

Schedule IV Control limits for radionuclides

1. Schedule IV-1 gives the lung absorption types, the dose conversion coefficients via inhalation and ingestion and the derived air concentrations (DAC) for radiation workers. Schedule IV-2 gives the lung absorption types and the concentration limits of released radionuclides in air and water for members of the public.
2. Lung absorption type refers to the following three types of materials which are classified based on the absorption rate into blood, defined in the clearance model developed by the ICRP for the removal of material from the respiratory tract by particle transport and by absorption into the blood: (1) Type F materials refer to deposited materials that are readily absorbed into blood from the respiratory tract (Fast solubilization). The default biological half life is 10 minutes. (2) Type M materials refer to deposited materials that have intermediate rates of absorption into blood from the respiratory tract (Moderate rate of solubilization). The default biological half lives are 10% of 10 minutes and the rest 90% of 140 days. (3) Type S materials refer to deposited materials that are relatively insoluble in the respiratory tract (Slow solubilization). The default biological half lives are 0.1% of 10 minutes and the rest 99.9% of 7000 days.
3. The derived air concentration (DAC) values are derived limits for control of chronic exposures that may be extended up to one year. The DAC values are derived by either one of the two following methods:
 - (1) for those radionuclides for which intake (committed effective dose) is limiting, the annual effective dose limit 50 mSv of occupational exposure for radiation workers is divided by $DCF \times 1000 \times 2400$. The factor DCF is the committed effective dose per unit intake $h(g)_{5\mu m}$ via inhalation for workers as given in Schedule III-1. The factor 1000 converts mSv to Sv, while 2400 is the volume of air in m^3 breathed at work each year by reference man under working condition of light activity (page 23 of ICRP Publication 66).
 - (2) for those radionuclides for which submersion (external exposure) is limiting, the annual effective dose limit 50 mSv is divided by $DCN \times 1000 \times 83.3$. The factor DCN is the effective dose rate per unit integrated air concentration as given in Schedule III-10 for adults. The factor 1000 converts mSv to Sv, while 83.3 is the equivalent days for annual occupational exposure of 2000 hours.
4. DAC values relate to intake, by specific route of entry into the body, of the single radionuclide given and include an appropriate allowance for any daughter radionuclides produced in the body during the decay of the parent nuclide. However, intakes that include both parent and daughter radionuclides shall be treated by the general method appropriate to mixtures.
5. The values of DAC do not apply directly when the radiation worker both ingests and inhales a radionuclide and when the radiation worker is exposed to a mixture of radionuclides, or when the radiation worker is exposed to F, M or S lung absorption type of the same radionuclide, or when

the radiation worker is exposed to both internal and external radiation simultaneously.

6. For the Effluent Concentrations in columns 4 and 5 of Schedule IV-2 are applicable to the assessment and control of dose to the public.

The Effluent Concentrations in air are derived by one of two following methods:

- (1) for those radionuclides for which intake (committed effective dose) is limiting, the annual effective dose limit 1 mSv for members of the public is divided by $DCA \times 1000 \times 22.2 \times 365$. The factor DCA is the committed effective dose per unit intake h(g) via inhalation for members of the public (age >17), as given in Schedule III-5. The factor 1000 converts mSv to Sv, 22.2 is the daily volume of air in m^3 breathed for members of the public (age >17, page 11 of ICRP publication 71), and 365 is the total days in a year.
- (2) for those radionuclides for which submersion (external exposure) is limiting, the annual effective dose limit 1 mSv for members of the public is divided by $DCN \times 1000 \times 365$. The factor DCN is the effective dose rate per unit integrated air concentration as given in Schedule III-10 for adults. The factor 1000 converts mSv to Sv, while 365 is the total days in a year.

The effluent concentrations in water, the annual effective dose limit 1 mSv for members of the public is divided by $DCW \times 1000 \times 1.095$. The factor DCW is the committed effective dose per unit intake h(g) via ingestion for members of the public (age >17) as given in Schedule III-4. The factor 1000 converts mSv to Sv, while 1.095 is the annual intake volume of water in m^3 for members of the public (age >17, page 360 of ICRP Publication 23).

7. The monthly average concentrations in column 6 of Schedule IV-2 for releases to sewers are those addressed in Article 14 of the Standards. The annual effective dose limit 1 mSv for members of the public is divided by $DCW \times 1000 \times 1.095 \times 0.1$. The factor DCW is the committed effective dose per unit intake h(g) via ingestion for members of the public (age >17) as given in Schedule III-4. The factor 1000 converts mSv to Sv, 1.095 is the annual intake volume of water in m^3 for members of the public (age >17, page 360 of ICRP Publication 23), while 0.1 is the modifying factor for possible ingestion of water acquiring from sewers by mistake.

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| 1 | Hydrogen | | | | |
| | Tritiated Water | | | 1.8×10 ⁻¹¹ | |
| | OBT | | | 4.2×10 ⁻¹¹ | |
| 4 | Beryllium | | | | |
| | Be-7 | M | 4.3×10 ⁻¹¹ | 2.8×10 ⁻¹¹ | 4.84×10 ⁵ |
| | | S | 4.6×10 ⁻¹¹ | | 4.53×10 ⁵ |
| | Be-10 | M | 6.7×10 ⁻⁹ | 1.1×10 ⁻⁹ | 3.11×10 ³ |
| | | S | 1.9×10 ⁻⁸ | | 1.10×10 ³ |
| 6 | Carbon | | | | |
| | C-11 | | | 2.4×10 ⁻¹¹ | |
| | C-14 | | | 5.8×10 ⁻¹⁰ | |
| 9 | Fluorine | | | | |
| | F-18 | F | 5.4×10 ⁻¹¹ | 4.9×10 ⁻¹¹ | 3.86×10 ⁵ |
| | | M | 8.9×10 ⁻¹¹ | | 2.34×10 ⁵ |
| | | S | 9.3×10 ⁻¹¹ | | 2.24×10 ⁵ |
| 11 | Sodium | | | | |
| | Na-22 | F | 2.0×10 ⁻⁹ | 3.2×10 ⁻⁹ | 1.04×10 ⁴ |
| | Na-24 | F | 5.3×10 ⁻¹⁰ | 4.3×10 ⁻¹⁰ | 3.93×10 ⁴ |
| 12 | Magnesium | | | | |
| | Mg-28 | F | 1.1×10 ⁻⁹ | 2.2×10 ⁻⁹ | 1.89×10 ⁴ |
| | | M | 1.7×10 ⁻⁹ | | 1.23×10 ⁴ |
| 13 | Aluminum | | | | |
| | Al-26 | F | 1.4×10 ⁻⁸ | 3.5×10 ⁻⁹ | 1.49×10 ³ |
| | | M | 1.2×10 ⁻⁸ | | 1.74×10 ³ |
| 14 | Silicon | | | | |
| | Si-31 | F | 5.1×10 ⁻¹¹ | 1.6×10 ⁻¹⁰ | 4.08×10 ⁵ |
| | | M | 1.1×10 ⁻¹⁰ | | 1.89×10 ⁵ |
| | | S | 1.1×10 ⁻¹⁰ | | 1.89×10 ⁵ |
| | Si-32 | F | 3.7×10 ⁻⁹ | 5.6×10 ⁻¹⁰ | 5.63×10 ³ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | | M | 9.6×10 ⁻⁹ | | 2.17×10 ³ |
| | | S | 5.5×10 ⁻⁸ | | 3.79×10 ² |
| 15 | Phosphorus | | | | |
| | P-32 | F | 1.1×10 ⁻⁹ | 2.4×10 ⁻⁹ | 1.89×10 ⁴ |
| | | M | 2.9×10 ⁻⁹ | | 7.18×10 ³ |
| | P-33 | F | 1.4×10 ⁻¹⁰ | 2.4×10 ⁻¹⁰ | 1.49×10 ⁵ |
| | | M | 1.3×10 ⁻⁹ | | 1.60×10 ⁴ |
| 16 | Sulphur | | | | |
| | S-35(inorganic) | F | 8.0×10 ⁻¹¹ | 1.4×10 ⁻¹⁰ | 2.60×10 ⁵ |
| | | M | 1.1×10 ⁻⁹ | 1.9×10 ⁻¹⁰ | 1.89×10 ⁴ |
| | S-35(organic) | | | 7.7×10 ⁻¹⁰ | |
| 17 | Chlorine | | | | |
| | Cl-36 | F | 4.9×10 ⁻¹⁰ | 9.3×10 ⁻¹⁰ | 4.25×10 ⁴ |
| | | M | 5.1×10 ⁻⁹ | | 4.08×10 ³ |
| | Cl-38 | F | 4.6×10 ⁻¹¹ | 1.2×10 ⁻¹⁰ | 4.53×10 ⁵ |
| | | M | 7.3×10 ⁻¹¹ | | 2.85×10 ⁵ |
| | Cl-39 | F | 4.8×10 ⁻¹¹ | 8.5×10 ⁻¹¹ | 4.34×10 ⁵ |
| | | M | 7.6×10 ⁻¹¹ | | 2.74×10 ⁵ |
| 18 | Argon | | | | |
| | Ar-37 | submersion | | | 1.46×10 ¹¹ |
| | Ar-39 | submersion | | | 5.46×10 ⁷ |
| | Ar-41 | submersion | | | 1.13×10 ⁵ |
| 19 | Potassium | | | | |
| | K-40 | F | 3.0×10 ⁻⁹ | 6.2×10 ⁻⁹ | 6.94×10 ³ |
| | K-42 | F | 2.0×10 ⁻¹⁰ | 4.3×10 ⁻¹⁰ | 1.04×10 ⁵ |
| | K-43 | F | 2.6×10 ⁻¹⁰ | 2.5×10 ⁻¹⁰ | 8.01×10 ⁴ |
| | K-44 | F | 3.7×10 ⁻¹¹ | 8.4×10 ⁻¹¹ | 5.63×10 ⁵ |
| | K-45 | F | 2.8×10 ⁻¹¹ | 5.4×10 ⁻¹¹ | 7.44×10 ⁵ |
| 20 | Calcium | | | | |
| | Ca-41 | M | 1.9×10 ⁻¹⁰ | 2.9×10 ⁻¹⁰ | 1.10×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Ca-45 | M | 2.3×10 ⁻⁹ | 7.7×10 ⁻¹⁰ | 9.06×10 ³ |
| | Ca-47 | M | 2.1×10 ⁻⁹ | 1.6×10 ⁻⁹ | 9.92×10 ³ |
| 21 | Scandium | | | | |
| | Sc-43 | S | 1.8×10 ⁻¹⁰ | 1.9×10 ⁻¹⁰ | 1.16×10 ⁵ |
| | Sc-44 | S | 3.0×10 ⁻¹⁰ | 3.5×10 ⁻¹⁰ | 6.94×10 ⁴ |
| | Sc-44m | S | 2.0×10 ⁻⁹ | 2.4×10 ⁻⁹ | 1.04×10 ⁴ |
| | Sc-46 | S | 4.8×10 ⁻⁹ | 1.5×10 ⁻⁹ | 4.34×10 ³ |
| | Sc-47 | S | 7.3×10 ⁻¹⁰ | 5.4×10 ⁻¹⁰ | 2.85×10 ⁴ |
| | Sc-48 | S | 1.6×10 ⁻⁹ | 1.7×10 ⁻⁹ | 1.30×10 ⁴ |
| | Sc-49 | S | 6.1×10 ⁻¹¹ | 8.2×10 ⁻¹¹ | 3.42×10 ⁵ |
| 22 | Titanium | | | | |
| | Ti-44 | F | 7.2×10 ⁻⁸ | 5.8×10 ⁻⁹ | 2.89×10 ² |
| | | M | 2.7×10 ⁻⁸ | | 7.72×10 ² |
| | | S | 6.2×10 ⁻⁸ | | 3.36×10 ² |
| | Ti-45 | F | 8.3×10 ⁻¹¹ | 1.5×10 ⁻¹⁰ | 2.51×10 ⁵ |
| | | M | 1.4×10 ⁻¹⁰ | | 1.49×10 ⁵ |
| | | S | 1.5×10 ⁻¹⁰ | | 1.39×10 ⁵ |
| | 23 | Vanadium | | | |
| V-47 | | F | 3.2×10 ⁻¹¹ | 6.3×10 ⁻¹¹ | 6.51×10 ⁵ |
| | | M | 5.0×10 ⁻¹¹ | | 4.17×10 ⁵ |
| V-48 | | F | 1.7×10 ⁻⁹ | 2.0×10 ⁻⁹ | 1.23×10 ⁴ |
| | | M | 2.7×10 ⁻⁹ | | 7.72×10 ³ |
| V-49 | | F | 2.6×10 ⁻¹¹ | 1.8×10 ⁻¹¹ | 8.01×10 ⁵ |
| | | M | 2.3×10 ⁻¹¹ | | 9.06×10 ⁵ |
| 24 | | Chromium | | | |
| | Cr-48 | F | 1.7×10 ⁻¹⁰ | 2.0×10 ⁻¹⁰ | 1.23×10 ⁵ |
| | | M | 2.3×10 ⁻¹⁰ | 2.0×10 ⁻¹⁰ | 9.06×10 ⁴ |
| | | S | 2.5×10 ⁻¹⁰ | | 8.33×10 ⁴ |
| | Cr-49 | F | 3.5×10 ⁻¹¹ | 6.1×10 ⁻¹¹ | 5.95×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | | M | 5.6×10 ⁻¹¹ | 6.1×10 ⁻¹¹ | 3.72×10 ⁵ |
| | | S | 5.9×10 ⁻¹¹ | | 3.53×10 ⁵ |
| | Cr-51 | F | 3.0×10 ⁻¹¹ | 3.8×10 ⁻¹¹ | 6.94×10 ⁵ |
| | | M | 3.4×10 ⁻¹¹ | 3.7×10 ⁻¹¹ | 6.13×10 ⁵ |
| | | S | 3.6×10 ⁻¹¹ | | 5.79×10 ⁵ |
| 25 | Manganese | | | | |
| | Mn-51 | F | 4.2×10 ⁻¹¹ | 9.3×10 ⁻¹¹ | 4.96×10 ⁵ |
| | | M | 6.8×10 ⁻¹¹ | | 3.06×10 ⁵ |
| | Mn-52 | F | 1.6×10 ⁻⁹ | 1.8×10 ⁻⁹ | 1.30×10 ⁴ |
| | | M | 1.8×10 ⁻⁹ | | 1.16×10 ⁴ |
| | Mn-52m | F | 3.5×10 ⁻¹¹ | 6.9×10 ⁻¹¹ | 5.95×10 ⁵ |
| | | M | 5.0×10 ⁻¹¹ | | 4.17×10 ⁵ |
| | Mn-53 | F | 3.6×10 ⁻¹¹ | 3.0×10 ⁻¹¹ | 5.79×10 ⁵ |
| | | M | 3.6×10 ⁻¹¹ | | 5.79×10 ⁵ |
| | Mn-54 | F | 1.1×10 ⁻⁹ | 7.1×10 ⁻¹⁰ | 1.89×10 ⁴ |
| | | M | 1.2×10 ⁻⁹ | | 1.74×10 ⁴ |
| | Mn-56 | F | 1.2×10 ⁻¹⁰ | 2.5×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | M | 2.0×10 ⁻¹⁰ | | 1.04×10 ⁵ |
| 26 | Iron | | | | |
| | Fe-52 | F | 6.9×10 ⁻¹⁰ | 1.4×10 ⁻⁹ | 3.02×10 ⁴ |
| | | M | 9.5×10 ⁻¹⁰ | | 2.19×10 ⁴ |
| | Fe-55 | F | 9.2×10 ⁻¹⁰ | 3.3×10 ⁻¹⁰ | 2.26×10 ⁴ |
| | | M | 3.3×10 ⁻¹⁰ | | 6.31×10 ⁴ |
| | Fe-59 | F | 3.0×10 ⁻⁹ | 1.8×10 ⁻⁹ | 6.94×10 ³ |
| | | M | 3.2×10 ⁻⁹ | | 6.51×10 ³ |
| | Fe-60 | F | 3.3×10 ⁻⁷ | 1.1×10 ⁻⁷ | 6.31×10 ¹ |
| M | | 1.2×10 ⁻⁷ | 1.74×10 ² | | |
| 27 | Cobalt | | | | |
| | Co-55 | M | 7.8×10 ⁻¹⁰ | 1.0×10 ⁻⁹ | 2.67×10 ⁴ |
| | | S | 8.3×10 ⁻¹⁰ | 1.1×10 ⁻⁹ | 2.51×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Co-56 | M | 4.0×10 ⁻⁹ | 2.5×10 ⁻⁹ | 5.21×10 ³ |
| | | S | 4.9×10 ⁻⁹ | 2.3×10 ⁻⁹ | 4.25×10 ³ |
| | Co-57 | M | 3.9×10 ⁻¹⁰ | 2.1×10 ⁻¹⁰ | 5.34×10 ⁴ |
| | | S | 6.0×10 ⁻¹⁰ | 1.9×10 ⁻¹⁰ | 3.47×10 ⁴ |
| | Co-58 | M | 1.4×10 ⁻⁹ | 7.4×10 ⁻¹⁰ | 1.49×10 ⁴ |
| | | S | 1.7×10 ⁻⁹ | 7.0×10 ⁻¹⁰ | 1.23×10 ⁴ |
| | Co-58m | M | 1.5×10 ⁻¹¹ | 2.4×10 ⁻¹¹ | 1.39×10 ⁶ |
| | | S | 1.7×10 ⁻¹¹ | 2.4×10 ⁻¹¹ | 1.23×10 ⁶ |
| | Co-60 | M | 7.1×10 ⁻⁹ | 3.4×10 ⁻⁹ | 2.93×10 ³ |
| | | S | 1.7×10 ⁻⁸ | 2.5×10 ⁻⁹ | 1.23×10 ³ |
| | Co-60m | M | 1.2×10 ⁻¹² | 1.7×10 ⁻¹² | 1.74×10 ⁷ |
| | | S | 1.2×10 ⁻¹² | 1.7×10 ⁻¹² | 1.74×10 ⁷ |
| | Co-61 | M | 7.1×10 ⁻¹¹ | 7.4×10 ⁻¹¹ | 2.93×10 ⁵ |
| | | S | 7.5×10 ⁻¹¹ | 7.4×10 ⁻¹¹ | 2.78×10 ⁵ |
| | Co-62m | M | 3.6×10 ⁻¹¹ | 4.7×10 ⁻¹¹ | 5.79×10 ⁵ |
| | | S | 3.7×10 ⁻¹¹ | 4.7×10 ⁻¹¹ | 5.63×10 ⁵ |
| 28 | Nickel | | | | |
| | Ni-56 | F | 7.9×10 ⁻¹⁰ | 8.6×10 ⁻¹⁰ | 2.64×10 ⁴ |
| | | M | 9.6×10 ⁻¹⁰ | | 2.17×10 ⁴ |
| | Ni-57 | F | 5.0×10 ⁻¹⁰ | 8.7×10 ⁻¹⁰ | 4.17×10 ⁴ |
| | | M | 7.6×10 ⁻¹⁰ | | 2.74×10 ⁴ |
| | Ni-59 | F | 2.2×10 ⁻¹⁰ | 6.3×10 ⁻¹¹ | 9.47×10 ⁴ |
| | | M | 9.4×10 ⁻¹¹ | | 2.22×10 ⁵ |
| | Ni-63 | F | 5.2×10 ⁻¹⁰ | 1.5×10 ⁻¹⁰ | 4.01×10 ⁴ |
| | | M | 3.1×10 ⁻¹⁰ | | 6.72×10 ⁴ |
| | Ni-65 | F | 7.5×10 ⁻¹¹ | 1.8×10 ⁻¹⁰ | 2.78×10 ⁵ |
| | | M | 1.3×10 ⁻¹⁰ | | 1.60×10 ⁵ |
| | Ni-66 | F | 7.6×10 ⁻¹⁰ | 3.0×10 ⁻⁹ | 2.74×10 ⁴ |
| | | M | 1.9×19 ⁻⁹ | | 1.10×10 ⁴ |
| 29 | Copper | | | | |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Cu-60 | F | 4.4×10 ⁻¹¹ | 7.0×10 ⁻¹¹ | 4.73×10 ⁵ |
| | | M | 6.0×10 ⁻¹¹ | | 3.47×10 ⁵ |
| | | S | 6.2×10 ⁻¹¹ | | 3.36×10 ⁵ |
| | Cu-61 | F | 7.3×10 ⁻¹¹ | 1.2×10 ⁻¹⁰ | 2.85×10 ⁵ |
| | | M | 1.2×10 ⁻¹⁰ | | 1.74×10 ⁵ |
| | | S | 1.2×10 ⁻¹⁰ | | 1.74×10 ⁵ |
| | Cu-64 | F | 6.8×10 ⁻¹¹ | 1.2×10 ⁻¹⁰ | 3.06×10 ⁵ |
| | | M | 1.5×10 ⁻¹⁰ | | 1.39×10 ⁵ |
| | | S | 1.5×10 ⁻¹⁰ | | 1.39×10 ⁵ |
| | Cu-67 | F | 1.8×10 ⁻¹⁰ | 3.4×10 ⁻¹⁰ | 1.16×10 ⁵ |
| | | M | 5.3×10 ⁻¹⁰ | | 3.93×10 ⁴ |
| | | S | 5.8×10 ⁻¹⁰ | | 3.59×10 ⁴ |
| 30 | Zinc | | | | |
| | Zn-62 | S | 6.6×10 ⁻¹⁰ | 9.4×10 ⁻¹⁰ | 3.16×10 ⁴ |
| | Zn-63 | S | 6.1×10 ⁻¹¹ | 7.9×10 ⁻¹¹ | 3.42×10 ⁵ |
| | Zn-65 | S | 2.8×10 ⁻⁹ | 3.9×10 ⁻⁹ | 7.44×10 ³ |
| | Zn-69 | S | 4.3×10 ⁻¹¹ | 3.1×10 ⁻¹¹ | 4.84×10 ⁵ |
| | Zn-69m | S | 3.3×10 ⁻¹⁰ | 3.3×10 ⁻¹⁰ | 6.31×10 ⁴ |
| | Zn-71m | S | 2.4×10 ⁻¹⁰ | 2.4×10 ⁻¹⁰ | 8.68×10 ⁴ |
| | Zn-72 | S | 1.5×10 ⁻⁹ | 1.4×10 ⁻⁹ | 1.39×10 ⁴ |
| 31 | Gallium | | | | |
| | Ga-65 | F | 2.0×10 ⁻¹¹ | 3.7×10 ⁻¹¹ | 1.04×10 ⁶ |
| | | M | 2.9×10 ⁻¹¹ | | 7.18×10 ⁵ |
| | Ga-66 | F | 4.7×10 ⁻¹⁰ | 1.2×10 ⁻⁹ | 4.43×10 ⁴ |
| | | M | 7.1×10 ⁻¹⁰ | | 2.93×10 ⁴ |
| | Ga-67 | F | 1.1×10 ⁻¹⁰ | 1.9×10 ⁻¹⁰ | 1.89×10 ⁵ |
| | | M | 2.8×10 ⁻¹⁰ | | 7.44×10 ⁴ |
| | Ga-68 | F | 4.9×10 ⁻¹¹ | 1.0×10 ⁻¹⁰ | 4.25×10 ⁵ |
| | | M | 8.1×10 ⁻¹¹ | | 2.57×10 ⁵ |
| | Ga-70 | F | 1.6×10 ⁻¹¹ | 3.1×10 ⁻¹¹ | 1.30×10 ⁶ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|-----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Ga-72 | M | 2.6×10 ⁻¹¹ | 1.1×10 ⁻⁹ | 8.01×10 ⁵ |
| | | F | 5.6×10 ⁻¹⁰ | | 3.72×10 ⁴ |
| | Ga-73 | M | 8.4×10 ⁻¹⁰ | 2.6×10 ⁻¹⁰ | 2.48×10 ⁴ |
| | | F | 1.0×10 ⁻¹⁰ | | 2.08×10 ⁵ |
| | | M | 2.0×10 ⁻¹⁰ | | 1.04×10 ⁵ |
| 32 | Germanium | | | | |
| | Ge-66 | F | 9.9×10 ⁻¹¹ | 1.0×10 ⁻¹⁰ | 2.10×10 ⁵ |
| | | M | 1.3×10 ⁻¹⁰ | | 1.60×10 ⁵ |
| | Ge-67 | F | 2.8×10 ⁻¹¹ | 6.5×10 ⁻¹¹ | 7.44×10 ⁵ |
| | | M | 4.2×10 ⁻¹¹ | | 4.96×10 ⁵ |
| | Ge-68 | F | 8.3×10 ⁻¹⁰ | 1.3×10 ⁻⁹ | 2.51×10 ⁴ |
| | | M | 7.9×10 ⁻⁹ | | 2.64×10 ³ |
| | Ge-69 | F | 2.5×10 ⁻¹⁰ | 2.4×10 ⁻¹⁰ | 8.33×10 ⁴ |
| | | M | 3.7×10 ⁻¹⁰ | | 5.63×10 ⁴ |
| | Ge-71 | F | 7.8×10 ⁻¹² | 1.2×10 ⁻¹¹ | 2.67×10 ⁶ |
| | | M | 1.1×10 ⁻¹¹ | | 1.89×10 ⁶ |
| | Ge-75 | F | 2.7×10 ⁻¹¹ | 4.6×10 ⁻¹¹ | 7.72×10 ⁵ |
| | | M | 5.4×10 ⁻¹¹ | | 3.86×10 ⁵ |
| | Ge-77 | F | 2.5×10 ⁻¹⁰ | 3.3×10 ⁻¹⁰ | 8.33×10 ⁴ |
| | | M | 4.5×10 ⁻¹⁰ | | 4.63×10 ⁴ |
| | Ge-78 | F | 8.1×10 ⁻¹¹ | 1.2×10 ⁻¹⁰ | 2.57×10 ⁵ |
| | | M | 1.4×10 ⁻¹⁰ | | 1.49×10 ⁵ |
| 33 | Arsenic | | | | |
| | As-69 | M | 3.5×10 ⁻¹¹ | 5.7×10 ⁻¹¹ | 5.95×10 ⁵ |
| | As-70 | M | 1.2×10 ⁻¹⁰ | 1.3×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | As-71 | M | 5.0×10 ⁻¹⁰ | 4.6×10 ⁻¹⁰ | 4.17×10 ⁴ |
| | As-72 | M | 1.3×10 ⁻⁹ | 1.8×10 ⁻⁹ | 1.60×10 ⁴ |
| | As-73 | M | 6.5×10 ⁻¹⁰ | 2.6×10 ⁻¹⁰ | 3.21×10 ⁴ |
| | As-74 | M | 1.8×10 ⁻⁹ | 1.3×10 ⁻⁹ | 1.16×10 ⁴ |
| As-76 | M | 9.2×10 ⁻¹⁰ | 1.6×10 ⁻⁹ | 2.26×10 ⁴ | |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|----------|----------------------|---|--|---|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation ($\text{Sv} \cdot \text{Bq}^{-1}$) | DCF via ingestion ($\text{Sv} \cdot \text{Bq}^{-1}$) | DAC ($\text{Bq} \cdot \text{m}^{-3}$) |
| | As-77 | M | 4.2×10^{-10} | 4.0×10^{-10} | 4.96×10^4 |
| | As-78 | M | 1.4×10^{-10} | 2.1×10^{-10} | 1.49×10^5 |
| 34 | Selenium | | | | |
| | Se-70 | F | 8.2×10^{-11} | 1.2×10^{-10} | 2.54×10^5 |
| | | M | 1.2×10^{-10} | 1.4×10^{-10} | 1.74×10^5 |
| | Se-73 | F | 1.5×10^{-10} | 2.1×10^{-10} | 1.39×10^5 |
| | | M | 2.4×10^{-10} | 3.9×10^{-10} | 8.68×10^4 |
| | Se-73m | F | 1.7×10^{-11} | 2.8×10^{-11} | 1.23×10^6 |
| | | M | 2.7×10^{-11} | 4.1×10^{-11} | 7.72×10^5 |
| | Se-75 | F | 1.4×10^{-9} | 2.6×10^{-9} | 1.49×10^4 |
| | | M | 1.7×10^{-9} | 4.1×10^{-10} | 1.23×10^4 |
| | Se-79 | F | 1.6×10^{-9} | 2.9×10^{-9} | 1.30×10^4 |
| | | M | 3.1×10^{-9} | 3.9×10^{-10} | 6.72×10^3 |
| | Se-81 | F | 1.4×10^{-11} | 2.7×10^{-11} | 1.49×10^6 |
| | | M | 2.4×10^{-11} | 2.7×10^{-11} | 8.68×10^5 |
| | Se-81m | F | 3.0×10^{-11} | 5.3×10^{-11} | 6.94×10^5 |
| | | M | 6.8×10^{-11} | 5.9×10^{-11} | 3.06×10^5 |
| | Se-83 | F | 3.4×10^{-11} | 4.7×10^{-11} | 6.13×10^5 |
| | | M | 5.3×10^{-11} | 5.1×10^{-11} | 3.93×10^5 |
| 35 | Bromine | | | | |
| | Br-74 | F | 5.0×10^{-11} | 8.4×10^{-11} | 4.17×10^5 |
| | | M | 6.8×10^{-11} | | 3.06×10^5 |
| | Br-74m | F | 7.5×10^{-11} | 1.4×10^{-10} | 2.78×10^5 |
| | | M | 1.1×10^{-10} | | 1.89×10^5 |
| | Br-75 | F | 5.6×10^{-11} | 7.9×10^{-11} | 3.72×10^5 |
| | | M | 8.5×10^{-11} | | 2.45×10^5 |
| | Br-76 | F | 4.5×10^{-10} | 4.6×10^{-10} | 4.63×10^4 |
| | | M | 5.8×10^{-10} | | 3.59×10^4 |
| | Br-77 | F | 1.2×10^{-10} | 9.6×10^{-11} | 1.74×10^5 |
| | | M | 1.3×10^{-10} | | 1.60×10^5 |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Br-80 | F | 1.1×10 ⁻¹¹ | 3.1×10 ⁻¹¹ | 1.89×10 ⁶ |
| | | M | 1.7×10 ⁻¹¹ | | 1.23×10 ⁶ |
| | Br-80m | F | 5.8×10 ⁻¹¹ | 1.1×10 ⁻¹⁰ | 3.59×10 ⁵ |
| | | M | 1.0×10 ⁻¹⁰ | | 2.08×10 ⁵ |
| | Br-82 | F | 6.4×10 ⁻¹⁰ | 5.4×10 ⁻¹⁰ | 3.26×10 ⁴ |
| | | M | 8.8×10 ⁻¹⁰ | | 2.37×10 ⁴ |
| | Br-83 | F | 2.9×10 ⁻¹¹ | 4.3×10 ⁻¹¹ | 7.18×10 ⁵ |
| | | M | 6.7×10 ⁻¹¹ | | 3.11×10 ⁵ |
| | Br-84 | F | 4.0×10 ⁻¹¹ | 8.8×10 ⁻¹¹ | 5.21×10 ⁵ |
| | | M | 6.2×10 ⁻¹¹ | | 3.36×10 ⁵ |
| 36 | Krypton | | | | |
| | Kr-74 | submersion | | | 1.33×10 ⁵ |
| | Kr-76 | submersion | | | 3.75×10 ⁵ |
| | Kr-77 | submersion | | | 1.54×10 ⁵ |
| | Kr-79 | submersion | | | 6.19×10 ⁵ |
| | Kr-81 | submersion | | | 2.86×10 ⁷ |
| | Kr-83m | submersion | | | 2.86×10 ⁹ |
| | Kr-85 | submersion | | | 2.73×10 ⁷ |
| | Kr-85m | submersion | | | 1.02×10 ⁶ |
| | Kr-87 | submersion | | | 1.77×10 ⁵ |
| | Kr-88 | submersion | | | 7.15×10 ⁴ |
| 37 | Rubidium | | | | |
| | Rb-79 | F | 3.0×10 ⁻¹¹ | 5.0×10 ⁻¹¹ | 6.94×10 ⁵ |
| | Rb-81 | F | 6.8×10 ⁻¹¹ | 5.4×10 ⁻¹¹ | 3.06×10 ⁵ |
| | Rb-81m | F | 1.3×10 ⁻¹¹ | 9.7×10 ⁻¹² | 1.60×10 ⁶ |
| | Rb-82m | F | 2.2×10 ⁻¹⁰ | 1.3×10 ⁻¹⁰ | 9.47×10 ⁴ |
| | Rb-83 | F | 1.0×10 ⁻⁹ | 1.9×10 ⁻⁹ | 2.08×10 ⁴ |
| | Rb-84 | F | 1.5×10 ⁻⁹ | 2.8×10 ⁻⁹ | 1.39×10 ⁴ |
| | Rb-86 | F | 1.3×10 ⁻⁹ | 2.8×10 ⁻⁹ | 1.60×10 ⁴ |
| | Rb-87 | F | 7.6×10 ⁻¹⁰ | 1.5×10 ⁻⁹ | 2.74×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Rb-88 | F | 2.8×10 ⁻¹¹ | 9.0×10 ⁻¹¹ | 7.44×10 ⁵ |
| | Rb-89 | F | 2.5×10 ⁻¹¹ | 4.7×10 ⁻¹¹ | 8.33×10 ⁵ |
| 38 | Strontium | | | | |
| | Sr-80 | F | 1.3×10 ⁻¹⁰ | 3.4×10 ⁻¹⁰ | 1.60×10 ⁵ |
| | | S | 2.1×10 ⁻¹⁰ | 3.5×10 ⁻¹⁰ | 9.92×10 ⁴ |
| | Sr-81 | F | 3.9×10 ⁻¹¹ | 7.7×10 ⁻¹¹ | 5.34×10 ⁵ |
| | | S | 6.1×10 ⁻¹¹ | 7.8×10 ⁻¹¹ | 3.42×10 ⁵ |
| | Sr-82 | F | 3.3×10 ⁻⁹ | 6.1×10 ⁻⁹ | 6.31×10 ³ |
| | | S | 7.7×10 ⁻⁹ | 6.0×10 ⁻⁹ | 2.71×10 ³ |
| | Sr-83 | F | 3.0×10 ⁻¹⁰ | 4.9×10 ⁻¹⁰ | 6.94×10 ⁴ |
| | | S | 4.9×10 ⁻¹⁰ | 5.8×10 ⁻¹⁰ | 4.25×10 ⁴ |
| | Sr-85 | F | 5.6×10 ⁻¹⁰ | 5.6×10 ⁻¹⁰ | 3.72×10 ⁴ |
| | | S | 6.4×10 ⁻¹⁰ | 3.3×10 ⁻¹⁰ | 3.26×10 ⁴ |
| | Sr-85m | F | 5.6×10 ⁻¹² | 6.1×10 ⁻¹² | 3.72×10 ⁶ |
| | | S | 7.4×10 ⁻¹² | 6.1×10 ⁻¹² | 2.82×10 ⁶ |
| | Sr-87m | F | 2.2×10 ⁻¹¹ | 3.0×10 ⁻¹¹ | 9.47×10 ⁵ |
| | | S | 3.5×10 ⁻¹¹ | 3.3×10 ⁻¹¹ | 5.95×10 ⁵ |
| | Sr-89 | F | 1.4×10 ⁻⁹ | 2.6×10 ⁻⁹ | 1.49×10 ⁴ |
| | | S | 5.6×10 ⁻⁹ | 2.3×10 ⁻⁹ | 3.72×10 ³ |
| | Sr-90 | F | 3.0×10 ⁻⁸ | 2.8×10 ⁻⁸ | 6.94×10 ² |
| | | S | 7.7×10 ⁻⁸ | 2.7×10 ⁻⁹ | 2.71×10 ² |
| | Sr-91 | F | 2.9×10 ⁻¹⁰ | 6.5×10 ⁻¹⁰ | 7.18×10 ⁴ |
| | | S | 5.7×10 ⁻¹⁰ | 7.6×10 ⁻¹⁰ | 3.65×10 ⁴ |
| | Sr-92 | F | 1.8×10 ⁻¹⁰ | 4.3×10 ⁻¹⁰ | 1.16×10 ⁵ |
| | | S | 3.4×10 ⁻¹⁰ | 4.9×10 ⁻¹⁰ | 6.13×10 ⁴ |
| 39 | Yttrium | | | | |
| | Y-86 | M | 8.0×10 ⁻¹⁰ | 9.6×10 ⁻¹⁰ | 2.60×10 ⁴ |
| | | S | 8.1×10 ⁻¹⁰ | | 2.57×10 ⁴ |
| | Y-86m | M | 4.8×10 ⁻¹¹ | 5.6×10 ⁻¹¹ | 4.34×10 ⁵ |
| | | S | 4.9×10 ⁻¹¹ | | 4.25×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Y-87 | M | 5.2×10 ⁻¹⁰ | 5.5×10 ⁻¹⁰ | 4.01×10 ⁴ |
| | | S | 5.3×10 ⁻¹⁰ | | 3.93×10 ⁴ |
| | Y-88 | M | 3.3×10 ⁻⁹ | 1.3×10 ⁻⁹ | 6.31×10 ³ |
| | | S | 3.0×10 ⁻⁹ | | 6.94×10 ³ |
| | Y-90 | M | 1.6×10 ⁻⁹ | 2.7×10 ⁻⁹ | 1.30×10 ⁴ |
| | | S | 1.7×10 ⁻⁹ | | 1.23×10 ⁴ |
| | Y-90m | M | 1.3×10 ⁻¹⁰ | 1.7×10 ⁻¹⁰ | 1.60×10 ⁵ |
| | | S | 1.3×10 ⁻¹⁰ | | 1.60×10 ⁵ |
| | Y-91 | M | 5.2×10 ⁻⁹ | 2.4×10 ⁻⁹ | 4.01×10 ³ |
| | | S | 6.1×10 ⁻⁹ | | 3.42×10 ³ |
| | Y-91m | M | 1.4×10 ⁻¹¹ | 1.1×10 ⁻¹¹ | 1.49×10 ⁶ |
| | | S | 1.5×10 ⁻¹¹ | | 1.39×10 ⁶ |
| | Y-92 | M | 2.7×10 ⁻¹⁰ | 4.9×10 ⁻¹⁰ | 7.72×10 ⁴ |
| | | S | 2.8×10 ⁻¹⁰ | | 7.44×10 ⁴ |
| | Y-93 | M | 5.7×10 ⁻¹⁰ | 1.2×10 ⁻⁹ | 3.65×10 ⁴ |
| | | S | 6.0×10 ⁻¹⁰ | | 3.47×10 ⁴ |
| | Y-94 | M | 4.4×10 ⁻¹¹ | 8.1×10 ⁻¹¹ | 4.73×10 ⁵ |
| | | S | 4.6×10 ⁻¹¹ | | 4.53×10 ⁵ |
| | Y-95 | M | 2.5×10 ⁻¹¹ | 4.6×10 ⁻¹¹ | 8.33×10 ⁵ |
| | | S | 2.6×10 ⁻¹¹ | | 8.01×10 ⁵ |
| 40 | Zirconium | | | | |
| | Zr-86 | F | 5.2×10 ⁻¹⁰ | 8.6×10 ⁻¹⁰ | 4.01×10 ⁴ |
| | | M | 6.8×10 ⁻¹⁰ | | 3.06×10 ⁴ |
| | | S | 7.0×10 ⁻¹⁰ | | 2.98×10 ⁴ |
| | Zr-88 | F | 4.1×10 ⁻⁹ | 3.3×10 ⁻¹⁰ | 5.08×10 ³ |
| | | M | 1.7×10 ⁻⁹ | | 1.23×10 ⁴ |
| | | S | 1.8×10 ⁻⁹ | | 1.16×10 ⁴ |
| | Zr-89 | F | 5.2×10 ⁻¹⁰ | 7.9×10 ⁻¹⁰ | 4.01×10 ⁴ |
| | | M | 7.2×10 ⁻¹⁰ | | 2.89×10 ⁴ |
| | | S | 7.5×10 ⁻¹⁰ | | 2.78×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Zr-93 | F | 2.9×10 ⁻⁸ | 2.8×10 ⁻¹⁰ | 7.18×10 ² |
| | | M | 6.6×10 ⁻⁹ | | 3.16×10 ³ |
| | | S | 1.7×10 ⁻⁹ | | 1.23×10 ⁴ |
| | Zr-95 | F | 3.0×10 ⁻⁹ | 8.8×10 ⁻¹⁰ | 6.94×10 ³ |
| | | M | 3.6×10 ⁻⁹ | | 5.79×10 ³ |
| | | S | 4.2×10 ⁻⁹ | | 4.96×10 ³ |
| | Zr-97 | F | 7.4×10 ⁻¹⁰ | 2.1×10 ⁻⁹ | 2.82×10 ⁴ |
| | | M | 1.3×10 ⁻⁹ | | 1.60×10 ⁴ |
| | | S | 1.4×10 ⁻⁹ | | 1.49×10 ⁴ |
| 41 | Niobium | | | | |
| | Nb-88 | M | 4.8×10 ⁻¹¹ | 6.3×10 ⁻¹¹ | 4.34×10 ⁵ |
| | | S | 5.0×10 ⁻¹¹ | | 4.17×10 ⁵ |
| | Nb-89 | M | 1.8×10 ⁻¹⁰ | 3.0×10 ⁻¹⁰ | 1.16×10 ⁵ |
| | | S | 1.9×10 ⁻¹⁰ | | 1.10×10 ⁵ |
| | Nb-89 | M | 1.1×10 ⁻¹⁰ | 1.4×10 ⁻¹⁰ | 1.89×10 ⁵ |
| | | S | 1.2×10 ⁻¹⁰ | | 1.74×10 ⁵ |
| | Nb-90 | M | 1.0×10 ⁻⁹ | 1.2×10 ⁻⁹ | 2.08×10 ⁴ |
| | | S | 1.1×10 ⁻⁹ | | 1.89×10 ⁴ |
| | Nb-93m | M | 2.9×10 ⁻¹⁰ | 1.2×10 ⁻¹⁰ | 7.18×10 ⁴ |
| | | S | 8.6×10 ⁻¹⁰ | | 2.42×10 ⁴ |
| | Nb-94 | M | 7.2×10 ⁻⁹ | 1.7×10 ⁻⁹ | 2.89×10 ³ |
| | | S | 2.5×10 ⁻⁸ | | 8.33×10 ² |
| | Nb-95 | M | 1.3×10 ⁻⁹ | 5.8×10 ⁻¹⁰ | 1.60×10 ⁴ |
| | | S | 1.3×10 ⁻⁹ | | 1.60×10 ⁴ |
| | Nb-95m | M | 7.7×10 ⁻¹⁰ | 5.6×10 ⁻¹⁰ | 2.71×10 ⁴ |
| | | S | 8.5×10 ⁻¹⁰ | | 2.45×10 ⁴ |
| | Nb-96 | M | 9.7×10 ⁻¹⁰ | 1.1×10 ⁻⁹ | 2.15×10 ⁴ |
| | | S | 1.0×10 ⁻⁹ | | 2.08×10 ⁴ |
| | Nb-97 | M | 6.9×10 ⁻¹¹ | 6.8×10 ⁻¹¹ | 3.02×10 ⁵ |
| | | S | 7.2×10 ⁻¹¹ | | 2.89×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Nb-98 | M | 9.6×10 ⁻¹¹ | 1.1×10 ⁻¹⁰ | 2.17×10 ⁵ |
| | | S | 9.9×10 ⁻¹¹ | | 2.10×10 ⁵ |
| 42 | Molybdenum | | | | |
| | Mo-90 | F | 2.9×10 ⁻¹⁰ | 3.1×10 ⁻¹⁰ | 7.18×10 ⁴ |
| | | S | 5.6×10 ⁻¹⁰ | | 3.72×10 ⁴ |
| | Mo-93 | F | 1.4×10 ⁻⁹ | 2.6×10 ⁻⁹ | 1.49×10 ⁴ |
| | | S | 1.2×10 ⁻⁹ | | 1.74×10 ⁴ |
| | Mo-93m | F | 1.9×10 ⁻¹⁰ | 1.6×10 ⁻¹⁰ | 1.10×10 ⁵ |
| | | S | 3.0×10 ⁻¹⁰ | | 6.94×10 ⁴ |
| | Mo-99 | F | 3.6×10 ⁻¹⁰ | 7.4×10 ⁻¹⁰ | 5.79×10 ⁴ |
| | | S | 1.1×10 ⁻⁹ | | 1.89×10 ⁴ |
| | Mo-101 | F | 2.7×10 ⁻¹¹ | 4.2×10 ⁻¹¹ | 7.72×10 ⁵ |
| | | S | 4.5×10 ⁻¹¹ | | 4.63×10 ⁵ |
| 43 | Technetium | | | | |
| | Tc-93 | F | 6.2×10 ⁻¹¹ | 4.9×10 ⁻¹¹ | 3.36×10 ⁵ |
| | | M | 6.5×10 ⁻¹¹ | | 3.21×10 ⁵ |
| | Tc-93m | F | 2.6×10 ⁻¹¹ | 2.4×10 ⁻¹¹ | 8.01×10 ⁵ |
| | | M | 3.1×10 ⁻¹¹ | | 6.72×10 ⁵ |
| | Tc-94 | F | 2.1×10 ⁻¹⁰ | 1.8×10 ⁻¹⁰ | 9.92×10 ⁴ |
| | | M | 2.2×10 ⁻¹⁰ | | 9.47×10 ⁴ |
| | Tc-94m | F | 6.9×10 ⁻¹¹ | 1.1×10 ⁻¹⁰ | 3.02×10 ⁵ |
| | | M | 8.0×10 ⁻¹¹ | | 2.60×10 ⁵ |
| | Tc-95 | F | 1.8×10 ⁻¹⁰ | 1.6×10 ⁻¹⁰ | 1.16×10 ⁵ |
| | | M | 1.8×10 ⁻¹⁰ | | 1.16×10 ⁵ |
| | Tc-95m | F | 4.8×10 ⁻¹⁰ | 6.2×10 ⁻¹⁰ | 4.34×10 ⁴ |
| | | M | 8.6×10 ⁻¹⁰ | | 2.42×10 ⁴ |
| | Tc-96 | F | 9.8×10 ⁻¹⁰ | 1.1×10 ⁻⁹ | 2.13×10 ⁴ |
| | | M | 1.0×10 ⁻⁹ | | 2.08×10 ⁴ |
| | Tc-96m | F | 1.1×10 ⁻¹¹ | 1.3×10 ⁻¹¹ | 1.89×10 ⁶ |
| | | M | 1.1×10 ⁻¹¹ | | 1.89×10 ⁶ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Tc-97 | F | 7.2×10 ⁻¹¹ | 8.3×10 ⁻¹¹ | 2.89×10 ⁵ |
| | | M | 1.6×10 ⁻¹⁰ | | 1.30×10 ⁵ |
| | Tc-97m | F | 4.0×10 ⁻¹⁰ | 6.6×10 ⁻¹⁰ | 5.21×10 ⁴ |
| | | M | 2.7×10 ⁻⁹ | | 7.72×10 ³ |
| | Tc-98 | F | 1.5×10 ⁻⁹ | 2.3×10 ⁻⁹ | 1.39×10 ⁴ |
| | | M | 6.1×10 ⁻⁹ | | 3.42×10 ³ |
| | Tc-99 | F | 4.0×10 ⁻¹⁰ | 7.8×10 ⁻¹⁰ | 5.21×10 ⁴ |
| | | M | 3.2×10 ⁻⁹ | | 6.51×10 ³ |
| | Tc-99m | F | 2.0×10 ⁻¹¹ | 2.2×10 ⁻¹¹ | 1.04×10 ⁶ |
| | | M | 2.9×10 ⁻¹¹ | | 7.18×10 ⁵ |
| | Tc-101 | F | 1.5×10 ⁻¹¹ | 1.9×10 ⁻¹¹ | 1.39×10 ⁶ |
| | | M | 2.1×10 ⁻¹¹ | | 9.92×10 ⁵ |
| | Tc-104 | F | 3.9×10 ⁻¹¹ | 8.1×10 ⁻¹¹ | 5.34×10 ⁵ |
| | | M | 4.8×10 ⁻¹¹ | | 4.34×10 ⁵ |
| 44 | Ruthenium | | | | |
| | Ru-94 | F | 4.9×10 ⁻¹¹ | 9.4×10 ⁻¹¹ | 4.25×10 ⁵ |
| | | M | 7.2×10 ⁻¹¹ | | 2.89×10 ⁵ |
| | | S | 7.4×10 ⁻¹¹ | | 2.82×10 ⁵ |
| | Ru-97 | F | 1.2×10 ⁻¹⁰ | 1.5×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | M | 1.6×10 ⁻¹⁰ | | 1.30×10 ⁵ |
| | | S | 1.6×10 ⁻¹⁰ | | 1.30×10 ⁵ |
| | Ru-103 | F | 6.8×10 ⁻¹⁰ | 7.3×10 ⁻¹⁰ | 3.06×10 ⁴ |
| | | M | 1.9×10 ⁻⁹ | | 1.10×10 ⁴ |
| | | S | 2.2×10 ⁻⁹ | | 9.47×10 ³ |
| | Ru-105 | F | 1.3×10 ⁻¹⁰ | 2.6×10 ⁻¹⁰ | 1.60×10 ⁵ |
| | | M | 2.4×10 ⁻¹⁰ | | 8.68×10 ⁴ |
| | | S | 2.5×10 ⁻¹⁰ | | 8.33×10 ⁴ |
| | Ru-106 | F | 9.8×10 ⁻⁹ | 7.0×10 ⁻⁹ | 2.13×10 ³ |
| | | M | 1.7×10 ⁻⁸ | | 1.23×10 ³ |
| | | S | 3.5×10 ⁻⁸ | | 5.95×10 ² |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|---|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation ($\text{Sv} \cdot \text{Bq}^{-1}$) | DCF via ingestion ($\text{Sv} \cdot \text{Bq}^{-1}$) | DAC ($\text{Bq} \cdot \text{m}^{-3}$) |
| 45 | Rhodium | | | | |
| | Rh-99 | F | 4.9×10^{-10} | 5.1×10^{-10} | 4.25×10^4 |
| | | M | 8.2×10^{-10} | | 2.54×10^4 |
| | | S | 8.9×10^{-10} | | 2.34×10^4 |
| | Rh-99m | F | 5.7×10^{-11} | 6.6×10^{-11} | 3.65×10^5 |
| | | M | 7.2×10^{-11} | | 2.89×10^5 |
| | | S | 7.3×10^{-11} | | 2.85×10^5 |
| | Rh-100 | F | 5.1×10^{-10} | 7.1×10^{-10} | 4.08×10^4 |
| | | M | 6.2×10^{-10} | | 3.36×10^4 |
| | | S | 6.3×10^{-10} | | 3.31×10^4 |
| | Rh-101 | F | 1.7×10^{-9} | 5.5×10^{-10} | 1.23×10^4 |
| | | M | 1.7×10^{-9} | | 1.23×10^4 |
| | | S | 3.1×10^{-9} | | 6.72×10^3 |
| | Rh-101m | F | 1.7×10^{-10} | 2.2×10^{-10} | 1.23×10^5 |
| | | M | 2.5×10^{-10} | | 8.33×10^4 |
| | | S | 2.7×10^{-10} | | 7.72×10^4 |
| | Rh-102 | F | 8.9×10^{-9} | 2.6×10^{-9} | 2.34×10^3 |
| | | M | 5.0×10^{-9} | | 4.17×10^3 |
| | | S | 9.0×10^{-9} | | 2.31×10^3 |
| | Rh-102m | F | 1.9×10^{-9} | 1.2×10^{-9} | 1.10×10^4 |
| | | M | 2.7×10^{-9} | | 7.72×10^3 |
| | | S | 4.2×10^{-9} | | 4.96×10^3 |
| | Rh-103m | F | 1.2×10^{-12} | 3.8×10^{-12} | 1.74×10^7 |
| | | M | 2.4×10^{-12} | | 8.68×10^6 |
| | | S | 2.5×10^{-12} | | 8.33×10^6 |
| | Rh-105 | F | 1.5×10^{-10} | 3.7×10^{-10} | 1.39×10^5 |
| | | M | 4.1×10^{-10} | | 5.08×10^4 |
| | | S | 4.4×10^{-10} | | 4.73×10^4 |
| | Rh-106m | F | 1.3×10^{-10} | 1.6×10^{-10} | 1.60×10^5 |
| | | M | 1.8×10^{-10} | | 1.16×10^5 |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Rh-107 | S | 1.9×10 ⁻¹⁰ | 2.4×10 ⁻¹¹ | 1.10×10 ⁵ |
| | | F | 1.6×10 ⁻¹¹ | | 1.30×10 ⁶ |
| | | M | 2.7×10 ⁻¹¹ | | 7.72×10 ⁵ |
| | | S | 2.8×10 ⁻¹¹ | | 7.44×10 ⁵ |
| 46 | Palladium | | | | |
| | Pd-100 | F | 7.6×10 ⁻¹⁰ | 9.4×10 ⁻¹⁰ | 2.74×10 ⁴ |
| | | M | 9.5×10 ⁻¹⁰ | | 2.19×10 ⁴ |
| | | S | 9.7×10 ⁻¹⁰ | | 2.15×10 ⁴ |
| | Pd-101 | F | 7.5×10 ⁻¹¹ | 9.4×10 ⁻¹¹ | 2.78×10 ⁵ |
| | | M | 9.8×10 ⁻¹¹ | | 2.13×10 ⁵ |
| | | S | 1.0×10 ⁻¹⁰ | | 2.08×10 ⁵ |
| | Pd-103 | F | 1.2×10 ⁻¹⁰ | 1.9×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | M | 3.0×10 ⁻¹⁰ | | 6.94×10 ⁴ |
| | | S | 2.9×10 ⁻¹⁰ | | 7.18×10 ⁴ |
| | Pd-107 | F | 3.3×10 ⁻¹¹ | 3.7×10 ⁻¹¹ | 6.31×10 ⁵ |
| | | M | 5.2×10 ⁻¹¹ | | 4.01×10 ⁵ |
| | | S | 2.9×10 ⁻¹⁰ | | 7.18×10 ⁴ |
| | Pd-109 | F | 2.1×10 ⁻¹⁰ | 5.5×10 ⁻¹⁰ | 9.92×10 ⁴ |
| | | M | 4.7×10 ⁻¹⁰ | | 4.43×10 ⁴ |
| | | S | 5.0×10 ⁻¹⁰ | | 4.17×10 ⁴ |
| 47 | Silver | | | | |
| | Ag-102 | F | 2.4×10 ⁻¹¹ | 4.0×10 ⁻¹¹ | 8.68×10 ⁵ |
| | | M | 3.2×10 ⁻¹¹ | | 6.51×10 ⁵ |
| | | S | 3.2×10 ⁻¹¹ | | 6.51×10 ⁵ |
| | Ag-103 | F | 2.8×10 ⁻¹¹ | 4.3×10 ⁻¹¹ | 7.44×10 ⁵ |
| | | M | 4.3×10 ⁻¹¹ | | 4.84×10 ⁵ |
| | | S | 4.5×10 ⁻¹¹ | | 4.63×10 ⁵ |
| | Ag-104 | F | 5.7×10 ⁻¹¹ | 6.0×10 ⁻¹¹ | 3.65×10 ⁵ |
| | | M | 6.9×10 ⁻¹¹ | | 3.02×10 ⁵ |
| | | S | 7.1×10 ⁻¹¹ | | 2.93×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Ag-104m | F | 3.1×10 ⁻¹¹ | 5.4×10 ⁻¹¹ | 6.72×10 ⁵ |
| | | M | 4.4×10 ⁻¹¹ | | 4.73×10 ⁵ |
| | | S | 4.5×10 ⁻¹¹ | | 4.63×10 ⁵ |
| | Ag-105 | F | 8.0×10 ⁻¹⁰ | 4.7×10 ⁻¹⁰ | 2.60×10 ⁴ |
| | | M | 7.0×10 ⁻¹⁰ | | 2.98×10 ⁴ |
| | | S | 7.3×10 ⁻¹⁰ | | 2.85×10 ⁴ |
| | Ag-106 | F | 1.7×10 ⁻¹¹ | 3.2×10 ⁻¹¹ | 1.23×10 ⁶ |
| | | M | 2.6×10 ⁻¹¹ | | 8.01×10 ⁵ |
| | | S | 2.7×10 ⁻¹¹ | | 7.72×10 ⁵ |
| | Ag-106m | F | 1.6×10 ⁻⁹ | 1.5×10 ⁻⁹ | 1.30×10 ⁴ |
| | | M | 1.5×10 ⁻⁹ | | 1.39×10 ⁴ |
| | | S | 1.4×10 ⁻⁹ | | 1.49×10 ⁴ |
| | Ag-108m | F | 7.3×10 ⁻⁹ | 2.3×10 ⁻⁹ | 2.85×10 ³ |
| | | M | 5.2×10 ⁻⁹ | | 4.01×10 ³ |
| | | S | 1.9×10 ⁻⁸ | | 1.10×10 ³ |
| | Ag-110m | F | 6.7×10 ⁻⁹ | 2.8×10 ⁻⁹ | 3.11×10 ³ |
| | | M | 5.9×10 ⁻⁹ | | 3.53×10 ³ |
| | | S | 7.3×10 ⁻⁹ | | 2.85×10 ³ |
| | Ag-111 | F | 5.7×10 ⁻¹⁰ | 1.3×10 ⁻⁹ | 3.65×10 ⁴ |
| | | M | 1.5×10 ⁻⁹ | | 1.39×10 ⁴ |
| | | S | 1.6×10 ⁻⁹ | | 1.30×10 ⁴ |
| | Ag-112 | F | 1.4×10 ⁻¹⁰ | 4.3×10 ⁻¹⁰ | 1.49×10 ⁵ |
| | | M | 2.5×10 ⁻¹⁰ | | 8.33×10 ⁴ |
| | | S | 2.6×10 ⁻¹⁰ | | 8.01×10 ⁴ |
| | Ag-115 | F | 2.6×10 ⁻¹¹ | 6.0×10 ⁻¹¹ | 8.01×10 ⁵ |
| | | M | 4.3×10 ⁻¹¹ | | 4.84×10 ⁵ |
| | | S | 4.4×10 ⁻¹¹ | | 4.73×10 ⁵ |
| 48 | Cadmium | | | | |
| | Cd-104 | F | 5.0×10 ⁻¹¹ | 5.8×10 ⁻¹¹ | 4.17×10 ⁵ |
| | | M | 6.2×10 ⁻¹¹ | | 3.36×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Cd-107 | S | 6.3×10 ⁻¹¹ | 6.2×10 ⁻¹¹ | 3.31×10 ⁵ |
| | | F | 4.2×10 ⁻¹¹ | | 4.96×10 ⁵ |
| | | M | 1.0×10 ⁻¹⁰ | | 2.08×10 ⁵ |
| | | S | 1.1×10 ⁻¹⁰ | | 1.89×10 ⁵ |
| | Cd-109 | F | 9.6×10 ⁻⁹ | 2.0×10 ⁻⁹ | 2.17×10 ³ |
| | | M | 5.1×10 ⁻⁹ | | 4.08×10 ³ |
| | | S | 4.4×10 ⁻⁹ | | 4.73×10 ³ |
| | Cd-113 | F | 1.4×10 ⁻⁷ | 2.5×10 ⁻⁸ | 1.49×10 ² |
| | | M | 4.3×10 ⁻⁸ | | 4.84×10 ² |
| | | S | 2.1×10 ⁻⁸ | | 9.92×10 ² |
| | Cd-113m | F | 1.3×10 ⁻⁷ | 2.3×10 ⁻⁸ | 1.60×10 ² |
| | | M | 4.0×10 ⁻⁸ | | 5.21×10 ² |
| | | S | 2.4×10 ⁻⁸ | | 8.68×10 ² |
| | Cd-115 | F | 5.4×10 ⁻¹⁰ | 1.4×10 ⁻⁹ | 3.86×10 ⁴ |
| | | M | 1.2×10 ⁻⁹ | | 1.74×10 ⁴ |
| | | S | 1.3×10 ⁻⁹ | | 1.60×10 ⁴ |
| | Cd-115m | F | 6.4×10 ⁻⁹ | 3.3×10 ⁻⁹ | 3.26×10 ³ |
| | | M | 5.5×10 ⁻⁹ | | 3.79×10 ³ |
| | | S | 5.5×10 ⁻⁹ | | 3.79×10 ³ |
| | Cd-117 | F | 1.3×10 ⁻¹⁰ | 2.8×10 ⁻¹⁰ | 1.60×10 ⁵ |
| | | M | 2.4×10 ⁻¹⁰ | | 8.68×10 ⁴ |
| | | S | 2.5×10 ⁻¹⁰ | | 8.33×10 ⁴ |
| | Cd-117m | F | 1.9×10 ⁻¹⁰ | 2.8×10 ⁻¹⁰ | 1.10×10 ⁵ |
| | | M | 3.1×10 ⁻¹⁰ | | 6.72×10 ⁴ |
| | | S | 3.2×10 ⁻¹⁰ | | 6.51×10 ⁴ |
| 49 | Indium | | | | |
| | In-109 | F | 5.7×10 ⁻¹¹ | 6.6×10 ⁻¹¹ | 3.65×10 ⁵ |
| | | M | 7.3×10 ⁻¹¹ | | 2.85×10 ⁵ |
| | In-110 | F | 2.2×10 ⁻¹⁰ | 2.4×10 ⁻¹⁰ | 9.47×10 ⁴ |
| | | M | 2.5×10 ⁻¹⁰ | | 8.33×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | In-110 | F | 5.5×10 ⁻¹¹ | 1.0×10 ⁻¹⁰ | 3.79×10 ⁵ |
| | | M | 8.1×10 ⁻¹¹ | | 2.57×10 ⁵ |
| | In-111 | F | 2.2×10 ⁻¹⁰ | 2.9×10 ⁻¹⁰ | 9.47×10 ⁴ |
| | | M | 3.1×10 ⁻¹⁰ | | 6.72×10 ⁴ |
| | In-112 | F | 8.6×10 ⁻¹² | 1.0×10 ⁻¹¹ | 2.42×10 ⁶ |
| | | M | 1.3×10 ⁻¹¹ | | 1.60×10 ⁶ |
| | In-113m | F | 1.9×10 ⁻¹¹ | 2.8×10 ⁻¹¹ | 1.10×10 ⁶ |
| | | M | 3.2×10 ⁻¹¹ | | 6.51×10 ⁵ |
| | In-114m | F | 1.1×10 ⁻⁸ | 4.1×10 ⁻⁹ | 1.89×10 ³ |
| | | M | 5.9×10 ⁻⁹ | | 3.53×10 ³ |
| | In-115 | F | 4.5×10 ⁻⁷ | 3.2×10 ⁻⁸ | 4.63×10 ¹ |
| | | M | 1.1×10 ⁻⁷ | | 1.89×10 ² |
| | In-115m | F | 4.5×10 ⁻¹¹ | 8.6×10 ⁻¹¹ | 4.63×10 ⁵ |
| | | M | 8.7×10 ⁻¹¹ | | 2.39×10 ⁵ |
| | In-116m | F | 5.5×10 ⁻¹¹ | 6.4×10 ⁻¹¹ | 3.79×10 ⁵ |
| | | M | 8.0×10 ⁻¹¹ | | 2.60×10 ⁵ |
| | In-117 | F | 2.8×10 ⁻¹¹ | 3.1×10 ⁻¹¹ | 7.44×10 ⁵ |
| | | M | 4.8×10 ⁻¹¹ | | 4.34×10 ⁵ |
| | In-117m | F | 5.5×10 ⁻¹¹ | 1.2×10 ⁻¹⁰ | 3.79×10 ⁵ |
| | | M | 1.1×10 ⁻¹⁰ | | 1.89×10 ⁵ |
| | In-119m | F | 1.8×10 ⁻¹¹ | 4.7×10 ⁻¹¹ | 1.16×10 ⁶ |
| | | M | 2.9×10 ⁻¹¹ | | 7.18×10 ⁵ |
| 50 | Tin | | | | |
| | Sn-110 | F | 1.9×10 ⁻¹⁰ | 3.5×10 ⁻¹⁰ | 1.10×10 ⁵ |
| | | M | 2.6×10 ⁻¹⁰ | | 8.01×10 ⁴ |
| | Sn-111 | F | 1.5×10 ⁻¹¹ | 2.3×10 ⁻¹¹ | 1.39×10 ⁶ |
| | | M | 2.2×10 ⁻¹¹ | | 9.47×10 ⁵ |
| | Sn-113 | F | 7.9×10 ⁻¹⁰ | 7.3×10 ⁻¹⁰ | 2.64×10 ⁴ |
| | | M | 1.9×10 ⁻⁹ | | 1.10×10 ⁴ |
| | Sn-117m | F | 3.9×10 ⁻¹⁰ | 7.1×10 ⁻¹⁰ | 5.34×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Sn-119m | M | 2.2×10 ⁻⁹ | 3.4×10 ⁻¹⁰ | 9.47×10 ³ |
| | | F | 3.6×10 ⁻¹⁰ | | 5.79×10 ⁴ |
| | Sn-121 | M | 1.5×10 ⁻⁹ | 2.3×10 ⁻¹⁰ | 1.39×10 ⁴ |
| | | F | 1.0×10 ⁻¹⁰ | | 2.08×10 ⁵ |
| | Sn-121m | M | 2.8×10 ⁻¹⁰ | 3.8×10 ⁻¹⁰ | 7.44×10 ⁴ |
| | | F | 9.7×10 ⁻¹⁰ | | 2.15×10 ⁴ |
| | Sn-123 | M | 3.3×10 ⁻⁹ | 2.1×10 ⁻⁹ | 6.31×10 ³ |
| | | F | 1.6×10 ⁻⁹ | | 1.30×10 ⁴ |
| | Sn-123m | M | 5.6×10 ⁻⁹ | 3.8×10 ⁻¹¹ | 3.72×10 ³ |
| | | F | 2.4×10 ⁻¹¹ | | 8.68×10 ⁵ |
| | Sn-125 | M | 4.4×10 ⁻¹¹ | 3.1×10 ⁻⁹ | 4.73×10 ⁵ |
| | | F | 1.3×10 ⁻⁹ | | 1.60×10 ⁴ |
| | Sn-126 | M | 2.8×10 ⁻⁹ | 4.7×10 ⁻⁹ | 7.44×10 ³ |
| | | F | 1.4×10 ⁻⁸ | | 1.49×10 ³ |
| | Sn-127 | M | 1.8×10 ⁻⁸ | 2.0×10 ⁻¹⁰ | 1.16×10 ³ |
| | | F | 1.2×10 ⁻¹⁰ | | 1.74×10 ⁵ |
| | Sn-128 | M | 2.0×10 ⁻¹⁰ | 1.5×10 ⁻¹⁰ | 1.04×10 ⁵ |
| | | F | 9.5×10 ⁻¹¹ | | 2.19×10 ⁵ |
| | | M | 1.5×10 ⁻¹⁰ | | 1.39×10 ⁵ |
| | | | | | |
| 51 | Antimony | | | | |
| | Sb-115 | F | 1.7×10 ⁻¹¹ | 2.4×10 ⁻¹¹ | 1.23×10 ⁶ |
| | | M | 2.3×10 ⁻¹¹ | | 9.06×10 ⁵ |
| | Sb-116 | F | 1.8×10 ⁻¹¹ | 2.6×10 ⁻¹¹ | 1.16×10 ⁶ |
| | | M | 2.3×10 ⁻¹¹ | | 9.06×10 ⁵ |
| | Sb-116m | F | 6.4×10 ⁻¹¹ | 6.7×10 ⁻¹¹ | 3.26×10 ⁵ |
| | | M | 8.5×10 ⁻¹¹ | | 2.45×10 ⁵ |
| | Sb-117 | F | 1.7×10 ⁻¹¹ | 1.8×10 ⁻¹¹ | 1.23×10 ⁶ |
| | | M | 2.7×10 ⁻¹¹ | | 7.72×10 ⁵ |
| | Sb-118m | F | 1.9×10 ⁻¹⁰ | 2.1×10 ⁻¹⁰ | 1.10×10 ⁵ |
| | | M | 2.3×10 ⁻¹⁰ | | 9.06×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|---|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation ($\text{Sv} \cdot \text{Bq}^{-1}$) | DCF via ingestion ($\text{Sv} \cdot \text{Bq}^{-1}$) | DAC ($\text{Bq} \cdot \text{m}^{-3}$) |
| | Sb-119 | F | 4.5×10^{-11} | 8.1×10^{-11} | 4.63×10^5 |
| | | M | 5.9×10^{-11} | | 3.53×10^5 |
| | Sb-120 | F | 9.8×10^{-10} | 1.2×10^{-9} | 2.13×10^4 |
| | | M | 1.3×10^{-9} | | 1.60×10^4 |
| | Sb-120 | F | 8.5×10^{-12} | 1.4×10^{-11} | 2.45×10^6 |
| | | M | 1.2×10^{-11} | | 1.74×10^6 |
| | Sb-122 | F | 6.3×10^{-10} | 1.7×10^{-9} | 3.31×10^4 |
| | | M | 1.2×10^{-9} | | 1.74×10^4 |
| | Sb-124 | F | 1.9×10^{-9} | 2.5×10^{-9} | 1.10×10^4 |
| | | M | 4.7×10^{-9} | | 4.43×10^3 |
| | Sb-124m | F | 5.3×10^{-12} | 8.0×10^{-12} | 3.93×10^6 |
| | | M | 8.3×10^{-12} | | 2.51×10^6 |
| | Sb-125 | F | 1.7×10^{-9} | 1.1×10^{-9} | 1.23×10^4 |
| | | M | 3.3×10^{-9} | | 6.31×10^3 |
| | Sb-126 | F | 1.7×10^{-9} | 2.4×10^{-9} | 1.23×10^4 |
| | | M | 3.2×10^{-9} | | 6.51×10^3 |
| | Sb-126m | F | 2.3×10^{-11} | 3.6×10^{-11} | 9.06×10^5 |
| | | M | 3.3×10^{-11} | | 6.31×10^5 |
| | Sb-127 | F | 7.4×10^{-10} | 1.7×10^{-9} | 2.82×10^4 |
| | | M | 1.7×10^{-9} | | 1.23×10^4 |
| | Sb-128 | F | 4.6×10^{-10} | 7.6×10^{-10} | 4.53×10^4 |
| | | M | 6.7×10^{-10} | | 3.11×10^4 |
| | Sb-128 | F | 1.9×10^{-11} | 3.3×10^{-11} | 1.10×10^6 |
| | | M | 2.6×10^{-11} | | 8.01×10^5 |
| | Sb-129 | F | 2.0×10^{-10} | 4.2×10^{-10} | 1.04×10^5 |
| | | M | 3.5×10^{-10} | | 5.95×10^4 |
| | Sb-130 | F | 6.3×10^{-11} | 9.1×10^{-11} | 3.31×10^5 |
| | | M | 9.1×10^{-11} | | 2.29×10^5 |
| | Sb-131 | F | 5.9×10^{-11} | 1.0×10^{-10} | 3.53×10^5 |
| | | M | 8.3×10^{-11} | | 2.51×10^5 |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| 52 | Tellurium | | | | |
| | Te-116 | F | 1.2×10 ⁻¹⁰ | 1.7×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | M | 1.7×10 ⁻¹⁰ | | 1.23×10 ⁵ |
| | Te-121 | F | 3.9×10 ⁻¹⁰ | 4.3×10 ⁻¹⁰ | 5.34×10 ⁴ |
| | | M | 4.4×10 ⁻¹⁰ | | 4.73×10 ⁴ |
| | Te-121m | F | 2.3×10 ⁻⁹ | 2.3×10 ⁻⁹ | 9.06×10 ³ |
| | | M | 3.6×10 ⁻⁹ | | 5.79×10 ³ |
| | Te-123 | F | 5.0×10 ⁻⁹ | 4.4×10 ⁻⁹ | 4.17×10 ³ |
| | | M | 2.8×10 ⁻⁹ | | 7.44×10 ³ |
| | Te-123m | F | 1.2×10 ⁻⁹ | 1.4×10 ⁻⁹ | 1.74×10 ⁴ |
| | | M | 3.4×10 ⁻⁹ | | 6.13×10 ³ |
| | Te-125m | F | 6.7×10 ⁻¹⁰ | 8.7×10 ⁻¹⁰ | 3.11×10 ⁴ |
| | | M | 2.9×10 ⁻⁹ | | 7.18×10 ³ |
| | Te-127 | F | 7.2×10 ⁻¹¹ | 1.7×10 ⁻¹⁰ | 2.89×10 ⁵ |
| | | M | 1.8×10 ⁻¹⁰ | | 1.16×10 ⁵ |
| | Te-127m | F | 2.0×10 ⁻⁹ | 2.3×10 ⁻⁹ | 1.04×10 ⁴ |
| | | M | 6.2×10 ⁻⁹ | | 3.36×10 ³ |
| | Te-129 | F | 2.9×10 ⁻¹¹ | 6.3×10 ⁻¹¹ | 7.18×10 ⁵ |
| | | M | 5.7×10 ⁻¹¹ | | 3.65×10 ⁵ |
| | Te-129m | F | 1.8×10 ⁻⁹ | 3.0×10 ⁻⁹ | 1.16×10 ⁴ |
| | | M | 5.4×10 ⁻⁹ | | 3.86×10 ³ |
| | Te-131 | F | 4.6×10 ⁻¹¹ | 8.7×10 ⁻¹¹ | 4.53×10 ⁵ |
| | | M | 6.1×10 ⁻¹¹ | | 3.42×10 ⁵ |
| | Te-131m | F | 1.2×10 ⁻⁹ | 1.9×10 ⁻⁹ | 1.74×10 ⁴ |
| | | M | 1.6×10 ⁻⁹ | | 1.30×10 ⁴ |
| | Te-132 | F | 2.4×10 ⁻⁹ | 3.7×10 ⁻⁹ | 8.68×10 ³ |
| | | M | 3.0×10 ⁻⁹ | | 6.94×10 ³ |
| | Te-133 | F | 3.8×10 ⁻¹¹ | 7.2×10 ⁻¹¹ | 5.48×10 ⁵ |
| | | M | 4.4×10 ⁻¹¹ | | 4.73×10 ⁵ |
| | Te-133m | F | 1.2×10 ⁻¹⁰ | 2.8×10 ⁻¹⁰ | 1.74×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Te-134 | M | 1.9×10 ⁻¹⁰ | 1.1×10 ⁻¹⁰ | 1.10×10 ⁵ |
| | | F | 8.3×10 ⁻¹¹ | | 2.51×10 ⁵ |
| | | M | 1.1×10 ⁻¹⁰ | | 1.89×10 ⁵ |
| 53 | Iodine | | | | |
| | I-120 | F | 1.9×10 ⁻¹⁰ | 3.4×10 ⁻¹⁰ | 1.10×10 ⁵ |
| | I-120m | F | 1.4×10 ⁻¹⁰ | 2.1×10 ⁻¹⁰ | 1.49×10 ⁵ |
| | I-121 | F | 3.9×10 ⁻¹¹ | 8.2×10 ⁻¹¹ | 5.34×10 ⁵ |
| | I-123 | F | 1.1×10 ⁻¹⁰ | 2.1×10 ⁻¹⁰ | 1.89×10 ⁵ |
| | I-124 | F | 6.3×10 ⁻⁹ | 1.3×10 ⁻⁸ | 3.31×10 ³ |
| | I-125 | F | 7.3×10 ⁻⁹ | 1.5×10 ⁻⁸ | 2.85×10 ³ |
| | I-126 | F | 1.4×10 ⁻⁸ | 2.9×10 ⁻⁸ | 1.49×10 ³ |
| | I-128 | F | 2.2×10 ⁻¹¹ | 4.6×10 ⁻¹¹ | 9.47×10 ⁵ |
| | I-129 | F | 5.1×10 ⁻⁸ | 1.1×10 ⁻⁷ | 4.08×10 ² |
| | I-130 | F | 9.6×10 ⁻¹⁰ | 2.0×10 ⁻⁹ | 2.17×10 ⁴ |
| | I-131 | F | 1.1×10 ⁻⁸ | 2.2×10 ⁻⁸ | 1.89×10 ³ |
| | I-132 | F | 2.0×10 ⁻¹⁰ | 2.9×10 ⁻¹⁰ | 1.04×10 ⁵ |
| | I-132m | F | 1.1×10 ⁻¹⁰ | 2.2×10 ⁻¹⁰ | 1.89×10 ⁵ |
| | I-133 | F | 2.1×10 ⁻⁹ | 4.3×10 ⁻⁹ | 9.92×10 ³ |
| | I-134 | F | 7.9×10 ⁻¹¹ | 1.1×10 ⁻¹⁰ | 2.64×10 ⁵ |
| | I-135 | F | 4.6×10 ⁻¹⁰ | 9.3×10 ⁻¹⁰ | 4.53×10 ⁴ |
| 54 | Xenon | | | | |
| | Xe-120 | submersion | | | 4.00×10 ⁵ |
| | Xe-121 | submersion | | | 8.00×10 ⁴ |
| | Xe-122 | submersion | | | 3.16×10 ⁶ |
| | Xe-123 | submersion | | | 2.50×10 ⁵ |
| | Xe-125 | submersion | | | 6.45×10 ⁵ |
| | Xe-127 | submersion | | | 6.19×10 ⁵ |
| | Xe-129m | submersion | | | 7.41×10 ⁶ |
| | Xe-131m | submersion | | | 1.88×10 ⁷ |
| Xe-133m | submersion | | | 5.46×10 ⁶ | |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Xe-133 | submersion | | | 5.00×10 ⁶ |
| | Xe-135m | submersion | | | 3.75×10 ⁵ |
| | Xe-135 | submersion | | | 6.25×10 ⁵ |
| | Xe-138 | submersion | | | 1.28×10 ⁵ |
| 55 | Cesium | | | | |
| | Cs-125 | F | 2.3×10 ⁻¹¹ | 3.5×10 ⁻¹¹ | 9.06×10 ⁵ |
| | Cs-127 | F | 4.0×10 ⁻¹¹ | 2.4×10 ⁻¹¹ | 5.21×10 ⁵ |
| | Cs-129 | F | 8.1×10 ⁻¹¹ | 6.0×10 ⁻¹¹ | 2.57×10 ⁵ |
| | Cs-130 | F | 1.5×10 ⁻¹¹ | 2.8×10 ⁻¹¹ | 1.39×10 ⁶ |
| | Cs-131 | F | 4.5×10 ⁻¹¹ | 5.8×10 ⁻¹¹ | 4.63×10 ⁵ |
| | Cs-132 | F | 3.8×10 ⁻¹⁰ | 5.0×10 ⁻¹⁰ | 5.48×10 ⁴ |
| | Cs-134 | F | 9.6×10 ⁻⁹ | 1.9×10 ⁻⁸ | 2.17×10 ³ |
| | Cs-134m | F | 2.6×10 ⁻¹¹ | 2.0×10 ⁻¹¹ | 8.01×10 ⁵ |
| | Cs-135 | F | 9.9×10 ⁻¹⁰ | 2.0×10 ⁻⁹ | 2.10×10 ⁴ |
| | Cs-135m | F | 2.4×10 ⁻¹¹ | 1.9×10 ⁻¹¹ | 8.68×10 ⁵ |
| | Cs-136 | F | 1.9×10 ⁻⁹ | 3.0×10 ⁻⁹ | 1.10×10 ⁴ |
| | Cs-137 | F | 6.7×10 ⁻⁹ | 1.3×10 ⁻⁸ | 3.11×10 ³ |
| | Cs-138 | F | 4.6×10 ⁻¹¹ | 9.2×10 ⁻¹¹ | 4.53×10 ⁵ |
| 56 | Barium | | | | |
| | Ba-126 | F | 1.2×10 ⁻¹⁰ | 2.6×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | Ba-128 | F | 1.3×10 ⁻⁹ | 2.7×10 ⁻⁹ | 1.60×10 ⁴ |
| | Ba-131 | F | 3.5×10 ⁻¹⁰ | 4.5×10 ⁻¹⁰ | 5.95×10 ⁴ |
| | Ba-131m | F | 6.4×10 ⁻¹² | 4.9×10 ⁻¹² | 3.26×10 ⁶ |
| | Ba-133 | F | 1.8×10 ⁻⁹ | 1.0×10 ⁻⁹ | 1.16×10 ⁴ |
| | Ba-133m | F | 2.8×10 ⁻¹⁰ | 5.5×10 ⁻¹⁰ | 7.44×10 ⁴ |
| | Ba-135m | F | 2.3×10 ⁻¹⁰ | 4.5×10 ⁻¹⁰ | 9.06×10 ⁴ |
| | Ba-139 | F | 5.5×10 ⁻¹¹ | 1.2×10 ⁻¹⁰ | 3.79×10 ⁵ |
| | Ba-140 | F | 1.6×10 ⁻⁹ | 2.5×10 ⁻⁹ | 1.30×10 ⁴ |
| | Ba-141 | F | 3.5×10 ⁻¹¹ | 7.0×10 ⁻¹¹ | 5.95×10 ⁵ |
| | Ba-142 | F | 2.7×10 ⁻¹¹ | 3.5×10 ⁻¹¹ | 7.72×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| 57 | Lanthanum | | | | |
| | La-131 | F | 2.4×10 ⁻¹¹ | 3.5×10 ⁻¹¹ | 8.68×10 ⁵ |
| | | M | 3.6×10 ⁻¹¹ | | 5.79×10 ⁵ |
| | La-132 | F | 2.0×10 ⁻¹⁰ | 3.9×10 ⁻¹⁰ | 1.04×10 ⁵ |
| | | M | 2.8×10 ⁻¹⁰ | | 7.44×10 ⁴ |
| | La-135 | F | 2.0×10 ⁻¹¹ | 3.0×10 ⁻¹¹ | 1.04×10 ⁶ |
| | | M | 2.5×10 ⁻¹¹ | | 8.33×10 ⁵ |
| | La-137 | F | 1.0×10 ⁻⁸ | 8.1×10 ⁻¹¹ | 2.08×10 ³ |
| | | M | 2.3×10 ⁻⁹ | | 9.06×10 ³ |
| | La-138 | F | 1.8×10 ⁻⁷ | 1.1×10 ⁻⁹ | 1.16×10 ² |
| | | M | 4.2×10 ⁻⁸ | | 4.96×10 ² |
| | La-140 | F | 1.0×10 ⁻⁹ | 2.0×10 ⁻⁹ | 2.08×10 ⁴ |
| | | M | 1.5×10 ⁻⁹ | | 1.39×10 ⁴ |
| | La-141 | F | 1.1×10 ⁻¹⁰ | 3.6×10 ⁻¹⁰ | 1.89×10 ⁵ |
| | | M | 2.2×10 ⁻¹⁰ | | 9.47×10 ⁴ |
| | La-142 | F | 1.0×10 ⁻¹⁰ | 1.8×10 ⁻¹⁰ | 2.08×10 ⁵ |
| | | M | 1.5×10 ⁻¹⁰ | | 1.39×10 ⁵ |
| | La-143 | F | 2.0×10 ⁻¹¹ | 5.6×10 ⁻¹¹ | 1.04×10 ⁶ |
| | | M | 3.3×10 ⁻¹¹ | | 6.31×10 ⁵ |
| 58 | Cerium | | | | |
| | Ce-134 | M | 1.5×10 ⁻⁹ | 2.5×10 ⁻⁹ | 1.39×10 ⁴ |
| | | S | 1.6×10 ⁻⁹ | | 1.30×10 ⁴ |
| | Ce-135 | M | 7.3×10 ⁻¹⁰ | 7.9×10 ⁻¹⁰ | 2.85×10 ⁴ |
| | | S | 7.6×10 ⁻¹⁰ | | 2.74×10 ⁴ |
| | Ce-137 | M | 1.8×10 ⁻¹¹ | 2.5×10 ⁻¹¹ | 1.16×10 ⁶ |
| | | S | 1.9×10 ⁻¹¹ | | 1.10×10 ⁶ |
| | Ce-137m | M | 5.5×10 ⁻¹⁰ | 5.4×10 ⁻¹⁰ | 3.79×10 ⁴ |
| | | S | 5.9×10 ⁻¹⁰ | | 3.53×10 ⁴ |
| | Ce-139 | M | 1.3×10 ⁻⁹ | 2.6×10 ⁻¹⁰ | 1.60×10 ⁴ |
| S | | 1.4×10 ⁻⁹ | 1.49×10 ⁴ | | |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|--------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Ce-141 | M | 2.7×10 ⁻⁹ | 7.1×10 ⁻¹⁰ | 7.72×10 ³ |
| | | S | 3.1×10 ⁻⁹ | | 6.72×10 ³ |
| | Ce-143 | M | 9.5×10 ⁻¹⁰ | 1.1×10 ⁻⁹ | 2.19×10 ⁴ |
| | | S | 1.0×10 ⁻⁹ | | 2.08×10 ⁴ |
| | Ce-144 | M | 2.3×10 ⁻⁸ | 5.2×10 ⁻⁹ | 9.06×10 ² |
| | | S | 2.9×10 ⁻⁸ | | 7.18×10 ² |
| 59 | Praseodymium | | | | |
| | Pr-136 | M | 2.4×10 ⁻¹¹ | 3.3×10 ⁻¹¹ | 8.68×10 ⁵ |
| | | S | 2.5×10 ⁻¹¹ | | 8.33×10 ⁵ |
| | Pr-137 | M | 3.4×10 ⁻¹¹ | 4.0×10 ⁻¹¹ | 6.13×10 ⁵ |
| | | S | 3.5×10 ⁻¹¹ | | 5.95×10 ⁵ |
| | Pr-138m | M | 1.3×10 ⁻¹⁰ | 1.3×10 ⁻¹⁰ | 1.60×10 ⁵ |
| | | S | 1.3×10 ⁻¹⁰ | | 1.60×10 ⁵ |
| | Pr-139 | M | 2.9×10 ⁻¹¹ | 3.1×10 ⁻¹¹ | 7.18×10 ⁵ |
| | | S | 3.0×10 ⁻¹¹ | | 6.94×10 ⁵ |
| | Pr-142 | M | 7.0×10 ⁻¹⁰ | 1.3×10 ⁻⁹ | 2.98×10 ⁴ |
| | | S | 7.4×10 ⁻¹⁰ | | 2.82×10 ⁴ |
| | Pr-142m | M | 8.9×10 ⁻¹² | 1.7×10 ⁻¹¹ | 2.34×10 ⁶ |
| | | S | 9.4×10 ⁻¹² | | 2.22×10 ⁶ |
| | Pr-143 | M | 1.9×10 ⁻⁹ | 1.2×10 ⁻⁹ | 1.10×10 ⁴ |
| | | S | 2.2×10 ⁻⁹ | | 9.47×10 ³ |
| | Pr-144 | M | 2.9×10 ⁻¹¹ | 5.0×10 ⁻¹¹ | 7.18×10 ⁵ |
| | | S | 3.0×10 ⁻¹¹ | | 6.94×10 ⁵ |
| | Pr-145 | M | 2.5×10 ⁻¹⁰ | 3.9×10 ⁻¹⁰ | 8.33×10 ⁴ |
| | | S | 2.6×10 ⁻¹⁰ | | 8.01×10 ⁴ |
| | Pr-147 | M | 2.9×10 ⁻¹¹ | 3.3×10 ⁻¹¹ | 7.18×10 ⁵ |
| | | S | 3.0×10 ⁻¹¹ | | 6.94×10 ⁵ |
| 60 | Neodymium | | | | |
| | Nd-136 | M | 8.5×10 ⁻¹¹ | 9.9×10 ⁻¹¹ | 2.45×10 ⁵ |
| | | S | 8.9×10 ⁻¹¹ | | 2.34×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Nd-138 | M | 3.7×10 ⁻¹⁰ | 6.4×10 ⁻¹⁰ | 5.63×10 ⁴ |
| | | S | 3.8×10 ⁻¹⁰ | | 5.48×10 ⁴ |
| | Nd-139 | M | 1.7×10 ⁻¹¹ | 2.0×10 ⁻¹¹ | 1.23×10 ⁶ |
| | | S | 1.7×10 ⁻¹¹ | | 1.23×10 ⁶ |
| | Nd-139m | M | 2.5×10 ⁻¹⁰ | 2.5×10 ⁻¹⁰ | 8.33×10 ⁴ |
| | | S | 2.5×10 ⁻¹⁰ | | 8.33×10 ⁴ |
| | Nd-141 | M | 8.5×10 ⁻¹² | 8.3×10 ⁻¹² | 2.45×10 ⁶ |
| | | S | 8.8×10 ⁻¹² | | 2.37×10 ⁶ |
| | Nd-147 | M | 1.9×10 ⁻⁹ | 1.1×10 ⁻⁹ | 1.10×10 ⁴ |
| | | S | 2.1×10 ⁻⁹ | | 9.92×10 ³ |
| | Nd-149 | M | 1.2×10 ⁻¹⁰ | 1.2×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | S | 1.3×10 ⁻¹⁰ | | 1.60×10 ⁵ |
| | Nd-151 | M | 2.8×10 ⁻¹¹ | 3.0×10 ⁻¹¹ | 7.44×10 ⁵ |
| | | S | 2.9×10 ⁻¹¹ | | 7.18×10 ⁵ |
| 61 | Promethium | | | | |
| | Pm-141 | M | 2.4×10 ⁻¹¹ | 3.6×10 ⁻¹¹ | 8.68×10 ⁵ |
| | | S | 2.5×10 ⁻¹¹ | | 8.33×10 ⁵ |
| | Pm-143 | M | 9.6×10 ⁻¹⁰ | 2.3×10 ⁻¹⁰ | 2.17×10 ⁴ |
| | | S | 8.3×10 ⁻¹⁰ | | 2.51×10 ⁴ |
| | Pm-144 | M | 5.4×10 ⁻⁹ | 9.7×10 ⁻¹⁰ | 3.86×10 ³ |
| | | S | 3.9×10 ⁻⁹ | | 5.34×10 ³ |
| | Pm-145 | M | 2.4×10 ⁻⁹ | 1.1×10 ⁻¹⁰ | 8.68×10 ³ |
| | | S | 1.2×10 ⁻⁹ | | 1.74×10 ⁴ |
| | Pm-146 | M | 1.3×10 ⁻⁸ | 9.0×10 ⁻¹⁰ | 1.60×10 ³ |
| | | S | 9.0×10 ⁻⁹ | | 2.31×10 ³ |
| | Pm-147 | M | 3.5×10 ⁻⁹ | 2.6×10 ⁻¹⁰ | 5.95×10 ³ |
| | | S | 3.2×10 ⁻⁹ | | 6.51×10 ³ |
| | Pm-148 | M | 2.1×10 ⁻⁹ | 2.7×10 ⁻⁹ | 9.92×10 ³ |
| | | S | 2.2×10 ⁻⁹ | | 9.47×10 ³ |
| | Pm-148m | M | 4.1×10 ⁻⁹ | 1.8×10 ⁻⁹ | 5.08×10 ³ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Pm-149 | S | 4.3×10 ⁻⁹ | 9.9×10 ⁻¹⁰ | 4.84×10 ³ |
| | | M | 7.6×10 ⁻¹⁰ | | 2.74×10 ⁴ |
| | | S | 8.2×10 ⁻¹⁰ | | 2.54×10 ⁴ |
| | Pm-150 | M | 2.0×10 ⁻¹⁰ | 2.6×10 ⁻¹⁰ | 1.04×10 ⁵ |
| | | S | 2.1×10 ⁻¹⁰ | | 9.92×10 ⁴ |
| | Pm-151 | M | 6.1×10 ⁻¹⁰ | 7.3×10 ⁻¹⁰ | 3.42×10 ⁴ |
| | | S | 6.4×10 ⁻¹⁰ | | 3.26×10 ⁴ |
| 62 | Samarium | | | | |
| | Sm-141 | M | 2.7×10 ⁻¹¹ | 3.9×10 ⁻¹¹ | 7.72×10 ⁵ |
| | Sm-141m | M | 5.6×10 ⁻¹¹ | 6.5×10 ⁻¹¹ | 3.72×10 ⁵ |
| | Sm-142 | M | 1.1×10 ⁻¹⁰ | 1.9×10 ⁻¹⁰ | 1.89×10 ⁵ |
| | Sm-145 | M | 1.1×10 ⁻⁹ | 2.1×10 ⁻¹⁰ | 1.89×10 ⁴ |
| | Sm-146 | M | 6.7×10 ⁻⁶ | 5.4×10 ⁻⁸ | 3.11×10 ⁰ |
| | Sm-147 | M | 6.1×10 ⁻⁶ | 4.9×10 ⁻⁸ | 3.42×10 ⁰ |
| | Sm-151 | M | 2.6×10 ⁻⁹ | 9.8×10 ⁻¹¹ | 8.01×10 ³ |
| | Sm-153 | M | 6.8×10 ⁻¹⁰ | 7.4×10 ⁻¹⁰ | 3.06×10 ⁴ |
| | Sm-155 | M | 2.8×10 ⁻¹¹ | 2.9×10 ⁻¹¹ | 7.44×10 ⁵ |
| | Sm-156 | M | 2.8×10 ⁻¹⁰ | 2.5×10 ⁻¹⁰ | 7.44×10 ⁴ |
| 63 | Europium | | | | |
| | Eu-145 | M | 7.3×10 ⁻¹⁰ | 7.5×10 ⁻¹⁰ | 2.85×10 ⁴ |
| | Eu-146 | M | 1.2×10 ⁻⁹ | 1.3×10 ⁻⁹ | 1.74×10 ⁴ |
| | Eu-147 | M | 1.0×10 ⁻⁹ | 4.4×10 ⁻¹⁰ | 2.08×10 ⁴ |
| | Eu-148 | M | 2.3×10 ⁻⁹ | 1.3×10 ⁻⁹ | 9.06×10 ³ |
| | Eu-149 | M | 2.3×10 ⁻¹⁰ | 1.0×10 ⁻¹⁰ | 9.06×10 ⁴ |
| | Eu-150 | M | 3.4×10 ⁻⁸ | 1.3×10 ⁻⁹ | 6.13×10 ² |
| | Eu-150 | M | 2.8×10 ⁻¹⁰ | 3.8×10 ⁻¹⁰ | 7.44×10 ⁴ |
| | Eu-152 | M | 2.7×10 ⁻⁸ | 1.4×10 ⁻⁹ | 7.72×10 ² |
| | Eu-152m | M | 3.2×10 ⁻¹⁰ | 5.0×10 ⁻¹⁰ | 6.51×10 ⁴ |
| | Eu-154 | M | 3.5×10 ⁻⁸ | 2.0×10 ⁻⁹ | 5.95×10 ² |
| | Eu-155 | M | 4.7×10 ⁻⁹ | 3.2×10 ⁻¹⁰ | 4.43×10 ³ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Eu-156 | M | 3.0×10 ⁻⁹ | 2.2×10 ⁻⁹ | 6.94×10 ³ |
| | Eu-157 | M | 4.4×10 ⁻¹⁰ | 6.0×10 ⁻¹⁰ | 4.73×10 ⁴ |
| | Eu-158 | M | 7.5×10 ⁻¹¹ | 9.4×10 ⁻¹¹ | 2.78×10 ⁵ |
| 64 | Gadolinium | | | | |
| | Gd-145 | F | 2.6×10 ⁻¹¹ | 4.4×10 ⁻¹¹ | 8.01×10 ⁵ |
| | | M | 3.5×10 ⁻¹¹ | | 5.95×10 ⁵ |
| | Gd-146 | F | 5.2×10 ⁻⁹ | 9.6×10 ⁻¹⁰ | 4.01×10 ³ |
| | | M | 4.6×10 ⁻⁹ | | 4.53×10 ³ |
| | Gd-147 | F | 4.5×10 ⁻¹⁰ | 6.1×10 ⁻¹⁰ | 4.63×10 ⁴ |
| | | M | 5.9×10 ⁻¹⁰ | | 3.53×10 ⁴ |
| | Gd-148 | F | 3.0×10 ⁻⁵ | 5.5×10 ⁻⁸ | 6.94×10 ⁻¹ |
| | | M | 7.2×10 ⁻⁶ | | 2.89×10 ⁰ |
| | Gd-149 | F | 4.5×10 ⁻¹⁰ | 4.5×10 ⁻¹⁰ | 4.63×10 ⁴ |
| | | M | 7.9×10 ⁻¹⁰ | | 2.64×10 ⁴ |
| | Gd-151 | F | 9.3×10 ⁻¹⁰ | 2.0×10 ⁻¹⁰ | 2.24×10 ⁴ |
| | | M | 6.5×10 ⁻¹⁰ | | 3.21×10 ⁴ |
| | Gd-152 | F | 2.2×10 ⁻⁵ | 4.1×10 ⁻⁸ | 9.47×10 ⁻¹ |
| | | M | 5.0×10 ⁻⁶ | | 4.17×10 ⁰ |
| | Gd-153 | F | 2.5×10 ⁻⁹ | 2.7×10 ⁻¹⁰ | 8.33×10 ³ |
| | | M | 1.4×10 ⁻⁹ | | 1.49×10 ⁴ |
| | Gd-159 | F | 1.8×10 ⁻¹⁰ | 4.9×10 ⁻¹⁰ | 1.16×10 ⁵ |
| | | M | 3.9×10 ⁻¹⁰ | | 5.34×10 ⁴ |
| 65 | Terbium | | | | |
| | Tb-147 | M | 1.2×10 ⁻¹⁰ | 1.6×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | Tb-149 | M | 3.1×10 ⁻⁹ | 2.5×10 ⁻¹⁰ | 6.72×10 ³ |
| | Tb-150 | M | 1.8×10 ⁻¹⁰ | 2.5×10 ⁻¹⁰ | 1.16×10 ⁵ |
| | Tb-151 | M | 3.3×10 ⁻¹⁰ | 3.4×10 ⁻¹⁰ | 6.31×10 ⁴ |
| | Tb-153 | M | 2.4×10 ⁻¹⁰ | 2.5×10 ⁻¹⁰ | 8.68×10 ⁴ |
| | Tb-154 | M | 6.0×10 ⁻¹⁰ | 6.5×10 ⁻¹⁰ | 3.47×10 ⁴ |
| | Tb-155 | M | 2.5×10 ⁻¹⁰ | 2.1×10 ⁻¹⁰ | 8.33×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Tb-156 | M | 1.4×10 ⁻⁹ | 1.2×10 ⁻⁹ | 1.49×10 ⁴ |
| | Tb-156m | M | 2.3×10 ⁻¹⁰ | 1.7×10 ⁻¹⁰ | 9.06×10 ⁴ |
| | Tb-156m | M | 1.3×10 ⁻¹⁰ | 8.1×10 ⁻¹¹ | 1.60×10 ⁵ |
| | Tb-157 | M | 7.9×10 ⁻¹⁰ | 3.4×10 ⁻¹¹ | 2.64×10 ⁴ |
| | Tb-158 | M | 3.0×10 ⁻⁸ | 1.1×10 ⁻⁹ | 6.94×10 ² |
| | Tb-160 | M | 5.4×10 ⁻⁹ | 1.6×10 ⁻⁹ | 3.86×10 ³ |
| | Tb-161 | M | 1.2×10 ⁻⁹ | 7.2×10 ⁻¹⁰ | 1.74×10 ⁴ |
| 66 | Dysprosium | | | | |
| | Dy-155 | M | 1.2×10 ⁻¹⁰ | 1.3×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | Dy-157 | M | 5.5×10 ⁻¹¹ | 6.1×10 ⁻¹¹ | 3.79×10 ⁵ |
| | Dy-159 | M | 2.5×10 ⁻¹⁰ | 1.0×10 ⁻¹⁰ | 8.33×10 ⁴ |
| | Dy-165 | M | 8.8×10 ⁻¹¹ | 1.1×10 ⁻¹⁰ | 2.37×10 ⁵ |
| | Dy-166 | M | 1.8×10 ⁻⁹ | 1.6×10 ⁻⁹ | 1.16×10 ⁴ |
| 67 | Holmium | | | | |
| | Ho-155 | M | 3.2×10 ⁻¹¹ | 3.7×10 ⁻¹¹ | 6.51×10 ⁵ |
| | Ho-157 | M | 7.6×10 ⁻¹² | 6.5×10 ⁻¹² | 2.74×10 ⁶ |
| | Ho-159 | M | 1.0×10 ⁻¹¹ | 7.9×10 ⁻¹² | 2.08×10 ⁶ |
| | Ho-161 | M | 1.0×10 ⁻¹¹ | 1.3×10 ⁻¹¹ | 2.08×10 ⁶ |
| | Ho-162 | M | 4.5×10 ⁻¹² | 3.3×10 ⁻¹² | 4.63×10 ⁶ |
| | Ho-162m | M | 3.3×10 ⁻¹¹ | 2.6×10 ⁻¹¹ | 6.31×10 ⁵ |
| | Ho-164 | M | 1.3×10 ⁻¹¹ | 9.5×10 ⁻¹² | 1.60×10 ⁶ |
| | Ho-164m | M | 1.6×10 ⁻¹¹ | 1.6×10 ⁻¹¹ | 1.30×10 ⁶ |
| | Ho-166 | M | 8.3×10 ⁻¹⁰ | 1.4×10 ⁻⁹ | 2.51×10 ⁴ |
| | Ho-166m | M | 7.8×10 ⁻⁸ | 2.0×10 ⁻⁹ | 2.67×10 ² |
| | Ho-167 | M | 1.0×10 ⁻¹⁰ | 8.3×10 ⁻¹¹ | 2.08×10 ⁵ |
| 68 | Erbium | | | | |
| | Er-161 | M | 8.5×10 ⁻¹¹ | 8.0×10 ⁻¹¹ | 2.45×10 ⁵ |
| | Er-165 | M | 1.4×10 ⁻¹¹ | 1.9×10 ⁻¹¹ | 1.49×10 ⁶ |
| | Er-169 | M | 9.2×10 ⁻¹⁰ | 3.7×10 ⁻¹⁰ | 2.26×10 ⁴ |
| | Er-171 | M | 3.0×10 ⁻¹⁰ | 3.6×10 ⁻¹⁰ | 6.94×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Er-172 | M | 1.2×10 ⁻⁹ | 1.0×10 ⁻⁹ | 1.74×10 ⁴ |
| 69 | Thulium | | | | |
| | Tm-162 | M | 2.7×10 ⁻¹¹ | 2.9×10 ⁻¹¹ | 7.72×10 ⁵ |
| | Tm-166 | M | 2.8×10 ⁻¹⁰ | 2.8×10 ⁻¹⁰ | 7.44×10 ⁴ |
| | Tm-167 | M | 1.0×10 ⁻⁹ | 5.6×10 ⁻¹⁰ | 2.08×10 ⁴ |
| | Tm-170 | M | 5.2×10 ⁻⁹ | 1.3×10 ⁻⁹ | 4.01×10 ³ |
| | Tm-171 | M | 9.1×10 ⁻¹⁰ | 1.1×10 ⁻¹⁰ | 2.29×10 ⁴ |
| | Tm-172 | M | 1.4×10 ⁻⁹ | 1.7×10 ⁻⁹ | 1.49×10 ⁴ |
| | Tm-173 | M | 2.6×10 ⁻¹⁰ | 3.1×10 ⁻¹⁰ | 8.01×10 ⁴ |
| | Tm-175 | M | 3.1×10 ⁻¹¹ | 2.7×10 ⁻¹¹ | 6.72×10 ⁵ |
| 70 | Ytterbium | | | | |
| | Yb-162 | M | 2.2×10 ⁻¹¹ | 2.3×10 ⁻¹¹ | 9.47×10 ⁵ |
| | | S | 2.3×10 ⁻¹¹ | | 9.06×10 ⁵ |
| | Yb-166 | M | 9.1×10 ⁻¹⁰ | 9.5×10 ⁻¹⁰ | 2.29×10 ⁴ |
| | | S | 9.5×10 ⁻¹⁰ | | 2.19×10 ⁴ |
| | Yb-167 | M | 9.0×10 ⁻¹² | 6.7×10 ⁻¹² | 2.31×10 ⁶ |
| | | S | 9.5×10 ⁻¹² | | 2.19×10 ⁶ |
| | Yb-169 | M | 2.1×10 ⁻⁹ | 7.1×10 ⁻¹⁰ | 9.92×10 ³ |
| | | S | 2.4×10 ⁻⁹ | | 8.68×10 ³ |
| | Yb-175 | M | 6.4×10 ⁻¹⁰ | 4.4×10 ⁻¹⁰ | 3.26×10 ⁴ |
| | | S | 7.0×10 ⁻¹⁰ | | 2.98×10 ⁴ |
| | Yb-177 | M | 8.8×10 ⁻¹¹ | 9.7×10 ⁻¹¹ | 2.37×10 ⁵ |
| | | S | 9.4×10 ⁻¹¹ | | 2.22×10 ⁵ |
| | Yb-178 | M | 1.0×10 ⁻¹⁰ | 1.2×10 ⁻¹⁰ | 2.08×10 ⁵ |
| | | S | 1.1×10 ⁻¹⁰ | | 1.89×10 ⁵ |
| 71 | Lutetium | | | | |
| | Lu-169 | M | 4.7×10 ⁻¹⁰ | 4.6×10 ⁻¹⁰ | 4.43×10 ⁴ |
| | | S | 4.9×10 ⁻¹⁰ | | 4.25×10 ⁴ |
| | Lu-170 | M | 9.3×10 ⁻¹⁰ | 9.9×10 ⁻¹⁰ | 2.24×10 ⁴ |
| | | S | 9.5×10 ⁻¹⁰ | | 2.19×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Lu-171 | M | 8.8×10 ⁻¹⁰ | 6.7×10 ⁻¹⁰ | 2.37×10 ⁴ |
| | | S | 9.3×10 ⁻¹⁰ | | 2.24×10 ⁴ |
| | Lu-172 | M | 1.7×10 ⁻⁹ | 1.3×10 ⁻⁹ | 1.23×10 ⁴ |
| | | S | 1.8×10 ⁻⁹ | | 1.16×10 ⁴ |
| | Lu-173 | M | 1.5×10 ⁻⁹ | 2.6×10 ⁻¹⁰ | 1.39×10 ⁴ |
| | | S | 1.4×10 ⁻⁹ | | 1.49×10 ⁴ |
| | Lu-174 | M | 2.9×10 ⁻⁹ | 2.7×10 ⁻¹⁰ | 7.18×10 ³ |
| | | S | 2.5×10 ⁻⁹ | | 8.33×10 ³ |
| | Lu-174m | M | 2.4×10 ⁻⁹ | 5.3×10 ⁻¹⁰ | 8.68×10 ³ |
| | | S | 2.6×10 ⁻⁹ | | 8.01×10 ³ |
| | Lu-176 | M | 4.6×10 ⁻⁸ | 1.8×10 ⁻⁹ | 4.53×10 ² |
| | | S | 3.0×10 ⁻⁸ | | 6.94×10 ² |
| | Lu-176m | M | 1.5×10 ⁻¹⁰ | 1.7×10 ⁻¹⁰ | 1.39×10 ⁵ |
| | | S | 1.6×10 ⁻¹⁰ | | 1.30×10 ⁵ |
| | Lu-177 | M | 1.0×10 ⁻⁹ | 5.3×10 ⁻¹⁰ | 2.08×10 ⁴ |
| | | S | 1.1×10 ⁻⁹ | | 1.89×10 ⁴ |
| | Lu-177m | M | 1.0×10 ⁻⁸ | 1.7×10 ⁻⁹ | 2.08×10 ³ |
| | | S | 1.2×10 ⁻⁸ | | 1.74×10 ³ |
| | Lu-178 | M | 3.9×10 ⁻¹¹ | 4.7×10 ⁻¹¹ | 5.34×10 ⁵ |
| | | S | 4.1×10 ⁻¹¹ | | 5.08×10 ⁵ |
| | Lu-178m | M | 5.4×10 ⁻¹¹ | 3.8×10 ⁻¹¹ | 3.86×10 ⁵ |
| | | S | 5.6×10 ⁻¹¹ | | 3.72×10 ⁵ |
| | Lu-179 | M | 1.6×10 ⁻¹⁰ | 2.1×10 ⁻¹⁰ | 1.30×10 ⁵ |
| | | S | 1.6×10 ⁻¹⁰ | | 1.30×10 ⁵ |
| 72 | Hafnium | | | | |
| | Hf-170 | F | 2.9×10 ⁻¹⁰ | 4.8×10 ⁻¹⁰ | 7.18×10 ⁴ |
| | | M | 4.3×10 ⁻¹⁰ | | 4.84×10 ⁴ |
| | Hf-172 | F | 3.7×10 ⁻⁸ | 1.0×10 ⁻⁹ | 5.63×10 ² |
| | | M | 1.3×10 ⁻⁸ | | 1.60×10 ³ |
| | Hf-173 | F | 1.3×10 ⁻¹⁰ | 2.3×10 ⁻¹⁰ | 1.60×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | | M | 2.2×10 ⁻¹⁰ | | 9.47×10 ⁴ |
| | Hf-175 | F | 8.7×10 ⁻¹⁰ | 4.1×10 ⁻¹⁰ | 2.39×10 ⁴ |
| | | M | 8.8×10 ⁻¹⁰ | | 2.37×10 ⁴ |
| | Hf-177m | F | 8.4×10 ⁻¹¹ | 8.1×10 ⁻¹¹ | 2.48×10 ⁵ |
| | | M | 1.5×10 ⁻¹⁰ | | 1.39×10 ⁵ |
| | Hf-178m | F | 3.1×10 ⁻⁷ | 4.7×10 ⁻⁹ | 6.72×10 ¹ |
| | | M | 7.8×10 ⁻⁸ | | 2.67×10 ² |
| | Hf-179m | F | 1.4×10 ⁻⁹ | 1.2×10 ⁻⁹ | 1.49×10 ⁴ |
| | | M | 3.2×10 ⁻⁹ | | 6.51×10 ³ |
| | Hf-180m | F | 1.2×10 ⁻¹⁰ | 1.7×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | M | 2.0×10 ⁻¹⁰ | | 1.04×10 ⁵ |
| | Hf-181 | F | 1.8×10 ⁻⁹ | 1.1×10 ⁻⁹ | 1.16×10 ⁴ |
| | | M | 4.1×10 ⁻⁹ | | 5.08×10 ³ |
| | Hf-182 | F | 3.6×10 ⁻⁷ | 3.0×10 ⁻⁹ | 5.79×10 ¹ |
| | | M | 8.3×10 ⁻⁸ | | 2.51×10 ² |
| | Hf-182m | F | 4.0×10 ⁻¹¹ | 4.2×10 ⁻¹¹ | 5.21×10 ⁵ |
| | | M | 7.1×10 ⁻¹¹ | | 2.93×10 ⁵ |
| | Hf-183 | F | 4.4×10 ⁻¹¹ | 7.3×10 ⁻¹¹ | 4.73×10 ⁵ |
| | | M | 8.3×10 ⁻¹¹ | | 2.51×10 ⁵ |
| | Hf-184 | F | 2.3×10 ⁻¹⁰ | 5.2×10 ⁻¹⁰ | 9.06×10 ⁴ |
| | | M | 4.5×10 ⁻¹⁰ | | 4.63×10 ⁴ |
| | 73 | Tantalum | | | |
| Ta-172 | | M | 5.5×10 ⁻¹¹ | 5.3×10 ⁻¹¹ | 3.79×10 ⁵ |
| | | S | 5.7×10 ⁻¹¹ | | 3.65×10 ⁵ |
| Ta-173 | | M | 1.6×10 ⁻¹⁰ | 1.9×10 ⁻¹⁰ | 1.30×10 ⁵ |
| | | S | 1.6×10 ⁻¹⁰ | | 1.30×10 ⁵ |
| Ta-174 | | M | 6.3×10 ⁻¹¹ | 5.7×10 ⁻¹¹ | 3.31×10 ⁵ |
| | | S | 6.6×10 ⁻¹¹ | | 3.16×10 ⁵ |
| Ta-175 | | M | 2.0×10 ⁻¹⁰ | 2.1×10 ⁻¹⁰ | 1.04×10 ⁵ |
| | | S | 2.0×10 ⁻¹⁰ | | 1.04×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|----------|-----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Ta-176 | M | 3.2×10 ⁻¹⁰ | 3.1×10 ⁻¹⁰ | 6.51×10 ⁴ |
| | | S | 3.3×10 ⁻¹⁰ | | 6.31×10 ⁴ |
| | Ta-177 | M | 1.2×10 ⁻¹⁰ | 1.1×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | S | 1.3×10 ⁻¹⁰ | | 1.60×10 ⁵ |
| | Ta-178 | M | 1.0×10 ⁻¹⁰ | 7.8×10 ⁻¹¹ | 2.08×10 ⁵ |
| | | S | 1.1×10 ⁻¹⁰ | | 1.89×10 ⁵ |
| | Ta-179 | M | 1.3×10 ⁻¹⁰ | 6.5×10 ⁻¹¹ | 1.60×10 ⁵ |
| | | S | 2.9×10 ⁻¹⁰ | | 7.18×10 ⁴ |
| | Ta-180 | M | 4.6×10 ⁻⁹ | 8.4×10 ⁻¹⁰ | 4.53×10 ³ |
| | | S | 1.4×10 ⁻⁸ | | 1.49×10 ³ |
| | Ta-180m | M | 5.8×10 ⁻¹¹ | 5.4×10 ⁻¹¹ | 3.59×10 ⁵ |
| | | S | 6.2×10 ⁻¹¹ | | 3.36×10 ⁵ |
| | Ta-182 | M | 5.8×10 ⁻⁹ | 1.5×10 ⁻⁹ | 3.59×10 ³ |
| | | S | 7.4×10 ⁻⁹ | | 2.82×10 ³ |
| | Ta-182m | M | 3.4×10 ⁻¹¹ | 1.2×10 ⁻¹¹ | 6.13×10 ⁵ |
| | | S | 3.6×10 ⁻¹¹ | | 5.79×10 ⁵ |
| | Ta-183 | M | 1.8×10 ⁻⁹ | 1.3×10 ⁻⁹ | 1.16×10 ⁴ |
| | | S | 2.0×10 ⁻⁹ | | 1.04×10 ⁴ |
| | Ta-184 | M | 6.0×10 ⁻¹⁰ | 6.8×10 ⁻¹⁰ | 3.47×10 ⁴ |
| | | S | 6.3×10 ⁻¹⁰ | | 3.31×10 ⁴ |
| | Ta-185 | M | 6.8×10 ⁻¹¹ | 6.8×10 ⁻¹¹ | 3.06×10 ⁵ |
| | | S | 7.2×10 ⁻¹¹ | | 2.89×10 ⁵ |
| | Ta-186 | M | 3.0×10 ⁻¹¹ | 3.3×10 ⁻¹¹ | 6.94×10 ⁵ |
| | | S | 3.1×10 ⁻¹¹ | | 6.72×10 ⁵ |
| 74 | Tungsten | | | | |
| | W-176 | F | 7.6×10 ⁻¹¹ | 1.0×10 ⁻¹⁰ | 2.74×10 ⁵ |
| | | | | 1.1×10 ⁻¹⁰ | |
| | W-177 | F | 4.6×10 ⁻¹¹ | 5.8×10 ⁻¹¹ | 4.53×10 ⁵ |
| | | | | 6.1×10 ⁻¹¹ | |
| W-178 | F | 1.2×10 ⁻¹⁰ | 2.2×10 ⁻¹⁰ | 1.74×10 ⁵ | |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|----------------------|--------------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | | | | 2.5×10 ⁻¹⁰ | |
| | W-179 | F | 1.8×10 ⁻¹² | 3.3×10 ⁻¹² | 1.16×10 ⁷ |
| | | | | 3.3×10 ⁻¹² | |
| | W-181 | F | 4.3×10 ⁻¹¹ | 7.6×10 ⁻¹¹ | 4.84×10 ⁵ |
| | | | | 8.2×10 ⁻¹¹ | |
| | W-185 | F | 2.2×10 ⁻¹⁰ | 4.4×10 ⁻¹⁰ | 9.47×10 ⁴ |
| | | | | 5.0×10 ⁻¹⁰ | |
| | W-187 | F | 3.3×10 ⁻¹⁰ | 6.3×10 ⁻¹⁰ | 6.31×10 ⁴ |
| | | | | 7.1×10 ⁻¹⁰ | |
| | W-188 | F | 8.4×10 ⁻¹⁰ | 2.1×10 ⁻⁹ | 2.48×10 ⁴ |
| 2.3×10 ⁻⁹ | | | | | |
| 75 | Rhenium | | | | |
| | Re-177 | F | 1.7×10 ⁻¹¹ | 2.2×10 ⁻¹¹ | 1.23×10 ⁶ |
| | | M | 2.2×10 ⁻¹¹ | | 9.47×10 ⁵ |
| | Re-178 | F | 1.8×10 ⁻¹¹ | 2.5×10 ⁻¹¹ | 1.16×10 ⁶ |
| | | M | 2.4×10 ⁻¹¹ | | 8.68×10 ⁵ |
| | Re-181 | F | 3.0×10 ⁻¹⁰ | 4.2×10 ⁻¹⁰ | 6.94×10 ⁴ |
| | | M | 3.7×10 ⁻¹⁰ | | 5.63×10 ⁴ |
| | Re-182 (2.67 d) | F | 1.1×10 ⁻⁹ | 1.4×10 ⁻⁹ | 1.89×10 ⁴ |
| | | M | 1.7×10 ⁻⁹ | | 1.23×10 ⁴ |
| | Re-182 (12.7 h) | F | 2.4×10 ⁻¹⁰ | 2.7×10 ⁻¹⁰ | 8.68×10 ⁴ |
| | | M | 3.0×10 ⁻¹⁰ | | 6.94×10 ⁴ |
| | Re-184 | F | 7.0×10 ⁻¹⁰ | 1.0×10 ⁻⁹ | 2.98×10 ⁴ |
| | | M | 1.8×10 ⁻⁹ | | 1.16×10 ⁴ |
| | Re-184m | F | 8.8×10 ⁻¹⁰ | 1.5×10 ⁻⁹ | 2.37×10 ⁴ |
| | | M | 4.8×10 ⁻⁹ | | 4.34×10 ³ |
| | Re-186 | F | 7.3×10 ⁻¹⁰ | 1.5×10 ⁻⁹ | 2.85×10 ⁴ |
| | | M | 1.2×10 ⁻⁹ | | 1.74×10 ⁴ |
| | Re-186m | F | 1.2×10 ⁻⁹ | 2.2×10 ⁻⁹ | 1.74×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | | M | 7.9×10 ⁻⁹ | | 2.64×10 ³ |
| | Re-187 | F | 2.6×10 ⁻¹² | 5.1×10 ⁻¹² | 8.01×10 ⁶ |
| | | M | 4.6×10 ⁻¹² | | 4.53×10 ⁶ |
| | Re-188 | F | 6.6×10 ⁻¹⁰ | 1.4×10 ⁻⁹ | 3.16×10 ⁴ |
| | | M | 7.4×10 ⁻¹⁰ | | 2.82×10 ⁴ |
| | Re-188m | F | 1.6×10 ⁻¹¹ | 3.0×10 ⁻¹¹ | 1.30×10 ⁶ |
| | | M | 2.0×10 ⁻¹¹ | | 1.04×10 ⁶ |
| | Re-189 | F | 4.3×10 ⁻¹⁰ | 7.8×10 ⁻¹⁰ | 4.84×10 ⁴ |
| | | M | 6.0×10 ⁻¹⁰ | | 3.47×10 ⁴ |
| 76 | Osmium | | | | |
| | Os-180 | F | 1.6×10 ⁻¹¹ | 1.7×10 ⁻¹¹ | 1.30×10 ⁶ |
| | | M | 2.4×10 ⁻¹¹ | | 8.68×10 ⁵ |
| | | S | 2.5×10 ⁻¹¹ | | 8.33×10 ⁵ |
| | Os-181 | F | 6.4×10 ⁻¹¹ | 8.9×10 ⁻¹¹ | 3.26×10 ⁵ |
| | | M | 9.6×10 ⁻¹¹ | | 2.17×10 ⁵ |
| | | S | 1.0×10 ⁻¹⁰ | | 2.08×10 ⁵ |
| | Os-182 | F | 3.2×10 ⁻¹⁰ | 5.6×10 ⁻¹⁰ | 6.51×10 ⁴ |
| | | M | 5.0×10 ⁻¹⁰ | | 4.17×10 ⁴ |
| | | S | 5.2×10 ⁻¹⁰ | | 4.01×10 ⁴ |
| | Os-185 | F | 1.4×10 ⁻⁹ | 5.1×10 ⁻¹⁰ | 1.49×10 ⁴ |
| | | M | 1.0×10 ⁻⁹ | | 2.08×10 ⁴ |
| | | S | 1.1×10 ⁻⁹ | | 1.89×10 ⁴ |
| | Os-189m | F | 5.2×10 ⁻¹² | 1.8×10 ⁻¹¹ | 4.01×10 ⁶ |
| | | M | 7.6×10 ⁻¹² | | 2.74×10 ⁶ |
| | | S | 7.9×10 ⁻¹² | | 2.64×10 ⁶ |
| | Os-191 | F | 3.5×10 ⁻¹⁰ | 5.7×10 ⁻¹⁰ | 5.95×10 ⁴ |
| | | M | 1.3×10 ⁻⁹ | | 1.60×10 ⁴ |
| | | S | 1.5×10 ⁻⁹ | | 1.39×10 ⁴ |
| | Os-191m | F | 4.1×10 ⁻¹¹ | 9.6×10 ⁻¹¹ | 5.08×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|--------------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | | M | 1.3×10 ⁻¹⁰ | | 1.60×10 ⁵ |
| | | S | 1.4×10 ⁻¹⁰ | | 1.49×10 ⁵ |
| | Os-193 | F | 2.8×10 ⁻¹⁰ | 8.1×10 ⁻¹⁰ | 7.44×10 ⁴ |
| | | M | 6.4×10 ⁻¹⁰ | | 3.26×10 ⁴ |
| | | S | 6.8×10 ⁻¹⁰ | | 3.06×10 ⁴ |
| | Os-194 | F | 1.3×10 ⁻⁸ | 2.4×10 ⁻⁹ | 1.60×10 ³ |
| | | M | 1.3×10 ⁻⁸ | | 1.60×10 ³ |
| | | S | 4.2×10 ⁻⁸ | | 4.96×10 ² |
| | 77 | Iridium | | | |
| Ir-182 | | F | 2.6×10 ⁻¹¹ | 4.8×10 ⁻¹¹ | 8.01×10 ⁵ |
| | | M | 3.9×10 ⁻¹¹ | | 5.34×10 ⁵ |
| | | S | 4.0×10 ⁻¹¹ | | 5.21×10 ⁵ |
| Ir-184 | | F | 1.2×10 ⁻¹⁰ | 1.7×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | M | 1.8×10 ⁻¹⁰ | | 1.16×10 ⁵ |
| | | S | 1.9×10 ⁻¹⁰ | | 1.10×10 ⁵ |
| Ir-185 | | F | 1.5×10 ⁻¹⁰ | 2.6×10 ⁻¹⁰ | 1.39×10 ⁵ |
| | | M | 2.5×10 ⁻¹⁰ | | 8.33×10 ⁴ |
| | | S | 2.6×10 ⁻¹⁰ | | 8.01×10 ⁴ |
| Ir-186 (15.8 h) | | F | 3.3×10 ⁻¹⁰ | 4.9×10 ⁻¹⁰ | 6.31×10 ⁴ |
| | | M | 4.8×10 ⁻¹⁰ | | 4.34×10 ⁴ |
| | | S | 5.0×10 ⁻¹⁰ | | 4.17×10 ⁴ |
| Ir-186 (1.75 h) | | F | 4.5×10 ⁻¹¹ | 6.1×10 ⁻¹¹ | 4.63×10 ⁵ |
| | | M | 6.9×10 ⁻¹¹ | | 3.02×10 ⁵ |
| | | S | 7.1×10 ⁻¹¹ | | 2.93×10 ⁵ |
| Ir-187 | | F | 7.2×10 ⁻¹¹ | 1.2×10 ⁻¹⁰ | 2.89×10 ⁵ |
| | | M | 1.1×10 ⁻¹⁰ | | 1.89×10 ⁵ |
| | | S | 1.2×10 ⁻¹⁰ | | 1.74×10 ⁵ |
| Ir-188 | | F | 4.4×10 ⁻¹⁰ | 6.3×10 ⁻¹⁰ | 4.73×10 ⁴ |
| | | M | 6.0×10 ⁻¹⁰ | | 3.47×10 ⁴ |
| | | S | 6.2×10 ⁻¹⁰ | | 3.36×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Ir-189 | F | 1.7×10 ⁻¹⁰ | 2.4×10 ⁻¹⁰ | 1.23×10 ⁵ |
| | | M | 4.1×10 ⁻¹⁰ | | 5.08×10 ⁴ |
| | | S | 4.6×10 ⁻¹⁰ | | 4.53×10 ⁴ |
| | Ir-190 | F | 1.2×10 ⁻⁹ | 1.2×10 ⁻⁹ | 1.74×10 ⁴ |
| | | M | 2.3×10 ⁻⁹ | | 9.06×10 ³ |
| | | S | 2.5×10 ⁻⁹ | | 8.33×10 ³ |
| | Ir-190m (3.10 h) | F | 9.7×10 ⁻¹¹ | 1.2×10 ⁻¹⁰ | 2.15×10 ⁵ |
| | | M | 1.4×10 ⁻¹⁰ | | 1.49×10 ⁵ |
| | | S | 1.4×10 ⁻¹⁰ | | 1.49×10 ⁵ |
| | Ir-190m (1.20 h) | F | 5.6×10 ⁻¹² | 8.0×10 ⁻¹² | 3.72×10 ⁶ |
| | | M | 1.0×10 ⁻¹¹ | | 2.08×10 ⁶ |
| | | S | 1.1×10 ⁻¹¹ | | 1.89×10 ⁶ |
| | Ir-192 | F | 2.2×10 ⁻⁹ | 1.4×10 ⁻⁹ | 9.47×10 ³ |
| | | M | 4.1×10 ⁻⁹ | | 5.08×10 ³ |
| | | S | 4.9×10 ⁻⁹ | | 4.25×10 ³ |
| | Ir-192m | F | 5.6×10 ⁻⁹ | 3.1×10 ⁻¹⁰ | 3.72×10 ³ |
| | | M | 3.4×10 ⁻⁹ | | 6.13×10 ³ |
| | | S | 1.9×10 ⁻⁸ | | 1.10×10 ³ |
| | Ir-193m | F | 1.6×10 ⁻¹⁰ | 2.7×10 ⁻¹⁰ | 1.30×10 ⁵ |
| | | M | 9.1×10 ⁻¹⁰ | | 2.29×10 ⁴ |
| | | S | 1.0×10 ⁻⁹ | | 2.08×10 ⁴ |
| | Ir-194 | F | 3.6×10 ⁻¹⁰ | 1.3×10 ⁻⁹ | 5.79×10 ⁴ |
| | | M | 7.1×10 ⁻¹⁰ | | 2.93×10 ⁴ |
| | | S | 7.5×10 ⁻¹⁰ | | 2.78×10 ⁴ |
| | Ir-194m | F | 6.5×10 ⁻⁹ | 2.1×10 ⁻⁹ | 3.21×10 ³ |
| | | M | 6.5×10 ⁻⁹ | | 3.21×10 ³ |
| | | S | 8.2×10 ⁻⁹ | | 2.54×10 ³ |
| | Ir-195 | F | 4.5×10 ⁻¹¹ | 1.0×10 ⁻¹⁰ | 4.63×10 ⁵ |
| | | M | 9.6×10 ⁻¹¹ | | 2.17×10 ⁵ |
| | | S | 1.0×10 ⁻¹⁰ | | 2.08×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Ir-195m | F | 1.1×10 ⁻¹⁰ | 2.1×10 ⁻¹⁰ | 1.89×10 ⁵ |
| | | M | 2.3×10 ⁻¹⁰ | | 9.06×10 ⁴ |
| | | S | 2.4×10 ⁻¹⁰ | | 8.68×10 ⁴ |
| 78 | Platinum | | | | |
| | Pt-186 | F | 6.6×10 ⁻¹¹ | 9.3×10 ⁻¹¹ | 3.16×10 ⁵ |
| | Pt-188 | F | 6.3×10 ⁻¹⁰ | 7.6×10 ⁻¹⁰ | 3.31×10 ⁴ |
| | Pt-189 | F | 7.3×10 ⁻¹¹ | 1.2×10 ⁻¹⁰ | 2.85×10 ⁵ |
| | Pt-191 | F | 1.9×10 ⁻¹⁰ | 3.4×10 ⁻¹⁰ | 1.10×10 ⁵ |
| | Pt-193 | F | 2.7×10 ⁻¹¹ | 3.1×10 ⁻¹¹ | 7.72×10 ⁵ |
| | Pt-193m | F | 2.1×10 ⁻¹⁰ | 4.5×10 ⁻¹⁰ | 9.92×10 ⁴ |
| | Pt-195m | F | 3.1×10 ⁻¹⁰ | 6.3×10 ⁻¹⁰ | 6.72×10 ⁴ |
| | Pt-197 | F | 1.6×10 ⁻¹⁰ | 4.0×10 ⁻¹⁰ | 1.30×10 ⁵ |
| | Pt-197m | F | 4.3×10 ⁻¹¹ | 8.4×10 ⁻¹¹ | 4.84×10 ⁵ |
| | Pt-199 | F | 2.2×10 ⁻¹¹ | 3.9×10 ⁻¹¹ | 9.47×10 ⁵ |
| | Pt-200 | F | 4.0×10 ⁻¹⁰ | 1.2×10 ⁻⁹ | 5.21×10 ⁴ |
| 79 | Gold | | | | |
| | Au-193 | F | 7.1×10 ⁻¹¹ | 1.3×10 ⁻¹⁰ | 2.93×10 ⁵ |
| | | M | 1.5×10 ⁻¹⁰ | | 1.39×10 ⁵ |
| | | S | 1.6×10 ⁻¹⁰ | | 1.30×10 ⁵ |
| | Au-194 | F | 2.8×10 ⁻¹⁰ | 4.2×10 ⁻¹⁰ | 7.44×10 ⁴ |
| | | M | 3.7×10 ⁻¹⁰ | | 5.63×10 ⁴ |
| | | S | 3.8×10 ⁻¹⁰ | | 5.48×10 ⁴ |
| | Au-195 | F | 1.2×10 ⁻¹⁰ | 2.5×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | M | 8.0×10 ⁻¹⁰ | | 2.60×10 ⁴ |
| | | S | 1.2×10 ⁻⁹ | | 1.74×10 ⁴ |
| | Au-198 | F | 3.9×10 ⁻¹⁰ | 1.0×10 ⁻⁹ | 5.34×10 ⁴ |
| | | M | 9.8×10 ⁻¹⁰ | | 2.13×10 ⁴ |
| | | S | 1.1×10 ⁻⁹ | | 1.89×10 ⁴ |
| | Au-198m | F | 5.9×10 ⁻¹⁰ | 1.3×10 ⁻⁹ | 3.53×10 ⁴ |
| | | M | 2.0×10 ⁻⁹ | | 1.04×10 ⁴ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 | |
|--------------------------------------|----------------------|-------------------------------------|---|--|-----------------------------|----------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) | |
| | Au-199 | S | 1.9×10 ⁻⁹ | 4.4×10 ⁻¹⁰ | 1.10×10 ⁴ | |
| | | F | 1.9×10 ⁻¹⁰ | | 1.10×10 ⁵ | |
| | | M | 6.8×10 ⁻¹⁰ | | 3.06×10 ⁴ | |
| | | S | 7.6×10 ⁻¹⁰ | | 2.74×10 ⁴ | |
| | Au-200 | F | 3.0×10 ⁻¹¹ | 6.8×10 ⁻¹¹ | 6.94×10 ⁵ | |
| | | M | 5.3×10 ⁻¹¹ | | 3.93×10 ⁵ | |
| | | S | 5.6×10 ⁻¹¹ | | 3.72×10 ⁵ | |
| | Au-200m | F | 5.7×10 ⁻¹⁰ | 1.1×10 ⁻⁹ | 3.65×10 ⁴ | |
| | | M | 9.8×10 ⁻¹⁰ | | 2.13×10 ⁴ | |
| | | S | 1.0×10 ⁻⁹ | | 2.08×10 ⁴ | |
| | Au-201 | F | 1.6×10 ⁻¹¹ | 2.4×10 ⁻¹¹ | 1.30×10 ⁶ | |
| | | M | 2.8×10 ⁻¹¹ | | 7.44×10 ⁵ | |
| | | S | 2.9×10 ⁻¹¹ | | 7.18×10 ⁵ | |
| | 80 | Mercury* | | | | |
| | | Hg-193 (other organic compounds) | F | 4.7×10 ⁻¹¹ | 3.1×10 ⁻¹¹ | 4.43×10 ⁵ |
| | | Hg-193 (organic methyl mercury) | | | 6.6×10 ⁻¹¹ | |
| Hg-193(inorganic) | | F | 5.0×10 ⁻¹¹ | 8.2×10 ⁻¹¹ | 4.17×10 ⁵ | |
| | | M | 1.0×10 ⁻¹⁰ | | 2.08×10 ⁵ | |
| Hg-193m (other organic compounds) | | F | 2.0×10 ⁻¹⁰ | 1.3×10 ⁻¹⁰ | 1.04×10 ⁵ | |
| Hg-193m (organic methyl mercury) | | | | 3.0×10 ⁻¹⁰ | | |
| Hg-193m (inorganic) | | F | 2.3×10 ⁻¹⁰ | 4.0×10 ⁻¹⁰ | 9.06×10 ⁴ | |
| | | M | 3.8×10 ⁻¹⁰ | | 5.48×10 ⁴ | |
| Hg-194 (other organic compounds) | | F | 1.9×10 ⁻⁸ | 5.1×10 ⁻⁸ | 1.10×10 ³ | |
| Hg-194 | 2.1×10 ⁻⁸ | | | | | |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------------------------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | (organic methyl mercury) | | | | |
| | Hg-194 (inorganic) | F | 1.5×10 ⁻⁸ | 1.4×10 ⁻⁹ | 1.39×10 ³ |
| | | M | 5.3×10 ⁻⁹ | | 3.93×10 ³ |
| | Hg-195 (other organic compounds) | F | 4.4×10 ⁻¹¹ | 3.4×10 ⁻¹¹ | 4.73×10 ⁵ |
| | Hg-195 (organic methyl mercury) | | | 7.5×10 ⁻¹¹ | |
| | Hg-195 (inorganic) | F | 4.8×10 ⁻¹¹ | 9.7×10 ⁻¹¹ | 4.34×10 ⁵ |
| | | M | 9.2×10 ⁻¹¹ | | 2.26×10 ⁵ |
| | Hg-195m (other organic compounds) | F | 2.2×10 ⁻¹⁰ | 2.2×10 ⁻¹⁰ | 9.47×10 ⁴ |
| | Hg-195m (organic methyl mercury) | | | 4.1×10 ⁻¹⁰ | |
| | Hg-195m (inorganic) | F | 2.6×10 ⁻¹⁰ | 5.6×10 ⁻¹⁰ | 8.01×10 ⁴ |
| | | M | 6.5×10 ⁻¹⁰ | | 3.21×10 ⁴ |
| | Hg-197 (other organic compounds) | F | 8.5×10 ⁻¹¹ | 9.9×10 ⁻¹¹ | 2.45×10 ⁵ |
| | Hg-197 (organic methyl mercury) | | | 1.7×10 ⁻¹⁰ | |
| | Hg-197 (inorganic) | F | 1.0×10 ⁻¹⁰ | 2.3×10 ⁻¹⁰ | 2.08×10 ⁵ |
| | | M | 2.8×10 ⁻¹⁰ | | 7.44×10 ⁴ |
| | Hg-197m (other organic compounds) | F | 1.8×10 ⁻¹⁰ | 1.5×10 ⁻¹⁰ | 1.16×10 ⁵ |
| | Hg-197m (organic methyl mercury) | | | 3.4×10 ⁻¹⁰ | |
| | Hg-197m (inorganic) | F | 2.1×10 ⁻¹⁰ | 4.7×10 ⁻¹⁰ | 9.92×10 ⁴ |
| | | M | 6.6×10 ⁻¹⁰ | | 3.16×10 ⁴ |
| | Hg-199m (other organic compounds) | F | 2.7×10 ⁻¹¹ | 2.8×10 ⁻¹¹ | 7.72×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|----------------------------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Hg-199m (organic methyl mercury) | | | 3.1×10 ⁻¹¹ | |
| | Hg-199m (inorganic) | F | 2.7×10 ⁻¹¹ | 3.1×10 ⁻¹¹ | 7.72×10 ⁵ |
| | | M | 5.2×10 ⁻¹¹ | | 4.01×10 ⁵ |
| | Hg-203 (other organic compounds) | F | 7.5×10 ⁻¹⁰ | 1.9×10 ⁻⁹ | 2.78×10 ⁴ |
| | Hg-203 (organic methyl mercury) | | | 1.1×10 ⁻⁹ | |
| | Hg-203 (inorganic) | F | 5.9×10 ⁻¹⁰ | 5.4×10 ⁻¹⁰ | 3.53×10 ⁴ |
| | | M | 1.9×10 ⁻⁹ | | 1.10×10 ⁴ |
| | 81 | Thallium | | | |
| Tl-194 | | F | 8.9×10 ⁻¹² | 8.1×10 ⁻¹² | 2.34×10 ⁶ |
| Tl-194m | | F | 3.6×10 ⁻¹¹ | 4.0×10 ⁻¹¹ | 5.79×10 ⁵ |
| Tl-195 | | F | 3.0×10 ⁻¹¹ | 2.7×10 ⁻¹¹ | 6.94×10 ⁵ |
| Tl-197 | | F | 2.7×10 ⁻¹¹ | 2.3×10 ⁻¹¹ | 7.72×10 ⁵ |
| Tl-198 | | F | 1.2×10 ⁻¹⁰ | 7.3×10 ⁻¹¹ | 1.74×10 ⁵ |
| Tl-198m | | F | 7.3×10 ⁻¹¹ | 5.4×10 ⁻¹¹ | 2.85×10 ⁵ |
| Tl-199 | | F | 3.7×10 ⁻¹¹ | 2.6×10 ⁻¹¹ | 5.63×10 ⁵ |
| Tl-200 | | F | 2.5×10 ⁻¹⁰ | 2.0×10 ⁻¹⁰ | 8.33×10 ⁴ |
| Tl-201 | | F | 7.6×10 ⁻¹¹ | 9.5×10 ⁻¹¹ | 2.74×10 ⁵ |
| Tl-202 | | F | 3.1×10 ⁻¹⁰ | 4.5×10 ⁻¹⁰ | 6.72×10 ⁴ |
| Tl-204 | | F | 6.2×10 ⁻¹⁰ | 1.3×10 ⁻⁹ | 3.36×10 ⁴ |
| 82 | Lead | | | | |
| | Pb-195m | F | 3.0×10 ⁻¹¹ | 2.9×10 ⁻¹¹ | 6.94×10 ⁵ |
| | Pb-198 | F | 8.7×10 ⁻¹¹ | 1.0×10 ⁻¹⁰ | 2.39×10 ⁵ |
| | Pb-199 | F | 4.8×10 ⁻¹¹ | 5.4×10 ⁻¹¹ | 4.34×10 ⁵ |
| | Pb-200 | F | 2.6×10 ⁻¹⁰ | 4.0×10 ⁻¹⁰ | 8.01×10 ⁴ |
| | Pb-201 | F | 1.2×10 ⁻¹⁰ | 1.6×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | Pb-202 | F | 1.4×10 ⁻⁸ | 8.7×10 ⁻⁹ | 1.49×10 ³ |
| | Pb-202m | F | 1.2×10 ⁻¹⁰ | 1.3×10 ⁻¹⁰ | 1.74×10 ⁵ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|---|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation ($\text{Sv} \cdot \text{Bq}^{-1}$) | DCF via ingestion ($\text{Sv} \cdot \text{Bq}^{-1}$) | DAC ($\text{Bq} \cdot \text{m}^{-3}$) |
| | Pb-203 | F | 1.6×10^{-10} | 2.4×10^{-10} | 1.30×10^5 |
| | Pb-205 | F | 4.1×10^{-10} | 2.8×10^{-10} | 5.08×10^4 |
| | Pb-209 | F | 3.2×10^{-11} | 5.7×10^{-11} | 6.51×10^5 |
| | Pb-210 | F | 1.1×10^{-6} | 6.8×10^{-7} | 1.89×10^1 |
| | Pb-211 | F | 5.6×10^{-9} | 1.8×10^{-10} | 3.72×10^3 |
| | Pb-212 | F | 3.3×10^{-8} | 5.9×10^{-9} | 6.31×10^2 |
| | Pb-214 | F | 4.8×10^{-9} | 1.4×10^{-10} | 4.34×10^3 |
| 83 | Bismuth | | | | |
| | Bi-200 | F | 4.2×10^{-11} | 5.1×10^{-11} | 4.96×10^5 |
| | | M | 5.6×10^{-11} | | 3.72×10^5 |
| | Bi-201 | F | 8.3×10^{-11} | 1.2×10^{-10} | 2.51×10^5 |
| | | M | 1.1×10^{-10} | | 1.89×10^5 |
| | Bi-202 | F | 8.4×10^{-11} | 8.9×10^{-11} | 2.48×10^5 |
| | | M | 1.0×10^{-10} | | 2.08×10^5 |
| | Bi-203 | F | 3.6×10^{-10} | 4.8×10^{-10} | 5.79×10^4 |
| | | M | 4.5×10^{-10} | | 4.63×10^4 |
| | Bi-205 | F | 6.8×10^{-10} | 9.0×10^{-10} | 3.06×10^4 |
| | | M | 1.0×10^{-9} | | 2.08×10^4 |
| | Bi-206 | F | 1.3×10^{-9} | 1.9×10^{-9} | 1.60×10^4 |
| | | M | 2.1×10^{-9} | | 9.92×10^3 |
| | Bi-207 | F | 8.4×10^{-10} | 1.3×10^{-9} | 2.48×10^4 |
| | | M | 3.2×10^{-9} | | 6.51×10^3 |
| | Bi-210 | F | 1.4×10^{-9} | 1.3×10^{-9} | 1.49×10^4 |
| | | M | 6.0×10^{-8} | | 3.47×10^2 |
| | Bi-210m | F | 5.3×10^{-8} | 1.5×10^{-8} | 3.93×10^2 |
| | | M | 2.1×10^{-6} | | 9.92×10^0 |
| | Bi-212 | F | 1.5×10^{-8} | 2.6×10^{-10} | 1.39×10^3 |
| | | M | 3.9×10^{-8} | | 5.34×10^2 |
| | Bi-213 | F | 1.8×10^{-8} | 2.0×10^{-10} | 1.16×10^3 |
| | | M | 4.1×10^{-8} | | 5.08×10^2 |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Bi-214 | F | 1.2×10 ⁻⁸ | 1.1×10 ⁻¹⁰ | 1.74×10 ³ |
| | | M | 2.1×10 ⁻⁸ | | 9.92×10 ² |
| 84 | Polonium | | | | |
| | Po-203 | F | 4.5×10 ⁻¹¹ | 5.2×10 ⁻¹¹ | 4.63×10 ⁵ |
| | | M | 6.1×10 ⁻¹¹ | | 3.42×10 ⁵ |
| | Po-205 | F | 6.0×10 ⁻¹¹ | 5.9×10 ⁻¹¹ | 3.47×10 ⁵ |
| | | M | 8.9×10 ⁻¹¹ | | 2.34×10 ⁵ |
| | Po-207 | F | 1.2×10 ⁻¹⁰ | 1.4×10 ⁻¹⁰ | 1.74×10 ⁵ |
| | | M | 1.5×10 ⁻¹⁰ | | 1.39×10 ⁵ |
| | Po-210 | F | 7.1×10 ⁻⁷ | 2.4×10 ⁻⁷ | 2.93×10 ¹ |
| | | M | 2.2×10 ⁻⁶ | | 9.47×10 ⁰ |
| | 85 | Astatine | | | |
| At-207 | | F | 4.4×10 ⁻¹⁰ | 2.3×10 ⁻¹⁰ | 4.73×10 ⁴ |
| | | M | 1.9×10 ⁻⁹ | | 1.10×10 ⁴ |
| At-211 | | F | 2.7×10 ⁻⁸ | 1.1×10 ⁻⁸ | 7.72×10 ² |
| | | M | 1.1×10 ⁻⁷ | | 1.89×10 ² |
| 87 | | Francium | | | |
| | Fr-222 | F | 2.1×10 ⁻⁸ | 7.1×10 ⁻¹⁰ | 9.92×10 ² |
| | Fr-223 | F | 1.3×10 ⁻⁹ | 2.3×10 ⁻⁹ | 1.60×10 ⁴ |
| 88 | Radium | | | | |
| | Ra-223 | M | 5.7×10 ⁻⁶ | 1.0×10 ⁻⁷ | 3.65×10 ⁰ |
| | Ra-224 | M | 2.4×10 ⁻⁶ | 6.5×10 ⁻⁸ | 8.68×10 ⁰ |
| | Ra-225 | M | 4.8×10 ⁻⁶ | 9.5×10 ⁻⁸ | 4.34×10 ⁰ |
| | Ra-226 | M | 2.2×10 ⁻⁶ | 2.8×10 ⁻⁷ | 9.47×10 ⁰ |
| | Ra-227 | M | 2.1×10 ⁻¹⁰ | 8.4×10 ⁻¹¹ | 9.92×10 ⁴ |
| | Ra-228 | M | 1.7×10 ⁻⁶ | 6.7×10 ⁻⁷ | 1.23×10 ¹ |
| 89 | Actinium | | | | |
| | Ac-224 | F | 1.3×10 ⁻⁸ | 7.0×10 ⁻¹⁰ | 1.60×10 ³ |
| | | M | 8.9×10 ⁻⁸ | | 2.34×10 ² |
| | | S | 9.9×10 ⁻⁸ | | 2.10×10 ² |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|--------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Ac-225 | F | 1.0×10 ⁻⁶ | 2.4×10 ⁻⁸ | 2.08×10 ¹ |
| | | M | 5.7×10 ⁻⁶ | | 3.65×10 ⁰ |
| | | S | 6.5×10 ⁻⁶ | | 3.21×10 ⁰ |
| | Ac-226 | F | 2.2×10 ⁻⁷ | 1.0×10 ⁻⁸ | 9.47×10 ¹ |
| | | M | 9.2×10 ⁻⁷ | | 2.26×10 ¹ |
| | | S | 1.0×10 ⁻⁶ | | 2.08×10 ¹ |
| | Ac-227 | F | 6.3×10 ⁻⁴ | 1.1×10 ⁻⁶ | 3.31×10 ⁻² |
| | | M | 1.5×10 ⁻⁴ | | 1.39×10 ⁻¹ |
| | | S | 4.7×10 ⁻⁵ | | 4.43×10 ⁻¹ |
| | Ac-228 | F | 2.9×10 ⁻⁸ | 4.3×10 ⁻¹⁰ | 7.18×10 ² |
| | | M | 1.2×10 ⁻⁸ | | 1.74×10 ³ |
| | | S | 1.2×10 ⁻⁸ | | 1.74×10 ³ |
| 90 | Thorium | | | | |
| | Th-226 | M | 7.4×10 ⁻⁸ | 3.5×10 ⁻¹⁰ | 2.82×10 ² |
| | | S | 7.8×10 ⁻⁸ | 3.6×10 ⁻¹⁰ | 2.67×10 ² |
| | Th-227 | M | 6.2×10 ⁻⁶ | 8.9×10 ⁻⁹ | 3.36×10 ⁰ |
| | | S | 7.6×10 ⁻⁶ | 8.4×10 ⁻⁹ | 2.74×10 ⁰ |
| | Th-228 | M | 2.3×10 ⁻⁵ | 7.0×10 ⁻⁸ | 9.06×10 ⁻¹ |
| | | S | 3.2×10 ⁻⁵ | 3.5×10 ⁻⁸ | 6.51×10 ⁻¹ |
| | Th-229 | M | 6.9×10 ⁻⁵ | 4.8×10 ⁻⁷ | 3.02×10 ⁻¹ |
| | | S | 4.8×10 ⁻⁵ | 2.0×10 ⁻⁷ | 4.34×10 ⁻¹ |
| | Th-230 | M | 2.8×10 ⁻⁵ | 2.1×10 ⁻⁷ | 7.44×10 ⁻¹ |
| | | S | 7.2×10 ⁻⁶ | 8.7×10 ⁻⁸ | 2.89×10 ⁰ |
| | Th-231 | M | 3.7×10 ⁻¹⁰ | 3.4×10 ⁻¹⁰ | 5.63×10 ⁴ |
| | | S | 4.0×10 ⁻¹⁰ | 3.4×10 ⁻¹⁰ | 5.21×10 ⁴ |
| | Th-232 | M | 2.9×10 ⁻⁵ | 2.2×10 ⁻⁷ | 7.18×10 ⁻¹ |
| S | | 1.2×10 ⁻⁵ | 9.2×10 ⁻⁸ | 1.74×10 ⁰ | |
| Th-234 | M | 5.3×10 ⁻⁹ | 3.4×10 ⁻⁹ | 3.93×10 ³ | |
| | S | 5.8×10 ⁻⁹ | 3.4×10 ⁻⁹ | 3.59×10 ³ | |
| 91 | Protactinium | | | | |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|---------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Pa-227 | M | 9.0×10 ⁻⁸ | 4.5×10 ⁻¹⁰ | 2.31×10 ² |
| | | S | 9.7×10 ⁻⁸ | | 2.15×10 ² |
| | Pa-228 | M | 4.6×10 ⁻⁸ | 7.8×10 ⁻¹⁰ | 4.53×10 ² |
| | | S | 5.1×10 ⁻⁸ | | 4.08×10 ² |
| | Pa-230 | M | 4.6×10 ⁻⁷ | 9.2×10 ⁻¹⁰ | 4.53×10 ¹ |
| | | S | 5.7×10 ⁻⁷ | | 3.65×10 ¹ |
| | Pa-231 | M | 8.9×10 ⁻⁵ | 7.1×10 ⁻⁷ | 2.34×10 ⁻¹ |
| | | S | 1.7×10 ⁻⁵ | | 1.23×10 ⁰ |
| | Pa-232 | M | 6.8×10 ⁻⁹ | 7.2×10 ⁻¹⁰ | 3.06×10 ³ |
| | | S | 2.0×10 ⁻⁹ | | 1.04×10 ⁴ |
| | Pa-233 | M | 2.8×10 ⁻⁹ | 8.7×10 ⁻¹⁰ | 7.44×10 ³ |
| | | S | 3.2×10 ⁻⁹ | | 6.51×10 ³ |
| | Pa-234 | M | 5.5×10 ⁻¹⁰ | 5.1×10 ⁻¹⁰ | 3.79×10 ⁴ |
| | | S | 5.8×10 ⁻¹⁰ | | 3.59×10 ⁴ |
| 92 | Uranium | | | | |
| | U-230 | F | 4.2×10 ⁻⁷ | 5.5×10 ⁻⁸ | 4.96×10 ¹ |
| | | M | 1.0×10 ⁻⁵ | | 2.08×10 ⁰ |
| | | S | 1.2×10 ⁻⁵ | | 1.74×10 ⁰ |
| | U-231 | F | 1.4×10 ⁻¹⁰ | 2.8×10 ⁻¹⁰ | 1.49×10 ⁵ |
| | | M | 3.7×10 ⁻¹⁰ | | 5.63×10 ⁴ |
| | | S | 4.0×10 ⁻¹⁰ | | 5.21×10 ⁴ |
| | U-232 | F | 4.7×10 ⁻⁶ | 3.3×10 ⁻⁷ | 4.43×10 ⁰ |
| | | M | 4.8×10 ⁻⁶ | | 4.34×10 ⁰ |
| | | S | 2.6×10 ⁻⁵ | | 8.01×10 ⁻¹ |
| | U-233 | F | 6.6×10 ⁻⁷ | 5.0×10 ⁻⁸ | 3.16×10 ¹ |
| | | M | 2.2×10 ⁻⁶ | | 9.47×10 ⁰ |
| | | S | 6.9×10 ⁻⁶ | | 3.02×10 ⁰ |
| | U-234 | F | 6.4×10 ⁻⁷ | 4.9×10 ⁻⁸ | 3.26×10 ¹ |
| M | | 2.1×10 ⁻⁶ | 9.92×10 ⁰ | | |
| S | | 6.8×10 ⁻⁶ | 3.06×10 ⁰ | | |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------------------------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | U-235 | F | 6.0×10^{-7} | 4.6×10^{-8} | 3.47×10^1 |
| | | M | 1.8×10^{-6} | 8.3×10^{-9} | 1.16×10^1 |
| | | S | 6.1×10^{-6} | | 3.42×10^0 |
| | U-236 | F | 6.1×10^{-7} | 4.6×10^{-8} | 3.42×10^1 |
| | | M | 1.9×10^{-6} | 7.9×10^{-9} | 1.10×10^1 |
| | | S | 6.3×10^{-6} | | 3.31×10^0 |
| | U-237 | F | 3.3×10^{-10} | 7.6×10^{-10} | 6.31×10^4 |
| | | M | 1.5×10^{-9} | 7.7×10^{-10} | 1.39×10^4 |
| | | S | 1.7×10^{-9} | | 1.23×10^4 |
| | U-238 | F | 5.8×10^{-7} | 4.4×10^{-8} | 3.59×10^1 |
| | | M | 1.6×10^{-6} | 7.6×10^{-9} | 1.30×10^1 |
| | | S | 5.7×10^{-6} | | 3.65×10^0 |
| | U-239 | F | 1.8×10^{-11} | 2.7×10^{-11} | 1.16×10^6 |
| | | M | 3.3×10^{-11} | 2.8×10^{-11} | 6.31×10^5 |
| | | S | 3.5×10^{-11} | | 5.95×10^5 |
| | U-240 | F | 3.7×10^{-10} | 1.1×10^{-9} | 5.63×10^4 |
| | | M | 7.9×10^{-10} | 1.1×10^{-9} | 2.64×10^4 |
| | | S | 8.4×10^{-10} | | 2.48×10^4 |
| 93 | Neptunium | | | | |
| | Np-232 | M | 3.5×10^{-11} | 9.7×10^{-12} | 5.95×10^5 |
| | Np-233 | M | 3.0×10^{-12} | 2.2×10^{-12} | 6.94×10^6 |
| | Np-234 | M | 7.3×10^{-10} | 8.1×10^{-10} | 2.85×10^4 |
| | Np-235 | M | 2.7×10^{-10} | 5.3×10^{-11} | 7.72×10^4 |
| | Np-236 (1.15×10^5 a) | M | 2.0×10^{-6} | 1.7×10^{-8} | 1.04×10^1 |
| | Np-236 (22.5 h) | M | 3.6×10^{-9} | 1.9×10^{-10} | 5.79×10^3 |
| | Np-237 | M | 1.5×10^{-5} | 1.1×10^{-7} | 1.39×10^0 |
| | Np-238 | M | 1.7×10^{-9} | 9.1×10^{-10} | 1.23×10^4 |
| | Np-239 | M | 1.1×10^{-9} | 8.0×10^{-10} | 1.89×10^4 |
| | Np-240 | M | 1.3×10^{-10} | 8.2×10^{-11} | 1.60×10^5 |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| 94 | Plutonium | | | | |
| | Pu-234 | M | 1.6×10^{-8} | 1.6×10^{-10} | 1.30×10^3 |
| | | S | 1.8×10^{-8} | 1.5×10^{-10} | 1.16×10^3 |
| | | | | 1.6×10^{-10} | |
| | Pu-235 | M | 2.5×10^{-12} | 2.1×10^{-12} | 8.33×10^6 |
| | | S | 2.6×10^{-12} | 2.1×10^{-12} | 8.01×10^6 |
| | | | | 2.1×10^{-12} | |
| | Pu-236 | M | 1.3×10^{-5} | 8.6×10^{-8} | 1.60×10^0 |
| | | S | 7.4×10^{-6} | 6.3×10^{-9} | 2.82×10^0 |
| | | | | 2.1×10^{-8} | |
| | Pu-237 | M | 2.9×10^{-10} | 1.0×10^{-10} | 7.18×10^4 |
| | | S | 3.0×10^{-10} | 1.0×10^{-10} | 6.94×10^4 |
| | | | | 1.0×10^{-10} | |
| | Pu-238 | M | 3.0×10^{-5} | 2.3×10^{-7} | 6.94×10^{-1} |
| | | S | 1.1×10^{-5} | 8.8×10^{-9} | 1.89×10^0 |
| | | | | 4.9×10^{-8} | |
| | Pu-239 | M | 3.2×10^{-5} | 2.5×10^{-7} | 6.51×10^{-1} |
| | | S | 8.3×10^{-6} | 9.0×10^{-9} | 2.51×10^0 |
| | | | | 5.3×10^{-8} | |
| | Pu-240 | M | 3.2×10^{-5} | 2.5×10^{-7} | 6.51×10^{-1} |
| | | S | 8.3×10^{-6} | 9.0×10^{-9} | 2.51×10^0 |
| | | | | 5.3×10^{-8} | |
| | Pu-241 | M | 5.8×10^{-7} | 4.7×10^{-9} | 3.59×10^1 |
| | | S | 8.4×10^{-8} | 1.1×10^{-10} | 2.48×10^2 |
| | | | | 9.6×10^{-10} | |
| | Pu-242 | M | 3.1×10^{-5} | 2.4×10^{-7} | 6.72×10^{-1} |
| | | S | 7.7×10^{-6} | 8.6×10^{-9} | 2.71×10^0 |
| | | | | 5.0×10^{-8} | |
| | Pu-243 | M | 1.1×10^{-10} | 8.5×10^{-11} | 1.89×10^5 |
| | | S | 1.1×10^{-10} | 8.5×10^{-11} | 1.89×10^5 |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-----------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | | | | 8.5×10 ⁻¹¹ | |
| | Pu-244 | M | 3.0×10 ⁻⁵ | 2.4×10 ⁻⁷ | 6.94×10 ⁻¹ |
| | | S | 7.4×10 ⁻⁶ | 1.1×10 ⁻⁸ | 2.82×10 ⁰ |
| | | | | 5.2×10 ⁻⁸ | |
| | Pu-245 | M | 6.1×10 ⁻¹⁰ | 7.2×10 ⁻¹⁰ | 3.42×10 ⁴ |
| | | S | 6.5×10 ⁻¹⁰ | 7.2×10 ⁻¹⁰ | 3.21×10 ⁴ |
| | | | | 7.2×10 ⁻¹⁰ | |
| | Pu-246 | M | 6.5×10 ⁻⁹ | 3.3×10 ⁻⁹ | 3.21×10 ³ |
| | | S | 7.0×10 ⁻⁹ | 3.3×10 ⁻⁹ | 2.98×10 ³ |
| | | | | 3.3×10 ⁻⁹ | |
| 95 | Americium | | | | |
| | Am-237 | M | 3.6×10 ⁻¹¹ | 1.8×10 ⁻¹¹ | 5.79×10 ⁵ |
| | Am-238 | M | 6.6×10 ⁻¹¹ | 3.2×10 ⁻¹¹ | 3.16×10 ⁵ |
| | Am-239 | M | 2.9×10 ⁻¹⁰ | 2.4×10 ⁻¹⁰ | 7.18×10 ⁴ |
| | Am-240 | M | 5.9×10 ⁻¹⁰ | 5.8×10 ⁻¹⁰ | 3.53×10 ⁴ |
| | Am-241 | M | 2.7×10 ⁻⁵ | 2.0×10 ⁻⁷ | 7.72×10 ⁻¹ |
| | Am-242 | M | 1.2×10 ⁻⁸ | 3.0×10 ⁻¹⁰ | 1.74×10 ³ |
| | Am-242m | M | 2.4×10 ⁻⁵ | 1.9×10 ⁻⁷ | 8.68×10 ⁻¹ |
| | Am-243 | M | 2.7×10 ⁻⁵ | 2.0×10 ⁻⁷ | 7.72×10 ⁻¹ |
| | Am-244 | M | 1.5×10 ⁻⁹ | 4.6×10 ⁻¹⁰ | 1.39×10 ⁴ |
| | Am-244m | M | 6.2×10 ⁻¹¹ | 2.9×10 ⁻¹¹ | 3.36×10 ⁵ |
| | Am-245 | M | 7.6×10 ⁻¹¹ | 6.2×10 ⁻¹¹ | 2.74×10 ⁵ |
| | Am-246 | M | 1.1×10 ⁻¹⁰ | 5.8×10 ⁻¹¹ | 1.89×10 ⁵ |
| | Am-246m | M | 3.8×10 ⁻¹¹ | 3.4×10 ⁻¹¹ | 5.48×10 ⁵ |
| 96 | Curium | | | | |
| | Cm-238 | M | 4.8×10 ⁻⁹ | 8.0×10 ⁻¹¹ | 4.34×10 ³ |
| | Cm-240 | M | 2.3×10 ⁻⁶ | 7.6×10 ⁻⁹ | 9.06×10 ⁰ |
| | Cm-241 | M | 2.6×10 ⁻⁸ | 9.1×10 ⁻¹⁰ | 8.01×10 ² |
| | Cm-242 | M | 3.7×10 ⁻⁶ | 1.2×10 ⁻⁸ | 5.63×10 ⁰ |
| | Cm-243 | M | 2.0×10 ⁻⁵ | 1.5×10 ⁻⁷ | 1.04×10 ⁰ |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-------------|----------------------|---|--|-----------------------------|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation (Sv · Bq ⁻¹) | DCF via ingestion (Sv · Bq ⁻¹) | DAC (Bq · m ⁻³) |
| | Cm-244 | M | 1.7×10^{-5} | 1.2×10^{-7} | 1.23×10^0 |
| | Cm-245 | M | 2.7×10^{-5} | 2.1×10^{-7} | 7.72×10^{-1} |
| | Cm-246 | M | 2.7×10^{-5} | 2.1×10^{-7} | 7.72×10^{-1} |
| | Cm-247 | M | 2.5×10^{-5} | 1.9×10^{-7} | 8.33×10^{-1} |
| | Cm-248 | M | 9.5×10^{-5} | 7.7×10^{-7} | 2.19×10^{-1} |
| | Cm-249 | M | 5.1×10^{-11} | 3.1×10^{-11} | 4.08×10^5 |
| | Cm-250 | M | 5.4×10^{-4} | 4.4×10^{-6} | 3.86×10^{-2} |
| 97 | Berkelium | | | | |
| | Bk-245 | M | 1.8×10^{-9} | 5.7×10^{-10} | 1.16×10^4 |
| | Bk-246 | M | 4.6×10^{-10} | 4.8×10^{-10} | 4.53×10^4 |
| | Bk-247 | M | 4.5×10^{-5} | 3.5×10^{-7} | 4.63×10^{-1} |
| | Bk-249 | M | 1.0×10^{-7} | 9.7×10^{-10} | 2.08×10^2 |
| | Bk-250 | M | 7.1×10^{-10} | 1.4×10^{-10} | 2.93×10^4 |
| 98 | Californium | | | | |
| | Cf-244 | M | 1.8×10^{-8} | 7.0×10^{-11} | 1.16×10^3 |
| | Cf-246 | M | 3.5×10^{-7} | 3.3×10^{-9} | 5.95×10^1 |
| | Cf-248 | M | 6.1×10^{-6} | 2.8×10^{-8} | 3.42×10^0 |
| | Cf-249 | M | 4.5×10^{-5} | 3.5×10^{-7} | 4.63×10^{-1} |
| | Cf-250 | M | 2.2×10^{-5} | 1.6×10^{-7} | 9.47×10^{-1} |
| | Cf-251 | M | 4.6×10^{-5} | 3.6×10^{-7} | 4.53×10^{-1} |
| | Cf-252 | M | 1.3×10^{-5} | 9.0×10^{-8} | 1.60×10^0 |
| | Cf-253 | M | 1.0×10^{-6} | 1.4×10^{-9} | 2.08×10^1 |
| | Cf-254 | M | 2.2×10^{-5} | 4.0×10^{-7} | 9.47×10^{-1} |
| 99 | Einsteinium | | | | |
| | Es-250 | M | 4.2×10^{-10} | 2.1×10^{-11} | 4.96×10^4 |
| | Es-251 | M | 1.7×10^{-9} | 1.7×10^{-10} | 1.23×10^4 |
| | Es-253 | M | 2.1×10^{-6} | 6.1×10^{-9} | 9.92×10^0 |
| | Es-254 | M | 6.0×10^{-6} | 2.8×10^{-8} | 3.47×10^0 |
| | Es-254m | M | 3.7×10^{-7} | 4.2×10^{-9} | 5.63×10^1 |
| 100 | Fermium | | | | |

SCHEDULE IV-1 CONTROL LIMITS OF DAC FOR WORKERS

| Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 |
|---------------|-------------|----------------------|---|--|---|
| Atomic Number | Nuclide | Lung Absorption Type | DCF via inhalation ($\text{Sv} \cdot \text{Bq}^{-1}$) | DCF via ingestion ($\text{Sv} \cdot \text{Bq}^{-1}$) | DAC ($\text{Bq} \cdot \text{m}^{-3}$) |
| | Fm-252 | M | 2.6×10^{-7} | 2.7×10^{-9} | 8.01×10^1 |
| | Fm-253 | M | 3.0×10^{-7} | 9.1×10^{-10} | 6.94×10^1 |
| | Fm-254 | M | 7.7×10^{-8} | 4.4×10^{-10} | 2.71×10^2 |
| | Fm-255 | M | 2.6×10^{-7} | 2.5×10^{-9} | 8.01×10^1 |
| | Fm-257 | M | 5.2×10^{-6} | 1.5×10^{-8} | 4.01×10^0 |
| 101 | Mendelevium | | | | |
| | Md-257 | M | 2.0×10^{-8} | 1.2×10^{-10} | 1.04×10^3 |
| | Md-258 | M | 4.4×10^{-6} | 1.3×10^{-8} | 4.73×10^0 |

* The gut transfer factor for organic methyl mercury is $f_1=1.0$, while that for other organic mercury compounds is $f_1=0.4$. The dose conversion factors for radionuclides per unit intake via ingestion are derived based on the two f_1 values.