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Processing and storage of radioactive waste in Specialized Division „Permanent Repository for Radioactive Waste - Novi Han“ (SD “PRRAW – Novi Han”)

Dimitrinka.Atanasova

Abstract: In this paper are discussed methods and procedures for the processing and storage of radioactive waste in SD “PRRAW – Novi Han” and storage sites .

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1. ALARA (ALARP)

ALARA – As Low As Reasonably Achievable -

ALARP – As Low As Reasonably Practicable -

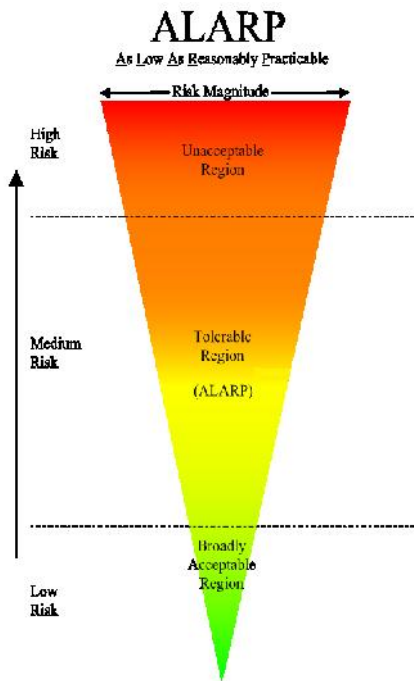
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ALARA (ALARP)

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.2 ALARA

2.

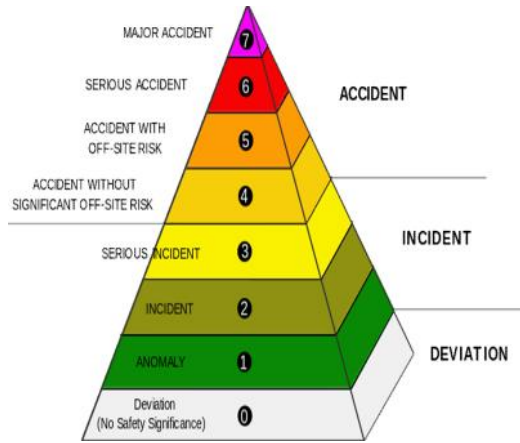
1990 .

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1. 0 –
2. 1 –
3. 2 – 1mSv, 50 mSv/h,
4. 3 – 1Sv/h
5. 4 – 0,1%
6. 5 –
7. 6 –
8. 7 –

“ 1”.

3.

440 MW 1 4 ”

(42.6 % 2006 .) 40-45% 32%.

1970 . 1- 1991 .

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1000)

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4

5- 6-

2 000 W. 1. - 5 6 ” -1000

(2000 MW), -320, “, 5 -

1987 ., 6- 1991 .

2008 . 212

2. 5 2017 ., 6 2021 . -440

(-230 (3 4), 1760 MW), -230 (1-4, 1 2)

2002 . 2006 . 2014 . 1 2

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-1000. 2014 .

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2015 .

-440 (1-4 ” “)

1-4 ” ” ”) (- ”

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1974 .,

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4.

2000

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1-

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(100),

- 1 -

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2a-

(

4.106 Bq/ .

137Cs),

4.105 Bq/ .;

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2a;

3-

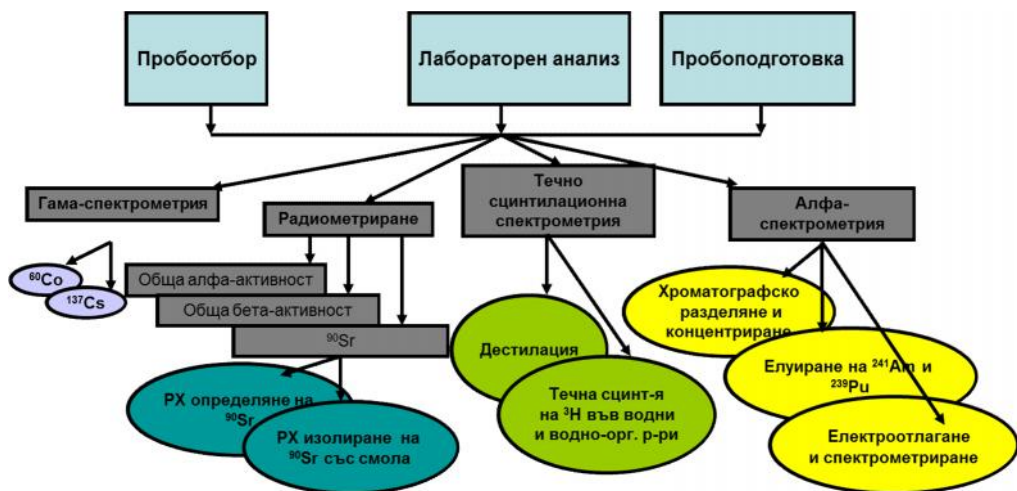


.4

• 2-I-	-	1μSv/h	0,3 mSv/h;	-	0.1m
• 2-II-	-	0,3 mSv/h	10mSv/h;	-	0.1m
• 2-III-	-	10mSv/h;		-	0.1m
• 2 - -	-			3,7.105 Bq/l	
• 2 - -	-			3,7.105 Bq/l	7,2.107 Bq/l
• 2 - -	-				7,2.107 Bq/l.

3

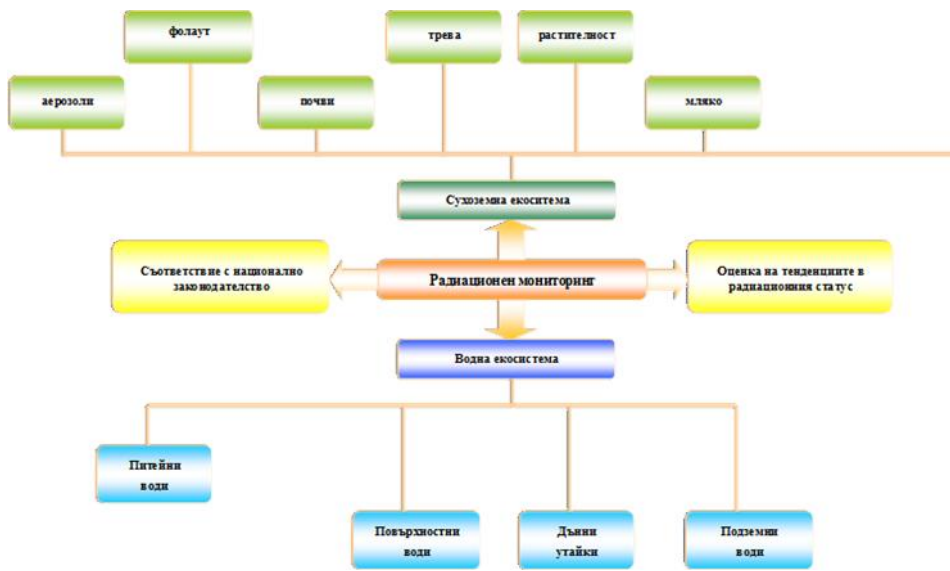
Определяне на нуклиден състав и активност на течни РАО

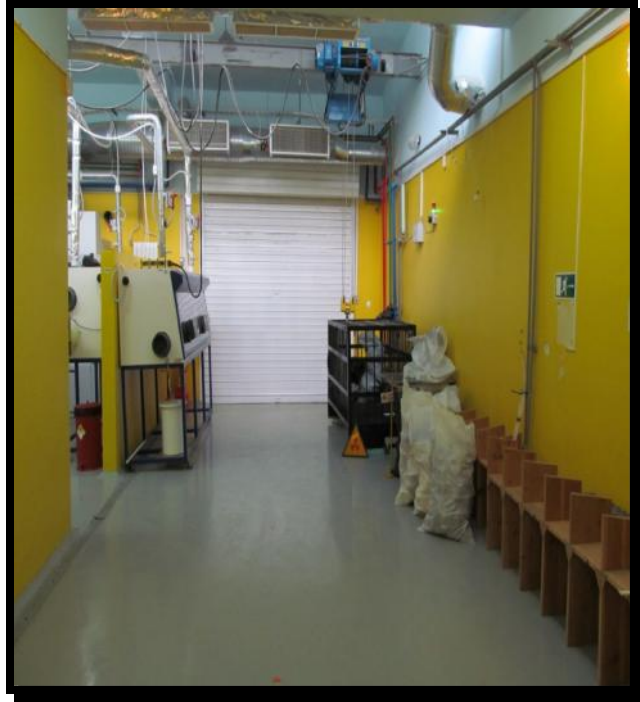


.5

500 TBq.

: ^{137}Cs , ^{134}Cs , ^{60}Co , ^{241}Am , $^{239,240}\text{Pu}$, ^{90}Sr , ^3H ,





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1. (,)

500m³/h



.8

2. () -



.9

3.

200



.10

4.



.11

5.

500 kN

200

4.



.12

6.

1000



.13

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500 TBq.

^{137}Cs ^{60}Co .



.14

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“ - ”

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- 5. 2014 .**
1. (- 12 110 .
 - 6 , 1, WAK 70130, , 21) 20 942 . , :
 - ^{239}Pu ,
 - ^{241}Am ,
 - ^{85}Kr .
 2. - 300 . , :
 - 616 ^{137}Cs
 - 129 ^{60}Co
 3. - 11 :
 - 22,4 m²
 - 14 .
 4. - 8,672 m³ .
 :
 - o
 - <0.5 Bq/L;
 - =2 Bq/L;
 - =400 Bq/L.
 5. - 103 L , :
 - ^{137}Cs ,
 - ^{60}Co ,
 - ^3H ,
 - ^{14}C
 6. - 2,6 ³

6.

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2030 .

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