

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

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T/GDAEPI 21 2023



T/GDAEPI 21 2023

groundwater vulnerability

8

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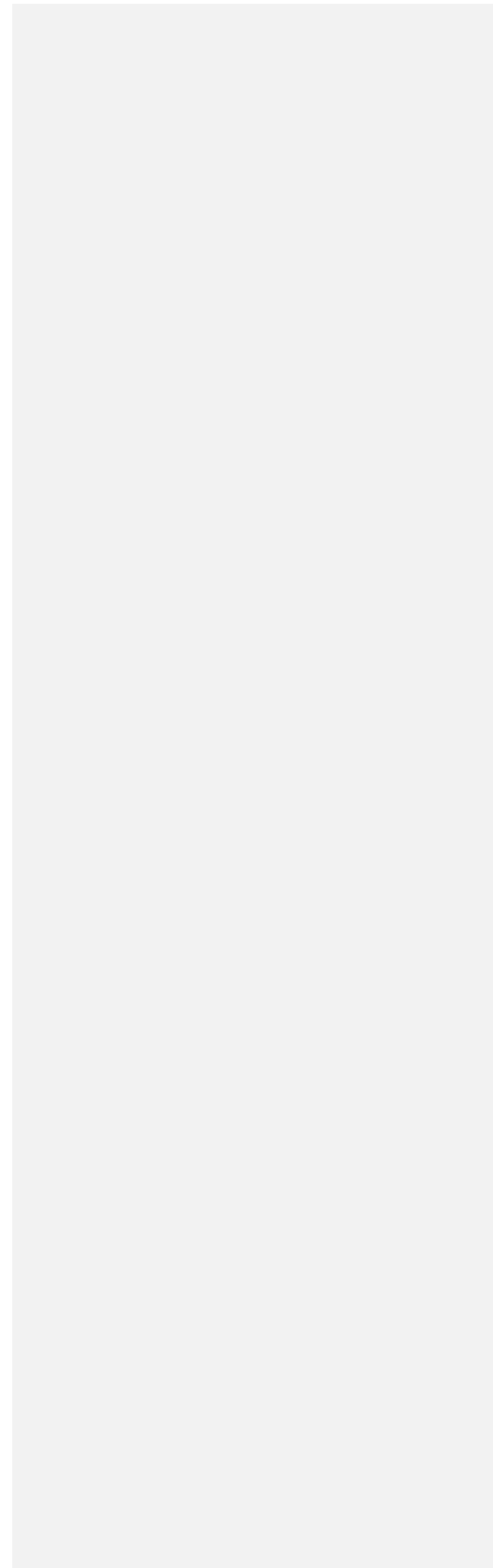
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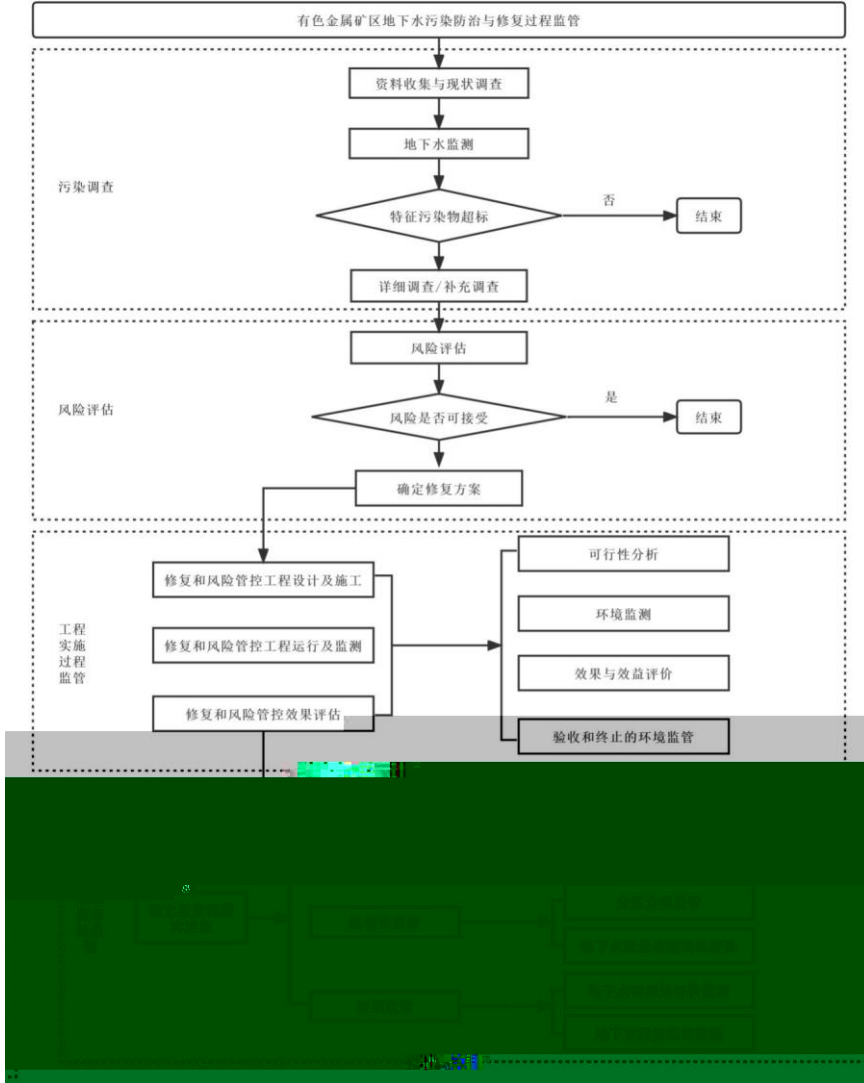
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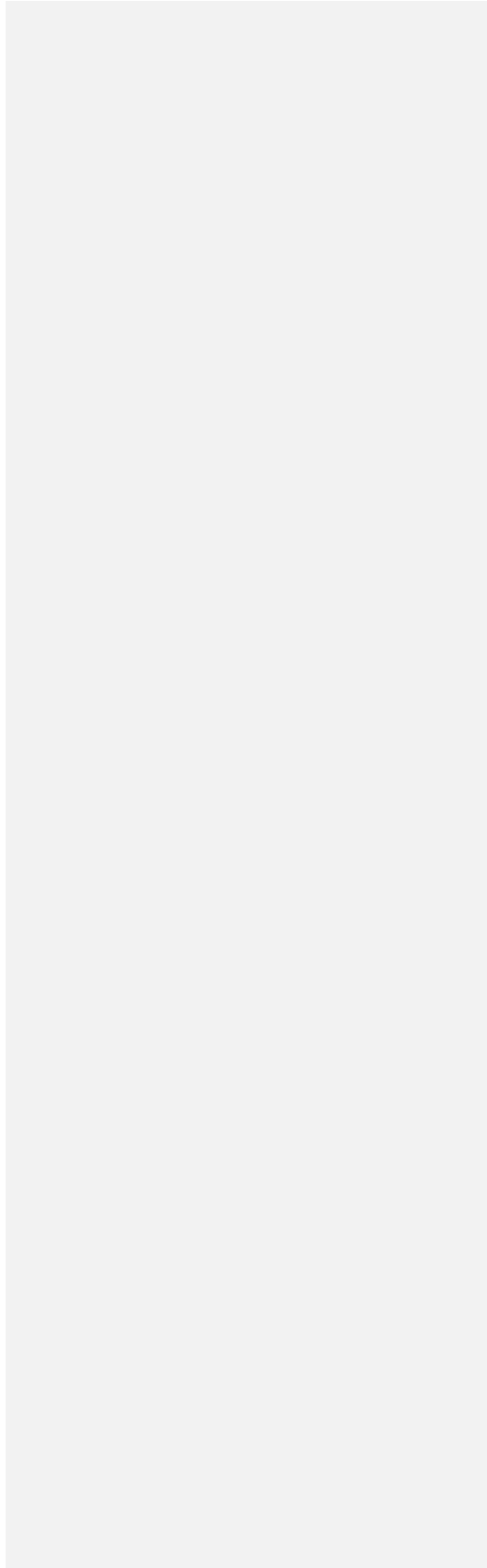
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T/GDAEPI 21 2023

GB 8537

HJ 25.3

HJ

164 2020

GB/T 14848

8  
HJ/T 91.2

HJ/T 166

HJ/T 20

HJ/T 91.2

HJ 164 2020

1

3

2

HJ 164 2020

8

T/GDAEPI 20 2023

[A1]:

8

8

8

1

HJ 164 2020

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

8

8

DZ/T 0270

8

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

8

8

8

8

-

8

8

8

*T*

*L*

1

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

*P<sub>i</sub>*      *i*  
*T<sub>i</sub>*      *i*  
*L<sub>i</sub>*      *i*  
*Q<sub>i</sub>*

*T<sub>i</sub>*    3

1 km

2

8

*L<sub>i</sub>*

1

1

	<i>L<sub>i</sub></i>
	0.1
	0.5
	0.7
	0.5
	1

8 8

2

2

	<i>Q<sub>i</sub></i>
	3
	6

	$Q_i$
	9

2004 208

8

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

$P_I$

$W_i \quad i$

$P_i \quad i$

$P_I$

6

$W_i$

5

8

PI

5

3

$P_I$					

8

8

8

D

HJ 164 2020

HJ 164 2020

pH

8

GB/T

14848

HJ 164 2020 E

8



T/GDAEPI 21 2023

8

2

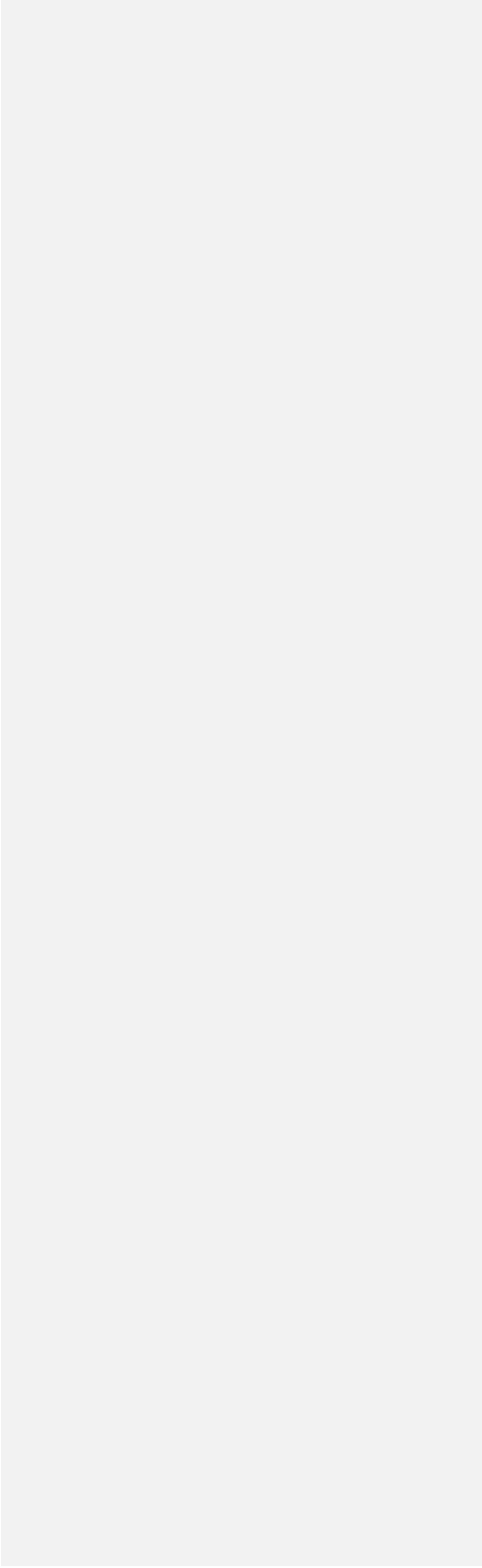
1 ~2

8

8

8

8



A.1

	— —				



C

EPA DRASTIC

DRASTIC

A

S

T

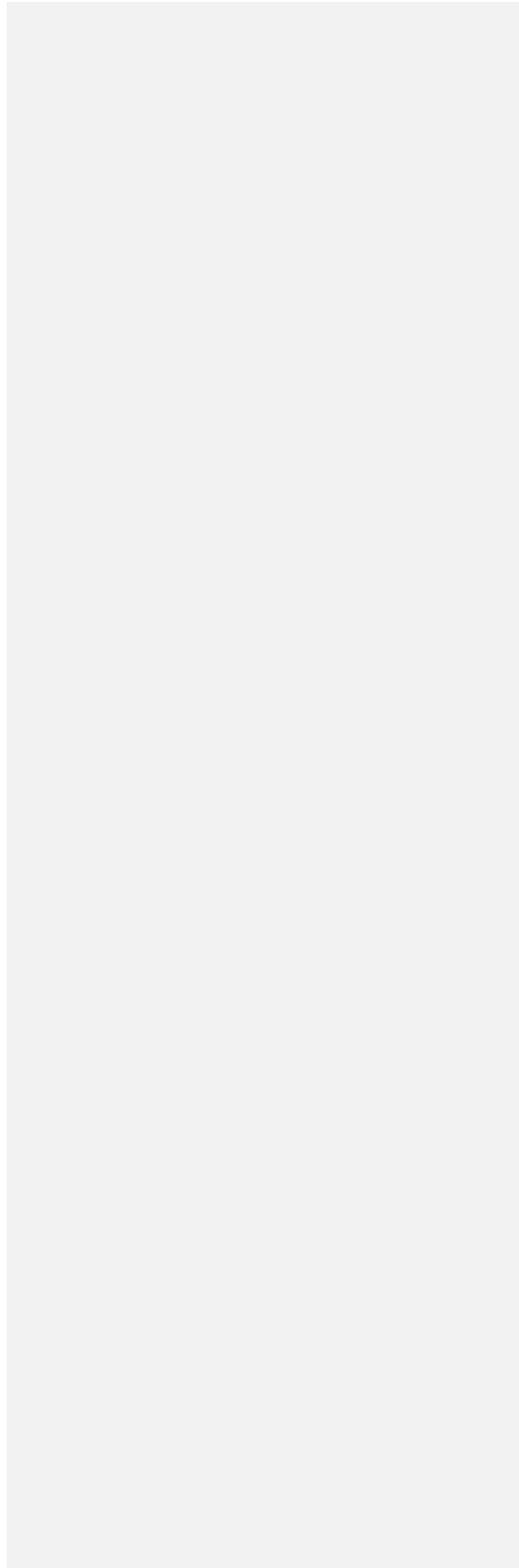
D

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 23 226 DRASTIC 50
8 100 10 DRASTIC
DRASTIC 5 C.2

Table with 6 columns and 3 rows.

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<sup>-1</sup>;

kg (d mg)<sup>-1</sup>

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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