

T/GDAEPI 21 2023

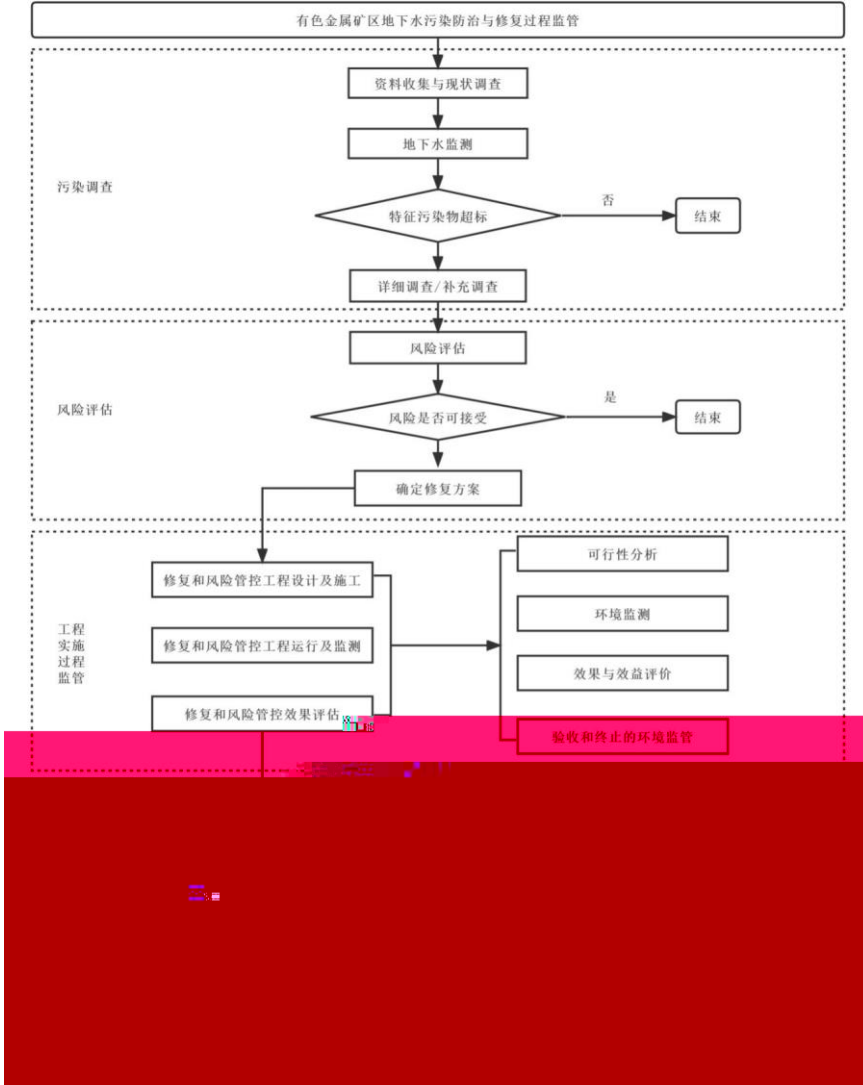
Technical specification for supervision of groundwater pollution prevention and
remediation process in nonferrous metal mining areas

T/GDAEPI 21 2023

T/GDAEPI 21 2023

:

groundwater vulnerability



T/GDAEPI 21 2023

GB 8537

HJ 25.3

HJ

164 2020

GB/T 14848

HJ/T 91.2

HJ/T 166

HJ/T 20

HJ/T 91.2

HJ 164 2020

1

3

2

HJ 164 2020

T/GDAEPI 20 2023

[A1]:

HJ 164 2020 1

T/GDAEPI 17 2023

[A2]:

6.3.1

5

HJ/T 91.2

1

1
3
30 m 50 m 1
30 m 50 m 2 3
1
1
HJ 164 2020

DZ/T 0270

A

2

1 m

15 min

a) HJ 164 2020 C

/

b)

c)

HJ/T 91.2 HJ/T 166

VOCs

SVOCs

HJ 1019 HJ 164 2020 C

HJ 164 2020 HJ/T 91.2 HJ/T 166

T/GDAEPI 21 2023

B

pH

HJ 164 2020

GB 3838

GB 36600

HJ 168

HJ 630

RB/T 214

HJ 164 2020

$$P_i = T_i \times L_i \times Q_i \dots\dots\dots 1$$

P_i i
 T_i i
 L_i i
 Q_i

T_i 3 1 km 2
 L_i 1

1

	L_i
	0.1
	0.5
	0.7
	0.5
	1

2

2

	Q_i
	3
	6

	Q_i
	9

2004 208

$$P_I = \sum W_i \times P_i \dots\dots\dots 2$$

P_I

W_i i

P_i i

P_I

6

W_i

5

PI

5

3

P_I					

D

HJ 164 2020

HJ 164 2020

pH

GB/T

14848

HJ 164 2020 E

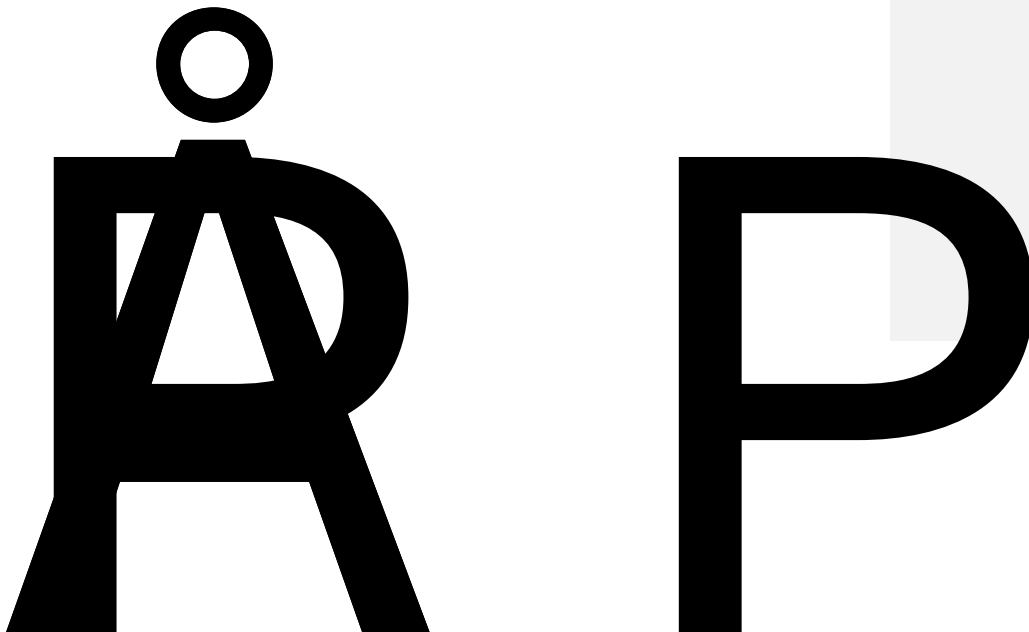
T/GDAEPI 21 2023

2

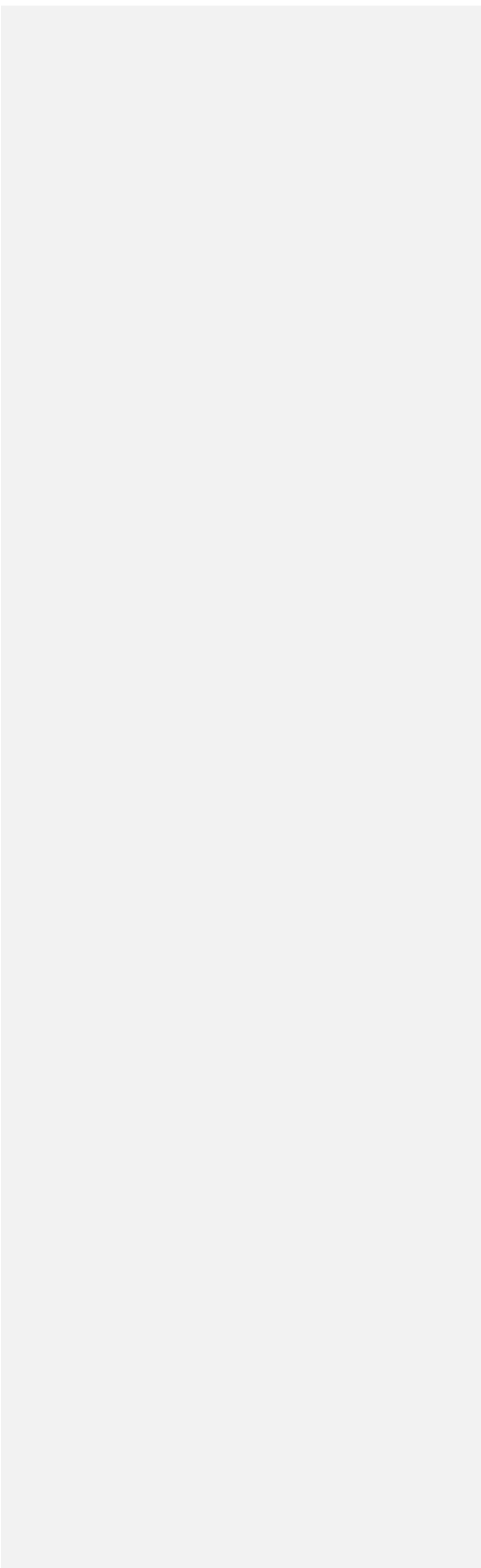
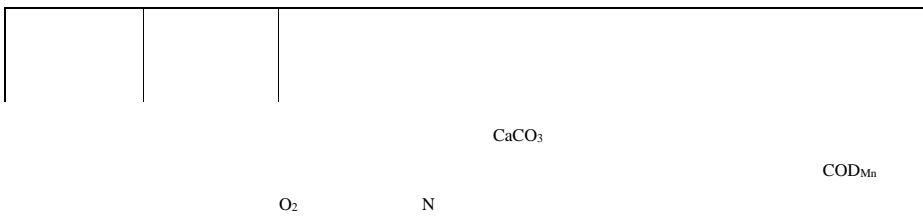
1 ~2

A.1

	— —				



B.1



C

EPA DRASTIC

DRASTIC

A

S

T

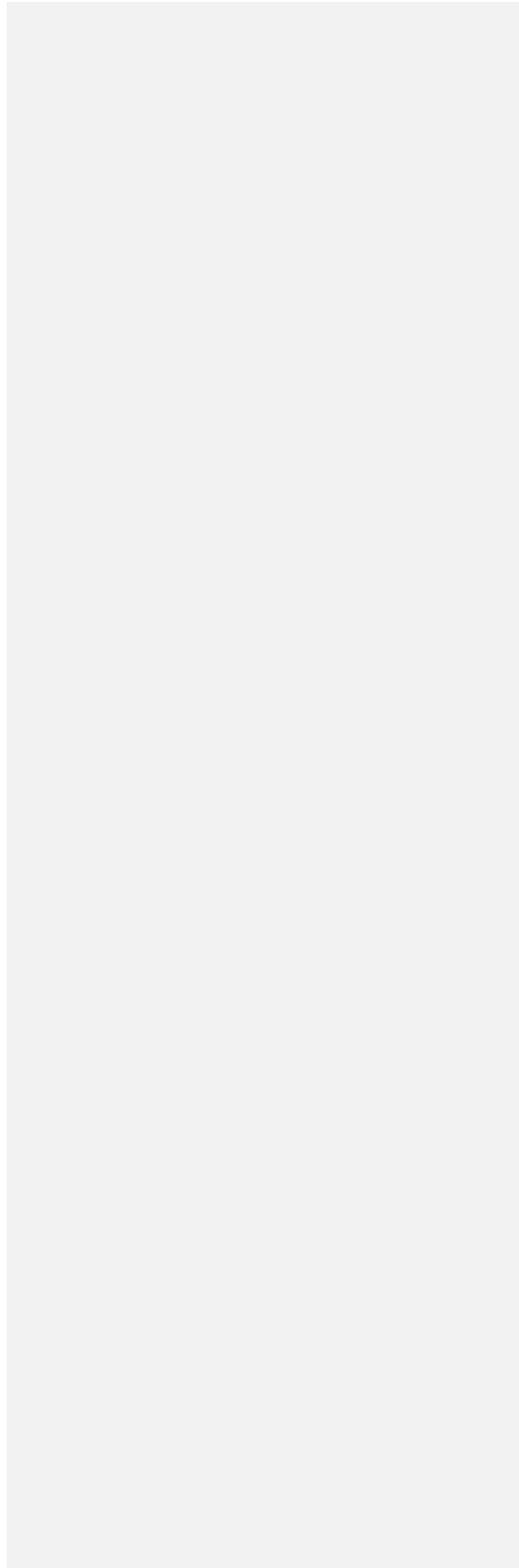
D

I

R

C

C.1



DRASTIC

DRASTIC

5,4,3,2,1,5,3

DRASTIC

DRASTIC = 5 × D + 4 × R + 3 × A + 2 × S + 1 × T + 5 × I + 3 × C.....

200

23
100

226
10

DRASTIC
DRASTIC 50

DRASTIC

5

C.2

DRASTIC

$$R_C = \sum [1 - \exp(-D_i Q_i / W)] \dots\dots\dots$$

R_C
 D_i
 Q_i
 W

i
 i

mg kg d⁻¹;

kg (d mg)⁻¹

kg

$$R_n = (D_i / R_{FDi}) \times 10^{-6} / W \dots\dots\dots$$

- [1] GB 3838
 - [2] GB 8537
 - [3] GB/T 14848
 - [4] GB 36600
 - [5] DZ/T 0270
 - [6] DZ/T 0282 2015 1:50000
 - [7] HJ 2.1
 - [8] HJ 19
 - [9] HJ/T 20
 - [10] HJ 25.2
 - [11] HJ 25.3
 - [12] HJ/T 91.2
 - [13] HJ 164 2020
 - [14] HJ/T 166
 - [15] HJ 610
 - [16] HJ 964 ()
 - [17] HJ 1019
 - [18] GWI-D3 1112
 - [19] T/GDAEPI 17 2023
 - [20] T/GDAEPI 20 2023
 - [21]
 - [22] 2014 99
 - [23] 2019 770
 - [24] 2019 770
 - [25] 2004 208
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