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**A Study on the Management Procedures for Radioactive Waste arising
from KRR 1&2 Decommissioning Activities**

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Abstract

The various kind of radioactive wastes will be arisen from the decontamination and decommissioning (D&D) of Korean Research Reactor (KRR) 1&2. It is needed to establish the management procedures on D&D radioactive wastes for the purpose of managing radioactive wastes systematically and effectively. The management procedures will contribute to protecting workers, publics and environment from the radioactive hazard. In this study, the management guidelines were developed, which is essential to establish the management procedures on D&D radioactive wastes. And it was investigated the items concerning the procedures and a plan to establish the procedures. All radioactive wastes arising from D&D of KRR 1&2 will be safely managed by the management procedures.

1.

1, 2 (TRIGA Mark-II & III) 1962

1972 가

가 가 가 , 1995

가 [1].

1, 2

2

1, 2

2

[1].

가

4m³

[2].

1, 2

2.

- 1, 2
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- .
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3.

가.

1, 2

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가

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가

가

[3].

가

(graphite)

가

1, 2

4.

1, 2

가 [3].

[3].

가.

1) ()

1 , , 2 (PVC) .

2)

- 4 : 10m³ × 4 EA

- 3 : 45m³ × 3 EA

3)

- : 1

- : 1

- : 1

- : 1

4)

가

- : 1
- : 1
- : 1

5)

-
- : 1.125m × 1.45m, 184

6)

- 3가
- ① :
- ② (2000 cps) :
- ③ : ① ②

7)

- 가

1)

- 2
- 4m 가 4m³ [4] 100 460m² ×

2)

- 2

4m³ 240 , 7.5

3)

300m² × 4m

5.

가.

1 [5] 가

1.

		(Bq/cm ³)
	VL	ND A < 0.2
	LL	0.2 A < 4,000
	ML	4,000 A < 4 × 10 ⁵
	HL	4 × 10 ⁵ A
	O	
	A	

1)

2 [3, 5] 가

① 가 , PE

가 , 가

② 가 , ,

가 가

③ , , ,

가

④ ,

⑤

(HEPA Filter)

⑥ , , 가

⑦ 가

⑧ 가 가 가

2.

	$< 0.4 \text{ Bq/g}$ Bq/cm^2 (,) $< 2 \times 10^{-3} \text{ A}_2/\text{g}$ (LSA-III) $2 \times 10^{-3} \text{ A}_2/\text{g}$ (LSA-III)			A_2 IAEA Safety Standards Series No. ST-1(1996) Table 1
C	가	SR		
IC	가	SF		
NC		L		
		SS		

2)

①

②

③

④

1

0.1

2

⑤

가

⑥

⑦

⑧

[6]

(

96-38) [7]

⑨

1)

①

pH,

②

1

③

④

가

⑤

(,)

2)

①

가

②

③

(96-38)

④

⑤

6.

가.

가

[8].

가

(OP-01-01)

1)

2

1

가

2)

1, 2

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(OP-01-02)

- ① Filter -1 Micro Filter Charcoal
- ② -2
- ③ -2

(OP-01-03)

- ① (RO) (MF)
- ② (UF)
- ③ MF UF
- ④ UF MF
- ⑤ MF

(OP-01-04)

(NP-10)

(NP-20)

가

7.

가.

가

가

1)

6

가

2)

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7.

1, 2

1, 2

1, 2

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