

## What's New to the July 2020 NCDEQ Risk Calculator

This update informs users of changes to exposure parameters, equation formats, and any other changes.

1. The July 2020 NCDEQ Risk Calculator has been updated with the revised US EPA Regional Screening Levels (RSL) information from May 2020. Changes in toxicity values can be found on the EPA RSL What's New web page at: <https://www.epa.gov/risk/regional-screening-levels-rsls-whats-new>
2. The NCDEQ vapor intrusion (VI) screening levels are now only accessible in the Risk Calculator (see green circles below). If a VI screening level is exceeded, the user is directed to enter the site data into the Risk Calculator to calculate risk. See the *NCDEQ Risk Calculator User Guide* for detailed instructions or conduct a quick data input/output as shown below (see blue circles). **It is NCDEQ policy to base mitigation decisions on risk to human health and not screening levels.**

Note that the NCDEQ Risk Calculator does not allow modification of the residential VI exposure duration for mutagens and conservatively applies a default of 26-years regardless of the site-specific exposure duration entered into the calculator. Consult with a NCDEQ toxicologist if you need to adjust exposure parameters at a site with mutagenic contaminants (see **List of Mutagenic Contaminants** on the following page).

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Enter all detected groundwater, soil gas OR indoor air data here.

Get calculated risk output for desired scenario here.

## List of Mutagenic Contaminants

Chemical	CASRN	Reference
Acrylamide	79-06-1	<a href="#">IRIS</a>
Benz[a]anthracene	56-55-3	Benzo[a]pyrene*
Benzidine	92-87-5	<a href="#">Supplemental Guidance</a>
Benzo[a]pyrene	50-32-8	<a href="#">Supplemental Guidance</a>
Benzo[b]fluoranthene	205-99-2	Benzo[a]pyrene*
Benzo[k]fluoranthene	207-08-9	Benzo[a]pyrene*
Chromium(VI)	18540-29-9	<a href="#">CalEPA</a> and <a href="#">IRIS</a>
Chrysene	218-01-9	Benzo[a]pyrene*
Coke Oven Emissions	8007-45-2	<a href="#">70 Federal Register 19992</a>
Dibenz[a,h]anthracene	53-70-3	<a href="#">Supplemental Guidance</a>
Dibromo-3-chloropropane, 1,2-	96-12-8	<a href="#">PPRTV</a>
Dimethylbenz(a)anthracene, 7,12-	57-97-6	<a href="#">Supplemental Guidance</a>
Ethylene Oxide	75-21-8	<a href="#">IRIS</a>
Indeno[1,2,3-cd]pyrene	193-39-5	Benzo[a]pyrene*
Methylcholanthrene, 3-	56-49-5	<a href="#">Supplemental Guidance</a>
Methylene Chloride	75-09-2	<a href="#">IRIS</a>
Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	<a href="#">PPRTV</a>
Nitrosodiethylamine, N-	55-18-5	<a href="#">Supplemental Guidance</a>
Nitrosodimethylamine, N-	62-75-9	<a href="#">Supplemental Guidance</a>
Nitroso-N-ethylurea, N-	759-73-9	<a href="#">Supplemental Guidance</a>
Nitroso-N-methylurea, N-	684-93-5	<a href="#">Supplemental Guidance</a>
Safrole	94-59-7	<a href="#">Supplemental Guidance</a>
Trichloroethylene	79-01-6	<a href="#">IRIS</a>
Trichloropropane, 1,2,3-	96-18-4	<a href="#">IRIS</a>
Urethane	51-79-6	<a href="#">Supplemental Guidance</a>
Vinyl Chloride	75-01-4	<a href="#">Supplemental Guidance</a>