

**SITE REMEDIATION & WASTE MANAGEMENT PROGRAM
IMPLEMENTATION OF UPDATED
SOIL REMEDIATION STANDARDS, N.J.A.C. 7:26D
(version September 18, 2017)**

BACKGROUND

On September 18, 2017, the New Jersey Department of Environmental Protection (the Department) published a Notice of Administrative Change in the New Jersey Register that updated the soil remediation standards for 19 contaminants in accordance with N.J.A.C. 7:26D-6.2. These updates reflect revisions to the toxicity information for these contaminants, as found in the United States Environmental Protection Agency (USEPA) Integrated Risk Information System (IRIS) database (see www.epa.gov/iris), on which the soil remediation standards are based.

A courtesy copy of the Notice of Administrative Change is available on the Department's website at www.nj.gov/dep/rules/notices.html. A courtesy copy of the updated Remediation Standards is available on the Department's website at www.nj.gov/dep/rules/rules/njac7_26d.pdf.

As a result of this update, the existing soil remediation standards are affected as follows:

- The soil remediation standards for 11 contaminants are increasing (becoming less stringent);
- The soil remediation standards for six (6) contaminants are decreasing (becoming more stringent);
- The soil remediation standards for one (1) contaminant are unchanged; and
- One (1) contaminant will no longer be regulated.

Of the six (6) contaminants for which the soil remediation standards are decreasing, the soil remediation standards for three (3) contaminants are decreasing by an order of magnitude or more. These three contaminants are:

- **1,1-Biphenyl**: both residential and non-residential soil remediation standards are decreasing by an order of magnitude or more
- **Cyanide**: both residential and non-residential soil remediation standards are decreasing by an order of magnitude or more
- **Nitrobenzene**: only the non-residential soil remediation standard is decreasing by an order of magnitude or more (the residential soil remediation standard is decreasing by less than an order of magnitude)

Contaminant	Previous Residential Direct Contact Soil Remediation Standard (mg/kg)	Updated Residential Direct Contact Soil Remediation Standard (mg/kg)	Previous Non-Residential Direct Contact Soil Remediation Standard (mg/kg)	Updated Non-Residential Direct Contact Soil Remediation Standard (mg/kg)
Direct Contact Soil Remediation Standards Increasing				
Benzo(a)Anthracene	0.6	5	2	17
Benzo(a) Pyrene	0.2 *	0.5	0.2	2
Benzo(b)Fluoranthene	0.6	5	2	17
Benzo(k)Fluoranthene	6	45	23	170
Chrysene	62	450	230	1,700
Dibenz(ah)Anthracene	0.2 *	0.5	0.2	2
Indeno(123-cd)Pyrene	0.6	5	2	17
Carbon Tetrachloride	0.6	2	2	4
Methylene Chloride	34	46	97	230
Tetrachloroethene	2	43	5	1,500
1,1,1-Trichloroethane	290	160,000*****	**	**
Direct Contact Soil Remediation Standard Not Changing ***				
1,1,2,2-Tetrachloroethane	1	1	3	3
Direct Contact Soil Remediation Standards Decreasing - No Order of Magnitude Change				
Hexachloroethane	35	12	140	48
Nitrobenzene	31	5	****	****
Pentachlorophenol	3	0.9	10	3
Trichloroethene	7	3	20	10
Direct Contact Soil Remediation Standards Decreasing - Order of Magnitude Change				
1,1-Biphenyl	3,100	61	34,000	240
Cyanide	1,600	47	23,000	680
Nitrobenzene	****	****	340	14
Contaminant No Longer Regulated				
Thallium	5	Not Regulated	79	Not Regulated
1,1,1-Trichloroethane	**	**	4,200	Not Regulated

Footnotes:

* Previous direct contact soil remediation standard based on practical quantitation level (PQL).

- ** Updated residential direct contact soil remediation standard for this contaminant increases. Updated non-residential direct contact soil remediation standard for this contaminant is not regulated because the health-based criterion exceeds the soil saturation level.
- *** 2010 IRIS reassessment presented a new cancer slope factor (ingestion/dermal exposure pathway) and withdrew the cancer unit risk factor (inhalation exposure pathway). Updated inhalation exposure pathway remediation standard based on route-to-route conversion of new ingestion/dermal cancer slope factor. Applying the route-to-route conversion, the remediation standard is not changing.
- **** Updated residential direct contact soil remediation standard for this contaminant decreases less than an order of magnitude. Updated non-residential direct contact soil remediation standard decreases by an order of magnitude or more.
- ***** This is the correct value. The September 18, 2017 Notice of Administrative Change contained an error (criterion listed as 22,000 mg/kg), which was corrected in a Notice of Administrative Correction to be published in the October 16, 2017 New Jersey Register. The operative date of this corrected value is September 18, 2017.

PHASE-IN

The updated soil remediation standards are operative as of September 18, 2017.

I. For sites that do not have a final remediation document

A. Updated soil Remediation Standard decreasing by less than an order of magnitude

The person responsible for conducting the remediation may continue to remediate a site using soil remediation standards in effect prior to September 18, 2017, provided the updated remediation standard is not an order of magnitude or more lower than the pre-September 18, 2017 remediation standard, and if the following conditions exist:

1. The site being remediated has either:
 - a. An existing Remedial Action Workplan or Remedial Action Report approved by the Department prior to September 18, 2017, or
 - b. An existing Remedial Action Workplan or Remedial Action Report certified by a licensed site remediation professional (LSRP) and that has been submitted to the Department prior to September 18, 2017.

- OR -

2. The site being remediated will have by March 18, 2018 either:
 - a. A Remedial Action Workplan or Remedial Action Report approved by the Department, or
 - b. A Remedial Action Workplan or Remedial Action Report certified by an LSRP and submitted to the Department.

Additionally, the remedial action must be conducted within the applicable regulatory timeframe as specified in the Technical Requirements for Site Remediation at N.J.A.C. 7:26E-5.8.

B. Updated soil Remediation Standard decreasing by an order of magnitude or more

For sites impacted by any of the three contaminants for which the soil remediation standard is decreasing by an order of magnitude or more, the updated remediation standard(s) must be used, regardless of whether there is an approved/certified remedial action workplan or remedial action report.

II. For sites that have a final remediation document

A. Updated soil Remediation Standard decreasing by less than an order of magnitude

No further evaluation is necessary.

B. Updated soil Remediation Standard decreasing by an order of magnitude or more

1. Deed Notice established

- a. In order to determine the protectiveness of the implemented remedy, the person responsible for maintaining the engineering and/or institutional control must perform the order of magnitude evaluation for each of the three contaminants as part of the biennial protectiveness certification pursuant to the Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C-7.7.
- b. If the remedy does not control exposure to the updated remediation standard, additional remediation will be required.
- c. If the remedy continues to be protective due to the use of the existing engineering and institutional controls, no additional remediation will be required.

- d. Regardless of the determination whether additional remediation will be required, both the deed notice and the soil remedial action permit will need to be modified to reflect the updated soil remediation standard.
 - e. If a soil remedial action permit has not yet been issued, the person responsible for maintaining the engineering and/or institutional control shall apply for a remedial action permit pursuant to N.J.A.C. 7:26C-7.5.
2. Deed Notice not established
- a. For sites that have a final remediation document but for which a Deed Notice did not need to be established, the order of magnitude evaluation will be conducted whenever the site “re-enters” the Site Remediation and Waste Management Program pursuant to the Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C-1.4.
 - b. If the remedy does not control exposure to the updated remediation standard, additional remediation will be required. If contamination remains above the applicable soil remediation standard(s), a Deed Notice will be required, as will a soil remedial action permit.