
| | | |
|---|-------|----|
| - | | 41 |
| - | | 41 |
| - | | 41 |
| - | | 41 |
| - | | 43 |
| | | 44 |
| | | 44 |
| | | 46 |

,
-

- ,

2004 1 16

70

54

30

108m³

VCM

VCM

VCM

70 /

3

70 /

9448

70 /

2014 12 9

2015 4 3

[2015]321

2015

682

" "

2017 12

1 2015. 1. 1
2 2016. 1. 1
3 , 2017. 7. 1
4 , 1997. 3. 1
5 , 2016. 11. 7
6 682 2017. 10. 1
7 [2017]4
2017 11 20

1
[2017]1529 2017. 9. 29
2
2015 3
3
, [2015]321 , 2015 4 3
4
1
2

70 /

3.1-1

42° 45′

44° 08′

86° 37′

88° 58′

153km

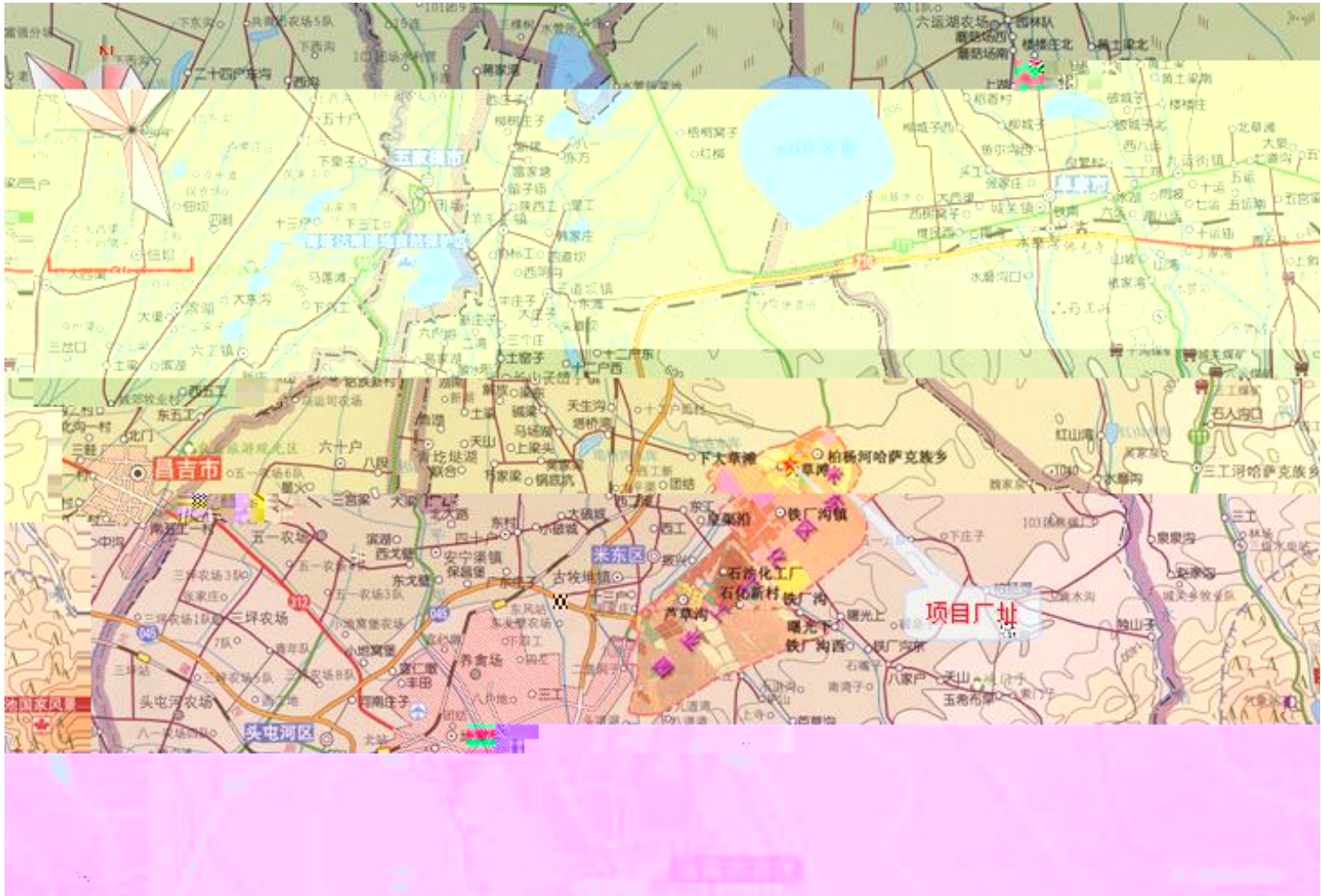
190km

12000km²

2007 8 1

15km

3.1-1



3.2-1

| | | | | |
|------|--|-----------|--|--------------|
| | | | | |
| 12 / | | | | |
| 10 / | | [2004]348 | | [2007] 05 |
| 12 / | | | | |
| 10 / | | | | |

70 /

- 1
- 2
- 3
- 4
- 5
- 6
- 7

3

70 /

3.3-1

| | | | |
|--|--|----------|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | 2× 135MW | |
| | | | |
| | | | |

| | | | |
|--|--|--|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

3.3-2

| | | | | | |
|---|--|--|--|----------------------|--|
| | | | | × × | |
| 1 | | | | 20000× 9500× 5000 | |
| 2 | | | | 23000× 5000× 6000 | |
| 3 | | | | 29000× 5000× 6000 | |

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
|--|--|--|--|--|--|--|

| | | | | | |
|----|--|---|--|-------------------------------------|-----|
| 17 | | 1 | | YKB-900.18/12-60 F=60m ² | + |
| 18 | | 1 | | Φ 1400× 2000 V=3m ³ | + |
| 19 | | 1 | | Φ 2000× 3000 V=10m ³ | + |
| 20 | | 1 | | Φ 1600× 2400 V=5m ³ | + |
| 21 | | 1 | | Φ 1600× 4000 V=8m ³ | + |
| 22 | | 1 | | Φ 1400× 2000 V=3m ³ | + |
| 23 | | 1 | | Φ 1200× 1600 | + |
| 24 | | 2 | | Φ 800× 1400 | |
| 25 | | 1 | | Φ 1200× 2400 | |
| 26 | | 2 | | Φ 6000× 7000 | +PO |
| 27 | | 2 | | Φ 6000× 7000 | +PO |
| 28 | | 1 | | Φ 500× 1900 | |
| 29 | | 1 | | Φ 600× 3265 | |
| 30 | | 2 | | Φ 800× 2500 | |
| 31 | | 1 | | Φ 2000× 2000× 1500 | |
| 32 | | 1 | | Φ 600× 4000 | |
| 33 | | 1 | | Φ 1600× 3859 | |
| 34 | | 1 | | Φ 1000× 7120 | |
| 35 | | 1 | | Φ 8000× 4000× 1600 | |
| 36 | | 1 | | Φ 8000× 4000× 1600 | |
| 37 | | 3 | | HTL-5 | +PO |
| 38 | | 3 | | LNYN-S-I-700 | +PO |
| 39 | | 1 | | Φ 1200× 1200 | |
| 40 | | 1 | | Φ 200× 2000× 1000 | |
| 41 | | 1 | | Φ 800× 1200 | |
| 42 | | 1 | | Φ 800× 1200 | |
| 43 | | 2 | | — — | |
| 44 | | 3 | | Φ 4000× 8000× 2000 | |
| 45 | | 3 | | Φ 13500× 12800 | |

1

2× 135MW

2

1. 3m³/h

2m³/h

0. 4MPa

798m³/h

900m³/h

0. 45MPa

0. 20 0. 30MPa

25

32

0. 5m³/s

0. 35MPa

3

4

16. 8t/h

5

98/70

8000h

24 /

3.4.1.1

1 1.05 1.1()
160

130 150

" "

130 150

| | | |
|--|------------|-------|
| | | |
| | 10.5-12.5% | 6% |
| | 99.5% | 99.9% |
| | | |
| | | |
| | | |
| | 7600 | 10000 |
| | | |
| | | |
| | | |

3.4.2.1

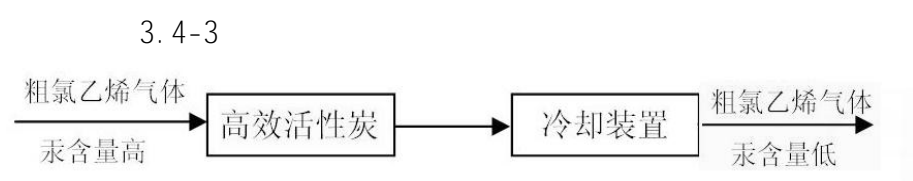
HCI

3.4.3.1

0.2m/s
1m
600m²/g 800m²/g

3.4.3.2

1.5
600m²/g 800m²/g
1 2
1 5
30%
90%
1



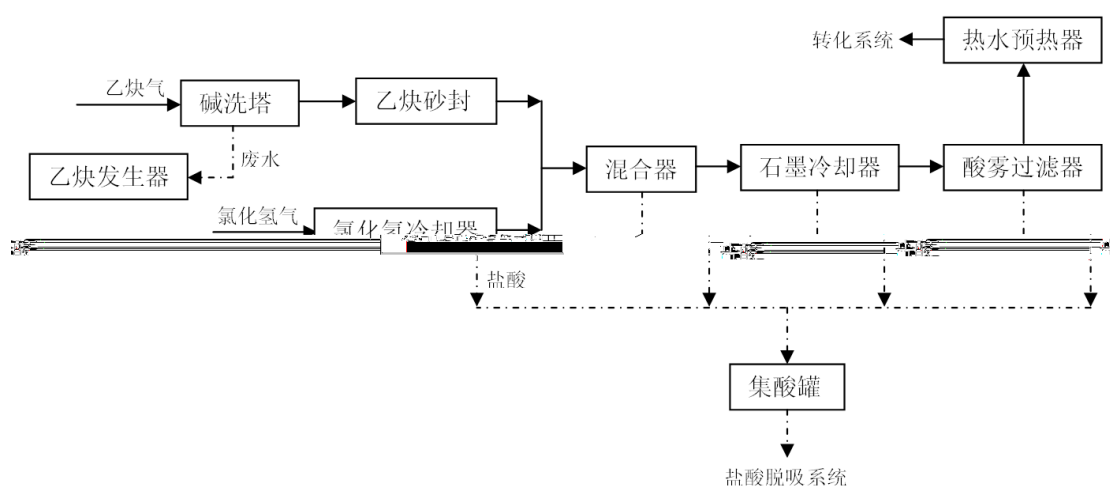
3.4.4.1

1%

| | | | | |
|-----|---|------------|------|------|
| | 1 | 1.1 | 1.05 | |
| -35 | | | 2.0 | -6.0 |
| -35 | | -14.0± 2.0 | | |

70.0 98.0

3.4-4



3.4.4.2

1

1

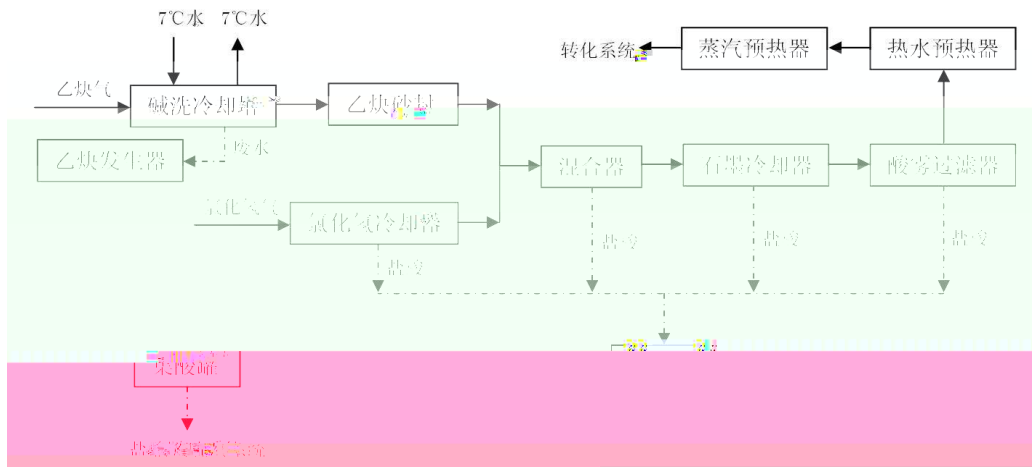
1%

2

1%

107

3.4-5



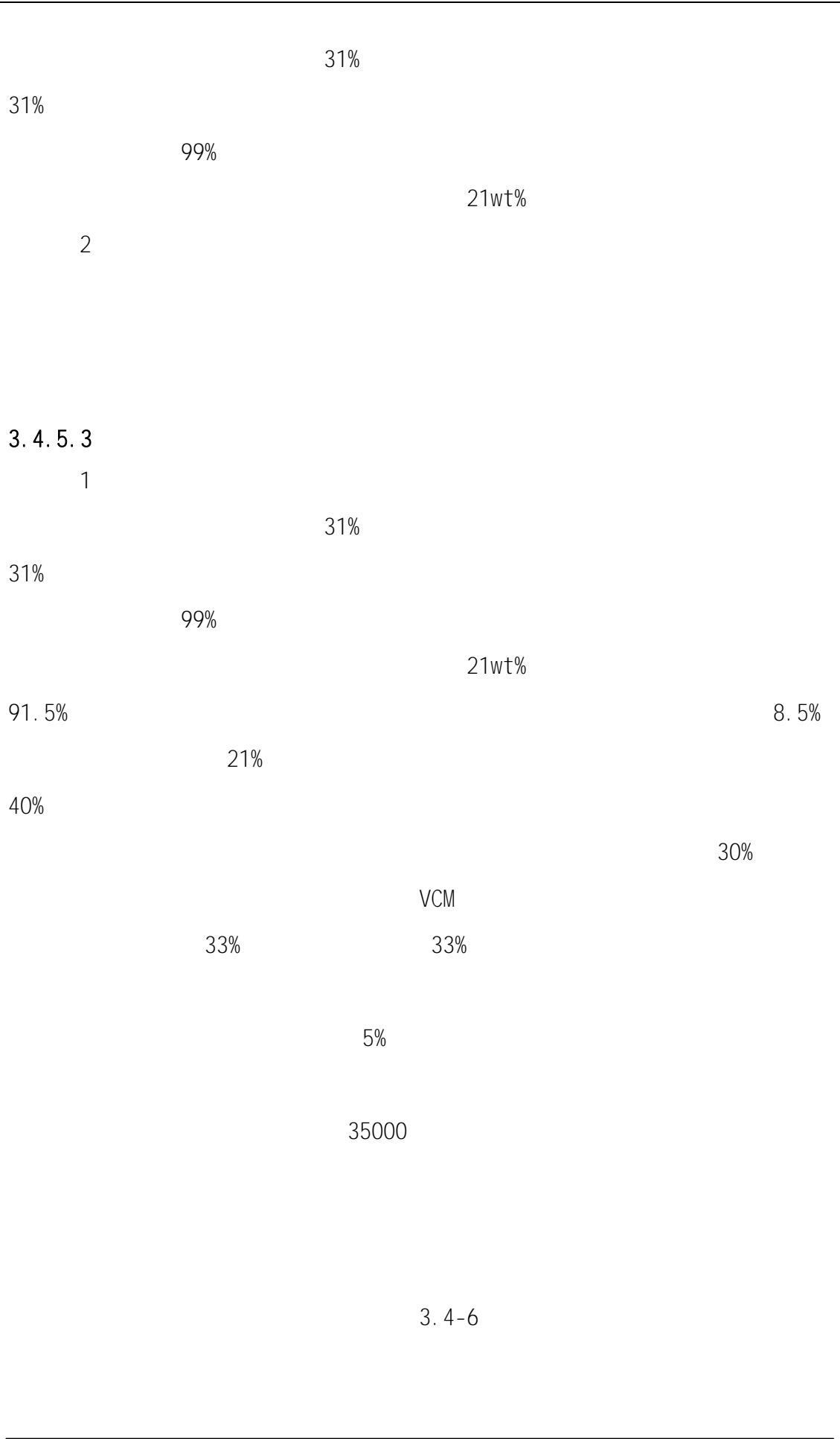
3.4.5.1

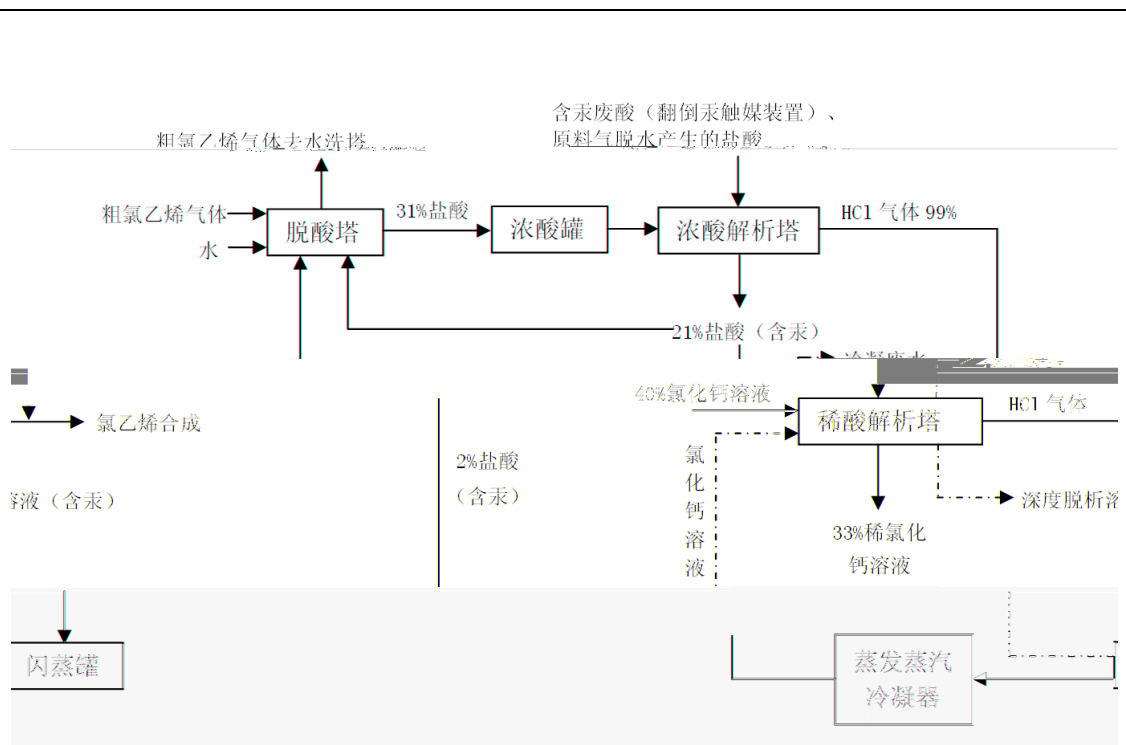
31wt%

VCM

3.4.5.2

1





2

4m³/h

pH 9 10

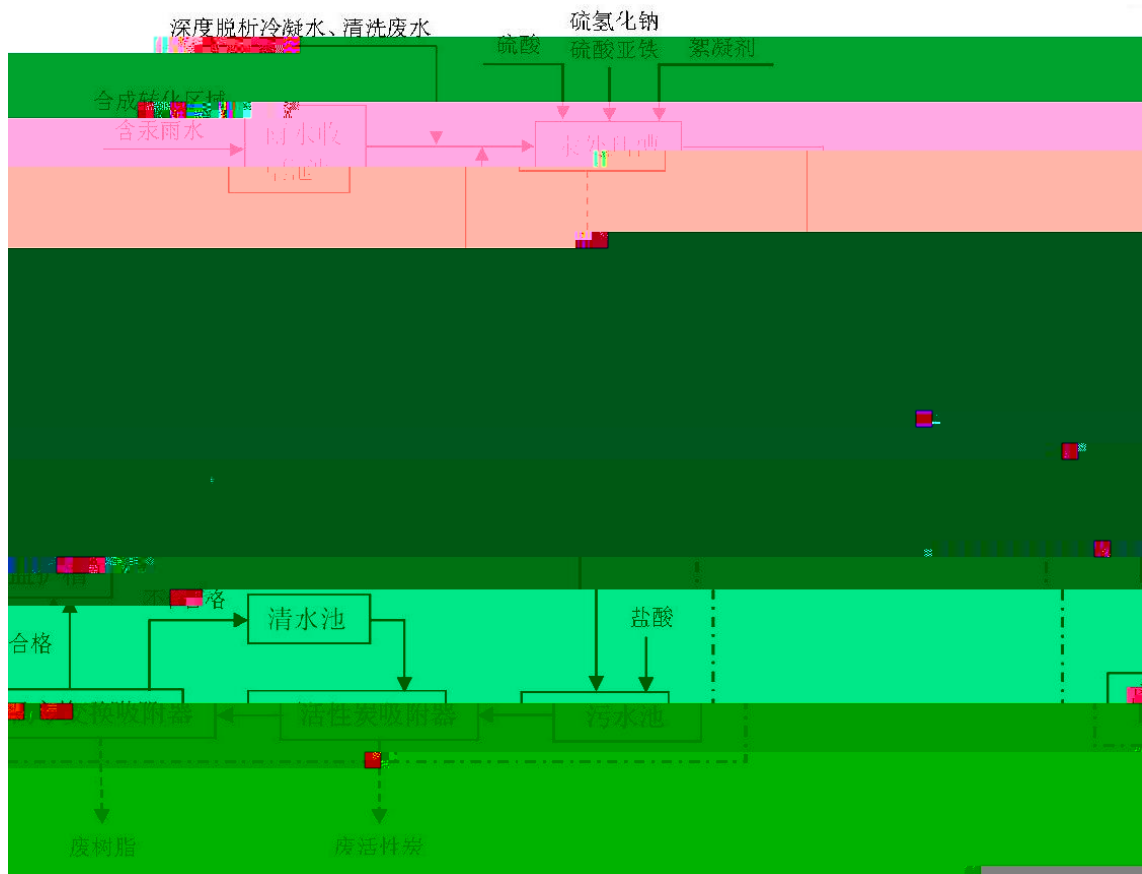
Fe OH₃

20ppb

20ppb

2ppb

3.4-7



3.4-1

| | | | | | | |
|---|--|--|----------------|--------------------------|------------|--|
| | | | | | | |
| 1 | | | 6% | t/a | 700 | |
| 2 | | | 380V 0.4MPa | kWh m ³ /h | 267 0.3 | |

| | | | |
|-----|--|--|-----|
| " " | | | |
| | | | 15m |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

3.6.2.1

1 15m

3.6.2.2

700t/a

100t/a

2t/a

223t/a

[2015]948

800t/a

9448

6700

9448

100%

| | | | |
|---|--|------|------|
| 1 | | 6523 | 6523 |
| 2 | | 230 | 230 |
| 3 | | 445 | 445 |
| 4 | | 300 | 300 |
| 5 | | 1500 | 1500 |
| 6 | | 150 | 150 |
| 7 | | 21 | 21 |
| 8 | | 400 | 400 |
| 9 | | 9448 | 9448 |

,

3.8-1

,

| | | | |
|--|--|--|-----------|
| | | | |
| | | | [2015]948 |

" " 17
33

4.1.2.1

4.1.2.2

" "

4.1.2.3

4.1.2.4

1

2

3

4

5

4.1.4.1

| | | | | | | | | | |
|-----------------|-----------------|----|----------------|-------|-----|---------|-----------------|-----|-----------------|
| SO ₂ | NO ₂ | CO | O ₃ | | | | | | GB3095-2012 |
| | | | | 14.8% | 34% | 33% | 49% | HCl | Cl ₂ |
| | | | | | | TJ36-79 | 1 | | |
| | | | | HCl | | 16% | Cl ₂ | | VCM |

36 / 30 /

| | | | | | | | | | |
|-----------------|-----------------|----|----------------|-------|-----|---------|-----|-----|-----------------|
| SO ₂ | NO ₂ | CO | O ₃ | | | | | | GB3095-2012 |
| | | | | 32.7% | 61% | 51% | 50% | HCl | Cl ₂ |
| Hg | | | | | | TJ36-79 | 1 | | |
| | | | | HCl | Hg | | | 13% | 3% |

Cl₂ PM_{2.5} PM₁₀

0.39 0.33 TSP 9

0.19

4.1.4.2

1

pH

GB3838-2002

V

2

3

pH

GB3838-2002

V

2

2

GB/T14848-93

GB 5749-2006

4.1.4.3

GB12348-2008 3

4.1.4.4

pH

GB15618-1995

4.1.5.1

| | | |
|-------|--------------------------|---------|
| | 0.0018mg/m ³ | TJ36-79 |
| 3.63% | 0.00005mg/m ³ | TJ36-79 |
| 5.44% | 0.00002mg/m ³ | TJ36-79 |
| 2.12% | | |

1060m

4.1.5.2

4.1.6

(HJ/T169-2004)

70 /

57.564

7225.5

,

-

" "



GB16297-1996)

15

"

"

(GB18597-2001)

(HJ2025-2012)

(GB12348-2008)3



[2015321]

GB16297-1996

5.1-1

| | | m | mg/m ³ | kg/h | |
|--|-----|----|-------------------|----------------------|--------------|
| | | 15 | 0.012 | 1.5×10^{-3} | GB16297-1996 |
| | HCl | | 100 | 0.26 | |

(GB12348-2008) 3

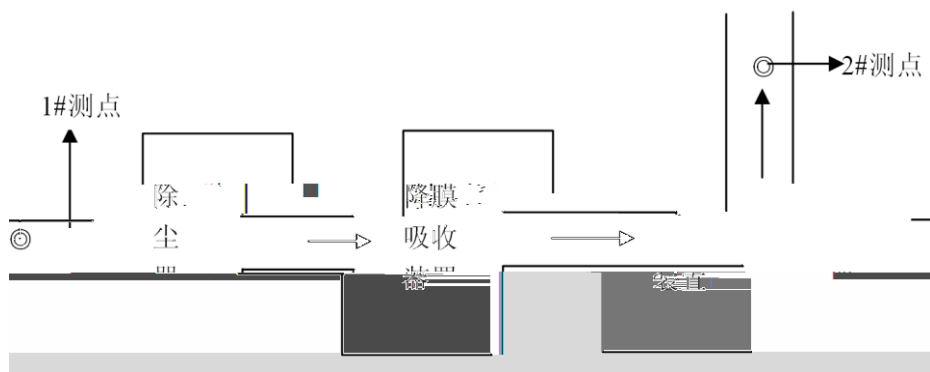
5.2-1

| | | 65 | dB A | GB12348-2008 |
|--|--|----|------|--------------|
| | | 55 | | |

1600 / 2200 / 1000 / 100% / 75%

6.2-1

| | | | |
|--|----|--|-------|
| | | | |
| | 1# | | 3 / 2 |
| | | | 3 / 2 |
| | 2# | | 3 / 2 |
| | | | 3 / 2 |



6.2-2

| | | |
|--|--|-------------|
| | | HJ 543-2009 |
|--|--|-------------|

(GB/T1

4.9mg/m³

8.39×10⁻⁴kg/h

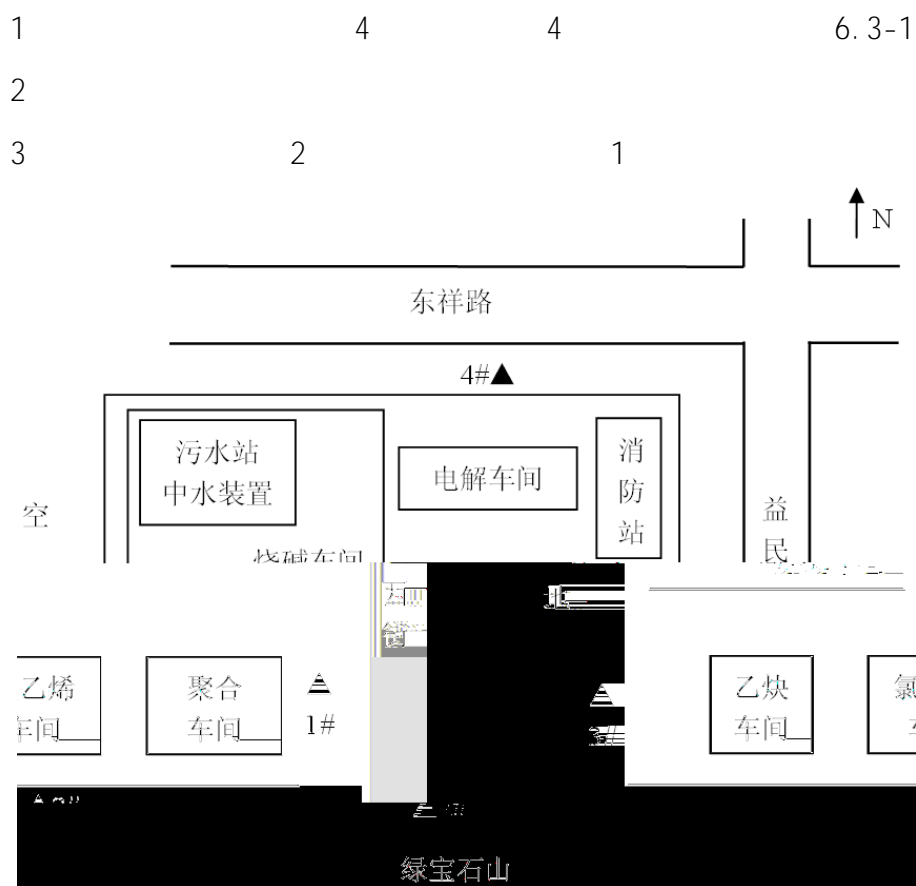
0.0036mg/m³

6.52×10⁻⁷kg/h

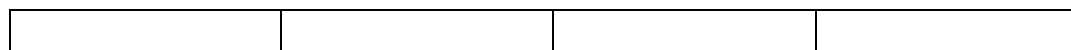
2.3mg/m³

4.96×10⁻⁴kg/h

GB16297-1996 2



6.3-1



| | |
|--|----------|
| | |
| | AWA6228+ |

(GB12348-2008)

- 1
- 2
- 3 0.5dB A 0.5dB A
- 4
- 5 5.5m/s

6.3-2

| | | | 2017.12.14 | 2017.12.15 | 2017.12.14 | | 2017.12.15 | |
|----|--|--|------------|------------|------------|------|------------|------|
| | | | Leq | Leq | Leq | Lmax | Leq | Lmax |
| 1# | | | 58.5 | 59.2 | 48.2 | 53.4 | 48.8 | 53.8 |
| 2# | | | 57.8 | 58.1 | 47.9 | 54.5 | 49.5 | 54.4 |
| 3# | | | 55.7 | 55.9 | 47.6 | 51.4 | 47.5 | 51.1 |
| 4# | | | 58.5 | 58.5 | 48.4 | 53.0 | 48.8 | 52.8 |

24

59.2dB A 54.5dB A

GB12348-2008

3

4.46×

10^{-4} kg/h 2.74×10^{-7} kg/h 8000

3.568kg/a 0.00219kg/a

2014 12 9

2015 4 3

[2015]321

2015

" "

1

2

1025t/a

| | |
|-----------------|-----------------|
| | GB16297-1996) |
| " | |
| (GB18597-2001) | |
| (HJ2025-2012) | |
| (GB12348-2008)3 | (GB12348—2008)3 |
| | |
| | |

-

2018 1 12

,

,

,

,

3

23

,

650109-2017-024-M

-

-

-

30

-

9.3-1

9.3-2

-

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|

-

| | | | % |
|--|--|----|-----|
| | | 24 | 80 |
| | | 0 | 0 |
| | | 6 | 20 |
| | | 27 | 90 |
| | | 0 | 0 |
| | | 3 | 10 |
| | | 22 | 73 |
| | | 0 | 0 |
| | | 8 | 27 |
| | | 30 | 100 |
| | | 0 | 0 |
| | | 0 | 0 |
| | | 15 | 50 |
| | | 8 | 27 |
| | | 3 | 10 |
| | | 4 | 13 |
| | | 26 | 87 |
| | | 4 | 13 |
| | | 0 | 0 |

-

2004 1 16

70

54

30

2014 12 9

2015 4 3

[2015]321

2015

9448

10.1.2.1

2200 /

100%

1600 /

100%

75%

10.1.2.2

GB16297-1996 2

10.1.2.3

24

59.2dB A

54.5dB A

GB12348-2008 3

10.1.2.4

1025t/a

2015 8 25

[2015]948

800t/a

10.1.2.5

4.46×

10^{-4} kg/h 2.74×10^{-7} kg/h

8000

3.568kg/a 0.00219kg/a

10.1.2.6

10.1.2.7

