
2020 6 2

:

2020 6 2

2020 6

	.....	1
1	.....	3
1.1	.....	3
1.2	.....	3
1.3	.....	4
1.4	.....	4
1.5	.....	6
1.6	.....	7
2	.....	8
2.1	.....	8
2.2	.....	13
2.3	.....	16
2.4	.....	17
3	.....	23
3.1	.....	23
3.2	.....	24
3.3	.....	34
3.4	.....	35
3.5	.....	56
4	.....	60
4.1	.....	60

4.2	.....	60
4.3	.....	61
4.4	.....	63
5	.....	63
5.1	.....	63
5.2	.....	65
5.3	.....	67
5.4	.....	68
5.5	.....	68
6	.....	70
6.1	.....	70
6.2	.....	70
6.3	.....	71
6.4	.....	72
6.5	.....	73
7	.....	77
7.1	.....	77
7.2	.....	77
7.3	.....	77
7.4	.....	78
7.5	.....	81
7.6	.....	83
8	.....	86

8.1	.....	86
8.2	.....	86
8.3	.....	86
8.4	.....	88
8.5	.....	90
9	.....	91
9.1	.....	91
9.2	.....	91
9.3	.....	91
10	.....	92
10.1	.....	92
10.2	.....	93
11	.....	95
11.1	.....	95
11.2	.....	95
11.3	.....	95
11.4	.....	96
11.5	.....	96
12	.....	97
12.1	.....	97
12.2	.....	97
12.3	.....	97
12.4	.....	97

12.5	.....	98
12.6	.....	98
12.7	.....	98
13	.....	100
13.1	.....	100
13.2	.....	100
13.3		

18	.....	150
18.1	.....	150
18.2	.....	150
18.3	.....	151
	.....	155
19	.....	156
19.1	.....	156
19.2	.....	157
19.3	.....	158
19.4	.....	161
	.....	163
20	.....	164
20.1	.....	164
20.2	.....	164
20.3	.....	164
20.4	.....	165
20.5	.....	165
20.6	.....	165
20.7	.....	167
20.8	.....	167
20.9	.....	168
20.10	.....	168





1

1.1

1.2

1	[2014]	9	
2	2014	12	1
3	2014	12	29
4	2018	1	1
5	2010	1	28
6			<
	>	2019	11 1
7		2014	12 1
8		[2011]	35
9		[2013]	101
10		591	
11		HJ941-2018	
12			17
13			34

14

[2015]4

15

[2017]62

16

2017 5

17

18

19

[2012]13

20

[2013]81

21

[2015]19

22

1.3

1.4

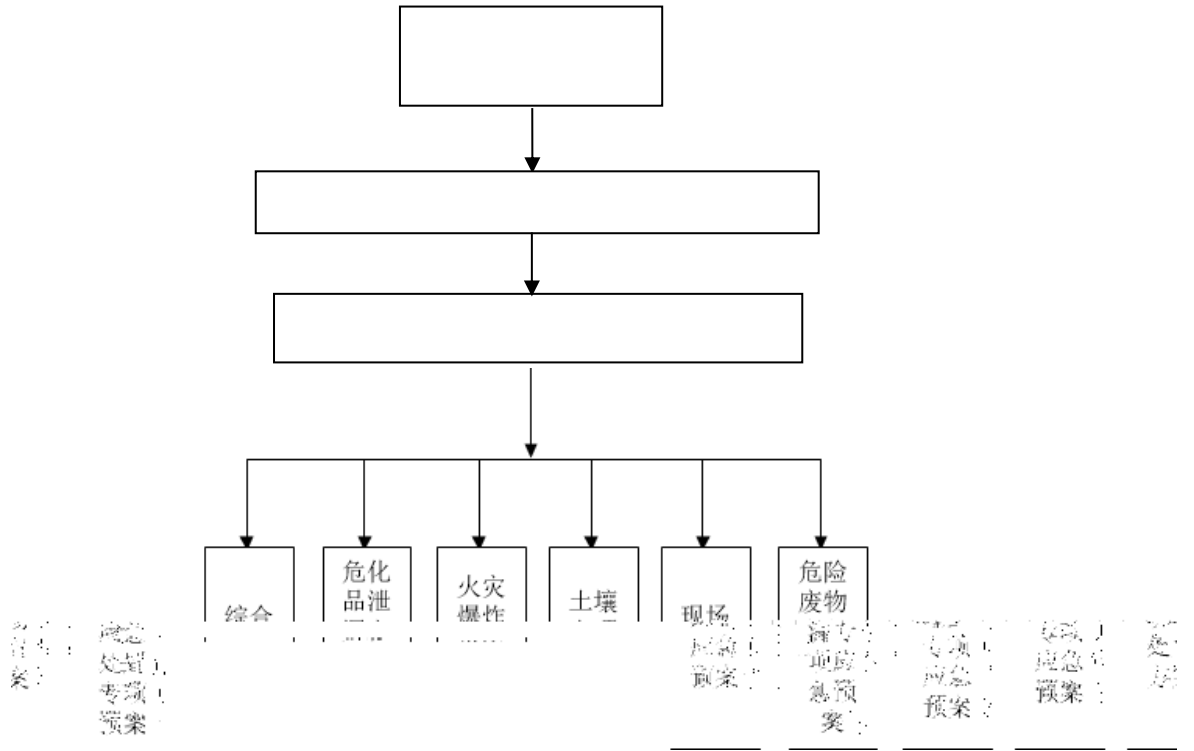
1

2

1

1

1.4-1



1.4-1



2

3

1.4-1

1.4-1

1.5

1.5.1

1.5.2

1.5.3

1.5.4

1.5.5

1.6

2017

5 19

2017 7006

273298.5m² 127412.5 60 350d 8400h
5 25 75×10⁴m³ 2 100000m³
2 50000m³ 1 100000m³
4 5000m³ 6 20000m³
2 5000m³ 6 30000m³
1 10000m³ 1 10000m³

2.1-1

2.1-2

2.1-3

2.1-1

1			2017 7006	2017.5.19			

0.1-2

	0546-8286889		257000
	91370500MA3CAJKN5L		76
			273298.5m ²
			G5941
			2016
	118.919		37.105

0.1-3

		2× 80000×21800	100000m ³	62952m ²
		2× 60000×19350	50000m ³	
		1× 80000×21800	100000m ³	
		4× 21000×16500	5000m ³	26656m ²
		6× 42000×17500	20000m ³	
		6× 40000×22000	30000m ³	25152m ²
		1× 30000×16500	10000m ³	4700m ²
		1× 30000×16500	10000m ³	
		2× 21000×16500	5000m ³	2380m ²
				26.3m ³ /d

		2 10000m ³	2 DN600		
		1500m ³ /h	0.3~0.35MPa	21m ³	1 2
				10kV	
			10kV 0.4kV		
			DN500		
			DN200		
			4000Nm ³ /h	3000Nm ³ /h	
		500Nm ³ /h			

1

5km

2.1-4

			m	
1		SW	4310	350
2		SW	4570	460
3		SW	4860	320
4		SW	3860	360
5		SW	4280	420
6		SW	4030	160
7		SW	3890	110
8		S	3520	450
9		SE	3680	650
10		S	4000	120
11		NW	3300	--
12		NW	350	70
13		SE	300	80
14		SE	986	60
15		S	1000	68
16		SW	1530	50

2

3

2-1.5

2-1.5

		m		
1		5100	S	GB3838-2002
2	6km ²	/	/	GB/T14848-2017

4

150m

2.2

2.2.1

2.2.2

0.1‰

0.5 1.0m 2.5 3.0m

10g/L

2.2.3

11.7

39.6

-18.0

549mm

67%

S

8.1%

SE

7.5%

3.4m/s

9

5

6.3

2.9

35.6

12

8.5

11

7

1.3

50

2.1

2.2.4

1

2.2-1

--	--	--	--

			——
		V	
		III	——
	3	3	——

2

1

2019 1 11

2018

2.2-2

2018

	$\mu\text{m}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	
SO ₂	18	60	
NO ₂	36	40	
PM ₁₀	94	70	
PM _{2.5}	49	35	
O ₃	198	160	
CO	1.5	4	

http://huanbao.dongying.gov.cn/art/2019/1/11/art_37847_4471878.html

2018

PM₁₀

PM_{2.5} O₃

GB3095-2012 2018

2

2020 1 20

12 84

COD 32mg/L 0.86mg/L

GB3838-2002 V

3

GB/T14848-2017

4

GB3096-2008

3

5

GB 33600-2018 1

2.3

HJ941-2018

2.3-1

					t	t	
1					166500	2500	
2					166500	2500	
3					94500	2500	
4					132840	2500	

5					7920	10	
6					7785	10	
7					7830	10	

2.4

2.4.1

1

DN450

DN450

2

DN450

DN450

3

DN350

DN250

4

DN350

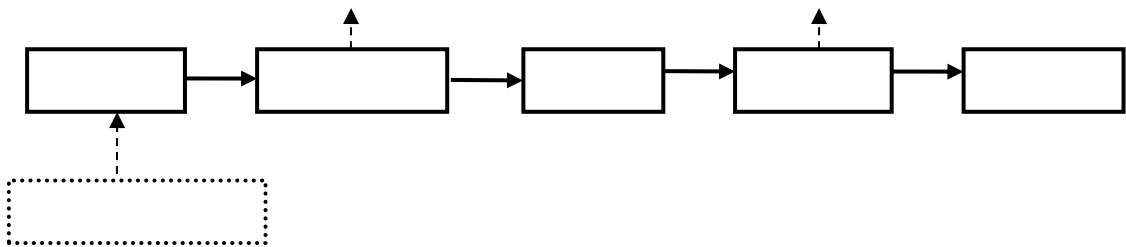
DN250

5

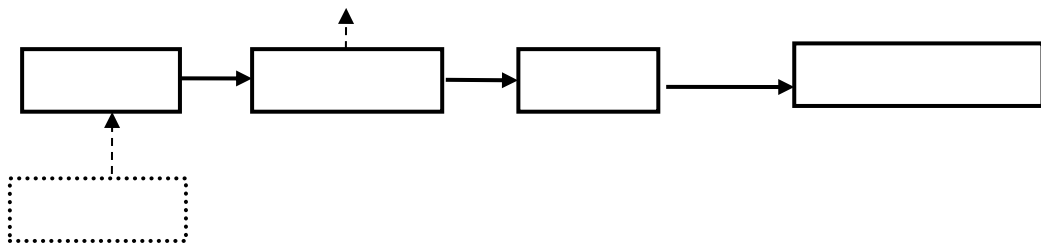


~

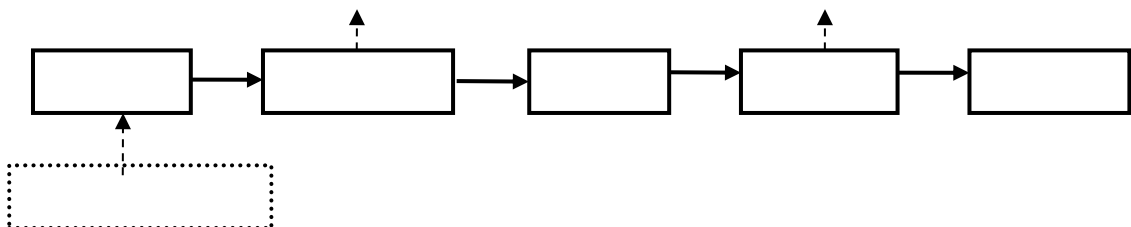
0-2



2.4-1

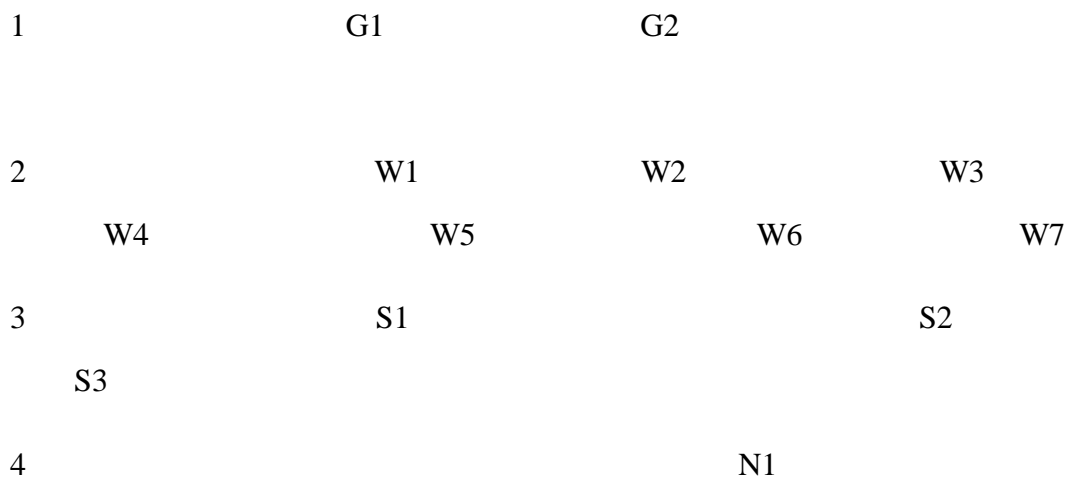


04-1



0-2

2.4.2



2.4-1

0-1

	G1					+
	G2					+
	W1			COD	SS	
	W2			COD	SS	
	W3			COD	SS	

	W4					
	W5					
	W6			COD SS		
	W7			COD SS		
	S1					
	S2					
	S3					
	N1			80 100dB A		

2.4.3

[2009]116

[2013]3

2.4.4

2.4-2

1		100000m ³ 80000×21800 344m×132m×2.5m	40	3	--
2		50000m ³ 60000×19350 172m×102m×2.5m	40	2	--
3		5000m ³ 21000×16500		4	

		128m×40m×1.7m			
4		20000m ³ 42000×17500 180m×120m×1.7m		6	
5		30000m ³ 44000×22000 192m×131m×2.1m		6	--
6		10000m ³ 30000×16500 94m×50m×1.8m		1	
7		10000m ³ 30000×16500 94m×50m×1.8m		1	
8		5000m ³ 21000×16500 68m×40m×1.8m		2	
9		200AY75		2	--
10		CZK150-500E		2	--
11		CZK150-500E		2	--
12		CZK150-500A		1	--
13		CZK150-500E		4	--
14		CZK100-315D		1	--
15		CZK100-315D		1	--
16		--	--	2	--
17		--	--	1	--
18		--	--	2	--
19		--	--	2	--
20		--	--	2	--
21		--	--	1	--
22		--	--	1	--

23		--	--	1	--
24		--	--	3	--

2.4.5

2.4-3 ” ”

	m ³ /a	22932.95	0	22932.95	
	COD t/a	13.17	12.02	1.15	
	t/a	0.70	0.59	0.11	
	t/a	6.67	6.66	0.01	
		753	682	71	
		10.34	9.93	0.41	+
		25.4	24.38	1.02	
		40.5	38.88	1.62	+
	VOCs	829.24	755.19	74.05	
	t/a	10.5	10.5	0	
	t/5a	104.4	104.4	0	
	80 100dB A GB12348-2008 3				

3

3.1

3.1.1

3.1-1

1				CO
2				
3				
4				
5				
6				
7				
8				
9				

3.1.2

HJ941-2018

Q

3.1-2

Q

				q t	q t	q/Q
1				166500	2500	66.6
2				166500	2500	66.6
3				94500	2500	37.8
4				132840	2500	53.136
5				7920	10	792
6				7785	10	778.5
7				7830	10	783
8		(qi/Qi)=2577.636				

3.1.3

3.2

3.2.1

3.2.1.1

1

1



5.1

2

2

1

/

2

/

3

6.0m

$1.0 \times 10^{-7} \text{cm/s}$

1.5m

$1.0 \times 10^{-7} \text{cm/s}$

/

/

/

/

2

1

10min 30min

30min

2

(HJ169-2018)

10min

30min

3

10min

10%

10min

30min

3

3.2-1

DNV

Crossthwaiteetal COVO Study

Canvey

0.9

3.2-1

3.2-1

5000m ³	160mm	6.5×10 ⁻⁵ /a	8.7×10 ⁻⁵ /a
10000m ³	160mm	6.5×10 ⁻⁵ /a	8.7×10 ⁻⁵ /a

4

1

1

1

160mm

30min

HJ 169-2018

F

$$Q_L = C_d A \sqrt{\frac{2(P - P_0)}{\rho} + 2gh}$$

Q_L —— kg/s

C_d —— 0.6-0.64 0.62

A —— m² 0.02 160mm

—— kg/m³ 870

P —— Pa 101000

P_0 —— Pa 101000

g —— 9.81m/s²

h —— m 11

160mm

158.4kg/s

5290m²

2769m²

2521m²

30min

2



Q ——— kg/s
 n ———
 P ——— Pa
 M ——— kg/mol
 R ——— $\text{J/ mol}\cdot\text{K}$
 T_0 ——— K
 u ——— 3.4m/s
 r ——— m

29m

3.2-2

	n	
F	0.3	5.285×10^{-3}

3.2-3

3.2-3

m/s

kg/s

CO

$$G_{co} = 2.33 \times q \times C \times Q$$

Gco—	CO	kg/s		
q—	%	5%	20%	q 5%
C—	%		C	92.3%
Q—	kg/s			
	158.4kg/s			703.2kg/s
	158.4kg/s		158.4kg/s	98.5m
	55.4min			

CO 17.03kg/s

2

1

$$Q_L = C_d A \sqrt{\frac{2(P - P_0)}{\rho} + 2gh}$$

Q_L —	kg/s	
C_d —	0.6-0.64	0.62
A—	m ² 0.02	160mm
—	kg/m ³ 873	
P—	Pa 101000	
P ₀ —	Pa 101000	
g—	9.81m/s ²	
h—	m	19

221.7kg/s

30min

399t

2

HJ 169-2018

$$Q_3 \ a \ p \ M / R \ T_0 \ u^{2 \ n / 2 \ n} \ r^{4 \ n / 2 \ n}$$

Q_3 —— kg/s

a ——

P —— 15.8KPa

M —— 0.064kg/mol

R —— 8.314J/mol·K

T_0 —— 288.8K

u —— m/s

r —— 83.2m 10 m³

3.2-4

	n	
F	0.3	5.285×10 ⁻³

3.2-5

	m/s		kg/s	m
	1.5	F	3.88	2.5

SO₂ NO₂

CO

3

CO SO₂ NO₂

$$m_f = \frac{0.001H_c}{C_p T_b - T_a H_v}$$

mf—— kg (m²·s)

Hc—— 49.5×10⁶J/kg

Cp—— 2072J (kg·K)

Tb—— 473K

Ta—— 288.8K

HV—— 474×10³J kg

2 SO₂

$$G_{SO_2} = 2BS$$

G_{SO₂}——SO₂ kg/s

B—— kg/s

S—— S 1.08%

3 NO₂

$$G_{NO_2} = 1.63 \times B \times N \times 2 + 0.000938$$

G_{NO₂}——NO₂ kg/s

B—— kg/s
 N—— 0.14 %
 2—— 40%
 4 CO
 $G_{CO}=2330q \times C$
 G_{CO}——CO g/kg,
 q—— 10%
 C—— C 85%
 0.05917kg/(m²·s) 4h
 30% 2006 2007
 20
 30%
 10% 10 m³
 10%
 SO₂ NO₂ CO

3.2-6

	SO ₂ kg/s		NO ₂ kg/s		CO kg/s	
10	1.93	2.78	0.22	0.31	17.67	25.48

3.2.2

12500m³

3.2.3

+
+
+A/O+HOT + 60m³/h + 1 “ +
”
VOCs

3.2.4

3.2.5

3.2.6

3.2.7

UPS UPS 220V

3.3

3.3-1

		1 2 3 4 5 6 7 8 9	1 2 / [2009]80 pH COD

		10	
		11	
		1	1
		2	2
		3	3
		4	
		1	1
		2	2
		1	
		2	
		1	1
		2	2
		3	
		1	
		2	
		3	

3.4

3.4.1

1

“ ”

“ ”

3.4-1

1	5000m ³		CO	CO	160mm	6.5×10 ⁻⁵ /a	8.7×10 ⁻⁵ /a
2	100000m ³		CO	CO	160mm	6.5×10 ⁻⁵ /a	8.7×10 ⁻⁵ /a

3.4.2

3.4.2.1

AFTOX

3.4.2.2

1 5km

2

1

2 500m 50m 500m

100m

3.4-2

				m				m
		X m	Y m					
		-950	-4390	-0.57		350	SW	4310
		-960	-4410	0.22		460	SW	4570
		-965	-4490	0.04		320	SW	4860
		-545	-3680	-4.99		360	SW	3860
		-430	-4105	-1.89		420	SW	4280
		-320	-3950	-2.13		160	SW	4030
		-300	-3790	-2.38		110	SW	3890
		0	-3520	-0.14		450	S	3520
		50	-3600	-0.28		650	SE	3680
		0	-4000	-7.32		120	S	4000
		-105	3160	-3.32		--	NW	3300



5		/	/	/
---	--	---	---	---

3.4.2.4

CO

3.4-6

3.4-6a 1.5m/s F

m	1.5m/s F mg/m ³					
	5min	10min	15min	20min	25 min	30 min
0	0	0	0	0	0	0
100	9,161.84	9,161.84	9,161.84	9,161.84	9,161.84	9,161.84
200	4,714.66	4,714.74	4,714.74	4,714.74	4,714.74	4,714.74
300	51.4334	3,014.72	3,014.72	3,014.72	3,014.72	3,014.72
400	0.0001	2,139.77	2,139.81	2,139.81	2,139.81	2,139.81
600	0	12.416	1,275.39	1,275.41	1,275.41	1,275.41
800	0	0	200.5825	863.6839	863.6905	863.6905
1000	0	0	0.0377	381.8686	630.8479	630.8516
1500	0	0	0	0	1.7667	230.333
2000	0	0	0	0	0	0.0041
2500	0	0	0	0	0	0
3000	0	0	0	0	0	0
3500	0	0	0	0	0	0
4000	0	0	0	0	0	0
4500	0	0	0	0	0	0
5000	0	0	0	0	0	0

3.4-6b

		/	25	/MPa	/
		/kg	5670	/mm	/
(kg/s)	3.15	/min	30	/kg	5670
/m	1.0	/kg	/		$6.5 \times 10^{-5}/a$
			(mg/m ³)	/m	/min
		-1	13000		/
		-2	2600	350	10.00
			/min	/min	(mg/m ³)
		/	/	/	/

CO

3.4-7

3.4-7a 1.5m/s F

CO

m	1.5m/s		F	CO	mg/m ³	
	5min	10min	15min	20min	25 min	30 min
0	0	0	0	0	0	0
100	180.6104	180.6104	180.6104	180.6104	180.6104	180.6104
200	165.5259	165.5259	165.5259	165.5259	165.5259	165.5259
300	159.2494	159.2494	159.2494	159.2494	159.2494	159.2494
400	152.2243	152.2243	152.2243	152.2243	152.2243	152.2243
600	139.7836	139.7836	139.7836	139.7836	139.7836	139.7836
800	75.3362	129.0217	129.0217	129.0217	129.0217	129.0217
1000	0.1147	119.5631	119.5631	119.5631	119.5631	119.5631

m	1.5m/s		F	CO	mg/m ³	
	5min	10min	15min	20min	25 min	30 min
1500	0	87.402	98.3231	98.3231	98.3231	98.3231
2000	0	0.0252	83.5909	83.6076	83.6076	83.6076
2500	0	0	18.0492	72.7201	72.7201	72.7201
3000	0	0	0.0097	57.2334	64.2991	64.2991
3500	0	0	0	3.3205	57.3344	57.5735
4000	0	0	0	0.0048	25.9691	52.0646
4500	0	0	0	0	0.8237	42.4689
5000	0	0	0	0	0.0027	9.479

3.4-7b

CO

		/	25	/MPa	/
	CO	/kg	/	/mm	/
(kg/s)	17.06	/min	30	/kg	30708
/m	1.0	/kg	/		$8.7 \times 10^{-5}/a$
	CO		(mg/m ³)	/m	/min
		-1	380		/
		-2	95	1510	11.05

			/min	/min	(mg/m ³)
		/	/	/	/

-1 9162mg/m³ 350m

-2

CO CO

-2 180mg/m³ 1510m -1

3.4.2.5

3.4-8

3.4-8

		/	25	/MPa	/
		/kg	6984	/mm	/
(kg/s)	3.88	/min	30	/kg	6984
/m	2.5	/kg	6984		6.5×10 ⁻⁵ /a
			(mg/m ³)	/m	/min
		-1	/		/
		-2	/		/
			/min	/min	(mg/m ³)

		/	/	/	/
--	--	---	---	---	---

CO SO₂ NO₂

3.4-9~3.4-11

3.4-9a 1.5m/s F

CO

m	1.5m/s F CO mg/m ³					
	5min	10min	15min	20min	25 min	30 min
0	0.00	0.00	0.00	0.00	0.00	0.00
100	828.1843	828.1843	828.1843	828.1843	828.1843	828.1843
200	711.0174	711.0174	711.0174	711.0174	711.0174	711.0174
300	622.6875	622.6875	622.6875	622.6875	622.6875	622.6875
400	550.6308	550.6316	550.6316	550.6316	550.6316	550.6316
600	249.218	439.2839	439.2839	439.2839	439.2839	439.2839
800	5.2943	358.156	358.1563	358.1563	358.1563	358.1563
1000	0.0403	290.5093	297.4336	297.4336	297.4336	297.4336
1500	0	6.0813	198.5554	202.6263	202.6263	202.6263
2000	0	0.0049	25.416	144.6108	147.2267	147.2267
2500	0	0	0.2457	40.9659	111.4054	113.2131
3000	0	0	0.0012	1.7429	47.1974	88.9685
3500	0	0	0	0.0304	5.023	47.4582
4000	0	0	0	0.0004	0.2184	9.1326
4500	0	0	0	0	0.0002	0.0432
5000	0	0	0	0	0.0002	0.0432

3.4-9b

CO

		/	25	/MPa	/
	CO	/kg	45864	/mm	/
(kg/s)	25.48	/min	30	/kg	45864
/m	1.0	/kg	/		$8.7 \times 10^{-5}/a$
	CO		(mg/m ³)	/m	/min
		-1	380	680	9.50
		-2	95	2800	22.50
			/min	/min	(mg/m ³)
		/	/	/	/

3.4-10a 1.5m/s F

SO₂

m	1.5m/s F SO ₂ mg/m ³					
	5min	10min	15min	20min	25 min	30 min
0	0.00	0.00	0.00	0.00	0.00	0.00
100	90.3592	90.3592	90.3592	90.3592	90.3592	90.3592
200	77.5757	77.5757	77.5757	77.5757	77.5757	77.5757
300	67.9384	67.9384	67.9384	67.9384	67.9384	67.9384
400	60.0767	60.0768	60.0768	60.0768	60.0768	60.0768
600	27.191	47.9282	47.9282	47.9282	47.9282	47.9282
800	0.5776	39.0767	39.0767	39.0767	39.0767	39.0767
1000	0.0044	31.6961	32.4516	32.4516	32.4516	32.4516
1500	0	0.6635	21.6634	22.1076	22.1076	22.1076
2000	0	0.0005	2.773	15.7778	16.0632	16.0632

m	1.5m/s F SO ₂ mg/m ³					
	5min	10min	15min	20min	25 min	30 min
2500	0	0	0.0268	4.4696	12.1549	12.3521
3000	0	0	0.0001	0.1902	1.1495	1.7069
3500	0	0	0	0.0033	0.548	1.1779
4000	0	0	0	0	0.0238	0.9964
4500	0	0	0	0	0	0.0047
5000	0	0	0	0	0	0.0047

3.4-10b

SO₂

		/	25	/MPa	/
	SO ₂	/kg	5004	/mm	/
(kg/s)	2.78	/min	30	/kg	5004
/m	1.0	/kg	/		8.7×10 ⁻⁵ /a
			(mg/m ³)	/m	/min
		-1	79	160	

SO₂

m	1.5m/s F NO ₂ mg/m ³					
	5min	10min	15min	20min	25 min	30 min
0	0.00	0.00	0.00	0.00	0.00	0.00
100	45.482	45.482	45.482	45.482	45.482	45.482
200	42.5527	42.5527	42.5527	42.5527	42.5527	42.5527
300	35.9229	35.9229	35.9229	35.9229	35.9229	35.9229

			(mg/m ³)	/m	/min	
	NO ₂	-1	38	240	4.50	
		-2	23	620	9.50	
				/min	/min	(mg/m ³)
		/	/	/	/	/

-1

-2

CO

CO

-1

828mg/m³

680m

-2

2800m

SO₂

SO₂

-1

90mg/m³

160m

-2

2700m

NO₂

NO₂

-1

45mg/m³

240m

-2

620m

3.4.2.6

1

-1

9162mg/m³

350m

-2

CO

CO

-2

180mg/m³

1510m

-1



2

-1

-2

CO

CO

-1

828mg/m³

680m

-2

2800m

SO₂

SO₂

-1

90mg/m³

160m

-2

2700m

NO₂

NO₂

-1

45mg/m³

240m

-2

620m

3.4.3

3.4.3.1

6

3.4-12

3.4-12

1995.8.20		150t			90-100t

1994.9.7		1-1.1t			
1994.7.30					20
1994.7.27					14
1994.3.30		1.5t			5
1993.7.28		4t			
1993.4.30					
1993.3					800
1992.1.16		60-70kg			2d
1991.5.2					160km ² 50 kg
1991.2.6					
1988.1.4		800t			800m
1987.8.14					11.6
1989.4.12					5

3.4.3.2

1

2

3.4.3.3

Q/SY 1303-2010

10^{-10} cm/s

10^{-7} cm/s

GB18599-2001

GB50483-2009

	V	$(V_1 V_2 V)_{\max}$	$V_3 V_4$
	V_1+V_2+V	\max	m^3
V1			m^3
V2			
		3	m^3
V			
V3			m^3
V4		m^3	
V1		$100000m^3$	$V_1=90000m^3$
V2			
1			

80m

GB50160-2008

[2010]118

	2.0L/ min·m ²	20m	
20m		6h	6h
	3943m ³		
2			
100000m ³			
3%		GB50151-2010	
		[2010]118	“
		12.5L/ min·m ²	
45min		3	
	480L/min	3	

$$= 90000 + 3943 + 199 + 1728 + 19933.5 - 103936.9 - 0 = 11866.6 \text{m}^3$$

$$12500 \text{m}^3$$

$$2 \times 450 \text{m}^3$$

6h

6h

3

[2009]80

1

1

3.4-1

GB 50316-2000

SH3054-2005

1.

2.

3.

4.

5.

3.4.4

12500m³

3.4.5

+
+
60m³/h 1 “ +
+A/O+HOT + + ”
VOCs

3.4.6

3.4.7

3.4.8

3.4.9

UPS

DCS

30min

3.5

3.5.1

1				
	-1	9162mg/m ³	350m	
-2				
		CO	CO	
	-2	180mg/m ³	1510m	-1
2				
	-1		-2	
		CO	CO	
	-1	828mg/m ³	680m	-2
2800m				
		SO ₂	SO ₂	
	-1	90mg/m ³	160m	-2
2700m				
		NO ₂	NO ₂	
	-1	45mg/m ³	240m	-2
620m				

3.5.2

3.5.3

“

”

GB18597-2001

3.5.4

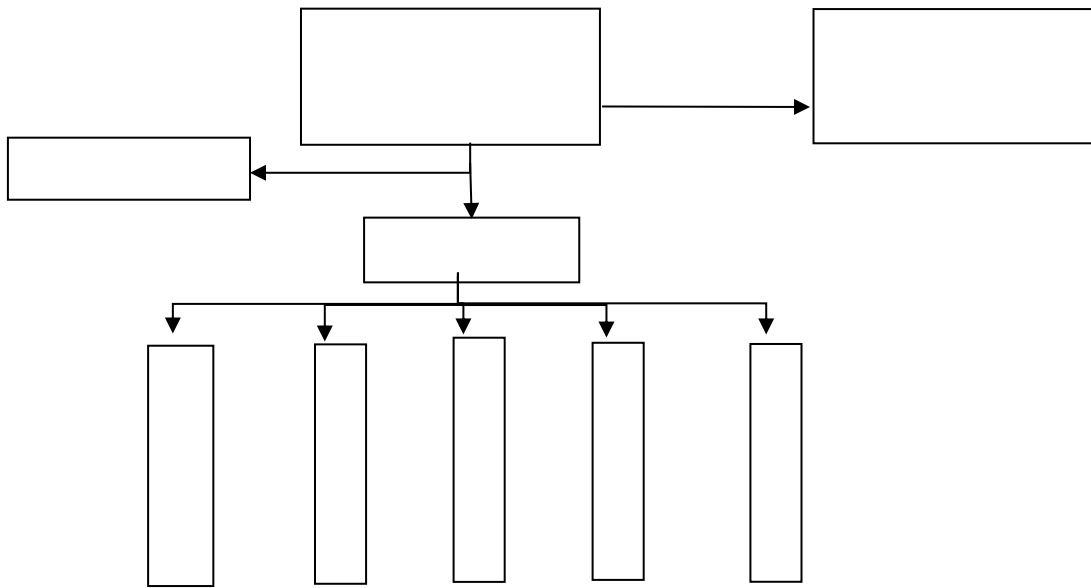
3.5-1

		344m×132m×2.5m 172m×102m×2.5m 192m×131m×2.1m 128m×40m×1.7m 180m×120m×1.7m 68m×40m×1.8m 04m×50m×1.8m

		12500m ³

4

4.1



4.1-1

4.2

4.2.1

4.2.2

4.3

13789831081

18954008137

18354678797

13220507223

18366952335

13455460817

4.4

/

1

2

3

5

5.1

5.1.1

1

1 /

5

6

5.1.2

1

2

5.1.3

1

24

2

3

4

5.2

5.2.1

5.2.2

I

1		1	10	
	5000			500

2

3

4

II

1		3	10		
3000	5000			100	500

2

3 /

4

III

5.2.3

1

2

I

/

II

III

3

4

5

6

5.3

5.3.1

24

0546-8286889

5.3.2

1

2

5.4

1

2

5

10

15

3

5.5

	110 119
	122
	120
/	0546-8312345

	0546-8330190/12350/8330361
	0546-8019288
	0546-8019190
	0546-8879110
	0546-6096119
	0546-8019001/8019002

6

6.1

1

2

3

6.2

1

2

3

1

2

3

6.3

1

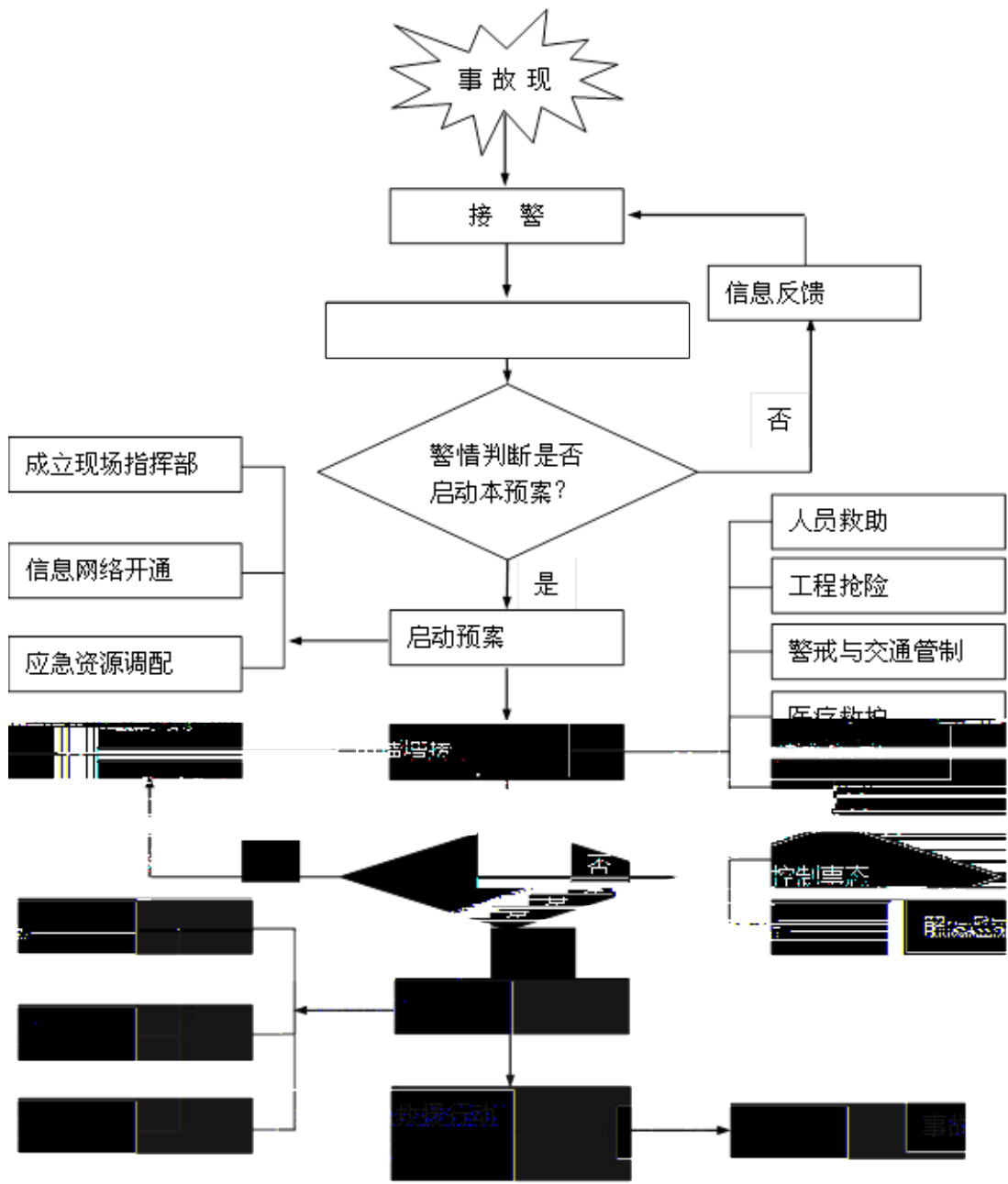
2

3

4

5

6



6.3-1

6.4



1

2

3

4

5

6

6.5

6.5.1

6.5.2

1

2

6.5.3

6.5.4



6.5-1



7

7.1

1

2

3

7.2

1

2

3

7.3

1

2

3

3

0 500



500 1000

1000

4

5

7.4

7.4.1

1

2

3

7.4-1

1	
2	
3	
4	
5	
6	

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7.4.2

1

2

3

4

5

6

7.4-2

1	
2	
3	

4	
5	
6	

7.5

7.5.1

1

2

12500m³

7.5.2

1

2

7.6

7.6.1

1

2

3

4

5

6

7.6.2

7.6.3

7.6.4

1

2

3

7.6.5

7.6.6

1

2

①

②

③

3

4

8

8.1

8.2

30

8.3

8.3.1

8.3.2

1

2

3

4

5

8.3.3

1

2

8.4



8-1

1		CO SO ₂ NO ₂ VOCs		30min	VOCs
2	100m				
3	500m				
4	1000m				
1		pH COD _{Cr} BOD ₅		30min	
2		pH COD _{Cr} BOD ₅			
1		pH COD		20min	

HJ589-2010

8.5

8-2

1	VOC	1	VOCs
2	pH	1	
3	COD	1	COD
4			

9

9.1

1

2

3

4

5

9.2

1

2

3

9.3

1

2

3

4

5

6

10

10.1

1

24

2

3

10.2

1

	110 119
	122
	120
/	0546-8312345
	0546-8019001
	0546-8019120
	0546-8331208/8221954
	0546-3661070/3662070
	0546-8305735/8305827/8305239
	0546-8331789/12369
	0546-8330190/12350/8330361
	0546-8019288
	0546-8019190
	0546-8879110
	0546-6096119
	0546-8019001/8019002

2

I

II

3



4

11

11.1

15

11.2

1

2

3

4

5

6

7

8

15

11.3

1



2

11.4

1

2

3

4

11.5

12

12.1

4.3

12.2

12.3

12.4

12.5

12.6

12.7

1

2



13

13.1

1

2

3

4

13.2

13.2.1

13.2-1

1			

2			
3			
4			
5			
6			
7			
8			
9			

10			
11			
12			
13			

13.2.2

1

2

3

4

13.2.3

1

2

2

3

13.2.4

1

2

3

4

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6

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9

10

11

13.2.5

13.3

1

2

3

4

1

2

3

4

5

6

7

13.4

1

2

30

14

14.1



14.2

14.3

14.4

15

1

				13054647938	
				13455707588	
				13884600198	
				13789831081	
				18354678797	
				18263350387	
				18560859114	
				18366952335	
				13589435508	

				18954008137	
				17176099990	
				13220507223	
				13455460817	
				15154681751	

2

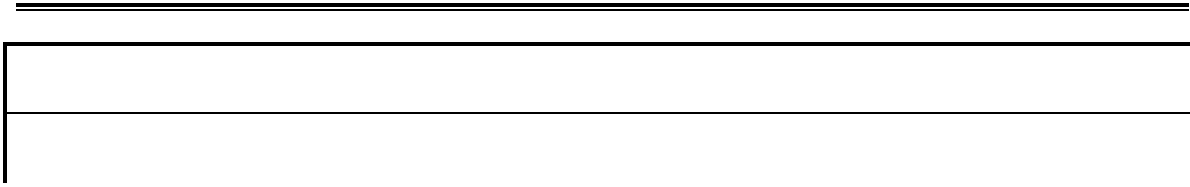
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2		010-67119686 010-66151780
1		110 119
2		122
3		120
4		8875119
5		6375119
6		13181974365
1		0546-8331789/12369
2		0546-8019288
3		0546-8330190/12350/8330361
4		0546-6096119

3

/	0546-8312345
	0546-8019001
	0546-8019120
	0546-8331208/8221954
	0546-3661070/3662070

	0546-8019190
	0546-8879110
	0546-6096119
	0546-8019001/8019002

		10		
		19		
		200		
		2		
		33	m ³	
		10		
		5		
		5		
		19		
		76		
		5		
		5		
		5		
		698		
		2		
		19		
		12		
		81		



应急救援协作协议书

甲方：东营神驰锂电池有限公司

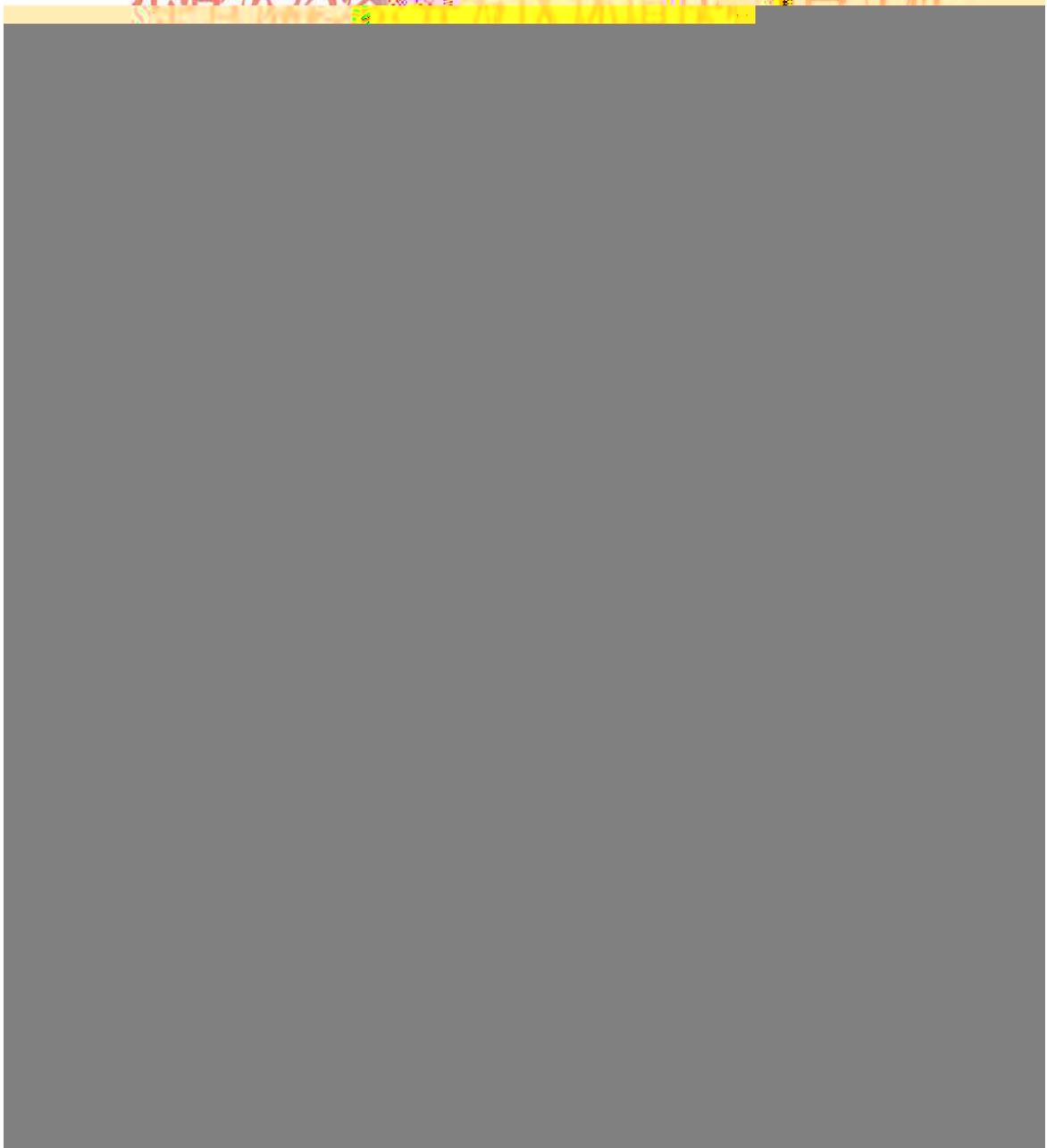
乙方：东营神驰锂电池有限公司

为贯彻落实《中华人民共和国安全生产法》以及其他相关法律法规，切实保障企业安全生产，保护企业及周边单位人员的生命财产安全，建立应急救援协作机制，经甲乙双方充分协商，达成如下应急救援协议：

一、双方职责



外 日 是 以 但 位 环 后 小 开 汶 外 洪 昔 尤



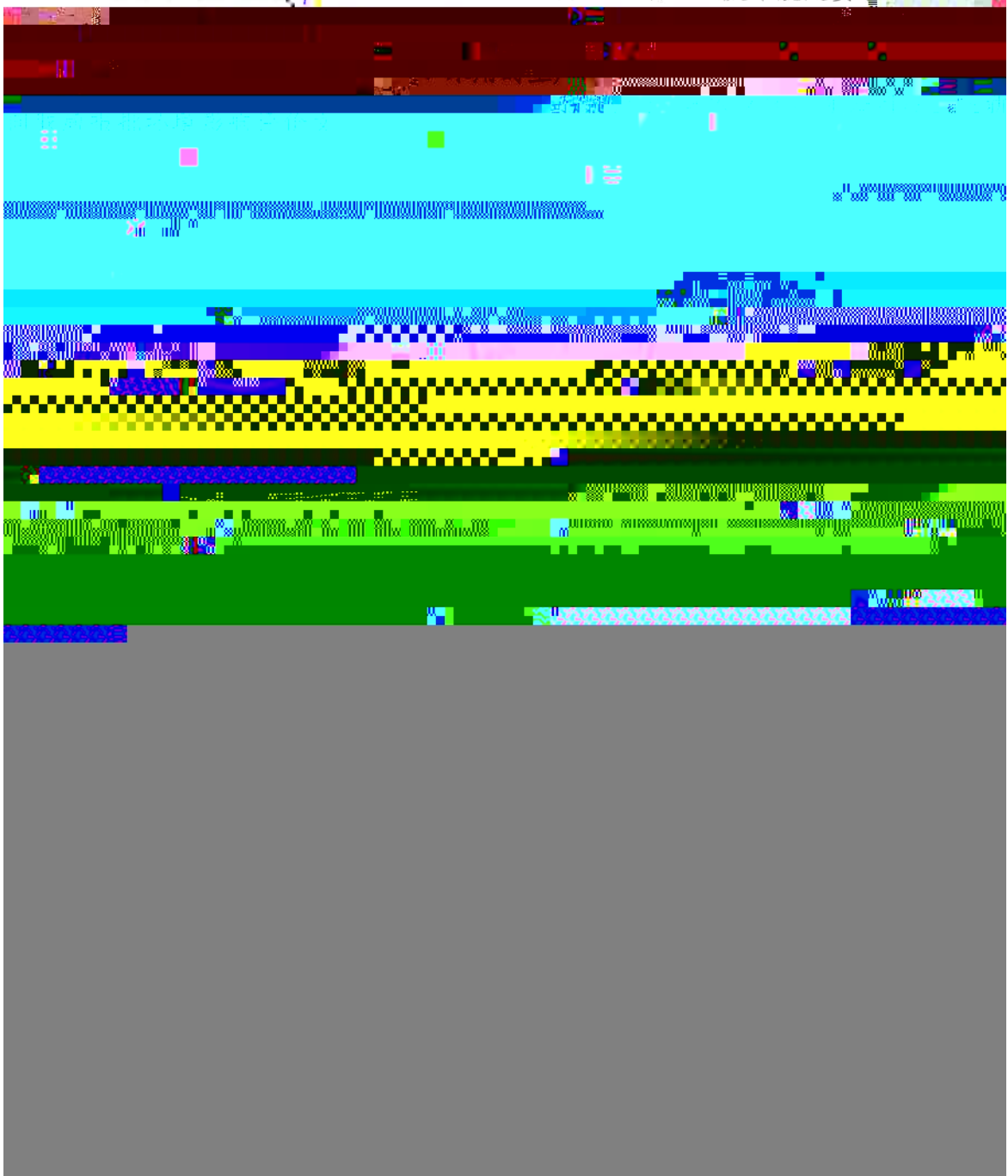
过管线输送至山东神驰石化有限公司进行回炼再利用。非甲烷总
烃、苯、甲苯和二甲苯须满足《大气污染物综合排放标准》

要求。

(四) 噪声污染防治。选用低噪声设备，合理布局，确保厂界噪声必须满足《工业企业厂界环境噪声排放标准》(GB12348-2008)中3米标准要求



项目竣工后，你单位必须按照规定的程序向我局申请工程竣工环境保护验收。验收合格后，项目方可正式投入运行。违反本规定要求



1	
2	
3	
(4)	
1	
2	
3	
4	
5	
6	

1

2

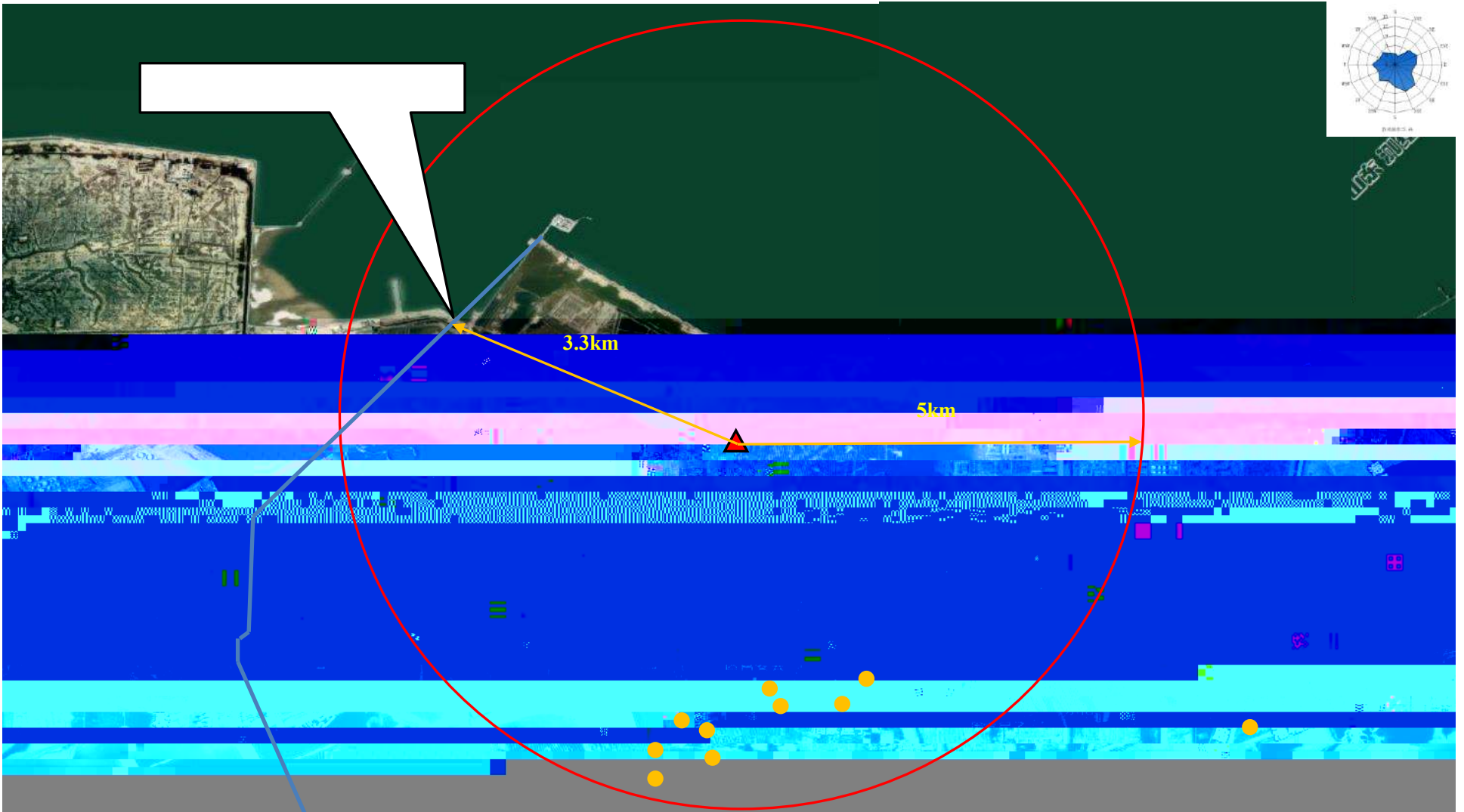
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4

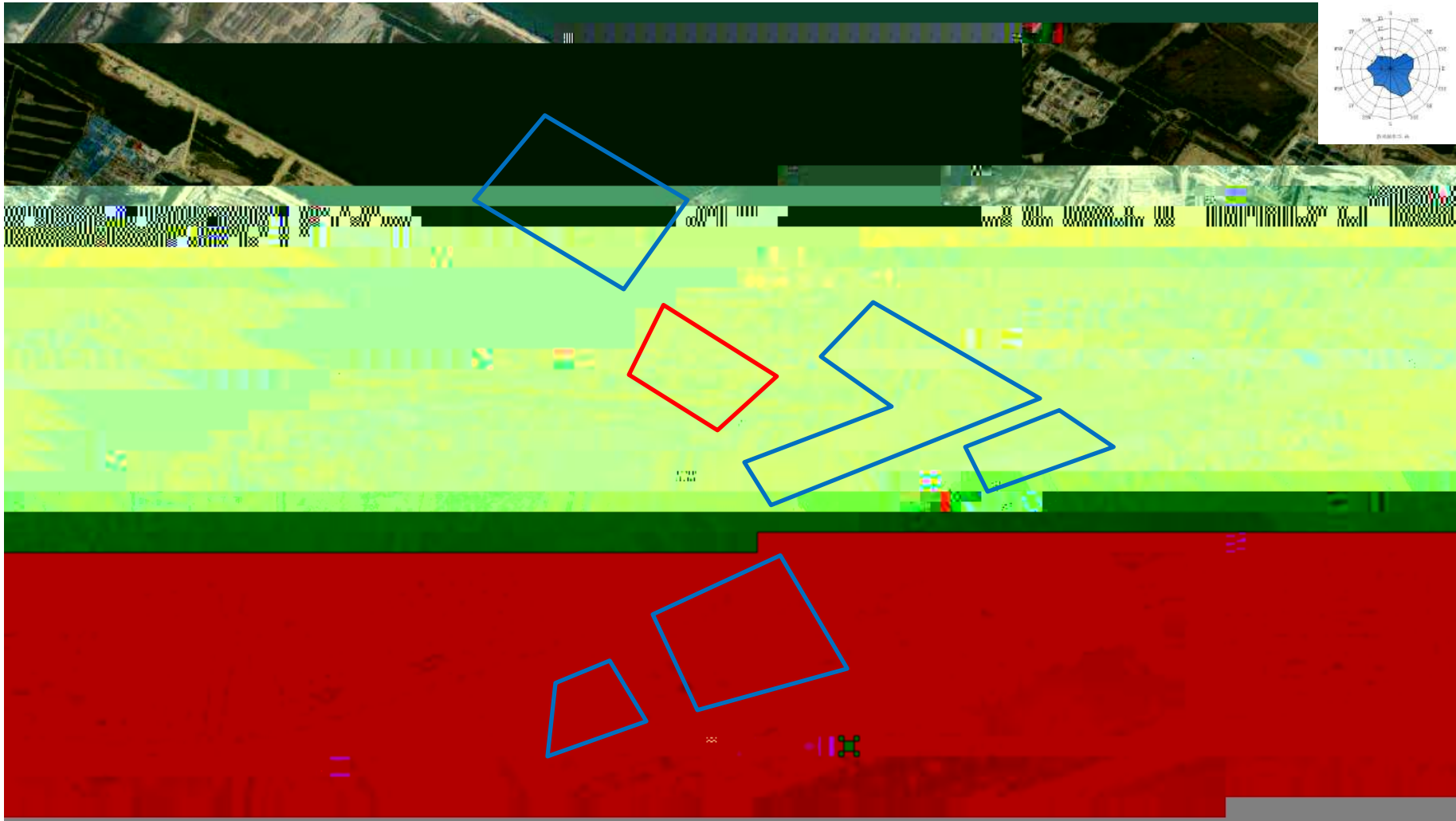


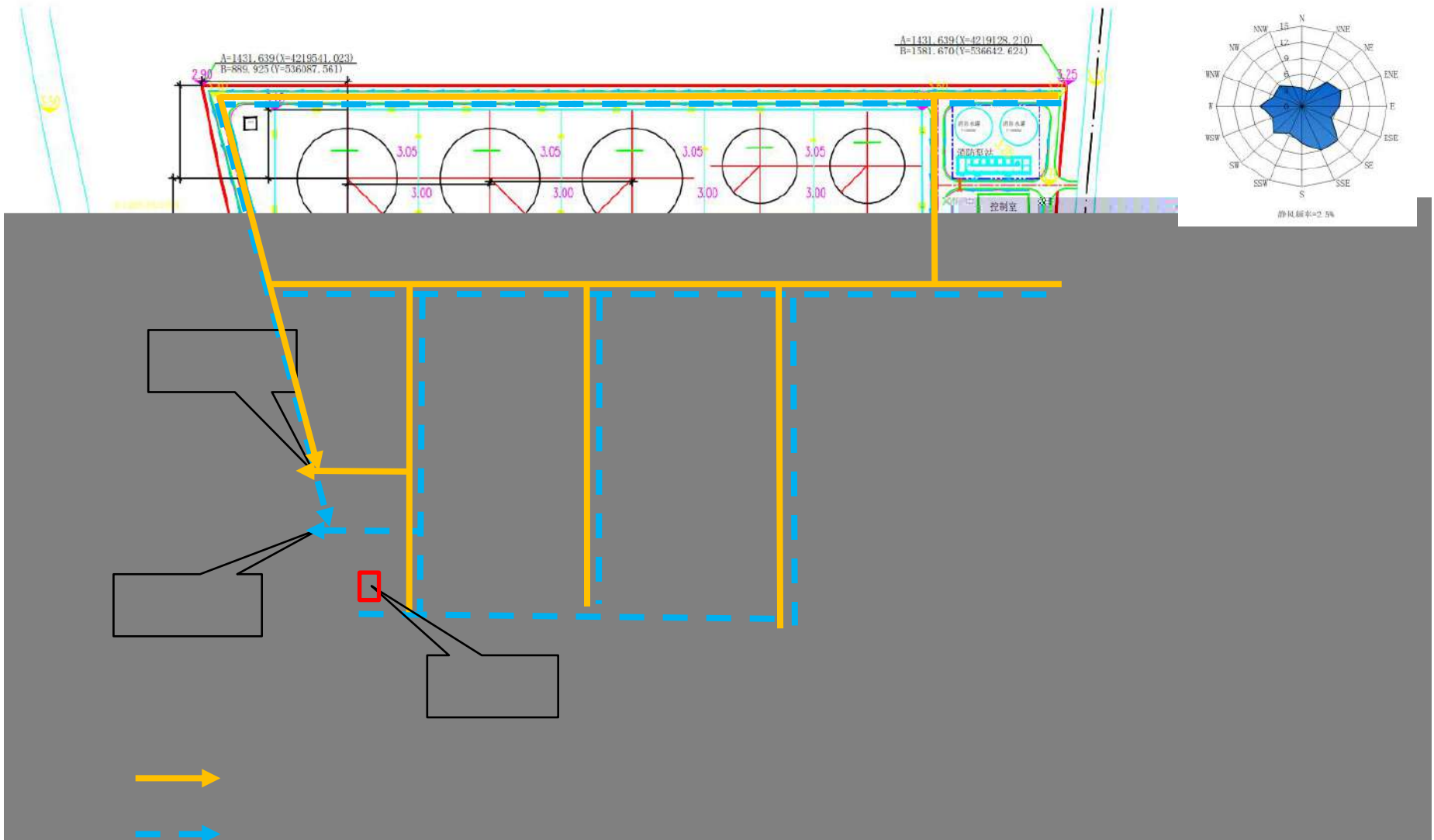
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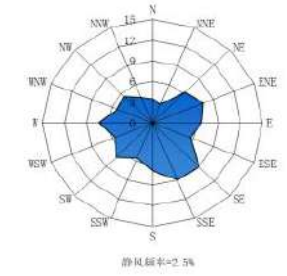
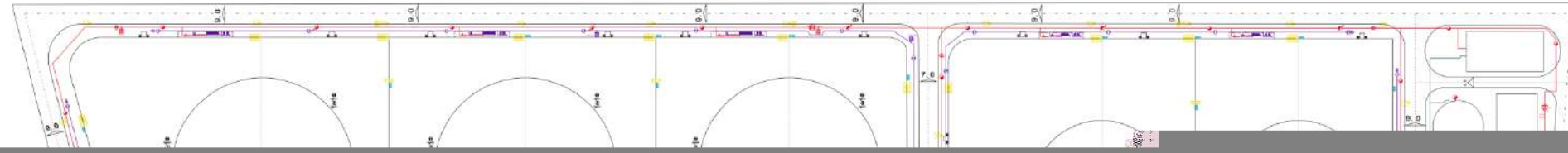




5

1:2000

应急物资布局图







16

16.1

16.1.1

16.1.2

16.1.3

16.2

16.2.1

16.2.2

16.2.3

16.2.4

16.3

16.3.1

I

4

II

1

3000

5000

3

10

100

500

2

3

/

4

III

16.3.2

1

2

3

4

16.3.3

I

II

16.3.4

16.3.5

1

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3

16.3.6

16.3.6.1

1

2

3

4

5

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7

16.3.6.2

1



2

,

3

16.3-1

1	

16.3.6.3

1

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3

4

16.3.7

16.3.7.1

16.3.7.2

16.3.8

1

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3

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5

17

17.1

17.1.1

17.1.2

17.1.3

17.2

17.2.1

17.2.1.1

17.2.1.2

17.2.1.3

17.2.2

17.2.2.1

17.2.2.2

17.2.3

17.2.3.1

17.2.3.2

17.2.4

17.3

17.3.1

I



1		1	10	
	5000			500

2

3

4

II

1		3	10		
3000	5000			100	500

2

3 /

4

III

17.3.2

17.3.2.1

17.3.2.4

17.3.3

I

II

17.3.4

17.3.5

17.3.5.1

pH

17.3.5.2

17.3.5.3

17.3.6

17.3.6.1

III

II I

1

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17.3.6.2

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17.3-1

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17.3.6.3

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17.3.7

17.3.7.1

3

17.3.7.2

17.3.8

1

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3

4

5

18

18.1

18.1.1

18.1.2

HJ964-2018

18.1.3

18.2

18.2.1

“

”

18.2.2

18.2.3

17.2.3.1

17.2.3.2

18.2.4

18.3

18.3.1

18.3.1.1

18.3.1.2

18.3.1.3

18.3.1.4

18.3.2

I

II

18.3.3

18.3.4

18.3.4.1

18.3.4.2

18.3.4.3

18.3.5

18.3.5.1

1

2

3

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18.3.5.2

18.3.5.3

1

2

18.3.6

1

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24

48

18.3.7

1

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3

4

19

19.1

19.1.1

1

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19.1.2

1

2

19.1.3

19.2

19.2.1

19.2.2

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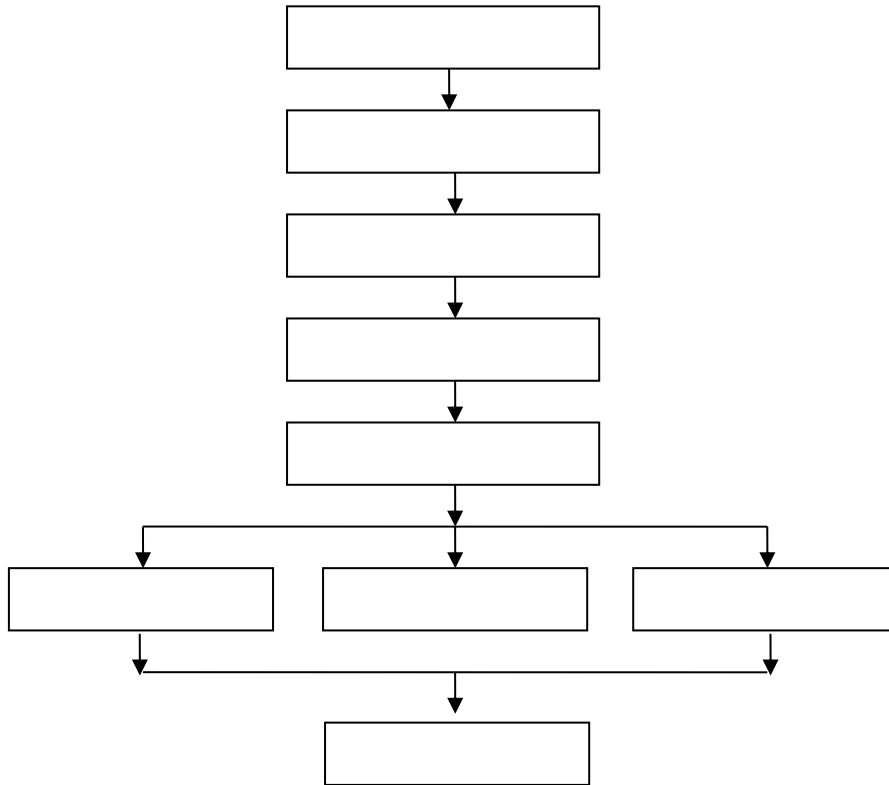
3

4

5

19.3

19.3.1



19.3.2

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1

2

3

19.3-1

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3	
4	
5	
6	

7	

2

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19.3-2

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5	
6	

19.3.3

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19.4

1

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7





20

20.1

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20.2

20.3

20.3.1

		450t/5a		HW08 251-001-08	
		36t/2.5a		HW08 251-001-08	

20.3.2

20.3.3

20.4

1

2

20.5

1

20

30kg

2

3

4

20.6

1

1



2

0.04t/a

0.04t

a

b



2

1

2



3

20.7

1

2

20.8

20.9

20.10

GB18597-2001

a

b

c

d

e

a

b

c

d

e.