$$A = A_0 e^{-\lambda t}$$

$$A_0 e^{-\lambda t} = A$$

$$A_0 = \frac{A}{e^{-\lambda t}} = A e^{\lambda t}$$

---

1 Hectare = 10,000 m^2

1 km^2 = 1,000,000 m^2 = .3861 mi^2

$$3.20 \times 10^4 \text{ hectares} \cdot \frac{10^4 \text{ m}^2}{\text{hectare}} \cdot \frac{.3861 \text{ mi}^2}{10^6 \text{ m}^2} = 124 \text{ mi}^2$$

(10^2 / 10^2)

$$\frac{.3861 \text{ mi}^2}{10^6 \text{ m}^2} \cdot \frac{10^4 \text{ m}^2}{\text{hectare}} = \frac{.003861 \text{ mi}^2}{\text{hectare}}$$

$$1\text{yr}\left(3.20 \times 10^4 \text{ hectare}\right) \cdot \left(.003861 \frac{\text{mi}^2}{\text{hectare}}\right) = 124 \text{ mi}^2 \quad \checkmark$$

$$30\text{ day}\left(3.43 \times 10^4 \text{ hectare}\right) \cdot \left(.003861 \frac{\text{mi}^2}{\text{hectare}}\right) = 132 \text{ mi}^2$$

C/3

90 days $(3.42 \times 10^4 \text{ hectare})\left(.003861 \frac{\text{mi}^2}{\text{hectare}}\right) = 132 \text{ mi}^2$

Case VI. A.

12 days following discharge of last batch

Files: atmos 6a.inp
early1.inp
Chrac1.inp
SURSIT.inp
METSUR.inp
6a_nout

$(3.44 \times 10^4 \text{ hectares})\left(.003861 \frac{\text{mi}^2}{\text{hectare}}\right) = 133 \text{ mi}^2$

4/21/99

Nuclide	(CALCULAT 12 days after last batch put in pool (Bq)
Co-58	1.01E+15
Co-60	1.39E+16
Kr-85	5.23E+16
Rb-86	7.28E+14
Sr-89	3.97E+17
Sr-90	5.26E+17
Y-90	5.30E+17
Y-91	5.40E+17
Zr-95	8.72E+17
Nb-95	1.14E+18
Mo-99	5.60E+16
Tc-99m	5.37E+16
Ru-103	7.91E+17
Ru-106	6.59E+17
Sb-127	8.09E+15
Te-127	9.17E+15
Te-127m	9.04E+15
Te-129	1.47E+16
Te-129m	2.26E+16
Te-132	6.82E+16
I-131	2.15E+17
I-132	7.02E+16
Xe-133	2.97E+17
Cs-134	2.97E+17
Cs-136	1.95E+16
Cs-137	7.48E+17
Ba-140	5.09E+17
La-140	5.85E+17
Ce-141	7.17E+17
Ce-144	1.02E+18
Pr-143	5.04E+17
Nd-147	1.77E+17
Np-239	#VALUE!
Pu-238	1.67E+16
Pu-239	3.29E+15
Pu-240	4.81E+15
Pu-241	8.49E+17
Am-241	1.07E+16
Cm-242	5.79E+16
Cm-244	8.41E+15

Case VI.A.

It's a Coincidence - I checked it.