

# **IRIS Updates**

## **Soil Remediation Standards**

**September 13, 2017**



# IRIS Updates

## Soil Remediation Standards

### Regulatory Basis

- **Remediation Standards N.J.A.C. 7:26D-6**
  - Department may update soil remediation standards contained in the rule if USEPA revises toxicity information in the Integrated Risk Information System (IRIS)



# IRIS Updates

## Soil Remediation Standards

### Regulatory Basis

- **Remediation Standards N.J.A.C. 7:26D-6**
  - Accomplished through a Notice of Administrative Change published in the New Jersey Register
  - Notice of Administrative Change shall:
    - Identify the contaminant
    - List the revised soil remediation standard
    - Describe the basis for the change of the soil remediation standard



# IRIS Updates Soil Remediation Standards

## Notice of Administrative Change

- **Will be published in the September 18, 2017 edition of the New Jersey Register**



# IRIS Updates

## Soil Remediation Standards

- **Additional information (available September 18, 2017)**
  - Listserv announcement
  - Courtesy copy of the Notice of Administrative Change available on the SRWMP website
  - Updated copy of the Remediation Standards available on the SRWMP website
  - Phase in guidance on the use/application of the updated soil remediation standards available on the SRWMP website



# IRIS Updates

## Soil Remediation Standards

### Affected Contaminants

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



# IRIS Updates

## Soil Remediation Standards

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)
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***Direct Contact Soil Remediation Standards Increasing***

Benzo(a)Anthracene	0.6	5	2	17
Benzo(a) Pyrene	0.2 (PQL)	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 (PQL)	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	NS (Csat)	NS (Csat)



# IRIS Updates

## Soil Remediation Standards

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)
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***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





# IRIS Updates

## Soil Remediation Standards

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)
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**Direct Contact Soil Remediation Standard Not Changing**

1,1,2,2-

Tetrachloroethane

1

1

3

3

**Contaminant No Longer Regulated**

Thallium

5

Not Regulated

79

Not Regulated

1,1,1-Trichloroethane

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4,200

Not Regulated



# IRIS Updates

## Soil Remediation Standards

### Standards Decreasing – Less than an Order of Magnitude

Contaminant	Number Existing Active Cases	Number of Additional Active Cases	Number of Closed Cases with Deed Notices	Number of Additional Closed Cases with Deed Notices
Hexachloroethane	59	3	N/A	N/A
Pentachlorophenol	7	9	N/A	N/A
Trichloroethene	203	54	N/A	N/A
Nitrobenzene	24	8	N/A	N/A



# IRIS Updates Soil Remediation Standards

## Standards Decreasing – Order of Magnitude or More

Contaminant	Number Existing Active Cases	Number of Additional Active Cases	Number of Closed Cases with Deed Notices	Number of Additional Closed Cases with Deed Notices
1,1-Biphenyl	1	14	0	5
Cyanide	3	20	0	6



# IRIS Updates

## Soil Remediation Standards

### Standards Increasing

Contaminant	Number Existing Active Cases	Number of Fewer Active Cases	Number of Closed Cases with Deed Notices	Number of Fewer Closed Cases with Deed Notices
Benzo(a)Pyrene	1325	212	1173	286
Benzo(b)Fluoranthene	1163	593	880	546



# IRIS Updates Soil Remediation Standards

## Operative Date of Update Changes

- **Publication of the Notice of Administrative Change (September 18, 2017)**



# IRIS Updates

## Soil Remediation Standards

### Phase in of Updated Soil Remediation Standards

- 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:



# IRIS Updates

## Soil Remediation Standards

### Phase in of Updated Soil Remediation Standards

1. The site being remediated has either:
  - a. an existing Remedial Action Workplan or Remedial Action Report approved by the Department, **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.

**OR**



# IRIS Updates Soil Remediation Standards

## Phase in of Updated Soil Remediation Standards

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.





# IRIS Updates

## Soil Remediation Standards

### Phase in of Updated Soil Remediation Standards

- 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.

