

Virginia Department of Environmental Quality

VURAM

Virginia Unified Risk Assessment Model

VERSION: 3.1

Screening Report: RCRA Corrective Action

Site Name: ASTSWMO 2020

Screening Threshold Criteria

Non-Cancer Hazard Quotient: 0.1

Individual Cancer Risk: 1.00E-06

Construction Worker Groundwater Contact Depth:

Direct Less Than 15ft

All Report Pages are Required for Risk Assessment Submission

Detailed Screening Report

Site Name: ASTSWMO 2020

Program: RCRA Corrective Action

1.00E-06

Screening Threshold Criteria

Non-Cancer Hazard Quotient: 0.1

Individual Cancer Risk:

Construction Worker Groundwater Contact Depth: Direct Less Than 15ft

Surface Water screening values are not applicable to ecological receptors.

Physical and biological parameters are not screened in surface water.

COPCs are listed as NE (not evaluated) where there is no screening level. A summary of NE analytes is provided at the end of the report.†

Soil

mg/kg

Screening Type: Residential Soil

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	1.20E+00	Y
Trichloroethylene	79-01-6	Y	1.00E+02	4.10E-01	Y

Screening Type: Industrial Soil

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	5.10E+00	Y
Trichloroethylene	79-01-6	Y	1.00E+02	1.90E+00	Y

Screening Type: Risk-based SSL

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	2.33E-04	Y
Trichloroethylene	79-01-6	Y	1.00E+02	1.01E-04	Y

Screening Type: MCL-based SSL

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	2.56E-03	Y
Trichloroethylene	79-01-6	Y	1.00E+02	1.79E-03	Y

Groundwater

ug/L

Screening Type: Residential Tapwater

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	4.60E-01	Y
Trichloroethylene	79-01-6	Y	1.00E+02	2.80E-01	Y

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Non-Cancer Hazard Quotient: 0.1

Individual Cancer Risk:

Construction Worker Groundwater Contact Depth: Direct Less Than 15ft

Surface Water screening values are not applicable to ecological receptors.

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Groundwater

ug/L

Screening Type: MCL

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	5.00E+00	Y
Trichloroethylene	79-01-6	Y	1.00E+02	5.00E+00	Y

Screening Type: Residential Groundwater VI

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	1.59E+00	Y
Trichloroethylene	79-01-6	Y	1.00E+02	5.21E-01	Y

Screening Type: Industrial Groundwater VI

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	7.05E+00	Y
Trichloroethylene	79-01-6	Y	1.00E+02	2.19E+00	Y

Screening Type: Construction Worker Groundwater

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	1.42E+01	Y
Trichloroethylene	79-01-6	Y	1.00E+02	4.94E-01	Y

Air

µg/m3

Screening Type: Residential Shallow/Sub-Slab Soil Gas

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	1.20E+01	Y
Trichloroethylene	79-01-6	Y	1.00E+02	7.00E+00	Y

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Individual Cancer Risk:

Construction Worker Groundwater Contact Depth: Direct Less Than 15ft

Surface Water screening values are not applicable to ecological receptors.

Physical and biological parameters are not screened in surface water.

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Air µg/m³

Screening Type: Residential Deep Soil Gas

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y		3.60E+01	
Trichloroethylene	79-01-6	Y		2.10E+01	

Screening Type: Industrial Shallow/Sub-Slab Soil Gas

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	5.33E+01	Y
Trichloroethylene	79-01-6	Y	1.00E+02	2.93E+01	Y

Screening Type: Industrial Deep Soil Gas

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y		1.60E+02	
Trichloroethylene	79-01-6	Y		8.80E+01	

Screening Type: Construction Worker Soil Gas

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	7.50E+03	
Trichloroethylene	79-01-6	Y	1.00E+02	2.63E+02	

Surface Water ug/L

Screening Type: Surface Water Fresh

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	5.80E-01	Y
Trichloroethylene	79-01-6	Y	1.00E+02	6.00E-01	Y

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Individual Cancer Risk:

Construction Worker Groundwater Contact Depth: Direct Less Than 15ft

Surface Water screening values are not applicable to ecological receptors.

Physical and biological parameters are not screened in surface water.

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Surface Water

ug/L

Screening Type: Surface Water Marine

Analyte	CAS	VOC	Concentration	Screening Level	COPC
Benzene	71-43-2	Y	1.00E+02	1.60E+01	Y
Trichloroethylene	79-01-6	Y	1.00E+02	7.00E+00	Y

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Non-Cancer Hazard Quotient: 0.1

Individual Cancer Risk:

Construction Worker Groundwater Contact Depth: Direct Less Than 15ft

Surface Water screening values are not applicable to ecological receptors.

Physical and biological parameters are not screened in surface water.

COPCs are listed as NE (not evaluated) where there is no screening level. A summary of NE analytes is provided at the end of the report.†

Summary of COPCs

Summarized by Residential and Industrial receptor screening for all screened media. Construction Worker screening results are included under the Industrial summary. Risk-based SSL, MCL-based SSL, and MCL results are included under the Residential summary.

Residential

Analyte	CAS
Benzene	71-43-2
Trichloroethylene	79-01-6

Industrial

Analyte	CAS
Benzene	71-43-2
Trichloroethylene	79-01-6

No NE Analytes in Screening Level Risk Assessment

†Not Evaluated (NE): COPCs are listed as NE (not evaluated) where there is no screening level. Some analytes have screening levels for some, but not all, screened media. An analyte may be in both the COPC and NE summary lists, e.g. analyte has screening values available in soil but not air.

END OF REPORT