**Section 340.APPENDIX A Decontamination Guidelines**

a) Surface Contamination Guide

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| Alpha Emitters: | | |
| Removable | 555 mBq (15 pCi) per 100 cm2  33 dpm per 100 cm2 | average over any one surface |
| 1.67 Bq (45 pCi) per 100 cm2  100 dpm per 100 cm2 | maximum |
| Total Fixed | 16.7 Bq (450 pCi) per 100 cm2  1,000 dpm per 100 cm2 | average over any one surface |
| 83.3 Bq (2,250 pCi) per 100 cm2  5,000 dpm per 100 cm2 | maximum |

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| Beta-Gamma Emitters: | | |
| Removable  (all beta-gamma emitters except hydrogen-3) | 3.7 Bq (100 pCi) per 100 cm2  222 dpm per 100 cm2 | average over any one surface |
| 18.5 Bq (500 pCi) per 100 cm2  1,110 dpm per 100 cm2 | maximum |
| Removable  (hydrogen-3) | 37 Bq (1,000 pCi) per 100 cm2  2,220 dpm per 100 cm2 | average over any one surface |
| 185 Bq (5,000 pCi) per 100 cm2 | maximum |
|  | | |
| Total Fixed | 2.5 microSv (250 microrem) per hour at 1 cm from surface | |

b) Concentration in air and water: tables I and II of appendix B to 10 CFR 20, published at 72 Fed. Reg. 55922, October 1, 2007.

c) Concentrations in soil and other materials except water:

1) Radioactive material except source material and radium: Column II of 32 Ill. Adm. Code 330.Appendix A.

2) Source material and radium: Concentration of radionuclides above background concentrations for total radium, averaged over areas of 100 square meters, shall not exceed:

A) 185 mBq (5 pCi) per gram of dry soil, averaged over the first 15 centimeters below the surface; and

B) 185 mBq (5 pCi) per gram of dry soil, averaged over layers of 15 centimeters thickness more than 15 centimeters below the surface.

d) The level of gamma radiation measured at a distance of 100 centimeters from the surface shall not exceed background.

AGENCY NOTE: This appendix shall be used only as a guide. The Agency may require lower values in specific instances, depending upon radionuclides, type of surface, intended present and future use, etc.

(Source: Amended at 35 Ill. Reg. 934, effective December 30, 2010)