008 2

-200(2)40(11(-)Tj/Span <</MCID 31 >>8DC /C2_0 1 Tf 0.75 009c e09w 1..5 <01C90F202152A31811BED14150

	( )		( )	
		NO_x CO		
			15mg/m^3	2mg/m^3
		SS	250mg/L	
			8.4 t/a	
		COD	400mg/L 33.60t/a	50mg/L 4.20t/a
		BOD_5	200mg/L 16.80t/a	10mg/L 0.84t/a
		SS	220mg/L 18.48t/a	10mg/L 0.84t/a
		NH_3-N	40mg/L 3.36t/a	5mg/L 0.42t/a
			75mg/L 6.30t/a	1mg/L 0.084t/a
			1645t	
			20t	
			11t	
			75t/a	
	86dB(A) 90dB(A) 80~100dB(A) 112 dB(A)			

2

1

1

2

3

4

5

2

pH SS COD

COD BOD_5

3

TSP

60

$$Q = 0.123 \times \left(\frac{v}{5}\right)\left(\frac{W}{6.8}\right)^{0.85}\left(\frac{P}{0.5}\right)^{0.75}$$

Q— kg/km.

V— km/h

W— t

P— kg/m^2

5t 500m

7 7

7 kg/km.

P(kg/m^2) / km/h	0.1	0.2	0.3	0.4	0.5	1.0
5	0.0283	0.0476	0.0646	0.0801	0.0947	0.1593
10	0.0566	0.0953	0.1291	0.1602	0.1894	0.3186
15	0.0850	0.1429	0.1937	0.2403	0.2841	0.4778
20	0.1133	0.1905	0.2583	0.3204	0.3788	0.6371

11 m

		75dB	70 dB	65 dB	60 dB	55 dB
1		22	40	75	120	190
2		25	42	75	120	190
3		21	37	66	110	200
4		10	14	25	44	80

9 11 200

GB12523-2011

1

2

12:00-14:00 22:00- 6:00

3

5

11422.06m^2

144kg/m^2 1645t

1.0kg

11t

100 1.0kg/ ·d

100kg/d 8 25 20t

( )

2 1000

1

1000 50L/ ·d

50m^3/d 40m^3/d 1.2 m^3/a

2

1000 100L/ .d 300

300m^3/d 240m^3/d 7.2 m^3/a

10.5 m^3 8.4 m^3

12

84000m³/a	COD		SS		NH_3-N			
	mg/L	t/a	mg/L	t/a	mg/L	t/a	mg/L	t/a
	330	2.772	160	1.344	25	0.210	75	0.63
	266	2.234	96	0.806	24	0.202	38	0.32
	500	/	400		/		100	
A	50	0.42	10	0.084	5	0.042	1	0.01

GB8978-1996

4

1000

50g/ ·d 2~4% 3%

450kg/a 15mg/m^3

2mg/m^3 60kg/a

GB18483-2001 2

1

2

3

13

13 Leq dB A

1#	52.3	55	42.6	45
2#	56.2	60	45.5	50
3#	55.6	60	46.3	50
4#	51.9	55	41.7	45

GB12348-2008

1000 0.25kg/d

250kg/d 75t/a

1

2011 2013

2

1

2003

[2003]433 [2004] 464

1267 230 90.58

20800 178916

10 / 3

2

11422.06 1000

2

X			35	131 XXXXXXXX
X			57	130 XXXXXXXX
XX			24	186 XXXXXXXX
XX			52	131 XXXXXXXX

16

			%
1		15	100
		0	0
2		2	13.3
		6	40
		14	93.3
		6	40
		0	0
3		1	0
		7	46.7
		7	46.7
		0	6.6
4		1	6.6
		4	26.7
		10	66.7
		0	0
5		15	100
		0	0
		0	0
		0	0
6		15	100
		0	0

“ ”

“ ” 17

17 “ ”

1		COD SS BOD_5	GB8978-1996 4	
2			GB18483-2001 ÉOžO J"é' Â n 7 ö Ê qAè#ƒ Ö?±"r	
3				
4		/	/	

1

2 2596.44

2004.46m^2 11422.06m^2 2017 8

2

1 NO_2 PM_{10} $PM_{2.5}$

SO_2 GB3095-2012 PM_{10}

$PM_{2.5}$

2

GB3838-2002

3 GB3096-2008

3

1

2

3

12:00~14:00 22:00~6:00

4

1 “ ”

2

3

4

12:00 14:00 22:00 6:00

5

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