.... 1

1 . - Ŏ Ŏ 1

1 ĩ . . . .

1 . 2 ΰ ↕ 7

1.3 ȁ E 7

1.4 10

1.5 14

1.6 16

2 18

2.1 18

2.2 19

2.3 20

2.4 ı l 24

2.5 ΰ 31

2.6 = № 32

3 ΰ 34

3.1 E 34

3.2 ΰ 38

3.3 Ƕ ƚ 44

3.4 45

3.5 45

4 ΰ 47

4.1 Ŧ 47

4.2 53

4.3 54

5 E 55

5.1 55

5.2 55

5.3 E 55
5.4 E 60
6 Ƅ № 61
6.1 61
6.2 64
6.3 67
7 Ƅ № 68
7.1 68
7.2 ŋ 68
7.3 Ƅ № 68
7.4 70
8 Ƅ № 71
8.1 ΰ 71
8.2 ŋ 71
8.3 Ƅ № 72
8.4 73
9 74
9.1 74
9.2 74
9.3 76
10 Ƅ № 77
10.1 77
10.2 Ƅ № 79
10.3 94
11 96
11.1 ΰ Ƅ № 96
11.2 β 96
11.3 97
11.4 97
11.5 97

12 ᵔᵔ ƀ └ 98

12.1 ᵔᵔ 98

12.2 ᵔᵔ 98

12.3 └ 99

12.4 100

13 Ƕ ΰ 101

13.1 Ƕ 101

13.2 Ƕ 101

13.3 113

14 ΰ 115

14.1 115

14.2 115

14.3 118

14.4 119

14.5 119

15 `E ʌ 120

15.1 `E ʌ 120

15.2 ƀ 120

15.3 ƀ № 120

15.4 `E ʌ ΐ 122

16 ƀ 124

16.1 124

16.2 № 125

16.3 126

16.4 ᵔᵔ ΰ └ 127

16.5 Ƕ ΰ 127

16.6 `E ʌ 127

16.7 127

16.8 128

طي

طي1 β طي

طي2 طي

طي3 طي

طي4 β طي

طي5 № طي

طي6 Ƅ ᵒᵒ β ˜ طي

طي7 β طي

Ð

(1)

(2) ê ˜ ٦ ʒ ٦ ᴇ

Ȉ ⁼ ˧ [2010]714 ˜

(3) ê ˜ ʼ̿ ʒ ٦ Ȉ

[2012]138 ˘ ١ طى ˘ 2012.5.24˜

(4) طى ê طى ˜ ʼ̿ ʒ ٦

Ȉ Ȑ 2011 ȓ 2875 ˘ 2011.12.8˜

(5) ê طى ˜ ʼ̿ ʒ ٦ ˥

Ȉ Ȑ 2012 ȓ 1914 ˘ 2012.6.28˜

(6) ê ˜ ʼ̿ ʒ ٦

Ȉ [2012]600 ˘ 2012.11.7˜

(7) ê ˜ ʼ̿ ʒ ٦ Ȉ طى

[2012]88 ˘ 2012.4.28˜

(8) ê ˜ ʼ̿ ʒ ٦ Ȉ

[2011]156 ˘ 2011.5.30˜

(9) ê ˧ ˜ ١ ʼ̿ ʒ ٦ ˆ ˜

Ȉ ˥ [2016]251 ˘ 2016.9.30˜

(10) ê Ƕ ˜ ٦ ʒ ٦

Ȉ 2010.7.6˜

(11) ê ˜ ʼ̿ ʒ ٦ ȕ ˜

[2010]100 2010.10.19

(12) [2010]224 2010.10.19

(13)

(14)

(15)

(16)

(17)

(18)

2018.7

(19)

(20)

(21)

(22)

ꆹ꒜ ꌠꉌ β ˘

꙰ ˜ 29.5km˘ Й 1.9km˘ Й ˀ ч

1013.5km Â ꭿ ч ꝗ 114°32′59″˘ ˭ 30°39′28″ Â

2011 12 8 ˘ ꓲ ط ɣ Ҽ 2011 Ͽ 2875

-꞉ ê ط ˜ ꆹ꒜ ꌠꉌ Ì

Ջ ꆹ꒜ ꌠꉌ ˘ 8 5000

β˘ 140 Â Ỉ ȁ № Ŀ ↕˘

ῳ ἰ **4** β˘ **70** **Â**

2011 12 ˘ ˋE꞉ ʜ ˩

ˋE꞉ └ ê ꆹ꒜ ꌠꉌ

Ì 2012 5 ˘ ꓲ ط ɣ Ҽ 2012 Ͽ 138-꞉ ê ˜

ꆹ꒜ ꌠꉌ Ì ἰ Â

ΰ Đ ꆹ꒜ ꌠꉌ ч Ỉ 5000D

β 8 ˆ ˋI 10000 ˜˘ 1034 Â

99.6 ˘ 37.8 Â Ց

ч 144 TEU ÂĿ

ꆹ꒜ ꌠꉌ ˘ Ϫ

˘ Ջ ꉌ ꓶ Ь Ց ˘ ط

ꆹ꒜ ꌠꉌ Ŧ №

ˆ Ҽ 2012 Ͽ 1914-꞉ ê ꆹ꒜ ꌠꉌ ꓶ

Ȉ˘ ῳ ˘ Ŧʿ Ỉ 4 5000

β ΰ ˘ ч 563m˘ ч 74 ĿÂ

2012 11 ꓲ ط ɣ ê ˜ ꆹ꒜

ꌠꉌ Ì [2012]600 -꞉ ˜

˘ чʿ 4 5000 β ΰ

˘ ч 563m˘ ч 74 Â

ط ꓶ

Ð ˘ ˋE 2013 3 ˘

2015 12 ˘ 4 5000DWT ᵝ ˋI 10000

˜ ΰ ˘ ˥ ԿI 563×30m˘ ˥ 3 Ƅ Ⲷ

˘ ԿI 74 TEU ˥ ˦ ԿI 45.36 ˋE ˘

13 ˆ ὶ ˜ ầ 4 ΰ Â

ȝ ˥ 4 ᵝ

˘ Â ط ˘

ΰ ˘ Ⲷ

˘ Ƅ ΐ Ð˘ ɩ ȝ ầ

Ŧ ˘ ʾ̗ ȝ ˥ ˜

Â

2018 6 ˘ ȝ ˥

ˋE ʾ̗ ȝ ˥

Â 0 Ⲷ˘ ˋE ˜ ˘

˘ ’

˦ ˋE Ⲷ

˘ ˘ Â └

ˆ ˜ Â

ˋE Ƒ ˘ 2018 7 19

˥ h ˜ ʾ̗ ȝ ˥

˘ Â Ⲷ˘ ᵝ /˥

ầ ’ ˋE

ầ Ḥ Â

˥ ˘

˦ ˋE ˘ ط

˘ Â

1.1

1.1.1

ˆ 1˜ ê ˥ ط Ȉ 2014 4 24 ˘ 2015 1 1 ˜’

ˆ 2˜ ê ˥ ط Ȉ 2017 6 27 ˘ 2018 1 1 ˜’

ˆ 3˜ ê ˥ ط ˆȈ 2015 8 29 ˘ 2016 1 1 ˜’

ˆ 4˜ ê ˥ ط Ȉ 1997 3 1 ˜’

ˆ 5˜ ê ˥ ط ˆȈ 2016 11 7 ˘ 2016 11 7 ˜’

ˆ 6˜ ê ˥ ط ᴇ Ȉ 2016 7 2 ˘ 2016 9 1 ˜’

ˆ 7˜ ê Ȉ 2017 7 16 ˘ 2017 10 1 ˜’

ˆ 8˜ ê Ȉ ط [2017]4 ˘ 2017 11 22 ˜

ˆ 9˜ ê Ȉ [2000]38 ˘ ط ˘ 2000.2˜’

ˆ 10˜ ê Ȉ פ 2003 5 ˘ 2003 6 1 ˜’

ˆ 11˜ ê ˥ ط Ȉ 2015 ˜’

ˆ 12˜ ê ˥ ط Ȉ 2017 10 7 ˘ 2017 10 7 ˜’

ˆ 13˜ ê ƀ Ƕ ˆȈ [2016]1493 ˘ ˋE ˧˘ 2016 8 11 ˜

ˆ 14˜ ê ᴇ ˋE ʌ ƀ Ȉ [2006]28 ˘ ط ˘ 2006 3 ˜’

ˆ 15˜ ê ˀ ˦ ê ʒ Ƕ ʒ ᵝ Ƕ ᴆ ˈ ˆ ˜ Ȉ

Ȉ [2015]4˗˝ ˘ ﻁ ˘ 2015 1 9 ˜ʾ

ˆ 16˜ [2012]77 ˗˝ ê ˀ ˙ ᴇ

Ȉ

ˆ 17˜ [2012]98 ˗˝ ê ˀ ℗ ˙ Ƕ ᴇ Ȉ

ˆ 18˜ פ 39˗˝ ê ﻁ ˥ Ւ Ȉ 2016 3 30

˩ ˘ 2016 8 1 ˜ʾ

ˆ 19˜ ê ˦ ﻁ Ȉ (2005

11˗˝ פ˘ 2005 8 20)ʾ

ˆ 20˜ ˦ ﻁ [2004]314 ˗˝ ê ˀ

Ȉ

ˆ 21˜ ê ˭ Ȉ 1997 12 3 ˜ʾ

ˆ 22˜ ê ˈ ˋE ˧ ˀ ˭ ˝ ˥ Ȉ

ˆ ˈ [2000]10˗˝ ˜ʾ

ˆ 23˜ ê ˈ ˋE ˧ ˀ ˝ ˥

˥ ˀ Ȉ ˈ [2000]74˗˝ ˜ʾ

ˆ 24˜ ê ˈ ˋE ˧ ˀ ˦ ˭ ˥

№ Ȉ ˈ [2011]130˗˝ ˜ʾ

ˆ 25˜ ê ˈ ˋE ˧ ˀ ˝ ˥

Ȉ ˈ [2013]129˗˝ ˜ʾ

ˆ 26˜ ê ˈ ˋE ˧ ˀ ˦ ˝ ˥ Ȉ

ˆ ˈ [2013]135˗˝ ˜ Â

1.1.2

ˆ 1˜ ê ᴇ ↕ - ↕ Ȉ HJ2.1-2011˜ʾ

ˆ 2˜ ê ᴇ ↕ - Ȉ HJ2.2-2008˜ʾ

ˆ 3˜ ê ᴇ ↕ - Ȉ HJ/T2.3-93˜ʾ

ˆ 4˜ ê ᴇ ↕ - Ȉ HJ2.4-2008˜ʾ

ˆ 5˜ ê ᴇ ↕ - Ȉ HJ19-2011˜ʾ

ˆ 6˜ ê - Ȉ HJT394-2007˜ʾ

ˆ 7˜ ê - ʾ Ȉ HJ436-2008˜ʾ

ˆ 8˜ ê ˀ ᴇ Ȉ JTJ226-97˜ʾ

ˆ 9˜ ê ˀ Ȉ JTS149-1-2007˜ʾ

ˆ 10˜ ê ᴇ ↕ Ȉ HJ/T 169-2004˜ʾ

ˆ 11˜ ê ˀ Ҥ Ȉ JT/T 451-2017˜ʾ

ˆ 12˜ ê ꞁ № Ȉ (HJ/T 338-2007)ʾ

ˆ 13˜ ê ȝ Ҥ Đ № Ȉ HJ941-2018˜ Â

1.1.3

1.1.3.1

ˆ 1˜ ê ˜ ꞁ ȝ ꞁ Ȉ [2012]138 ˘ ˘ 2012.5.24˜ʾ

ˆ 2˜ ê ꞁ ȝ ꞁ Ȉ Ȑ 2011 ȑ 2875 ˘ 2011.12.8˜ʾ

ˆ 3˜ ê ꞁ ȝ ꞁ Ȉ Ȑ 2011 ȑ 97 ˜ʾ

ˆ 4˜ ê ꞁ ȝ ꞁ Ȉ Ȑ 2012 ȑ 1914 ˘ 2012.6.28˜ʾ

ˆ 5˜ ê ꞁ ȝ ꞁ Ȉ Ȑ 2012 ȑ 119 ˜ʾ

ˆ 6˜ ê ꞁ ȝ ꞁ Ȉ [2012]600 ˘ 2012.11.7˜ʾ

ˆ 7˜ ê Ҥ ꞁ ȝ ꞁ Ȉ 2010.7.6˜ʾ

ˆ 8˜ ê ꞁ ȝ ꞁ ű Ȉ [2010]100 ˘ 2010.10.19˜ʾ

ˆ 9˜ ê ꞁ ȝ ꞁ Ȉ [2010]224 ˘ 2010.10.19˜ʾ

ˆ 10˜ ê ꞁ ȝ ꞁ Ȉ [2012]88 ˘ 2012.4.28˜ʾ

ˆ 11˜ ê ꞁ ȝ ꞁ Ȉ [2011]156 ˘ 2011.5.30˜ʾ

ˆ 12˜ ê ˧ ˜ ˨ ᠢ᠋ ᠷ ᠭ ˆ
˜ Ȉ ˥ [2016]251 ˘ 2016.9.30˜'

ˆ 13˜ ê ˧ ˜ ᠢ᠋ ᠷ ᠭ ˜
Ȉ ˧˘ [2017]18 ˘ 2017.1.18˜

1.1.3.2

ˆ 1˜ ê ᠢ᠋ ᠷ ᠭ Ȉ Ⱨ ˩
ˋE ˘ 2011.12˜'

ˆ 2˜ ê ᠢ᠋ ᠷ ᠭ Ȉ
˘ 2011.3˜'

ˆ 3˜ ê ᠢ᠋ ᠷ ᠭ ˥ Ȉ Ⱨ
˩ ˋE ˘ 2011.6˜'

ˆ 4˜ ê ᠢ᠋ ᠷ ᠭ ˥ Ȉ
ˆ Ⱨ ˩ ˋE ˘ 2011.12˜'

ˆ 5˜ ê ᠢ᠋ ᠷ ᠭ Ȉ
Ⱨ ˩ ˋE ˘ 2012.9˜'

ˆ 6˜ ê ᠢ᠋ ᠷ ᠭ طي Ȉ
Ⱨ ˩ ˋE ˘ 2013.12˜'

ˆ 7˜ ê ᠢ᠋ ᠷ ᠭ
Ȉ ᠭ ˘ 2013 2015˜'

ˆ 8˜ ê ᠢ᠋ ᠷ ᠭ
Ȉ ط ˘ 2016.8˜

ˆ 9˜ ê ᠢ᠋ ᠷ ᠭ
Ȉ ط ˘ 2018.7˜

ˆ 10˜ ê ᠢ᠋ ᠷ ᠭ
Ȉ ˘ 2016.6˜'

ˆ 11˜ β ˆ 2015.12˜

ˆ 12˜ ê ᠢ᠋ ᠷ ᠭ Ⱨ Ð
Ȉ

ˆ 13˜ ê ᠢ᠋ ᠷ ᠭ Ȉ 2016.11˜'

ˆ 14˜ ê ᠢ᠋ ᠷ ᠭ Ȉ

ê - ̉ Ȉ ê ˑ

Ȉ ˘ ê ᴇ ↕ Ȉ ’

ƀ ˘ ˋE ʌ ’

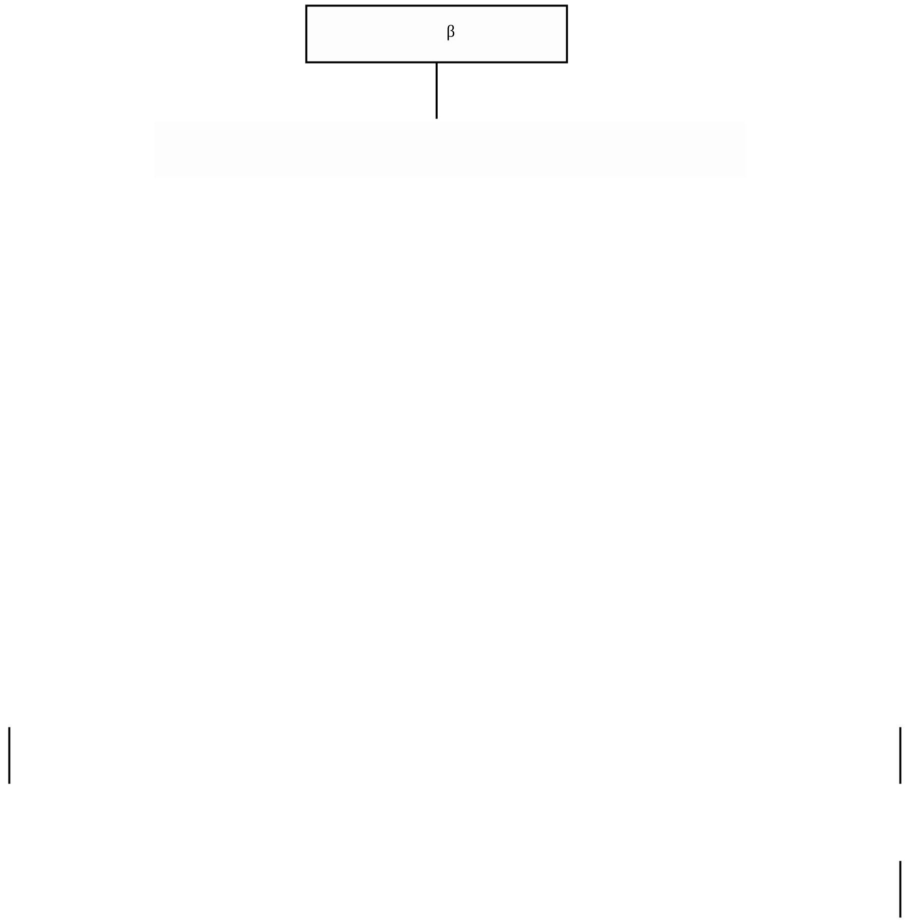
Ɓ ˘ ɼ ɥ ɦ’

Б № Ł Ŧ ’

Ɓ ê ᴇ ˋE ʌ Ƅ ˑ Ȉ ˘ ˋE ʌ ʊ̋

˘ “ˋE ʌ ” Â

ط1.3-1Â



ط 1.3-1 ̉

ٵ ˘ ч pH ǎ ǎ ǎ

ǎ COD ǎ BOD_5 ǎ ǎ Â

ƅ

Ŋ ’

˘ ч TSP ǎ PM10 ǎ SO2 ǎ NO2 Â

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Б

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ٵ ΰ A Â

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ٵ ൽ ΰ ൽ Â

1.4

1.4.1

ſ ˶ ٵ

ˈE ˧ Ȑ 2013 ȓ 129 ꞊ ê ˈE ˧ ˀ

˶ ٵ Ȉ ˀ ʿ ٵ

ԋ ٵ˘ ê Ȉ GB3095-2012˜ ԋ Â

ƀ ˶ ٵ

[2000]10 ꞊ ê ˈE ˧ ˀ

˶ Ȉ ˈE ˧ [2000]74 ꞊ ê

ˈE ˧ ˀ ˶ ٵ

ˀ Ȉ ΰ ˆ ˜ № ч ê

Ȉ GB3838-2002˜ ’n Â

Ɓ ˶ ٵ

ˈE ˧ Ȑ 2013 ȓ 135 ꞊ ê ˈE ˧ ˀ ˩

˶ ٵ Ȉ β ȝ ٵ ˘ ٵ

3 ˶ ٵ Â

1.4.2

à ı

Ꭓ ꞁ ı ˘ Ƅ ˘ Ŧ̓ ê Ꝑ

Ȉ GB/T 18920-2002˜ ı Â ȉ

ȶ̤̒ ê Ꞁ̤̑ ʒ ꞁ Ȉ

˘ Ꭓ ˜Ḩ ˘ ↕ Â

ч 1.4-1 Â

1.4-1 ᴇ

	ᴇ	-‥	Ꝉ ű№	
	ꞁ	GB3095-2012	ê Ȉ	Ꞓ
		GB16297-1996	ê Ȉ	
		GB3838-2002	ê Ȉ	’n
	ꝰ	GB8978-1996	ê Ȉ	̤̑
		GB/T18920-2002	ê Ꝑ Ȉ	ı
		GB3552-1983	ê Ȉ	Ƅ ꞁ
		GB3096-2008	ê Ȉ	4a à 2

1.4-2

ê Ȉ **GB3095-1996**

1.5.2.2

ê Ì (GB3552-83) Â

1.4-5 Â

1.4-5 ê Ì GB3552-83

1		≤15 mg/L
2		BOD_5≤50 mg/L
3		SS≤150 mg/L
4		

Â

Ì GB/T 18920-2002 " " Â

ê Ì (GB8978-1996)

1.4-6 Â

1.4-6 ê Ì GB8978-1996

		ê Ì GB8978-1996 mg/L	ê Ì GB/T 18920-2002 mg/L
1	pH	6~9	6~9
2	COD	500	
3	BOD_5	300	20
4	SS	400	-
5		20	-
6		-	20

ê Ì

(GB12348-2008)3 ê Ì (GB12523-90) Â

ê Ì (GB12523-2011) 2012 7 1

ê Ì (GB12523-90) ê Ì (GB1

2524-90) ˘ 2013 3 ˘ ˘ ê

Ỉ GB12523-2011˜ ˜ ˘ 70dB(A)˘ 5

5dB(A) Â ᴇ ê ȝ ȝ Ỉ (GB12348-2

008)3 ˘ ч 65dB(A)˘ 55dB(A) Â

ỉ 1.4-7 1.4-8 Â

1.4-7 ê ȝ ȝ Ỉ (GB12348-2008)

Ղ		ˆ / ˜
ê ȝ ȝ Ỉ (GB12348-2008)	3	65dB(A) / 55dB(A)

1.4-8 ê Ỉ (GB12523-2011)

Ղ	ˆ / ˜
ê Ỉ GB12523-2011˜	70dB(A) / 55dB(A)

1.5

1.5.1

˘ ä Ղ ǘ β ƅ

1.5-1 Â ı ı № ʿ ꞁ ꞁ ч

ʊ ķ ʊ ˘ ꙰ ȝ ꞁ

꙰ ȝ ꞁ 8 β ꙰ 4 β ˘ Ӌ 5#~8# β ǘ ỉ

Ꭓ ˘ ꞁ ꞁ ƅ Â

1.5-1

	Ղ	β	Ղ	β	
	ꞁ	10m ʊ	ꞁ	170m ʊ	˘ ˘ 2 6 ч ħ˘ 1842 4296 Â
	꙰ ꞁ	25m ķ ʊ	꙰ ꞁ	10m ķ ʊ	˘ 2 3 ч ħ˘ ỉ ч 9 14 ꞁ˘ 2000 4100 Â
	ꞁ	50m ʊ	ꞁ	540m ķ ʊ	˘ ƅ ч
	ꞁ	50m ķ ʊ	ꞁ	400m ķ ʊ	˘ ƅ ч
	ꞁ	180m ʊ	ꞁ	60m ķ ʊ	˘ 3~6 ч ħ˘ 3000 9000 Â ˘ ꞁ˘ ꙰ ч ꞁ Â
	ꞁ	200m ķ ʊ			

1.5.2

1.5-1 Â

8 4

Â

1.5-2

		10m		170m	2 6 1842 4296 Â
		25m		10m	2 3 9 14 2000 4100 Â
		50m		540m	2 3 810 2800 Â
		50m		400m	2 3 3200 8800 Â
		180m		60m	3~6 3000 9000 Â
		200m			
		500m		850m	3 4 430 1400 Â
		1200m		1250m	3 4 1020 3200 Â
		400m		800m	3 4 704 2300 Â
		650m		1490m	3 4 711 2300 Â
		1530m		1750m	3 4 806 2500 Â
		900m		1400m	3 4 798 3000 Â
		900m		1300m	2 3 703 2200 Â
		500m		1100m	2 3 1105 3500 Â

1.5.3

˘ ᴇ ŋ ̓ Ѣ ŋ ̓

1.5.3 Â

1.5-3 ŋ ̓ №

ŋ ̓ Ղ	Ѣ ᵝ ˀ	ᵝ	(t/d) ΰ	ŋ ̓ Ղ	Ѣ ᵝ ˀ	ᵝ	(t/d) ΰ	
ı ŋ ˛	Ӣ Ӣ 12.2km		6 8 ʒ ầ ŋ ̓	ı ŋ ˛	Ӣ Ӣ 12.8km		10 ʒ ầ ŋ ̓	ᵝ 0.6km˘ ŋ
ŋ ̓	Ӣ Ӣ 13.8km		2 ŋ ˛	˦ ŋ ˛	Ӣ Ӣ 26.2km		10 ʒ ầ ŋ ̓	٦ ˀ ˘ ч ˦ ŋ
٦ ŋ ̓	Ӣ Ӣ 15.3km		2 ʒ ầ ŋ ̓					
ı ŋ ̓ ^ ŋ ˛ ~			15 ʒ ầ ŋ ̓	ı 80 ŋ ̓	1 ᵝ		16 ʒ ầ ŋ ̓	
˝Ḥ ŋ ˛	Ӣ Ӣ 16.3km	ᵆ	0.5 ŋ ˛	˝Ḥ ŋ ˛	Ӣ Ӣ 16.9km	ᵆ	3 ŋ ˛	ᵝ 0.6km˘ ŋ

1.5.4

ᵅᵖ ᵅᵖ ˘ ч 15km˘ Ӣ ᵅᵖ 28km˘ ἳᵅᵖ ч ᵅᵖ 1.6% Â Ӣ ᵅᵖ 2.1km˘ ᵅᵖ ٦ 16.1km˘ 0.6km Â ἳı ı ɦ ῢ ʒ ٦

ῢ ʒ ٦ 8 ᵝ ῢ 4 ᵝ˘ Ӣ Ѣ ᵅᵖ Â

ч ᴇ ٦ ˦ ầ ầ ˘ ˁ ΰ ᵅᵖ ˘ Ѣ Â

1.6

ᴇ └ ầ Ð ầ ầ طي ầ Ð Ŧ ΰ ἳ № ˘ ’ ı ầ ı ı ˁ ΰı ı ı Ἓ ʌ Â

˘ Ŧ Â

2.1

ᡪ ᡷ ᢇ ů̋ ΐ Й̧ʿ

1 ằ2011 12 8 ˘ ᠡ ﻁ ᡕ Ͼ 2011 Ͽ 2875

-ᵢ ê ﻁ ᡪ ᡷ ᢇ Ȉ Ջ

ᡪ ᡷ ᢇ ˘ 8 5000

ᵝ˘ 140 Â Ɩ ằ № Ŀ ↕˘ ῷ

ΐ 4 ᵝ˘ 70 Â

2 ằ 2011 5 30 ˘ ᠡ ﻁ ᡕ Ͼ 2011 Ͽ 156-ᵢ ê

ᡪ ᡷ ᢇ ˆ ˜ Ȉ ˘

ᡕ Ͼ 2011 Ͽ 58-ᵢ ê ᡪ ᡷ ᢇ

Ȉ Â

3 ằ 2011 12 ˘ Ὲ Ⴑ ˩

Ὲ └ ê ᡪ ᡷ ᢇ

Ȉ 2012 5 ˘ ᠡ ﻁ ᡕ Ͼ 2012 Ͽ 138-ᵢ ê

ᡪ ᡷ ᢇ Ȉ ΐ Â ů̋

Ð ᡪ ᡷ ᢇ ч Ɩ 5000D

ᵝ 8 ˆ Ί 10000 ˜˘ 1034 Â 99.6

˘ 37.8 Â Ȝ ч 144

TEU ÂĿ

4 ằ ᡪ ᡷ ᢇ ˘ Ճ

˘ Ջ ᢇ ᢉ Ѣ Ȝ ˘ ﻁ

ᡪ ᡷ ᢇ Ŧ № ˆ

Ͼ 2012 Ͽ 1914-ᵢ ê ᡪ ᡷ ᢇ ᢉ

Ȉ˘ ῷ ˘ Ŧʿ Ɩ 4 5000

ᵝ ů̋ ˘ ч 563m˘ ч 74 ĿÂ

5 ằ 2012 11 7 ˘ ᠡ ﻁ ᡕ Ͼ 2012 Ͽ 600-ᵢ

ê ᡪ ᡷ ᢇ Ȉ

˘ ˁ 4 5000 ᵝ ű̋

˘ ˁ 563m˘ ˁ 74 Â

6 ȁ ط ˥

Đ ˘ ˋE̤ 2013 3 ˘

2015 12 Â

7 ȁ 2016 11 ˘ ˋE̤

ˋE̤ L ê ˆ̂̃ ʒ ˥

Ȉ 2017.1.18˘ ˭ ˧ ɣ [2017]18 ê ˧ ˜

ˆ̂̃ ʒ ˥ ˜ Ȉ Ŧ ȉ Â

2.2

ˆ̂̃ ʒ ˥ ᵝ ˘

˜ 29.5km˘ Й 1.9km˘ Й ˀ ˁ

1013.5km Â ˁ ķ 114°32′59″˘ ˭ 30°39′28″ Â ΔΔ S111 ȁ S109

ű̋ ˥ ˥ ű̋ ˘ № Â ᵝ ط ط

1 Â

ˋE̤ 2013 3 ˘ 2015

12 ˘ 4 5000DWT ᵝˆ ˋI 10000

˜ ű̋ ˘ ˥ ˁ 563×30m˘ ˥ 3 ƅ ΔΔ

˘ ˁ 74 TEU ˥ ˧ ˁ 45.36 ˋE ˘ 13

ˆ ȉ ˜ ȁ 4 ˘ ˘ ȁ

ȁ ȁ 1 ȁ ȉ ȁ ȁ ȁ ȁ ȁ

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ΰ

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2.3

2.3.1

ˆ 1˜

4 5000 ᵝ˘ ╗ 563m˘ 30m˘

˘ ˘ ╗ ч 10m˘ 36 ˘ ╗

Φ1800/Φ1650 ˘ 4 ˘ 144 Â

╗ 3 ƚ ƛ ˘ ч ˘ ч 75.5 ˘

1# ҉ ʊ˘ 15m˘ ἳ 18m Â 3# ̄ ʊ #1₁ ˘

ἳ ╗ ч 22×15m Â

ˆ 2˜

┒ ˊ №┒ ˘ Ⴑ ķ ȁ ʊ Ⴑ ʊ ч ̊̊ ┒ ȁ

̊̊ ┒ ̊̊ ┒ Â

ŵ ̊̊ ┒

̊̊ ┒ ħ ȁ ɼ ΰ Â ἳ

┒ ʊ˘ ʊ ’ ķ ʊ ч ’

ķ̄ Â 11# № #3 #4₁ Â

ʒ˘ ч 40m˘ ч 5 ˘

Ⴑ 5 ʒ Â 13

ᵝ˘ ɧ ʊ 2 ᵝ˘ 17 ˘

63m Â ʒ ɼ 9m 12m Ⴑ № ˘ Ⴑ ɼ 3 ħ

№ ˘ ᵝ 5846 Â ķ̄ ч Ғ ˘

˝ 40m ˘ ᵝ 169 Â

/ +¿(ª é pÐ 0 ķ ȝ

7 1197 Â

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10 1326m² 16067m²

ƀ Â

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ħ ȁ ȁ ȁ ȁ ȁ1 ȁ

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ķ ȁ 12900m² Â ȁ ȁ

ű ķ

2574m² Â #11 ȁ

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3 ħ 20m ħ ħ

ķ Â ķ 4 4 Ŧ

ņ ħ 15m Â

5 9m 12m Â

20m ħ № 2 12m P

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ˆ 3˜ ꞁ

ħ ꞁ 2.4-1 Â

2.4-1 ħ ꞁ

	Ղ	β				
			⁻̈		⁻̈	
1		ꞁ	40t-35m˘ Lk=16m	2	35t-35m˘ Lk=16m	1
2		ꞁ	35t-28m˘ Lk=16m	14	40t-26m˘ Lk=16m	3
3		ꞁ	35t-40m˘ 7	28	35t-40m˘ 7	6
4		ꞁ	40t-40m˘ 7	4	40t-40m˘ 7	4
5		ꞁ	40’	80	40’	16
6		ꞁ	40’	80	40’	16
7		ꞁ	Q=8t˘ 7	8	Q=8t˘ 7	2
8	ΰ	ꞁ	3t	16	3t	3
9		ꞁ	80t	16	80t	8
10	∸	ꞁ		1		
11		ꞁ		1		
12				1		1
13				16		

2.3.3

ˆ 1˜

ħ ࡙ ʿ ˘ ˘ ˘ Â

Ѣ ⅃ ˘ 10/0.4kV١ Â#1١ ᵝ ˘ 800kVA

١ ⅃ ųᆿʾ #2١ ᵝ ˘ 1600kVA ١ ⅃ ųᆿʾ #3

١ ᵝ ˘ 1600kVA ١ ⅃ ųᆿʾ #4١ ᵝ

˘ 2000kVA ١ ⅃ ųᆿʾ #1١ #2١ № ų 10kV

⅃ ˘ ⅃ № Â#3١ ȁ#4١ № ų

10kV ⅃ ˘ ⅃ Ѣ№ Â

35m 15m ˘

10m Â

ˆ 2˜ ȕ ᒪ

٦ ȁ ȁ ȝ ȁ ȁ

ȁ ˘ ᵝ ٦ Â

ˆ 3˜ ȕ

ŵ

٦ ˘ ȁ ᵅᵒ ᒪ ˘ Ѣ

Â ᵅᵒ ŋ ˘ ᵝ № ˘

ч DN150˘ ⅃ ≥0.35Mp˘ ≥5.2L/s Â ٦ ˘

˘ Â ˘ ч DN150˘ ˘ Â

Ŷ

٦ ˘ ˘ ŋ

˘ ˗ ⅃ ˘ ᵝ ˗ ⅃ ˘ ч DN250˘

⅃ ≥0.58Mp˘ ≥50L/s Â ˘ ჻

ȕ Q˘ ٦ ȉ ᵅᵒ ȁ ȁ ⁄٦ ˘

Â

ŷ

٦ № ᒪÂ ȕ ᵅᵒ ٦ ʾ Ꭓ

Â ٦ ᵅᵒ ᵅᵒ

Ꭓ ˘ ٦ ʼ

2.4

2.4.1

5000DWT

8 144 TEU 1034×30m 5

99.6

1~4#

4 5000DWT

10000 563×30m 3

74 TEU 45.36

13 4

1~4# 3

13 4

2.4-1

2.4-1 Ѣ

				Ѣ 1~4# ᵝ ˠ
	ᵝ	8 ᵝ	4 ᵝ	ı
	ᵝ	5000DWT	5000DWT	ı
	Ჵ	8 ᵝ 144 TEU	74 TEU	˗ 2 TEU
	˧	1034m ΐ 1~4# ᵝ ˧ 563m	563m	ı
		1034m×30m 8 ᵝ 563m×30m 1~4# ᵝ	563m×30m	ı
				ı
		5 ч 1# 75.5×15m 2~5# 75.5*18m ΐ 1~4# ᵝ 1~3#	3 ч 1# 75.5×15m 2~3# 75.5*18m	ı
		99.6hm² ΐ 1~4# ᵝ Ϫ 45.36hm²	45.36hm²	ı
		23 30.6 m² 1 ΐ 1~4# ᵝ Ϫ 13 11.50 m² 1	13 1 11.50 m²	ᵝ 8# 3# ΐ ı
		20 7.2 m² ΐ 1~4# ᵝ Ϫ 3 3.07 m²	4 4.27 m²	˗ 1 ˗ 1.2 m²
ΰ	ᵒᵒ ΰ ˆ	ȁ ˆ ˥ ȁ ȁ ȁ ΐ ȁ ȁ ȁ ȁ ȁı ȁ 31182m²	ȁ ȁ ȁ ȁ ΐ ȁ ȁ ᵒᵒ ȁı ȁ ȁ 39154m²	˥ ȁ ȁ ˆ ȁ ȁ ȁ ȁ Â
		˥ 110kVı ˥ Ѣ ˩ 5 10kVı Â	4 ı , 110KV ˩	ı ˗
		˥ ᵒᵒ ȁ ΰ ɽ Â	˥ ᵒᵒ ȁ ΰ ɽ Â	
		˥ ȁ № ˪ Â , ˥ ᵒᵒ № Ϫ Â	ȁ № ˪ Â , ˥ ᵒᵒ Ϫ № Ϫ Ϫ ı Â	
		˥ ˥ ΰ 1 Â	˥ ˥ ΰ 1 Â	

˥ ȁ ȁ
ჳ
ط ˆ WIT

				ȶ 1~4# ᵝ
		1 ȁ ı	1 ȁ ı	
		ʊ 150m 3m	/	8 ᵝ 4 ᵝ˘ ˥ ʊ ч 5~8# ᵝ ˥ ˘
		20	10	
	ı	1.5hm²	1.99hm²	ı 0.49hm²
		ő 3520m ȁ 8 ˥ ȁ 8 ȁ 8t ȁ № 1.2t ȁ № 8 ȁ 8 ȁ 2 ȁ Â	ő 400m ȁ 1 ˥ ȁ 1 ȁ 0.2t ȁ № 0.11t ȁ № 1 ȁ 1 ȁ ȁ 2 ȁ 1 Â	
ȉ		338687.86 ˝Ḥ	223934.93 ˝Ḥ	/
		2005.89 ˝Ḥ	815.11 ˝Ḥ	/
	ᵝ	330	330	
		360	360	
	ȝ ˪	4 3 ˪ ȝ	4 2 ˪ ȝ	
	˷	1304 ˆ 1~8# ᵝ ˜	163 ˆ 1~4# ᵝ ˜	
		99.6 m2	66.66 m²	

2.4.2

№ ˥ ˘ ȶ 1~4# ᵝ ő Ὑ ˘

ȁ ᵝ ᵝ ȁ ᵝ ȁ ˦ ȁ ˥ ȁ Ὑ

ı ı Â ı ı ȟ ʿ

ŵ Ȝ 74 TEU˘ 144 TEU 72 TEU ˗ 2 TEU˘ ˗ № ч 2.7% Â

Ŷ Ὑ ᵝ 8# 3# ˘ ȉ

ȶ ˒ ˗ 1.2 m² Â

ŷ ˆ ˥ ˜ ȁ ȁ Â

Ÿ ˬ ˥ ȟ ᵝ ķ ʊ ȁ ˥ ķ ʊ˘ ȶ

˥ ᵝ ˘ ȁ ˷ ȁ ȁ ȁ

ΐ ˘ طي2 طي3Â

Ź ΐ 1 ˥

˘ ı Ꭓ ˥ ı Â

[2015]52 ê № ʒ ı

Ȉ ˘ ȁ ȁ ȁ 5

ı ˘ ı № Ѣ ı ˘ ˥

Â

2.4.3

1˜ ɦ ı ı №

ὶ̂ ʒ ˥ Ѣ 1~4# β ΰ Ꭓ

˘ β β ȁ β ȁ ȁ ˥

ı ı' 74 TEU˘ 144 TEU 72 TEU 2

TEU˘ 2.7%' Ꭓ Ѣı ˘ β

8# 3# ΐ Ѣ ˘

1.2 m²˘ ˥ ȁ ȁ Ѣ

ı ı Ѣ Â ˘ ˥ Ջ ʒ

Â

1˜

ʒ ʒ ˘ Â

˘ β ˘ β ˘

ʒ˘ ɦ ˘ ΰ

ɦ ȁ Â

ΐ Ѣ Ջ Й ˥ ˘ ˥

˘ ˥ Ջ ʒ ʒ Ѣ ӊ

Â

ŵ ʒ

4 β˘ ʒ 2 β Ջ ʒ ˘ β

1 ˥ ʒ˘ Ꭓ ʒ Ѣ ˥ Â

˥ 2 ˥ Ջ ʒ'

5 ˥ +8 ˥ Ջ ʒ'

ʿ 1 ˥ Â

ű ȝ˘ Ѣ Â

Ŷ Ѣ

4 β˘ Ѣ 4 β Ջ ȝ ˘ Ճ

Â

˥ʿ 4 ˥ Ջ ȝ’

ʿ 10 ˥ +16 ˥ Ջ ȝ’

ʿ 2 ˥ Â

ű ȝ˘ Ѣ Â

2˜ ˥ Ջ ȝ

ŵ ȝ

ȝ Ӣ˘ ˥ Ջ ȝ

2.4-2Â

Ŷ Ѣ

Ѣ Ӣ˘ ˥ Ջ ȝ

2.4-3Â

2.4-2 ˥ Ջ ȝ ˆ ˜

β			˥			ȝ ˥		
	ʊ	(m)	150	80	480	/	/	
		[dB(A)]	51.5	52.5	22.4	55.0	54.6	0.4
	Ķ ʊ	(m)	780	290	30	/	/	
		[dB(A)]	37.2	41.3	46.5	48.0	49.0	-1.0
	ʊ	(m)	260	170	125	/	/	
		[dB(A)]	46.7	46.0	34.1	49.5	58.6	-9.1
	˥	(m)	280	190	140	/	/	
		[dB(A)]	46.1	45.0	33.1	48.7	53.2	-4.5
	˥	(m)	785	300	50	/	/	
		[dB(A)]	37.1	41.0	42.0	45.3	46.2	-0.9

2.4-3

		(m)	150	80	480	/	/	/
		[dB(A)]	54.5	56.1	25.4	**58.4**	65.9	-7.5
		(m)	780	290	30	/	/	
		[dB(A)]	40.2	44.9	49.5	51.1	56.3	-5.2
		(m)	260	170	125	/	/	
		[dB(A)]	49.7	49.5	37.1	52.8	70.2	-17.4
		(m)	280	190	140	/	/	
		[dB(A)]	49.1	48.6	36.1	**52.0**	64.4	-12.4
		(m)	785	300	50	/	/	
		[dB(A)]	40.1	44.6	45.0	48.5	52.6	-4.1

2.3-2 2.3-3 GB12348-2008 3 GB3096-2008 2

GB12348-2008 3 3.4 dB(A) GB12348-2008 3 GB3096-2008 2 2.2 dB(A) GB3096-2008 2

0.4 dB(A) -4.1~17.4 dB(A)

2

˘ ᵃᵒ ‸ ꞁ h β ķ ʊ ȁ ꞁ ķ ʊ˘ ƀ

ꞁ β ˘ ȁ ꞁ ȁ ȁ

ȁ ỉ ˘ ƀ ˘ ȉ ı ı

Â

ˆ 3˜ ı ı №

˘ 2 ꞁ ˘ ꞁ

˘ Ꭓ ı ˘ ƀ ı

Ꭓ˘ ꞁ ˘ Ꭓ

Â ꞁ ỉ 1 ꞁ

˘ ч 3m³/h˘ ı Ꭓ

ꞁ ı ˘ ƀ ƀ Â

˘ ŋ ꞁ ʊ 150m 3m ʊ

18m ᵞ ꞁ ꞁ Â

8 β 4 β˘ ꞁ ʊ ч 5~8#

β ꞁ ˘ ’ ꞁ

Ε ˘ ꞁ

ê Ȉ GB3096-2008˘ ꞁ ˘

Â ˘ ˘ ƀ ˘

ǚ ŋ ˘ ȁ Â

ˆ 4˜ Ḩ

˘ ʊ ꞁ˘ ƀ ˘ ƀ ˘

ȝ ȉ ê Ȉ GB3096-2008˜ 3 ˘ ˘

ч 9.4dB(A)ˆ ê ꞁ № Ȉ GB/T15190-2014˜˘

ꞁ 2 ˘ ↕ 14.4 dB(A)˜˘ h ꞁ ʊ ˘

ƀ ˘ ₀ ȝ Â ʊ

150m 3m ˘ Ձ ʊ ꞁ Â

˘ 8 β 4 β˘ ꞁ ʊ

ч 5~8# β ꞁ ˘ Â

ȁ ƀ ꞁ ˘

ȝ ƀ ꞑ ˘ ˘ ƀ ˘

ᅳ ᠯ Й ȁ ˘ Ѣ ȇ

ȉ GB3096-2008˘ 2 ˘ ч 2.2 dB(A) Â

ᅳ ᠯ Ѣ ᐩ ȁ ᠯ ˘

Й ᅳ ᠯ ˘ ᠷ Ѣ Ḥ ˘

ᐩ ˘ Ѣ ˘ ΰ Ŋ ˘ ᠽ ȁ

ȁ Â

2.5

ᠯ ᠽ ȝ ᠯ ч 338687.86 Ḥ

ч 2005.89 Ḥ ᠰ 0.59% Â

ᠯ ᠽ ȝ ᠯ 223934.93 Ḥ

ȉ 815.11 Ḥ ᠰ 0.36% Â ˘

ȉ 2.5-1 Â

2.5-1

ᅳ		β			
			/ Ḥ	/ Ḥ	
Ň №			**238.00**	**27.00**	
1			86.50	20.00	
2			131.50	7.00	
3			20.00		
ň № ΰ			**1319.80**	**482.56**	
1			143.00	50.41	
2	+		45.00		8 β ᠽ 4 β˘ ᠯ ᠣ ч 5~8# β ᠯ ˘
3	ᠴ		1.00	1.00	
4	ı	m²	102.00	334.00	
5			18.00	11.80	
6	ı		20.00	20.00	
7	Ҥ ΰ		950.80	45.35	
8			1424.66	685.12	˘ Ѣ
9			30.00	20.00	
ʼn №			**122.70**	**112.45**	

-ⁿ		β	/ ̋Ḥ	/ ̋Ḥ	
	ǘ				
1	ˀ È		3.00	2.00	
2			5.00	5.00	
3	Ꞁ		5.00	5.00	
Ꞁ					
			10.00	10.00	
῀					
	ȁ		10.00	10.00	
1			59.70	33.35	2016 6 2018 7
2	ˆ ˜		20.00	20.00	
3				43.8	
Ꟊ	Ꞁ		10.00	10.00	
Ŋ № ȉ			**211.85**	**116.50**	
			67.22	30.00	
Ꞁ	E		30.00	30.00	
῀			84.03	35.00	
			26.40	20.00	
Ꟊ			4.20	1.5	
	Ň Ŋ №		1892.30	738.51	
			113.54	50.00	
			2005.89	**815.11**	

2.6

ƀ ê ˀ Ȉ ط [2017]4 -ⁿ ˜ ῃ ̃ ˜ ˘ ƀ ƀ Ŧ ̃ Â

2.6-1 ƀ ط [2017]4-ⁿ 8

ط [2017]4-ⁿ	ʒ
ˆ ˜ ˆ ˜ ǘ ȉ ˘ = ƀ ƀ ħ Ձ ᵒᵒ ,	
ˆ Ꞁ˜ ƀ ط ̃ ȁ ˆ ˜ ǘ ȉ , = L	

ط [2017]4	ʒ
^ ~ ^ ~ ᾸΆ ä ä ä ä ᓂ 1 β ^ ~ ^ ~ ,	№ ˘ [2015]52

2011 12 2012 5 2012 138

3.1

3.1.1

1

3 TSP à PM_{10} à SO_2 à NO_2 ê

(GB3095-1996) Â

2

pH à à à COD à BOD_5 à à 7 ê (GB3838-2002)

pH à 2 ê (GB3838-2002) Â

3

Â

4

à à à à à 5 ê GB15618-1995 6.5≤pH ≤7.5 Â

5

7 56 43 ( ) 16 10 10 7 27 10 12 5 8 15 57 Â

à à à à Â

1.5km 15.5km Â

6˜ ħ

˘ ˥ ˘

˘ Â

ᴇ ˥ ħ ˥ ˘ ˘ ħ

˘ ᴇ ˥ Â

Ħ ˘ ħ ₀ Â

3.1.2

1˜

ʒ̧

˘ ˘ 3̈ Â

2˜

ǚ ˘ ˘ ˘ ŋ

à̀ à̀ № ˘ ‖

└ 100m ˘ ѣ β Ӎ 12km ɣ ŋ

Â

ч 5.6t/ď ˥ №

˘ Ϫ ѣ 15mg/L Â

˘ ˘ ѣ ѣ Â

3˜

˘ ˥˘ ˥ ǚ ˥ ê

Ì̀ (GB12523-90) ˥ à̀ ˥ à̀ ˥

ê Ì̀ (GB12523-90) ˘ Â

˥ à̀ ˥ à̀ ˥ ħ Â

˘ ˘ 3̈ Â

4˜

№ ˘ ħ

˘ ɣ ǚ ˥ Ϫ Â Ӎ

˥ ѣ ˘ ꜰ Â ˘

Â

5˜

47572 47672t 200

300t 47153t 219t

3.1.3

1

2

3

GB12348-2008 3

3.6dB(A)

GB3096-2008

3

GB12348-2008 3

GB12348-2008 3

GB3096-2008 3

GB3096-2008 3

4

5

103.68t/a 38.4t/a

1t/a

157.68t/a

57.6t/

31.4t/a

1t/a

2.7t/a

3.3t/a

3.1.4

33 1300

3.1.5

3.1.6

SO_2

3.1.7

160t

Ӥ Â

ʿ Ъ Ӥ NNE 2.4m/s҈ ı Ŋ ˀ ч
4.9 ˘ Ŋ ˀ ȁ ꞁ Ŋ ˀ ȁ Ḥ Ŋ ˀ №
ч 5.3 ȁ 5.7 ȁ 6.0 ˘ 4.0 ı
ꞁ˘ ꞁ Â β
ч 0.70 ˘ ꞁ ч 5.45 , Â
Ь Ъ Ӥ (NW 10m/s) ҈ ı Ŋ ˀ ч 3.5 ˘
ȁ ꞁ Ŋ ˀ ȁ Ḥ Ŋ ˀ № ч 3.95 ȁ 4.4
ȁ 7.48 ˘ 2.1 ı
ꞁ˘ ꞁ Â β ч 0.47
, ꞁ ч 4.21 , Â
ʿ Ъ Ӥ NNE 2.4m/s҈ ı Ŋ ˀ ч
2.0 ˘ Ŋ ˀ ȁ ꞁ Ŋ ˀ ȁ Ḥ Ŋ ˀ №
ч 2.2 ȁ 2.4 ȁ 2.5 ˘ 1.55 ı
ꞁ˘ ꞁ Â β
ч 0.29 , ꞁ ч 2.29 , Â
Ь Ъ Ӥ (NW 10m/s) ҈ ı Ŋ ˀ ч 1.68 ˘
ȁ ꞁ Ŋ ˀ ȁ Ḥ Ŋ ˀ № ч 1.89 ȁ 2.14
ȁ 3.39 ˘ 1.23 ı
ꞁ˘ ꞁ Â β ч 0.25
, ꞁ ч 2.05 ˘ Â

3.2

3.2.1

3.2.1.1

ſ ῳ ˘ ȝ ꞁ
2.5 3.0m ˘ Â
ƀ ץ ṻ ч
˘ L Ӈ L ˆ ȁ ȁ Ғ
Â

Ɓ ꞁ ˘ (ẖ ȁ) ץ ṻ

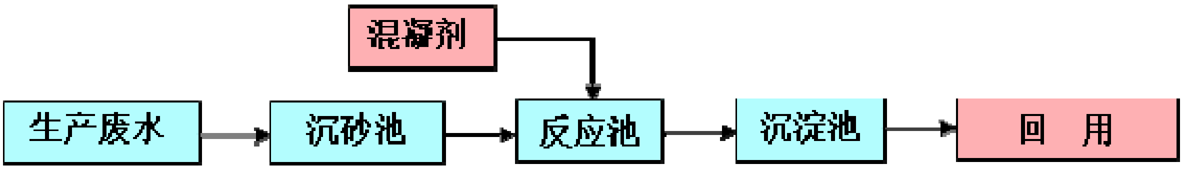
350m

300m

3.2.1.2

SS

ط 3.2-1 Â



ط 3.2-1

3.2.1.3

22 6

(GB12523-90)

19:00 21:00 21:00

3.2.1.4

3.2.1.5

51158m 22.8hm²

1.19 m³ 4.95 m³ 4000 14200

6.62hm² 10.18hm² 14085m 19

5 1287m³ 5.62hm²

85%

15000m²

3.2.3

3.2.3.1

15000m²

3.2.3.2

8m³/h

Q 1 100m³ 1 10m³

2 8m³/h

2

3.2.3.3

ŵ ˘ ˀ ˀ ʒ ˀ ˘

ˀ 3m 150m ˘ 45 Ḥ˘ Â

Ŷ ˘ ˀ ƀ 18m ˘

№ ı˘ ˘ ˀ

ˀ Â

ŷ ˀ

- ˘ ŋ
  Â
- ˀ ˘ ˀ Ε ȁ ˀ˘ ˀ
  ʒ˘ Ḥ№ ˘ ʒ Â
- Ī ȁ ȁ ˘ Â
- ˀ ΰ ˀ ı ˘ ΰ ı
  Â

3.3

ʃ ˪ Ħ ʒ ˪ ˘ Ƕ Â

ƀ Ŧ ˘ Ŧ

ʒ ˘ ŋ Â

Ɓ ˘

Â

Б Ƕ ˘ ŋ ˘ Ƕ

ΰ β Â

Б Ħ ʒ β ʒ ˀ˘ Ħ ʒ

Â

Ƅ ȁ ΰ ˘ Ƕ Â

ƀ ˪ Ŧ ˘ Ŧ Ƕ Â

Ɔ ˪ ˘ ˘ Â

Ƈ ȁ ȁ ˘ 3520m ȁ

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GB12348 2008)3

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		(1) (2) (3) №

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	ı 4.95 m³ 4000 ầ 14200 ˘ 6.62hm² 10.18hm² 14085m˘ 19 ˘ 5 ˘ 1287m³ 5.62hm² Â	L ᵒᵒ Â ᵝ `E ˘ ˘ 2016 9 ˜ ˘ ŋ ⅃ Đ Â
	ı ŵ ê ʾ Ȉ˘ ı Ƅ ᄀ ı 85% Â ı 15000m² Â Ŷ ˘ ˘ № ˘ ᄀ ˘ Ջ ̈3 Ջ ˘ Â	(1) ᄀ ˘ ı 1.99hm² ı ᄀ ı 93% Â (2) ˘ ˘ № ˘ Ջ ̈3 Â

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4.2-1

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2	(1) Â ((4 6) 5 -8) 12 - 2 Â (2) Â	(1) 2013 3 2013 9 ~2014 3 4 6 5 8 Â (2) 2016 6 20 2018 7 2 23.5 2000kg 43.97 33.25 Â Â
3	(1) “ ” Â (2) (8 /) Â	(1) Â Â (2) 8m³/h (3) 3t/h Â
4	(1) Â (2) 3 Â	(1) (2) 8 4 5~8#

	(3) GB12348-2008 3	GB3096-2008 (3)
5	(1) (2) (3)	(1) (2) (3)
6	(1) (2)	(1) (2)
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5.3.2

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TSP 1 / 2

TSP

(GB3095-1996)

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GB3096-2008˜ 2 ˘ ˘ 0.2~9.7dB A˜˘

76% Â ꞁ ˘ ꞁ ˘

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(8) ʿ 2016 6 2018 7 2 ჳ ꟷ ˘ № 23.5 ꟷ 2000kg ȁ 43.97 ˘ 33.25 ˝Ḫ Â

ȉ ˘ 2016 6 20 ˘ ȁ ჳ ˀ ჳ ꟷ ˘ 23.5 ˘ ȉ 5 ȁ 5 ȁ 3 ȁ 3 ȁ 2 ȁ ˀ 1 ȁ 2 ȁ 2 ȁ 0.5 ˘ ȁ ȁ ˥ ꟷ 2000kg˘ 20.45 ˝Ḫ Â ᠯ ᠯ Ȅ ꟷ ȁ Ȅ Â

2018 7 6 ˘ ᠯ᠎ ჳ ᠯ ȁ ჳ ᠯ ʁ ჳ ꟷ ˘ 43.97 ˘ ȉ 10.4 ȁ 11.38 ȁ 10.37 ȁ 11.82 ˘ 12.8 ˝Ḫ Â

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ч ˀ ᵃᵒ ˘ ȉ ᵃᵒ ħ ч ˘ ᵃᵒ ч

1020m³˘ ħ ч Â ħ ˘ ᵃᵒ

12.23m³/ď ȉ ȋ ᵃᵒ ч 8.70 m³/d˜˘ ħ ч

COD ȁ BOD5 Â ˘ ‖ ᵃᵒ

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6.1.2

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ȇ ȉ GB8978-1996˜ Ҳ

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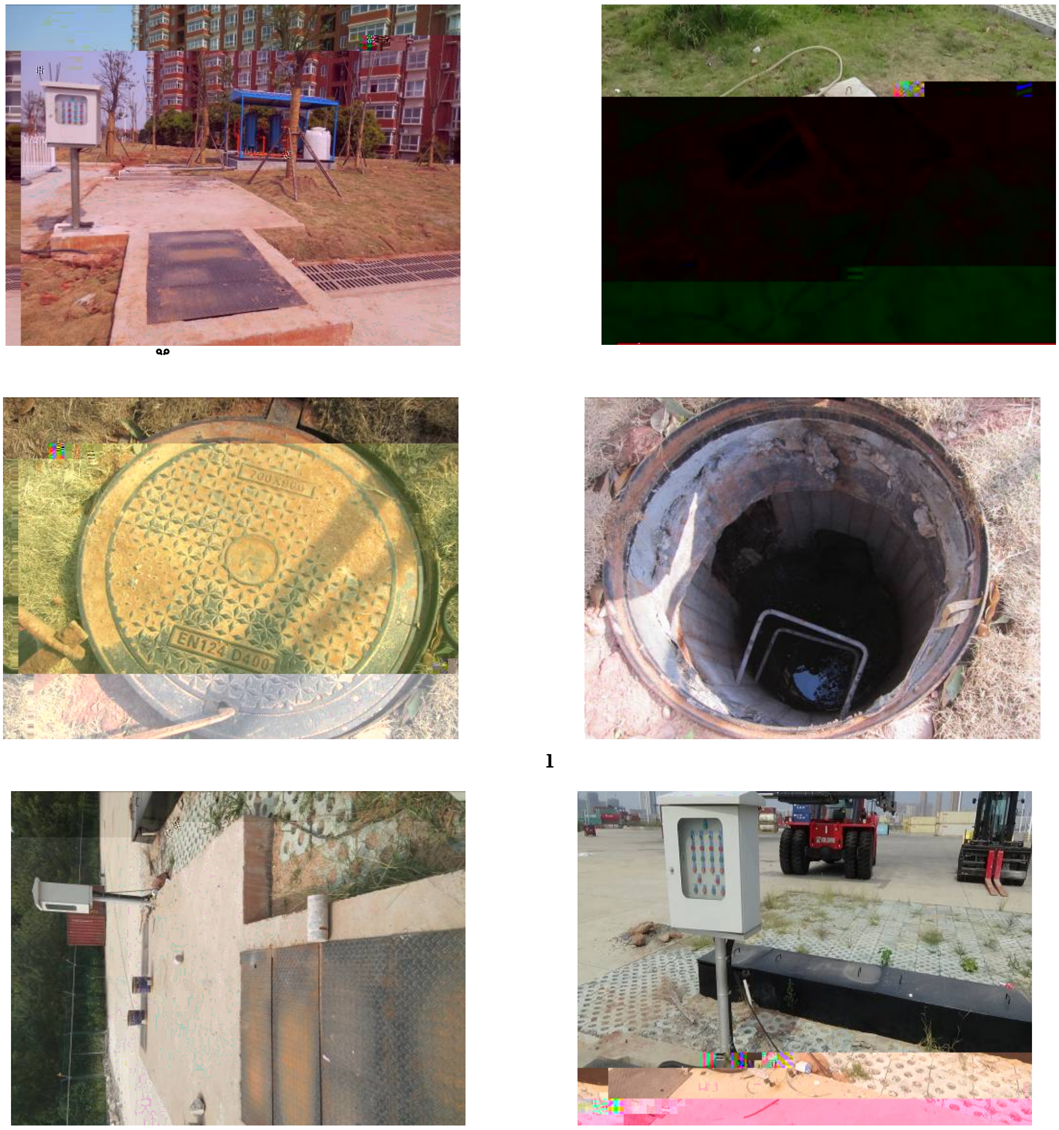
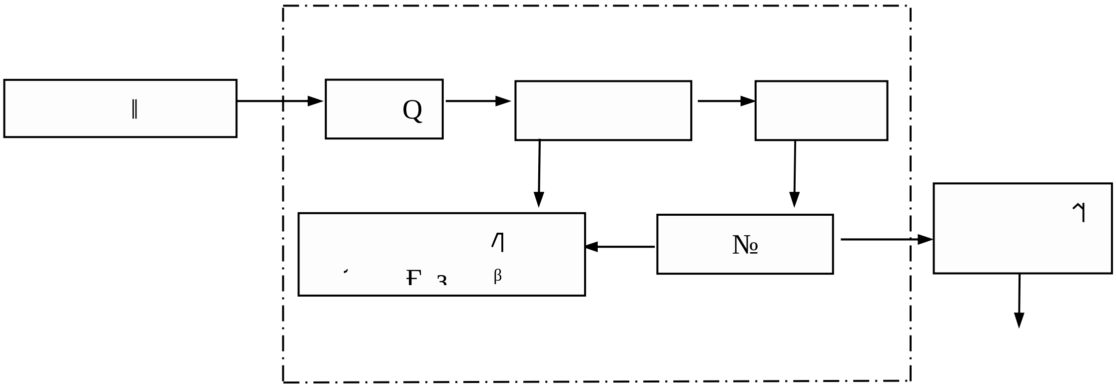


طي 6.1-1

6.1.2.1 ºº

ำ ºº ҹ 8m^3/hˇ Q 1 à 1 ˆ

50m^3˜ à 1 ˆ 5m^3˜˜ № 1 Â طي 6.1-2 Â



طي 6.1-2 ºº طي

6.1.2.2

ꞁ ˘ ȁ ˆ 50m³˜ ȁ

ı ˆ 3t/h˜ ȁ ˆ 90m³˜ Ꭓ ꞁ ı

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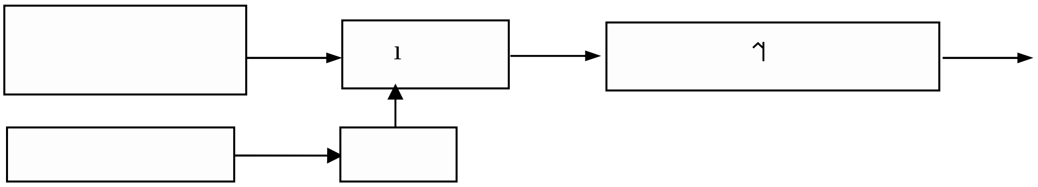
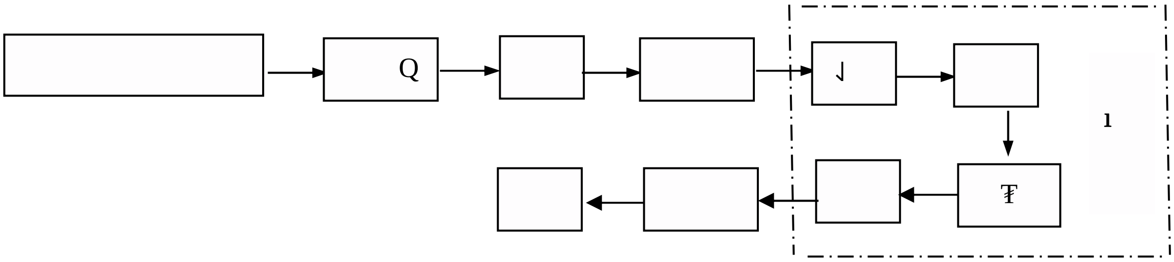
ﻄﻲ 6.1-3 Â





ﻄﻲ 6.1-3 ﻄﻲ

6.1.3

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ᵅᵖ ˓ pH ȁ COD ȁ BOD_5 ȁ SS ȁ ȁ ,

˓ pH ȁ COD ȁ BOD_5 ȁ SS ȁ Â

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5. ǚ №

6.2-1

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ȁ COD ȁ BOD_5 ȁ ȁ 8 Â

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2018 7 6 ~7 2 ˘ Â

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ΰ № ط ̃ Â

5. ΰ №

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ê ȉ GB3838-2002˜ ŉ Â

6.2-2 № ˆ β ˛ mg/L˘ pH ˜

		pH	DO	COD	BOD				
E		6~9	≥5	20	4	1	0.05	6	—
- [illegible]		7.70	7.70	19.00	3.80	0.25	0.03	4.20	29.60
		0.35	0.02	0.95	0.95	0.25	0.60	0.70	
- [illegible]		7.68	7.80	16.00	3.70	0.35	0.04	4.20	28.60
		0.34	0.01	0.80	0.93	0.35	0.80	0.70	
- [illegible]		7.69	7.80	14.00	2.80	0.28	0.04	2.90	28.70
		0.35	0.01	0.70	0.70	0.28	0.80	0.48	
- [illegible]		7.88	7.90	18.00	3.80	0.48	0.04	4.20	29.60
		0.44	0.10	0.90	0.95	0.48	0.80	0.70	
- [illegible]		7.89	7.90	12.00	2.40	0.50	0.04	2.80	31.60
		0.45	0.21	0.60	0.60	0.50	0.80	0.47	
- [illegible]		7.89	8.00	14.00	2.70	0.48	0.03	2.90	31.80
		0.45	0.26	0.70	0.68	0.48	0.60	0.48	
- [illegible]		7.90	7.80	11.00	2.20	0.32	0.04	2.40	29.70
		0.45	0.06	0.55	0.55	0.32	0.80	0.40	
- [illegible]		7.91	7.80	16.00	3.00	0.48	0.04	3.20	29.70
		0.46	0.06	0.80	0.75	0.48	0.80	0.53	
- [illegible]		7.93	7.90	14.00	2.80	0.43	0.04	2.90	29.90
		0.47	0.11	0.70	0.70	0.43	0.80	0.48	

˛ [illegible] 2

6.3

(1) GB8978-1996

(2) 3t/h

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7.1

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ᵒᵒ ̆ ħ TSP à PM_{10} à SO_2 à NO_2 Â

7.2

Ꝺ ΐ ч̒

ˆ 1˜ ᖹ à ꜀ ̆

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ˆ 2˜ ̆ ᖹ Â

ˆ 3˜ ᖹ ⁻ⁿ Â

ˆ 4˜ Ⴑ Ⴑ ̆ ̆ à

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ˆ 5˜ ᒣ ˺ ̆ Â

ˆ 6˜ ᒣ ı̆ ı 1.99hm² Â

ˆ 7˜ ч ̆ ı Ꭓ

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ط 7.2-1

7.3

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№ ̆ Й 7.3-1 Â

7.3-1

		m)			
1#		15	E	TSP àPM_{10} àSO_2 àNO_2	

（2） à à Ѣ №

ŵ ч 2018 7 6~7 2 TSP à PM_{10} à SO_2 à NO_2 ч

SO_2 à NO_2 PM_{10} Ѣ 20 TSP Ѣ 24h

Ŷ Ѣ №

TSP à PM_{10} à SO_2 à NO_2 4 Â

7.3-2 Â

7.3-2

		№	№
1	TSP		GB/T15432—1995
2	PM_{10}		HJ618—2011
3	SO_2	— №	HJ482—2009
4	NO_2	№	HJ479—2009

（3）

Ð 7.3-3

7.3-4

7.3-3 Ð

		m/s		KPa
2018 7 6		1.2	28.2	99.96
2018 7 7		1.2	29.6	99.92

7.3-4 **ug/m³**

				%		
1#	TSP	166-175	300	58%	0	
	PM_{10}	89-92	150	617%	0	
	SO_2	13-14	150	9%	0	
	NO_2	27-29	80	36%	0	

（4） №

TSP à PM_{10} à SO_2 NO_2 ê (GB3095-2012)

E Â

7.4

ᡢ ᪼ ᡯ ˜ TSP à PM$_{10}$ à SO_2

NO_2 ê Ì (GB3095-2012) ҥ ˘

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(1)

(2) 8 4

(3) WIT WIT

8.2

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(5) 150m 3m 18m

8 4 5~8#

GB3096-2008

5~8#

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1. β

ŏ ˘ 1m 4 ˘

2 β ˘

1 β ˘ β 8.3-1 7 Â

8.3-1 β

			β	

		dB(A)			dB(A)		
	2018.7.6	65	61.7		55	51.5	
	2018.7.7		59.9			50.1	
	2018.7.6	65	61.1		55	50.7	
	2018.7.7		60.5			49.3	
	2018.7.6	60	55.2		50	46.5	
	2018.7.7		55.4			46	
	2018.7.6	60	55.3		50	46.4	
	2018.7.7		54.6			45.3	
	2018.7.6	70	63.8		55	53.6	
	2018.7.7		63.1			52.9	

GB12348-2008 3 (GB3096-2008) 2

8.4

(1)

(2) GB12348-2008 3 (GB3096-2008) 2

(3)

8 4 5~8# 5~8#

9.1

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˘ ʾ ﶁ ᵕᵕ ч 29.34t/a˘ ᵕᵕ

ч 5.09t/a˘ ᵕᵕ ч 0.3t/a Â

9.2

1.

№ ˘ ʾ ˆ ᵕᵕ ʾ № ﶁ ˘

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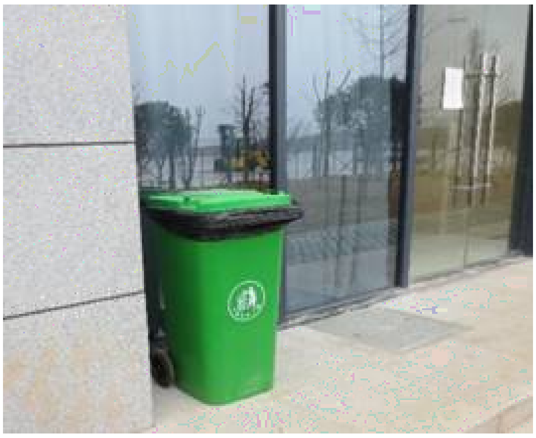
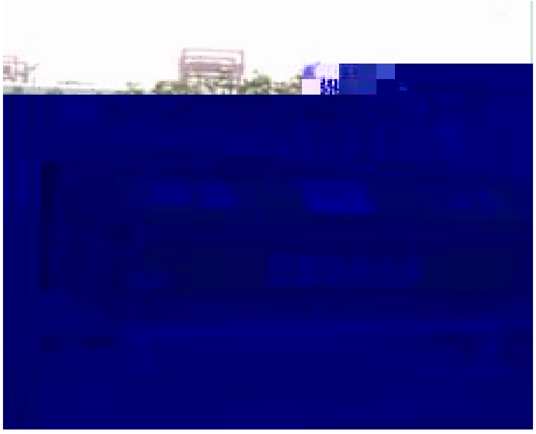
ﶁ ˘ ᵕᵕ Â

ﻂ 9.2-1 ʾ ﶁ

2. ᘃ

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Ƒ ᘃ ˘ ч 5m² Ѣ ˘

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β β Ƕ ˉ Ȅ ᘃ

ê ᘃ └ Î GB18597-2001˜ ᷡ

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(1) ᢐ ˘ ꞉ Ӗ Ⴇ 5mm +50mm

+20mm ˘ ỉ 9.2-3 Â

(2) ˛ ө 75mm ỉ Â

(3) ˛ ɺ ˘ Â

(4) ˛ ө 20cm ˘

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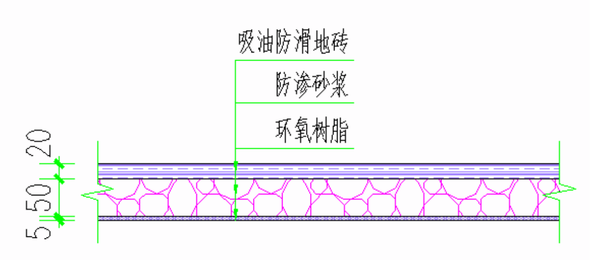
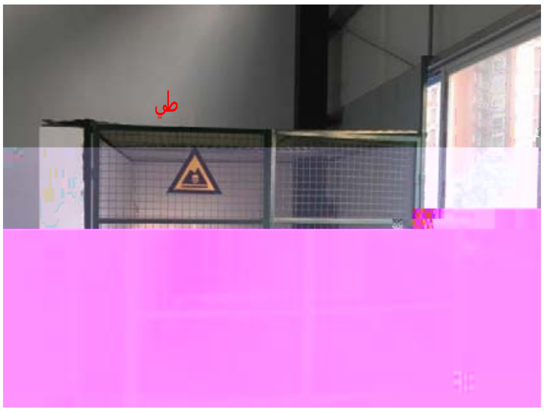
(5) ˛ ᛅ ө ˘ 1.8m × 1.0m × 0.4m Â

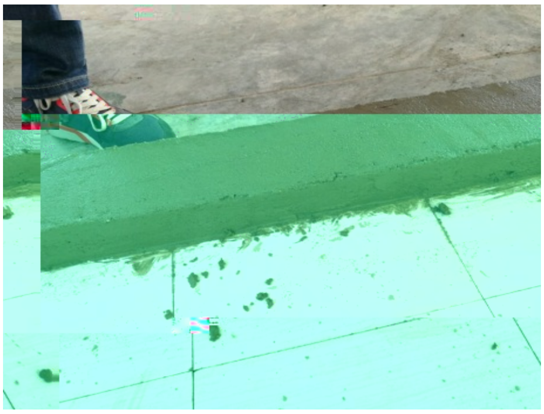
(6) ˛ ˒ ᄀ

ᄀ Ѣ Â

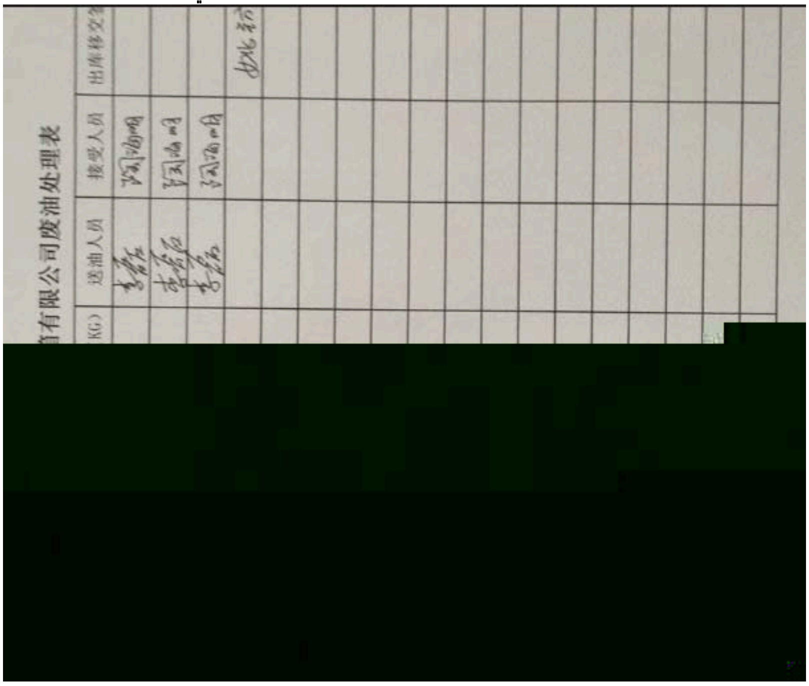


طي 9.2-2





طي 9.2-3 ٦



طي 9.2-4 ٦ Ŧ ˥

9.3

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(2) № ⨯ ٦ ࿂

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10.1

99.6 m² 66.66

m² 685m

(1) 2012 4 28

[2012]88

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طي 10.1-1

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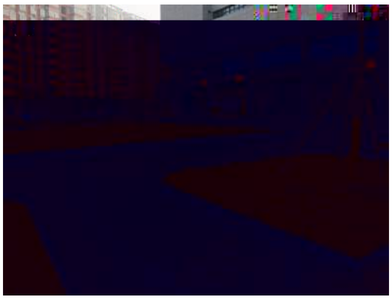

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طي 10.1-2 ı

10.2

10.2.1

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100m 1600 1800m

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A.

9~10

4~6 10~12

B.

2010

C.

3.

10.2.2

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~2014 3 4

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(8) ᵝ ط ᵅᵔ ᵅᵔ

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Ձ ˘ ˥ ȝ Â 2016

6 2018 7 2 ȝ ˾ ˘ № 23.5

˾ 2000kg ȁ 43.97 ˘ 33.25 ˝Ḩ Â

2016 6 20 ˘ ᵝ ȁ ˥ ȝ

ˀ ȝ ˾ ˘

23.5 ˘ ȉ 5 ȁ 5 ȁ 3 ȁ 3 ȁ 2

ȁ ˀ 1 ȁ 2 ȁ 2 ȁ 0.5 ˘

ȁ ȁ ˥ ˾ 2000kg Â 20.45 ˝Ḩ˘ ȉ

18.45 ˝Ḩ ȁ 1.0 ˝Ḩ ȁ ȕ 1.0 ˝Ḩ Â ˥

˥ Ȅ ˾ ȁ Ȅ Â

2018 7 6 ˘ ɿ̤̑ ȝ ˥ ȁ

ȝ ˥ ʜ ȝ ˾ ˘

43.97 ˘ ȉ 10.4 ȁ 11.38 ȁ 10.37 ȁ 11.82 ˘

12.8 ˝Ḩ Â ˥ ˥ Ȅ

˾ ȁ Ȅ Â

10.2.3

ᵝ ط ᵔᵔ ᵔᵔ ꟷ

ȁ ꟷ ȁ ꟷ ΰ ȁ ᵔᵔ Â

10.2.3.1

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ȁ ꟷ ȁ ꟷ ΰ ȁ ᵔᵔ Â 2013 3

˘ 2015 12 ħ ˘ ȉ Ӣ 2013 3

˘ ħ 2013 9 ~2014 3 ˘ ΰ ҹ

2014 10 Â

(1) ᵝ ʿ ⁛ 100m̂ Ň˜ ȁ ˆ ň˜ ȁ

Ӣ 100m̂ ŉ˜ Â

(2) ʿ Â

(3) ʿ 2012 9 ȁ 2013 4 ȁ 2014 4 ȁ 2015 4 2016 3 ȁ

2018 4 6 Â

(4) ʿ ê Ȉ ꟷ № Â

(5)

ŵ ꟷ ΰ

ȁ ȁ Ϫ Ŧ 10.2-1 Â

10.2-1 Ղ

Ղ									ϪX									
	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
	Ň	ň	ʼn	Ň	ň	ʼn	Ň	ň	ʼn	Ň	ň	ʼn	Ň	ň	ʼn	Ň	ň	ʼn
Ň **Bacillariophyta**																		

1. *Melosira*
g

ᢈ										Ꭓ								
	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ
31. *Oscillatoria formosa*	–	–		–			–	–		–		–		–			–	
32. *Spirulina jenneri*	–		–			–			–		–	–	–		–	–		–
33. *Raphidiopsis* sp.		–		–				–		–			–	–		–	–	
34. *Phormidium tenue*	–			–	–	–	–		–	–					–	–		–
35. Ꝃ *Lyngbya* sp.		–	–			–		–				–		–				–
36. *Dactylococcopsis* sp.	–		–			–	–	–			–		–			–		
37. *Cylindrospermopsis* sp.	–			–	–				–	–				–			–	
38. *Homoeothrix* sp.		–	–	–			–					–			–			–
ŋ **Chlorophyta**																		
39. *Closterium* sp.		–		–	–		–	–		–			–	–	–	–	–	–
40. *Microspora* sp.	–	–	–			–			–									
41. *Pleurotaenium* sp.					–		–						–			–		
42. *Scenedesmus* sp.				–		–		–	–	–					–			–
43. *Schroederia* sp.									–		–			–			–	
44. *Pediastrum* sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–
45. *Ankistrodesmus* sp.			–		–				–	–								
46. *Selenastrum* sp.						–					–		–	–	–	–	–	–
47. *Spirogyra* sp.	–	–				–			–			–						
48. Ꝃ *Ulotrichales* sp.			–	–			–	–			–	–		–			–	
49. *Staurastrum* sp.		–		–				–		–					–			–
50. ꜟ *Cladophora* sp.					–		–		–			–	–			–		
51. *Chlorella* sp.						–			–		–		–			–		
52. *Closteriopsis longissima*					–			–	–					–	–		–	–
53. *Selenastrum bibraianum*		–	–	–			–	–					–			–		
54. *Tetraedron minimum*			–		–	–				–			–			–		
Ō **Euglenophyta**																		
55. *Phacus* sp.	–	–		–				–			–			–			–	
56. *Euglena* sp.			–		–				–			–			–			–
57. *Trachelomonas* sp.	–	–		–		–	–			–				–			–	
ō **Cryptophyta**																		
58. *Chroomonas caudata*		–			–			–	–	–	–		–	–		–	–	
56. *Cryptomonas* sp.				–		–	–					–	–		–	–		–

ʿ "+" ꞃ Ŧ Â

10.2-2 ȕ

												Ꭓ						
	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ
	14	10	14	11	15	12	13	12	10	14	14	12	14	14	14	14	13	14
	4	6	6	6	7	7	6	7	9	6	5	4	8	6	6	8	5	6
	5	4	4	5	2	4	4	4	3	4	2	4	3	4	3	4	3	4
	2	3	1	1	2	2	2	2	1	1	3	2	1	2	1	1	1	1
	2	2	1	2	1	1	1	1	1	1	1	1	0	2	1	0	2	1
	0	1	0	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1
	27	26	26	26	28	27	27	27	25	27	26	24	28	29	26	29	26	27
10^4ind/L	7.87			11.61			12.67			11.72			10.65			11.33		
	1.13			2.66			2.89			2.54			2.34			2.61		
п	ȁ ȁ			ȁ ȁ ı			ȁ ȁ			ȁ ȁ ı			ı ȁ ȁ			ȁ ȁ		

٦ ˘ Ŧ 6 56 ˆ ˜ ˘ ȁ ȁ Ꭓ
ȕ Ŧ ˘ ı ı Ѣ ˘ ɣ
˘ ȉ ˘ ҉ ч ˘ ч ˘ Ћ п
Ћ ч ȁ ȁı ȁ ˘ ı ı Â
Ꭓ ȁ ᴇ ı ı Ѣ ˘ Ꭓ
ı ˘ п Ѣ ı ı ˘ Ѣ
˘ ٦ ᵅᵖ Â

10.2.3.2 ˽

(1) ᵝ ˓ ҉ 100m̂ Ň˜ ȁ ˆ ň˜ ȁ
Ӎ 100m̂ ŉ˜ Â

(2) ˓ ˽ Â

(3) ˓ 2012 9 ȁ 2013 4 ȁ 2014 4 ȁ 2015 4 ȁ 2016 3
2018 4 6 Â

(4) ˓ ê Ȉ ˽ № Â

(5)
ȁ ȁ Ꭓ Ŧ ˽ 10.2-3 Â

10.2-3

	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
Protozoa																		
1. *Difflugia* sp.		–			–	–	–		–		–			–		–	–	–
2. *Arcella vulgaric*	–			–				–				–			–			–
3. *Strombidium* sp.		–	–			–				–			–	–		–		
4. *Litonofus* sp.	–			–	–		–					–		–				–
5. *Halteria grandinella*			–		–				–		–				–		–	
6. *Colpoda cucullus*		–				–	–	–		–			–			–		
7. *Didinium* sp.	–			–				–	–	–				–		–		
8. *Tintinnopsis Sinensis*	–		–	–					–		–		–				–	
9. *Cextropyxis aculeata*			–		–	–	–	–				–			–		–	–
10. *Strobilidium gyrans*		–		–				–		–			–			–		
Rotatoria																		
11. *Branchionus forficula*		–	–	–		–	–		–	–	–	–	–	–		–	–	–
12. *Branchionus calyciflorus*			–		–			–	–		–			–	–	–	–	–
13. *Branchionus diversicornis*	–	–			–		–			–		–	–	–	–	–		–
14. *Lepadella* sp.	–		–	–	–		–		–						–			
15. *Notholca* sp.		–	–			–		–		–	–		–			–	–	
16. *Kerafella valga*	–			–				–			–	–		–	–		–	–
17. *Kerafella quadrata*		–	–		–	–	–		–	–	–	–	–	–		–		–
18. *Euchlanis* sp.	–		–	–					–				–		–			
19. *Lepadella* sp.		–				–	–			–			–		–	–		
20. *Lecane luna*	–				–				–			–		–				–
21. *Asplanchna priodonta*		–	–	–			–	–	–	–	–	–	–		–	–	–	–
22. *Trichocerca longisrta*	–		–			–				–	–		–	–		–	–	
23. *Trichocerca cylindrica*	–	–		–			–				–	–		–	–			–
24. *Filinia* sp.	–	–			–	–		–		–			–		–	–		
25. *Schizocerca diversicornis*		–	–	–			–		–		–	–			–		–	–
26. *Polyarthra* sp.	–				–		–			–		–	–			–		–
		–																
27. *Sida crystallina*	–		–	–	–		–		–	–		–	–		–	–		–

	2012 9	2013 4	2014 4	2015 4	2016 3 2018 4

ˀ˘ ˽ ˽ ˆ Protozoan˜ ȁ ˆ Rotifer˜ ȁ ˆ Cladocera˜ ȁ ˆ Copepods˜˘ Ŧ ˽ 43 ˆ ˜ Â ȁ ȁ ϪϋŦ ˽ ˘ ˽ ı ı Ѣ ˘ ᵧ ˘ ȉ ˘ ̤̑ ч ˽ ˘ ч ˘ ħ п ı ı˘ ħ ч ȁ ȁ Â 2013 4 2014 4 ˘ 2012 9 Ϫ 2015 4 Ӆ ˘ ħ ƅ Ӆ ˜˘ Ӆ ˘ 2015 4 ˽ Â 2016 3 ᵞ ˀ ħ ᵞ Â 2018 4 ˽ ᵧ ϋ ˗ ˘ п Ѣı ˘ ᵧ ϋ Ī Â

№ ˀ ˘ ˽ ᵒᵖ ˘ ̤̑ ᵞ ˽ ˘ Â

10.2.3.3

(1) ᵝ ʿ ̤̑ 100m̂ Ň˜ ȁ ˆ ň˜ ȁ Ӆ 100m̂ ʼn˜ Â

(2) ʿ Â

(3) ʿ 2012 9 ȁ 2013 4 ȁ 2014 4 ȁ 2015 4 ȁ 2016 3 2018 4 6 Â

(4) ʿ ê Ȉ № Â

(5)

ȁ ȁ Ϫ 10.2-5 Â

10.2-5

	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
1. *Branchiura* sp.		–	–	–				–	–	–		–		–	–	–		–
2. *Branchiura sowerbyi*			–		–		–	–			–	–	–		–			–
3. *Limnodrilus hoffmeisteri*	–	–	–	–	–	–	–		–	–	–		–	–	–	–	–	
4. *Limnodrilus* sp.	–					–		–	–			–		–				–
5. *Tubif* sp.			–		–		–		–		–		–			–	–	
6. *Nais inflata*		–		–				–		–		–				–		–
7. *Telmatodrelus vejdovsky*	–	–	–	–	–	–	–		–	–		–	–	–	–	–		–
8. *Chaetogaster* sp.	–	–				–		–			–	–	–				–	–
9. *Bothrioneurum* sp.			–		–		–		–	–	–		–		–	–	–	
10. *Aulophorus* sp.		–		–			–	–						–	–			
11. *Limnoperna lacustris*	–		–		–		–	–	–		–	–		–			–	–
12. *Lamprotula leai*					–	–				–			–			–		
13. *Cuneopsis pisciculus*		–		–			–	–			–	–		–		–	–	–
14. *Hyriopsis cumingii*	–		–			–	–		–			–			–			–
15. *Unio dauglasiae*		–			–			–		–	–		–	–		–		
16. *Corbicula fluminea*	–	–		–	–		–	–	–		–	–		–	–	–	–	–
17. *Oncomelania hupensis*	–	–	–	–		–	–				–	–	–	–		–	–	–
18. *Parafossarulus sinensis*	–			–	–			–	–	–			–		–	–		
19. *Parafossarulus striatulus*	–	–				–	–	–		–	–			–		–	–	
20. *Radix plicatula*		–	–	–	–			–		–		–		–	–	–		–
21. *Cipangapaludina cathayensis*		–	–	–					–		–		–		–		–	
22. *Cipangapaludina* sp.	–		–		–	–	–	–	–					–	–			
Arthropoda																		
23. *Caridina nilotica gracilipes*	–		–	–	–			–		–		–	–		–	–		–
24. *Aeschna* sp.		–				–	–		–	–	–	–	–	–		–	–	–
25. *Limnochironomus* sp.	–	–	–	–	–	–	–	–	–		–	–		–	–		–	–
26. *Chironomidae*		–	–	–	–		–	–		–	–	–	–		–	–	–	–
27. *Heptagenia* sp.	–	–	–		–	–			–	–	–		–	–		–	–	

“+”

10.2-7

					Ꭓ			
	2012.3	2013.3	2013.10	2014.8	2015.3	2015.10	2016.2	2018.7
ᵒᵒ	15.23	8.65	6.67	6.38	5.81	5.03	3.8	11.7
	105	89	110	69	105	97	46	211
	13	17	20	17	20	14	8	18

h à à à

2.1km 16.1km

0.6km

2008 5 15 7 24

71 7310min

108 88419

1.37 ×10^11

7.64×10^10

4.23×10^10 1.03×10^10 1.96×10^9 2.52×10^9 2.71×10^9 1.04×10^9

68.75% 0.38×10^8 0.02

292.72 km

2012 5 28 7 5 N

29°50'35. 5"E 115°32'51.3" N 30°37'42. 2"E 114°49'38.4"

238 9280

№ 5 9 26 30 9.4 /100m³

190×10^5 485×10^7

243×10^4 380km —

20km 500km

130km 17km 2012

2008

2012

-

2.

10.2-8

2010	0	0	0	0	0	68	0	0
2011	0	0	0	0	0	70	0	0
2012	0	0	0	0	0	50	0	0
2013	0	0	0	0	0	130	0	0
2014	0	0	0	0	0	90	0	0
2015	0	0	0	0	0	101	0	0
2016	0	0	0	0	0	67	0	0
2018	0	0	0	0	0	17	0	0

2016 7 2018 5

19 80

2009 200 2010

19 80

2009 3~5 2010

2010 6.5 2010 2016

8~15cm 10~50

2010

2016

2018

8~15cm 10~50

10.3

Â

Ɓ β ꞁ ȝ Â 2016

6 20 2018 7 6 ˘ β ȁ ꞁ ȝ

˒ 2 ȝ ꞁ ˘ №

23.5 ꞁ 2000kg ȁ 43.97 ˘ 33.25 ˝Ḥ Â

11.1

11.1.1

99.57

66.66 m² 2012 4 28

[2012]88

2010 224

2010 100

11.1.2

2011 1

1000

11.2

10330m 8050m

48 7005m

5368 391 TEU

2365m 2185m

17 ˆ ч ᵝ˘ 13 ᵝ˜˘ 289 TEU˘

848 1760m˘ 264.4 m²˘ 22.6 m² Â ч Ғ ˘

ᵝ Ἇ῀ ʒ ⅂ ˘ ⅂ ч ˘

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11.3

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11.4

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˘ ᐱ ˘ ḤN№

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⅂ ч ⅂ ħ ˘

⅂ ˘ ч ˘ ʒ˘

⇔ Đ Â Ω ˘ ʒ ˘ ч

˘ Â

11.5

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12.1

(1)

(2)

12.2.2

(1) GB8978-1996

(2)

(3) 1.99hm²

(4)

(5)

12.2.3

12.3

12.4

13

˘ ᵝ Ꮒ ǚ ἰ Ꮒ ƀ ˘ ᒪ ȇ

ȉ ȝ ᥰ Ꮒ ᴆ Ȉ ᥰ

Â ᵝ ˘

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13.1

ȉ ȝ ᥰ 4 5000DWT

ᵝ˄ Ȉ 10000DWT ˜˜ Ȣ ч 74 TEU/ Â

ħ ȁ ȁ ȁ ı ȁ ʿ ˚˚ ˘ ƀ ᥰ ȁ ᥰ Â

ƀ ˗ ȝ˘ Ꮒ ᒣ Â ˘

ƀ ˚˚ Ꮒ Â № ˘ ˚˚ Ꮒ ħ

чʿ ˆ ˜ ˘ ʾ ˆ ˜

ƀ ˘ № ˆ ᒣ˜ Â

№ ᥰ ȝ

Ꮒ ˘ Ŋ 135ť ħ NNE˜ 2.4m/s˜ ȁ

ƀ Ƭ NW˜ 10 m/s˜˜ 90% ч 7650m³/s'

10% ч 32600m³/s˘ 19.6 Ȣ˘

ᒣ 44.96km² 19.6 Ȣ ˘ Ȣ Â

˘ Ꮒ Â

13.2

13.2.1

Ȅ ч ˚˚ ȁ ȁ ȝ ȁ

˘ Ȅ ˘ ط ˘ Ȅ

˚˚ ȁ ȝ ȁ Â Ȅ

˘ Ꮒ ˘ ȁ ˘

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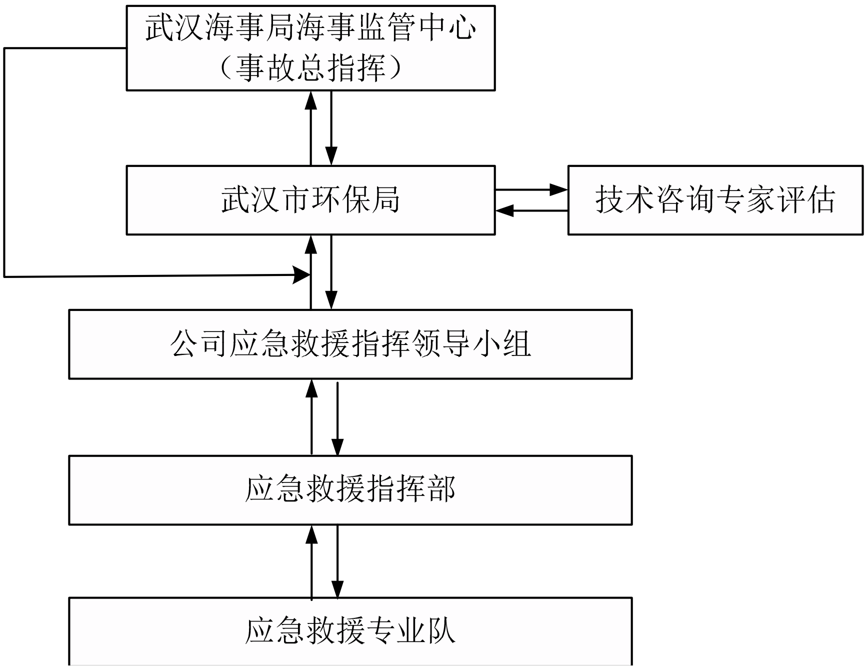
Ꮒ طي 13.2--1 Â



13.2-1

13.2.2

1.

13.2-1

13.2-1

		027-59102777
		027-59102766
		027-59102700
		027-59102822
		027-59102800
		027-59102822
		027-59102833
		027-59102833
		027-59102833
		027-59102788
		027-59102866
		027-59102799
		027-59102727
		027-86961297

2.

3. Ƒ ꞅ

ꟼ Ƕ Ð № ˘ ˘ Ӣ

Ƒ ꞅ Â ˘ ˘ ˩ ȁ

˘ ȁ ˩ ȁ Â Ƒ ꞅ

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Ð Â Ƕ ˘ Ⲭ˘ ˘ ȁ

ꞅ ˘ ˥ ˘ ℗ Ƕ Â

Ӣ 2 Ð˘ ᵝ ȁ └ Ƕ ˘ Ɣ Â

$ È Ä O † Łb » °š. 6„COꞅN Ct ` Ŏ § p,¼˘ \Ñ ! ` 18u‰y$ é \Ñ 0 Ꞇ M ϟ ɏ

2ÀSÐJ Í

ˆ ˜ Â

13.2-2 ǚ

-ᵐ	Ꮟ ǚ	β	ˆ 8 β ˜	ˆ 4 β ˜	
					β
1		m	3520	400	ꞁ
2		ꞁ	8	1	ꞁ
3			8	1	ꞁ
4		t	8.0	0.2	ꞁ
5	№	t	1.2	0.11	ꞁ
6	№		8	1	ꞁ
7			8	1	ꞁ
8			1	1	
9				2	ꞁ
10				1	ꞁ
11			2	Ꮟ β β Й 200m̆ Ꮟ ꞁ Ꮟ Ꮟ Ѵ ̂	

№

№

13.2.3.2

ˆ 1˜ ƀ ê ˀ ჻ Ƕ Ȉ

ê ˀ ჻ Ƕ Ȉ JT/T451-2017˜˜

JT/T451-2017 ľ 5 ὶ ჻ ằ ằ

Ŀ ᷉ ˘ ƀ JT/T451-2017

13.2-3 Â

13.2-2 ǖ

-ᵘ	Ƕ ǖ	ᵝ	JT/T451-2017		
1		m	ƀ ᵞ 3	400	
2		ᄀ	1m3/h	1 ᄀ ằ 5t/h	
3			1	1	
4		t	0.2	0.2	
5	№	t	0.11	0.11	
6		m3	1m3	1 /1m3	
7	№			1	
8				1	
9				2	
10				1	

ᄀ ˘ ˆ ˜ ê ˀ ჻ Ƕ

Ȉ JT/T451-2017˜ ᷉ ˘ Ƕ

Ӣ Â

2

100% "153040" 15 № 30 № 40 №

116

10 37 №

12395 VHF

GPS VTS CCTV

300 150

100%

"153040" 15 № 30 № 40 №

5 №

91%

50t

1)

13.2-3

200m

13.2-3

	027-86980835	1		1012	1016-1004	027-86980823
		2		1001	1004-984	027-87605011

2)

48.81

13.2-4

2.7km

10 №

15 №

13.2-4

1			
1.1			600
1.2			400
1.3			200
1.4			1
1.5			200
1.6			
2			
2.1			1
2.2			1
2.3			1
2.4			2
2.5			1
2.6			1
2.7			2
3			

3.1			5
3.2			800
3.3			3
3.4			2
3.5			2
3.6			5
3.7			3
3.8			4
4			
4.1			1
4.2			1
4.3			1
5			
5.1			1
5.2			1
5.3			3
5.4			1
6			
6.1			50
6.2			1
6.3			1
6.4			2
6.5			2

JT/T451-2017

200m 2.7km

13.2.4

1

Ꮒ ȁ Ꮒ ȁ ȶ ȁ Ꮒ ΰ̏ Ꮒ

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ˆ 2˜

ŵ ꞁ ᒪ ˘ ɣ ΰ̏ ꞁ ꝫ ꞁ

Ꮒ ȶ ˘ ΰ̏ Ꮭ ꞁ ꞁ ꝫ

˘ ΰ̏ ŋ ˘ Ꮒ ᴆ Â

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Ꮒ Ꭓ˜ = ꞁ Â Ꮒ

˘ ȁ ί ˘ ȁ ˘

ȁ ȶ ί ˘ ꞁ Â

ȉ ί Ꮭ ɦ ɣ ΰ̏ ȶ Ꮒ

ɦ ȁ Ȅ ȁ Ꮒ ȁ Â

ŋ ˘ ᒪ ȶ ˘

Â Ω ˘ Ꮒ Ҋ ˘ β ŋ

˘ ˘ ŋ Â

ȉ 13-2 Â

Ꮒ ȁ ᴆ ȁ ˘

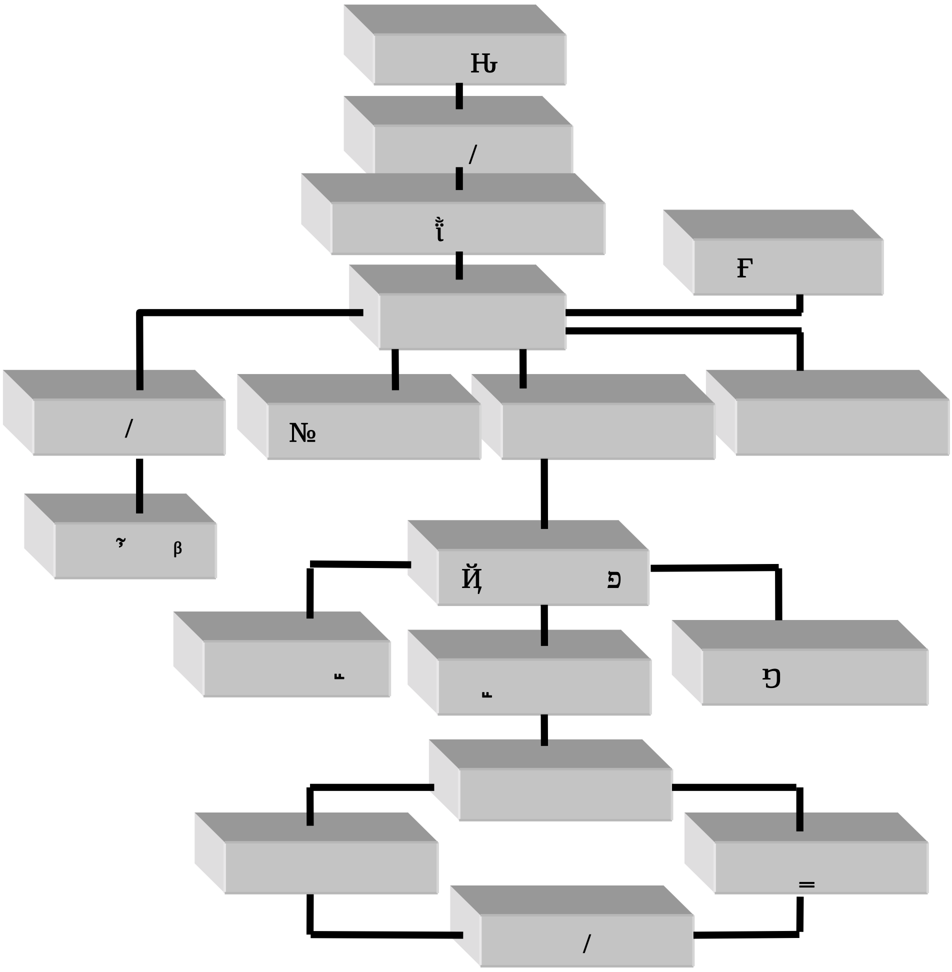
Ꮒ ˆ ˘ ί Ꮒ

ȁ Â

ˆ 4˜

Ȅ Ȅ ˘ Ȅ

˘ № Â



13-2

13.2.5

13.2.6

13.2.7

13.2.8

13.3

ꞏ Ƕ Â

Ƕ ȁ ȕ ˘ ᵝ Ƞ

ㄴ ꞏ ˘ . ꞏ ȿ Ӌ ʿ

(1) ꞏ ˘ Ƕ Â

(2) ꞏ ƀ ꞏ ˘ ꞏ Â

(3) Ƕ ˘ Ƕ Â

(4) ꞏ ꞏ ˘ ꞏ ȁ ȁ

˘ ȉ ȋ Ƕ Â

14.1

14.2

14.2.1

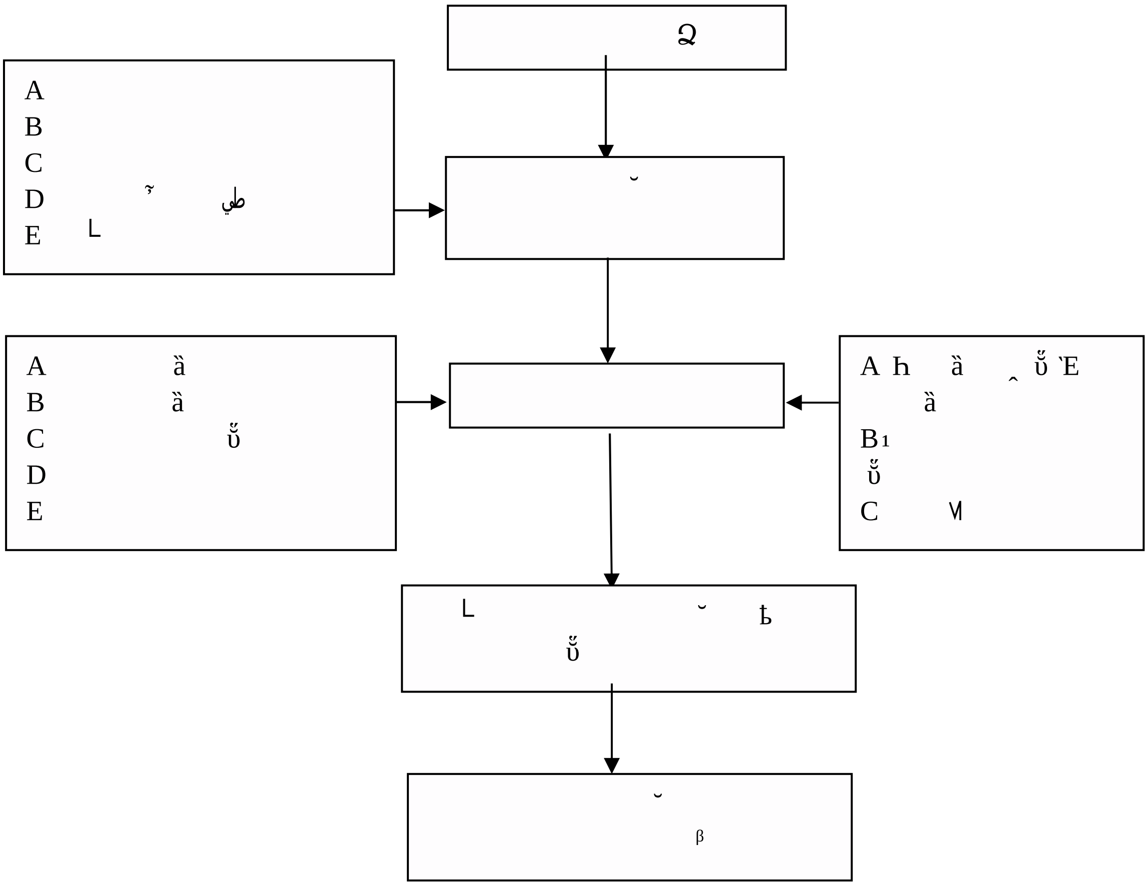
14.2.2

14.2.3

β ’

ˆ 4˜ ƀ Â

طي ť طي 14.2-1 Â



طي 14.2-1 طي

14.2.3

β ˘ ˪ ˪ ˘ ɣ ȁ

˘ ħ ʿ ˪ ȁ ᴆ ˪ ȁ ˪ ȁ ˪ ȁ ᴆ

˪ ȁ ˥ ˪ ȁ ƀ ˪ Â

ɣ ȍ̋ ˘ ˜ ˘

ŋ ħ ʿ ȁ ȁ ȁ ƀ ȁ

ᴆ Â

14.2.4

ʃ

˞ ̀E ȁ β ȁ β

14.3

14.3.1

14.3.2

(1)

(2)

(3)

(4)

14.4

14.4.1

14.4.2

14.4-1

14.4-1

			1 /	2 1	
		COD, BOD_5, SS	1 /		

14.5

(1)

(2)

15.1

15.2

21

15.3

15.3.1

54 54 100%

15.3.2

15.3-2

15.3-2 Ѐ ʌ

-ǁ				ˆ ˜
1	ᴇ		48	88.9
			6	11.1
		Ѣ	0	0
		Ѣ	0	0
2	ħ		0	0
			21	38.9
			32	59.3
		ȉ	1	1.9
3		Ƕ	0	0
			2	3.7
			49	90.7
		Ѣ	3	5.6
4	22:00 6̔ 00		0	0.0
			4	7.4
			50	92.6
		Ѣ	0	0.0
5	ᑊ β		52	96.3
			0	0.0
		Ѣ	2	3.7
6	Ե		0	0.0
			47	87.0
		Ѣ	7	13.0
7	ч ˀ ħ		29	53.7
			4	7.4
		ఊ	0	0.0
		ΰ	21	38.9
			0	0.0
8	ȁ ఊ		0	0.0
			50	92.6
		Ѣ	4	7.4
9		Ƕ	0	0.0
			18	33.3
			36	66.7
		Ѣ	0	0.0
10		Ƕ	0	0.0
			14	25.9
			39	72.2
		Ѣ	1	1.9
11	Ŧ ᑎ Ҥ		0	0.0
			52	96.3
		Ѣ	2	3.7
12	ᒣ		18	33.3
			35	64.8
		Ѣ	0	0.0
		Ѣ	1	1.9

ſ 88.9% ч Ε ˘ 11.1%

Â

ƀ 39.8% ч ч ħ ᵅᵖ

˘ 59.3% ч ˘ ħ Â

Ɓ 90.7 ч ˘ ℩

3.7 Â

Б 7.4% ˘

˘ Ѣ ˘ ἳ ↕ Â

Ɓ 96.3% ℩ Ŋ

˘ ἳ ↕ Ѣ Â

Ѣ 87.0% Ⴑ

˘ ἳ ↕ Ѣ Â

ƀ ˘ ч 53.7%˘ 7.4%

ч ˥ ˘ ἳ ↕ Â

Ɔ 92.6% ằ ˘ ἳ

↕ Ѣ ’

Ƈ 33.3% ᵅᵖ ˘ 66.7%

↕ Â

(10) ˘ 25.9% ч ˘ 72.2%

˘ ἳ 1.9% Ѣ Â

(1) 96.3 ч Ŧ ˥ Ѣ ˘ 3.7

Ѣ Â

(12) 33.3% ч Ѣ ˘ 64.8

ч ˘ ἳ Ѣ Â

˘ Ὲ ʌ Ŋ ˥ ˘ Ὲ ʌ ħ ч

˥ ʒ └ ằ └ ˘ ˘

ˠ Â

15.4

№ ˘ Ὲ ʌ ħ └ ằ Ƕ ʒ ˠ

Â Ὲ ʌ Ѣ Ŧ ˘ ᵝ Ὲ ʌ

16.1

29.5km 1.9km

1013.5km 114°32′59″ 30°39′28″

2011 12

2012 5 2012 138

5000D 8

10000 1034 99.6

37.8 144

TEU

2012 1914

4 5000

563m 74 2012 11

[2012]600

2013 3

4 5000DWT 10000

563×30m 3

74 TEU 45.36 13

4 2015 12

223934.93 815.11 0.36%

16.2

16.2.1

(1)

(2)

(3) 2016

6 20 2018 7 6

2 №

23.5 2000kg 43.97 33.25

16.2.2

16.2.3

COD、BOD_5

(1)

GB8978-1996

(2)

3t/h

(3)

16.2.4

(1)

(2)

GB12348-2008 3

(GB3096-2008)

2

16.2.5

(1)

(2)

16.3

16.4

16.5

16.6

88.9%

11.1%

16.7

(1)

(2)

(3)

(4)

(5)

(6)

(7) 37

16.8