These are the human health toxicity data that were used by the Department to derive its health based criteria.

### Cadmium

**7440-43-9**

#### Drinking water

- **Carcinogen Group:**
- **Oral Slope Factor:** \((\text{mg/kg/day})^{-1}\)
- **Oral Reference Dose:** \((\text{mg/kg/day})\)
- **Basis:** FEDERAL

#### Ground water

- **Carcinogen Group:**
- **Oral Slope Factor:** \((\text{mg/kg/day})^{-1}\)
- **Oral Reference Dose:** 0.0005 \((\text{mg/kg/day})\)
- **Basis:** IRIS (RfD for water)

#### Surface water

- **Carcinogen Group**
- **Oral Slope Factor:** \((\text{mg/kg/day})^{-1}\)
- **Oral Reference Dose:** \((\text{mg/kg/day})\)
- **Basis:** IRIS

#### Soil

- **Oral**
  - **Carcinogen Group**
  - **Slope Factor:** \((\text{mg/kg/day})^{-1}\)
  - **Reference Dose:** 0.001 \((\text{mg/kg/day})\)
  - **Basis:** IRIS (RfD for food)

- **Inhalation**
  - **Carcinogen Group:** carcinogen
  - **Unit Risk Factor:** 0.0042 \((\text{ug/m}^3)\)
  - **Reference Concentration:** \((\text{ug/m}^3)\)
  - **Basis:** Cal 02

*Reference Doses for Group C chemicals are shown with uncertainty factor of 10 for possible carcinogenicity included. These are the Reference Doses used to derive criteria for all media. In the Basis and Background documents for these criteria, these Reference Doses may or may not be shown with this uncertainty factor incorporated.*
Drinking Water - Notes

1. The Reference Doses for the Group C chemicals incorporate an additional uncertainty factor of 10 for possible carcinogenicity.
2. Toxicity factors were developed by the NJDWQI under the A-280 process for the following chemicals, but MCLs were not adopted for unrelated reasons, such as lack of a standardized analytical method for drinking water: Ethylene glycol, formaldehyde, hexane, methyl ethyl ketone, and 2,4,6-trichlorophenol.
3. The New Jersey MCL for 1,4-Dichlorobenzene was adopted from USEPA, but New Jersey did not necessarily agree with the USEPA RfD, so it is not included on this table.

Surface Water - Footnotes

* See text on cadmium. For RfD for cadmium, "(w)" stands for water. "(f)" stands for food.
+ See text on cadmium. For RfD for cadmium, "(w)" stands for water. "(f)" stands for food.
* The criterion for lead remains unchanged. The criteria for nickel are based on data from 2002 Calculation Matrix updated by the current fish consumption rate of 17.5 g/day.

Soil - Footnotes

1. Carcinogen Classification - All classifications are based on IRIS unless stated otherwise.
2. Toxicity factors were developed by the NJDWQI under the A-280 process for the following chemicals, but MCLs were not adopted for unrelated reasons, such as lack of a standardized analytical method for drinking water: Ethylene glycol, formaldehyde, hexane, methyl ethyl ketone, and 2,4,6-trichlorophenol.
3. The New Jersey MCL for 1,4-Dichlorobenzene was adopted from USEPA, but New Jersey did not necessarily agree with the USEPA RfD, so it is not included on this table.