**Drinking water**

<table>
<thead>
<tr>
<th>Carcinogen Group:</th>
<th>Oral Slope Factor: ( (\text{mg/kg/day})^{-1} )</th>
<th>Oral Reference Dose: ( (\text{mg/kg/day}) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ground water**

<table>
<thead>
<tr>
<th>Carcinogen Group:</th>
<th>Oral Slope Factor: ( 0.011 \ (\text{mg/kg/day})^{-1} )</th>
<th>Oral Reference Dose: ( (\text{mg/kg/day}) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis:</td>
<td>IRIS</td>
<td></td>
</tr>
</tbody>
</table>

**Surface water**

<table>
<thead>
<tr>
<th>Carcinogen Group:</th>
<th>Oral Slope Factor: ( (\text{mg/kg/day})^{-1} )</th>
<th>Oral Reference Dose: ( (\text{mg/kg/day}) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Soil**

<table>
<thead>
<tr>
<th>Oral Carcinogen Group</th>
<th>Inhalation Carcinogen Group:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slope Factor: ( (\text{mg/kg/day})^{-1} )</td>
<td>Unit Risk Factor ( (\text{ug/m}^3) )</td>
</tr>
<tr>
<td>Reference Dose: ( (\text{mg/kg/day}) )</td>
<td>Reference Concentration: ( (\text{ug/m})^3 )</td>
</tr>
<tr>
<td>Basis:</td>
<td>Basis:</td>
</tr>
</tbody>
</table>

*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.*
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**

^ The carcinogen group assigned to acrolein in IRIS is the descriptor, "data are inadequate for an assessment of human carcinogenic potential" which is equivalent to Group D.

+. 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

1999 Cancer Draft Guidelines:

KNOWN - Known carcinogen
CANTDET - Can not determine carcinogenic classification
LIK - Likely to be a human carcinogen
NLIK - Not likely to be a carcinogen
INAD - Inadequate data
ORL - Oral exposure route
INHL - Inhalation exposure route

1986 Cancer Guidelines:

Group A - Human carcinogen
Group B - Probable human carcinogen
Group B2 - Sufficient evidence from animal studies and inadequate or no data from epidemiologic studies
Group C - Possible human carcinogen
Group D - Not classifiable as to human carcinogenicity
Group E - Evidence on non-carcinogenicity for humans

2. References:

IRIS - Integrated Risk Information System
HEAST - Health Effects Assessment Summary Tables
NCEA - National Center for Environmental Assessment/EPA Provisional Value
DEP - NJ Department of Environmental Protection
NR02 - EPA National Recommended Water Quality Criteria 2002

^ A-280 - Chemicals regulated under A-280 Amendments to NJ Safe Drinking water Act (P. L. 1983, c.443) Blanks indicate that no information is available

Mercury* - standard is based on RfD for mercuric chloride (CAS# 007847-94-7)