



Q/HYRD

Q/HYRD 209.25.Z09-2022



1	.....	1
1.1	.....	1
1.2	.....	1
1.3	.....	3
1.4	.....	3
1.5	.....	3
1.6	.....	4
2	.....	5
2.1	.....	5
2.2	.....	8
2.3	.....	14
2.4	.....	15
3	.....	17
3.1	.....	17
3.2	.....	19
3.3	.....	21
4	.....	22
4.1	.....	22
4.2	.....	23
5	.....	28
5.1	.....	28
5.2	.....	28
5.3	.....	29
5.4	.....	31
6	.....	32
6.1	.....	32
6.2	.....	32
7	.....	33
7.1	.....	33
7.2	.....	38
7.3	.....	42
8	.....	47
8.1	.....	47
8.2	.....	47
8.3	.....	47

8.4	.....	48
8.5	.....	48
8.6	.....	48
9	.....	50
9.1	.....	50
9.2	.....	51
10	.....	53
11	.....	53
11.1	.....	53
11.2	.....	53
11.3	.....	54
11.4	.....	54
11.5	.....	54
11.6	.....	55
11.7	.....	55
11.8	.....	55
11.9	.....	55
12	.....	56
12.1	.....	56
12.2		57
12.3		57
12.4		57
12.5		57
		58
1		58
2		60
3		61
4		62
5		64
6		65

Q/HYRD 209.25.Z09-2020

2020

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-- 3.2

/ /

2020 11

2022 6 1

“ ”

1.1

1.2

- | | | | | |
|------|------|--------|-----------|----------|
| (1) | 2015 | 1 | 1 | |
| (2) | 2008 | 6 | | |
| (3) | | | | 2016 1 1 |
| (4) | | 1997 | 3 1 | |
| (5) | | | 2016 11 7 | |
| (6) | | 2007 | 11 | |
| (7) | 2014 | 12 | 1 | |
| (8) | 2014 | 12 | 29 | 2014 119 |
| (9) | | [2013] | 101 | |
| (10) | 2011 | 4 | 18 . | 17 |

(11)				[2009]130
(12)	<		>	[2010]113
(13)				[2014]34
(14)				HJ/T169-2004
(15)			2011 2	
(16)				([2012]77)
(17)			6	2009
(18)			493	
(19)		2016		88
(20)			591	
(21)			2003 1	
(22)				GB/T 29639-2013
(23)				GB18218-2009
(24)				GB50016-2014
(25)				ERG2000
(26)				
(27)				
(28)		2015 7 1		
(29)		2010 7 1		
(30)		2006-2020		
(31)				[2008]19
(32)				
			(2017 9)	
(33)				[2008]36
(34)				[2008]49
(35)				[2010]50
(36)				
(37)				2004
27				
(38)				2012

(39)

1.3

8

#6 7 8 9

1.4

1

2

3

4

1.5

1.5.1

.

1.5.2

1.5.3

500 2000

1.5.4

I II III

1.6

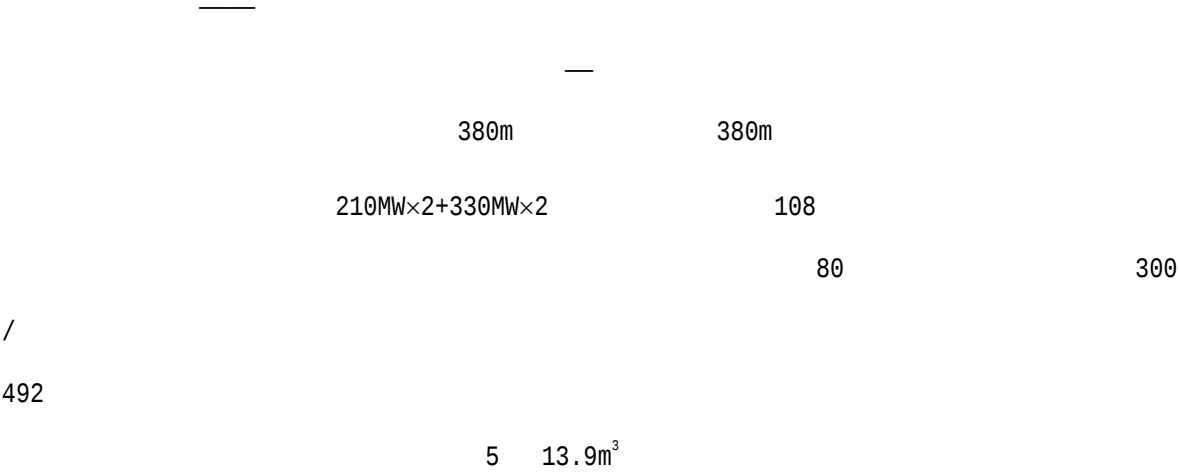
1

2

3

4

2.1



2.1-1

	#6	210MW	1998	1998	
	#7	210MW	2002	2002	
	#8	300MW	2007	2007	2009 12 [2009]323
	#9	300MW	2008	2008	

2.1-2

	#6	#7	#8	#9
--	----	----	----	----

		680t/h	680t/h	1025t/h	1025t/h
		210MW	210MW	300MW	300MW
		+ SCR	+ SCR	+ SCR	+ SCR
		-	-	-	-
		180		210	

2.1.1

2.1-3

			m			
1			20		20	
2			300		730	
3			662		1256	
4			1000		2206	
5			2213		—	
6			2269		960	
7			2385		700	
8			2396		1800	
9			2541		877	
10			2789		5178	

$$1.3 \times 10^6 \quad / \quad 460\text{g/kwh}$$

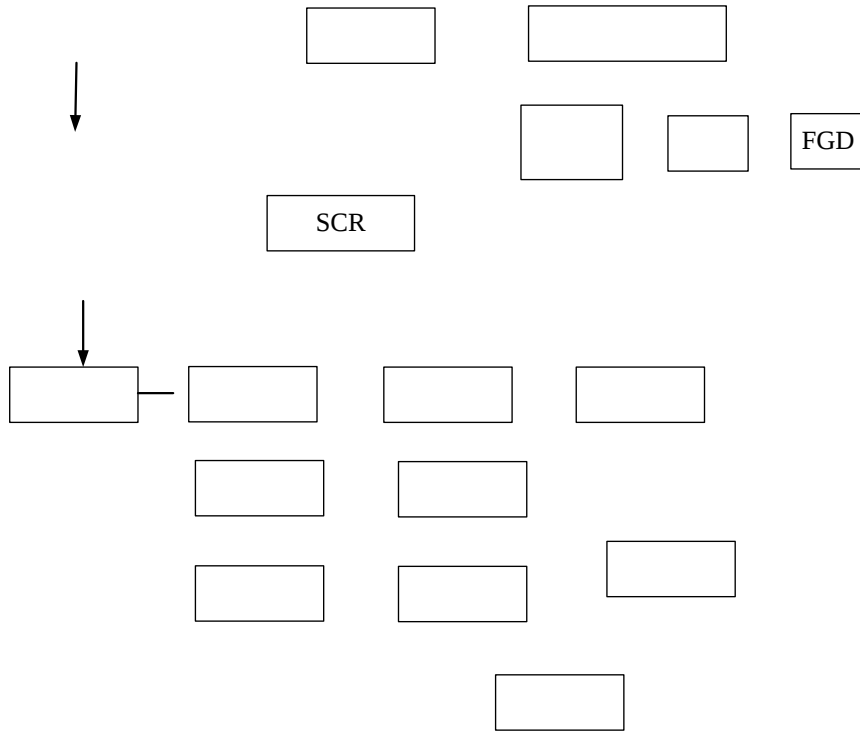
330g/kwh

2.1-4

%	%	%	MJ/Kg	MJ/Kg	%
11.12	19.35	24.99	21877.00	21060.67	0.75

2.1.2.2

#6 #7



2.2-1 #6 #7

#6 #7

+ SCR

85%

NO_x

#6 7

SCR

/

SCR

NH₃

290~400

NO

NO₂

N₂

NH₃

N₂

NH₃

SCR

2

#6 7

SCR

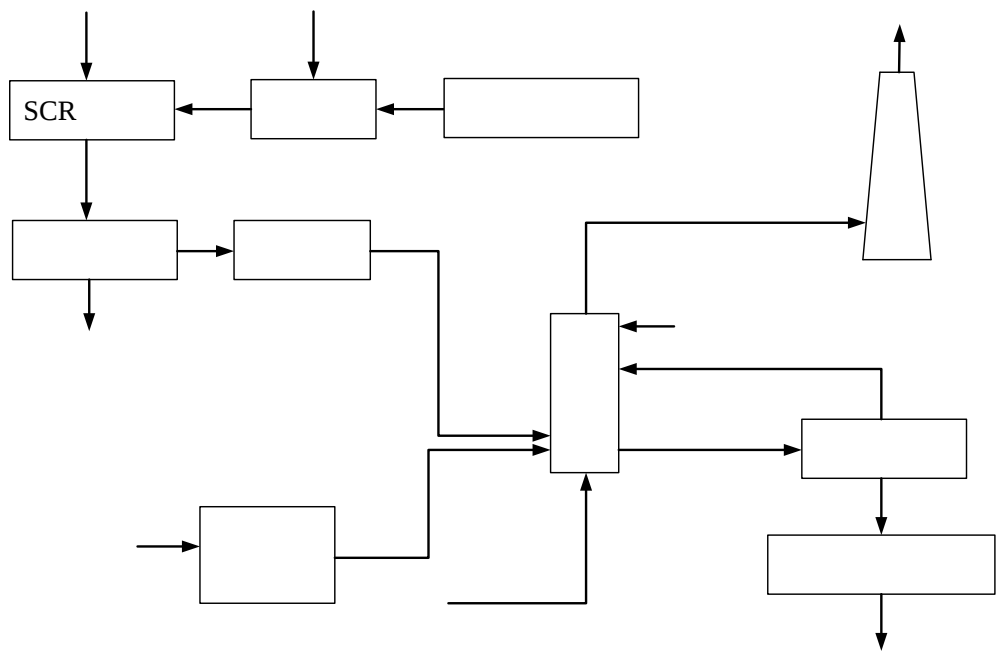
2

#6 #7

—

90%

SO₂



2.2-2

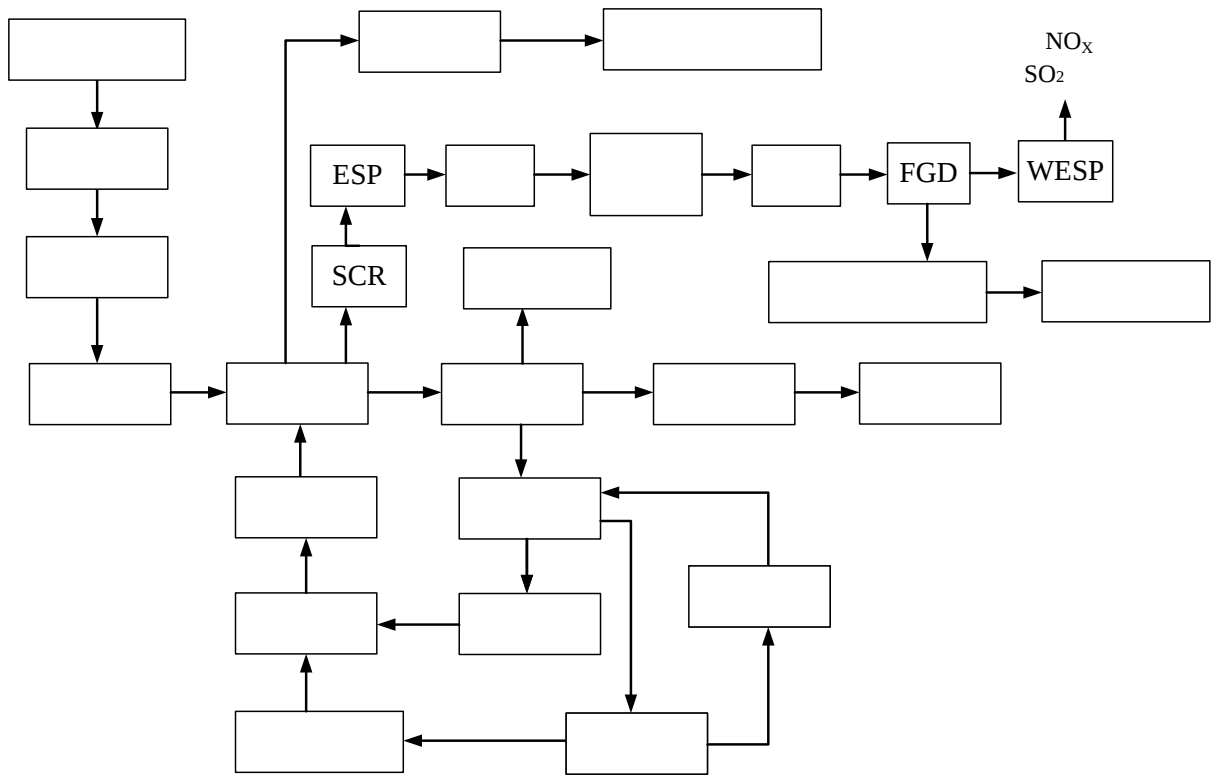
#6 #7

#6 #7

2.2-1

2.2-1 #6 #7		2×210MW	
	DG680/13.7-20	2	
#6	N210-12.7/535/535	1	
#7	N210-12.7/535/535	1	
	QFSN-210-2	2	
	ZGM-80G	10	
	DPG40	10	
	2008AB/1040	2	
	CMF6N4.2D152	4	

	AH-R198SW(PAF)	2	
	LAP8650/883	4	
	FAF17-9-1	2	
	ML-H1-R85/172(FDF)	2	
	SAF25-18-1	2	
	SAF25-16-2	2	
	7LD1N-7-A	2	



2.2-3

#8 #9

+SCR

85%

NO_x

SCR

/

SCR

#8 9

SCR

2

3

7790 × 12000 × 12600mm

3

3

#8 #9

+

+

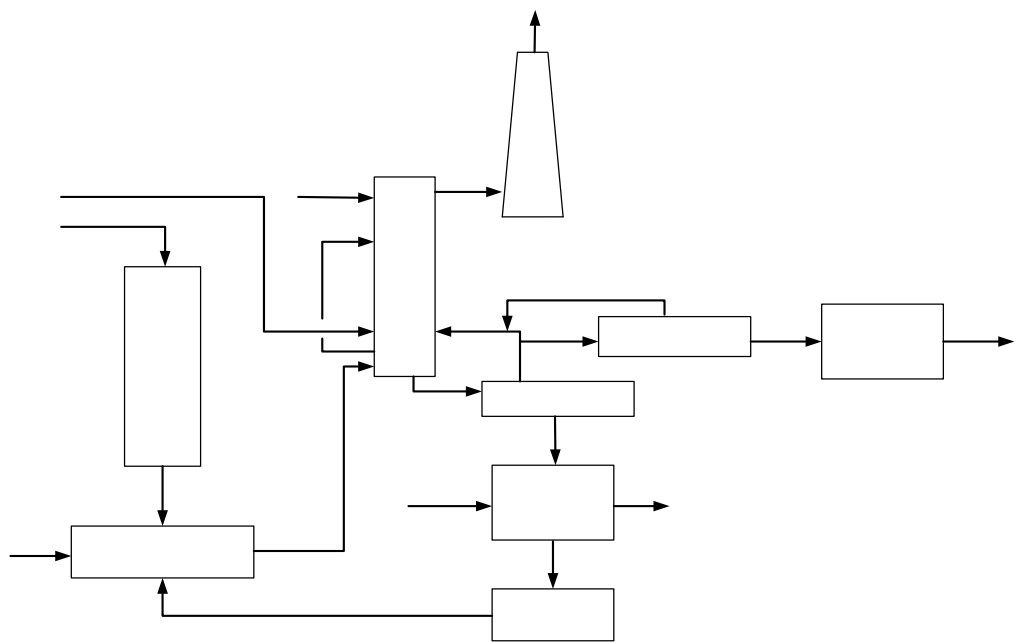
-

1.5%

98.7%

-

SO₂



2.2-4

#8 #9

2.2-2

2.2-2	#8	#9	2×300MW
DG1025/18.2- 4	2		
N300-16.7/537/537-8	2		
QFSN-300-2-20B	2		
ZGM95N	10		
DPG50	10		
2008AB/1135	4		
LAP/0320/883	4		

	LEK259-3*4-2-2	4	
	3HE-140	4	
	Y315M-4	4	
	9-19NO.5A	4	
	IK-525SL	24	
	2031G	-	

2.3

2.3.1

2.

“ ”

- /

3. SO₂ NO_x

- #6 #7

90% 50% #8 #9 1.5%

98.7% 50%

#6 #7 + SCR

#8 #9 + SCR

2.3.2

1	Ca ²⁺	Mg ²⁺	Cl-	SO ₄ ²⁻	SO ₃ ²⁻	/
FGD				26.2t/h		

2

2.3.3

- 1
- 2

GB12348-90III

2.3.4

4						
8	8000m ³		6			
					/	
					/	

100% 4

2.4

2.4.1

2.4.1.1

“ — — ”

50-300

45%

55%

433.6

382

2.4.1.2

3km

2.4.3

2.4-1

1		GB3838-2002
2		GB3095-2012
3		GB3096-2008 3
4		
5		
6		
7		
8		
9		
10		
11		

3.1

3.1-1

				H ₂
		2.1		2
	UN	1049	21001	CAS 1333-74-0
				0.07
		-259.2		-252.8
		506.62 kPa (4.7)		132.5
				11.40 MPa
				——

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3.2

3.2.1.1

1

2

3

4

3			
4			/
5			
6			
7			
8			“ ”
9			
1			1
2			
3			
4			
1			
2			
3			

4			
5			GIS
6			
1			
2			
13			

3.2-2

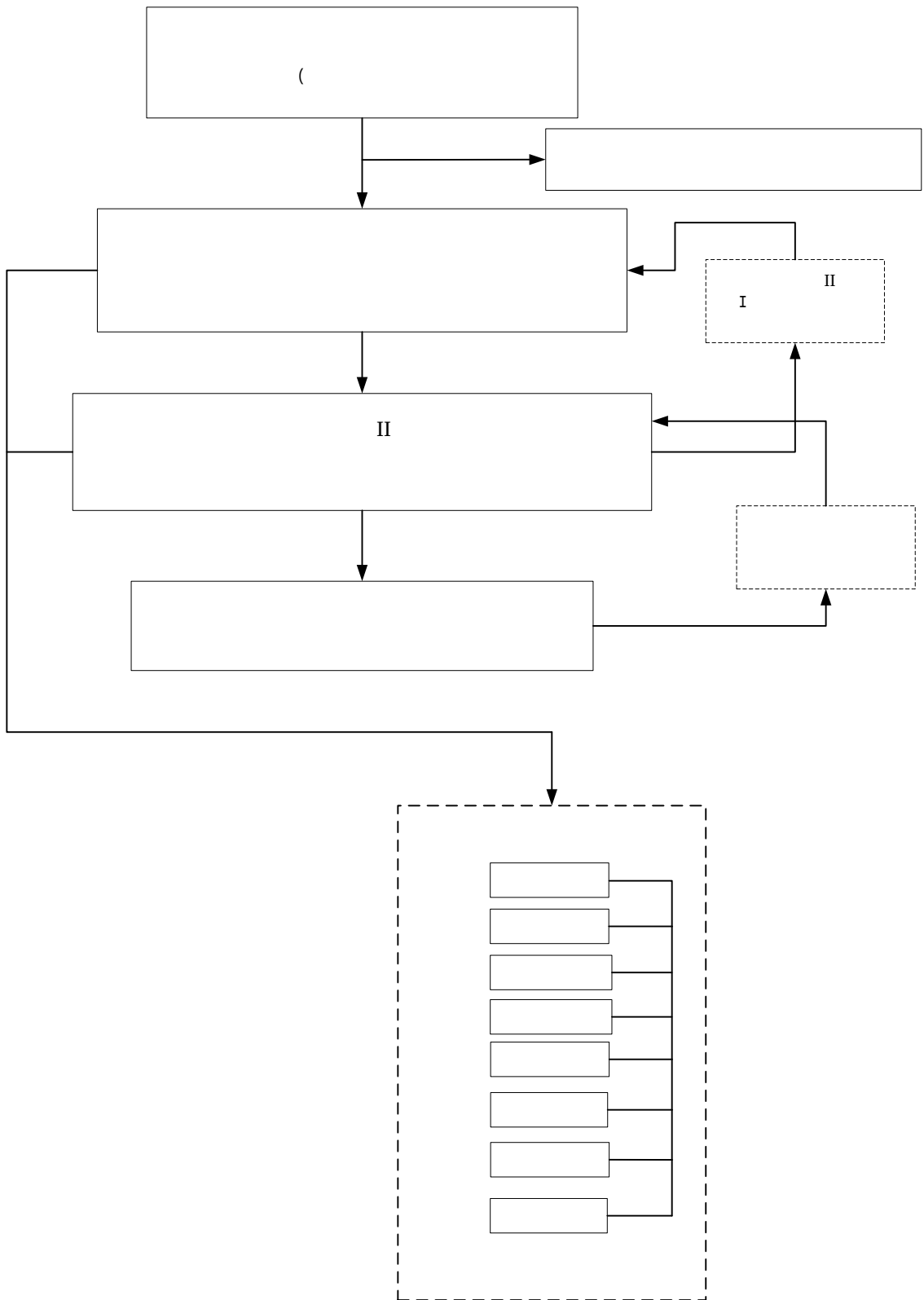
				/	/	
				/	/	
				/	/	
				/	/	
			/			
				/	/	
				/	/	
				/	/	
				/	/	
			/			

3.3

3.3-1

1			H ₂	
2			SO ₂ NO _x	
3			SO ₂ NO _x	
4			Ca ²⁺ Mg ²⁺ COD TN TP pH	
5				

4.1



4.1-1

4.2.1

4.2.1.1

4.2.1.2

1

2

3

4

5

6

4.2.2

4.2.2.1

4.2.2.2

1

2

3

4

5

6

7

8

9

4.2.3

4.2.3.1

1

4.2.3.2

1

2 “ ”

3

4

5

6

a.

b.

c.

4.2.3.3

1

2

e

f

g

h

4.2.5

1

4.2.6

5.1

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

24

“ ”

5.2

- 1
- 2
- 3
- 4

5.2-1

	GB 50058-92

	4
	2m
	GB190-90

5.3

5.3.1

5.2-2

		1 2

5.3.2

5.3.3

6.1

24

020

7.1

7.1.1

7.1-1		
		1 2

7.1.2

1

2 /

7.1.2.1

7.1.2.2

7.1-2 II

/		
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	II	



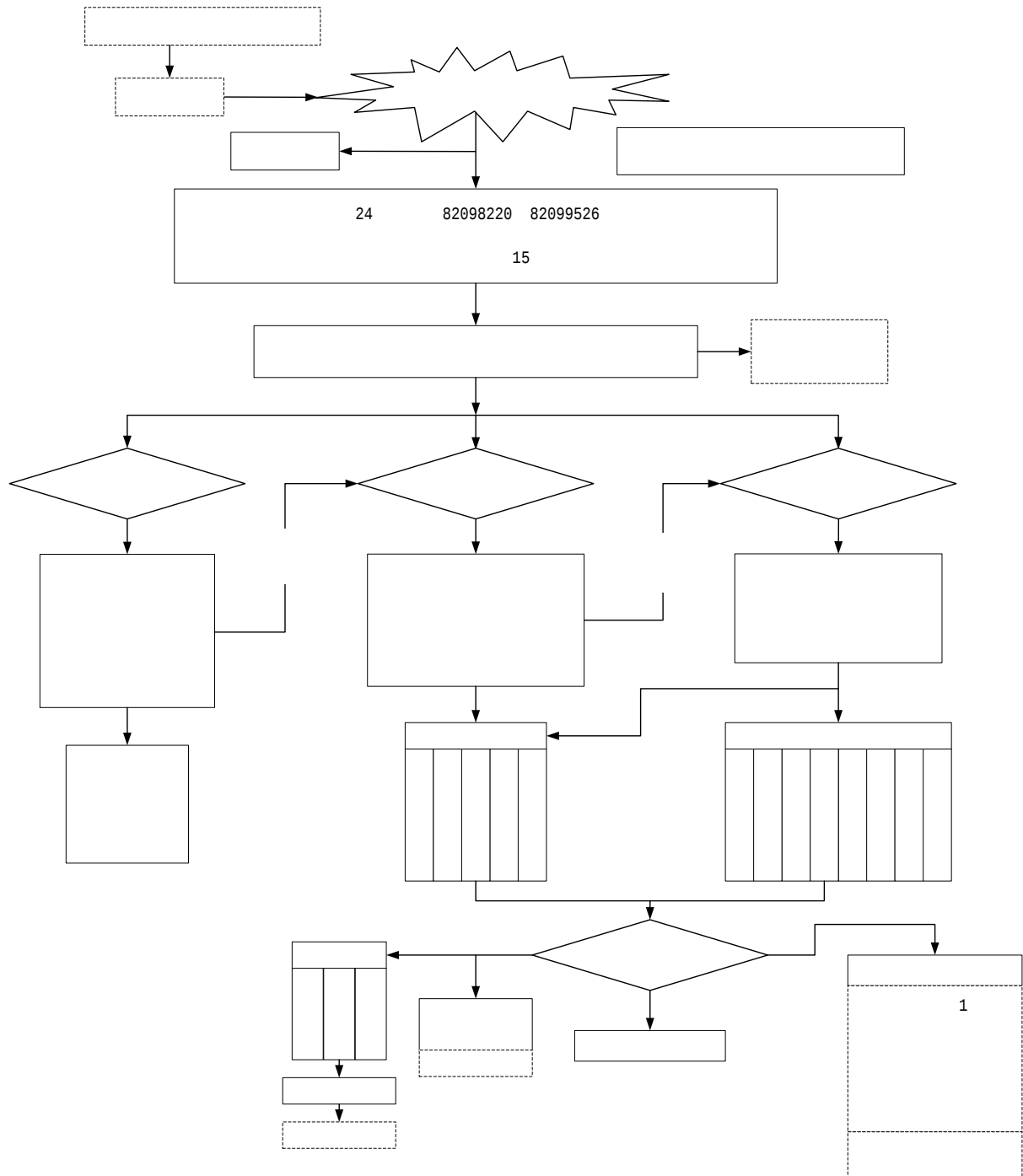
I

119 120

7.1-3 I

7.1-3 I		
/		
	I	
	119 120	

7.1.3



7.1-1

7.2

7.2.1

7.2.1.1

1

1211

2

119

3

4

5

7.2.1.2

1

2

3

7.2.1.3

4

7.2.1.4

5

7.2.1.5

7.2.1.6

1

2

BP

3

4

,

7.2.2

1

SO₂ NO_x

SO₂ NO_x

2

a)

b)

c)

d)

e)

120

f)

3

c)

d)

e)

f)

g)

h)

i)

j)

k)

4

a)

b)

c)

d)

5

a)

b)

c)

d)

7.3.1

7.3.2

1

2

1

3

7.3.3

020-82111855

020-83357844

020-82113386 82113730

020-82222999

020-82111733

7.3.4

7.3.5

1

2

3

7.3.6 .

pH pH

7.3.7

7.3.7.1

1

2

3

10cm

10m×10m

5

7.3.7.2

2

6

24

7.3-1

	PH			

	COD BOD ₅ SS	1 2		200 200	500	
	SO ₂ NO ₂	1 4	10	100m 200m 1km	2~50m 2~50m	4 4

8.1

1

2

3

4

5

6

8.2

1

2

3

8.3

8.4

1

2

3

4

5

6

7

8

9

8.5

1

2

3

4

8.6

10

1

2

3

4

5

6

7

8

9

10

9.1

9.1.1

- (1)
- (2)
- (3)
- (4)
- (5)

9.1.2

- (1)
- (2)
- (3)

- (4)

9.1.3

- (1)
- (2)
- (3)
- (4)
- (5)

(6)

(7)

9.1.4

(1)

(2)

(3) 2 3

(4)

(5)

15

(6)

(7)

(8)

9.1.5

1

9.1.6

9.2

9.2.1

9.2.2

9.2.3

1

9.2.4

11.1

1

2

11.2

2

3

11.3

a

b

11.4

11.5

11.6

1 1~2

2

3

110

4

11.7

“ ”

120

11.8

11.9

1

2

3

4

5

6

7

12.1

1 emergency response plan

2 emergency preparedness

3 emergency response

4 emergency rescue

5 recovery

6

7

8

12.2

12.3

3

1

2

3

4

5

6

7

12.4

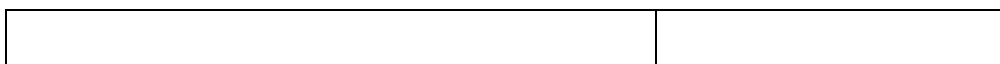
2022 3

12.5

			1363222439 020-82098819
			13622231512 020-82099449
			13660096680 020-82099449
			13650974256 020-82098283
			13828442110 020-82098813
			18819828098 020-82099592
			13602755382 020-82098809
			13710489896 020-82091167
			13922742726 020-82099560
			13502412084 020-82099782
			13802737300 020-82099578
			13710518948 020-82899582
			18198979723 020-82091745
			020-82098220 15014175476
			020-82099526

			15014175477
--	--	--	-------------

2



110

			13825068493
			13500025818
			13556155505

4

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1

5

33			50		#9		13533430951	
34			105		#6 #7		13533430951	
35			30		#6 #7		13533430951	
36			100		#6 #7		13533430951	
37			30		#6 #7		13533430951	
38			108		#8 #9		13533430951	
39			80		#8 #9		13533430951	
40		GP328	6				13539432396 82099576	
41			2				82098220 82099526	
42		-	1		A			
43					A		82098220 82099526	
44		ZC30	2		#5		13316089609 82098084	
45		TIME2160	3				13539924908 82098056	
46		ST-20 -50 ~1600	7				13539924908 82098056	
47		11KW	2				13268042727	
48		GBK3-2000PD	3				13539924908 82098056	
49		Y100L-2 380	2				13539924908 82098056	
50		LGK-60K 380 v	2				13539924908 82098056	
51		ZX7250GS, 220V	5				13539924908 82098056	
44		ZX7400GT, 380V NB(II) 380V	9				13539924908 82098056	

