LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
ARRINGTON MANOR
2225 COLLEGE STREET
COLUMBIA, SOUTH CAROLINA 29205

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PREPARED FOR:
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1.0 EXECUTIVE SUMMARY

Dominion Due Diligence Group (D3G) conducted a Limited Phase II Environmental Site Assessment (ESA) of Arrington Manor located at 2225 College Street in Columbia, South Carolina (subject property), in accordance with D3G's proposal to Columbia Housing (Client) for the work, accepted by the Client on March 4, 2024. This report has been prepared for and can be relied upon by the Client and the United States Department of Housing and Urban Development (HUD). As such, Columbia Housing and HUD are authorized "Users" of this Phase II ESA. This report is not to be relied upon or reproduced, either in whole or in part, without written consent from D3G.

The subject property consists of one (1) six-story age-restricted apartment structure constructed in 1971. The subject property structure contains a total of fifty-eight (58) residential dwelling units and is situated on approximately 0.94 acres of land. Located within the apartment structure are laundry facilities, office areas, laundry facilities, a community room/kitchen, and mechanical areas. Exterior property improvements include sitting areas, landscaped regions, and asphalt parking areas. The subject property is serviced by electricity and municipally supplied water and sewer. The Sponsor is submitting this project through the HUD Special Applications Center (SAC), consisting of a Section 18 disposition application of the existing age-restricted apartment complex with no significant ground disturbing activities.

The purpose of the Limited Phase II ESA was to evaluate the environmental integrity of the subject property based on the Draft D3G Phase I ESA findings, dated November 15, 2023, for Arrington Manor in Columbia, South Carolina, which identified the following Recognized Environmental Conditions (RECs):

Recognized Environmental Conditions [RECs]	
On-site LUST/UST/VEC	Arrington Manor High Rise (Subject Property), located at the subject property, is identified as a LUST incident and UST facility in the EDR Report. According to the UST listing, the facility (Facility ID: 07323) is associated with one (1) 560-gallon abandoned diesel underground storage tank (UST). No information regarding the age of the UST was included in the EDR Report. According to the LUST listing (Facility ID #07323), a release of diesel was reported on December 20, 1991. Clean up was initiated November 23, 1992, and a No Further Action letter was issued on January 13, 1993. D3G submitted a FOIA request with the South Carolina Department of Health and Environmental Control (SCDHEC) to obtain records regarding the adjacent LUST incident and UST facility. However, SCDHEC responded that no files were available for the on-site facility. Therefore, D3G requested that the Columbia Housing Authority provide any/all documentation related to the on-site UST facility and LUST incident. However, no information was available. Based on the lack of documentation for the adjacent LUST incident and UST facility, the adjacent facility is considered a REC, and a Vapor Encroachment Condition (VEC) currently exists on the

Recognized Environmental Conditions [RECs]	
	subject property. Further investigation is warranted to further evaluate the identified VEC attributed/associated with the on-site LUST/UST.

Therefore, to determine if the LUST incident involving one (1) 560-gallon abandoned diesel UST have negatively affected the environmental integrity of the subject property, and to assess whether there has been a release of hazardous substances at levels that would exceed the Statewide screening-level criteria (*de minimis* levels), D3G performed a Limited Phase II ESA on March 15, 2024, which included the advancement of three (3) soil borings with the collection of subsurface soil (SB-1, SB-2, and SB-3) for laboratory analysis. In addition, three (3) soil gas borings were advanced for the collection of soil gas samples (SG-1, SG-2, and SG-3). Subsurface soil samples were analyzed for Select Volatile Organic Compounds (VOCs) via EPA Method 8260/8011 and Polycyclic Aromatic Hydrocarbons (PAHs) via Environmental Protection Agency (EPA) Method 8270-SIM. Soil gas samples were analyzed for Select VOCs via EPA Method TO-15.

Conclusions:

East Coast Geophysics reported to the Arrington Manor property in Columbia, South Carolina (subject property) on March 15, 2024, to perform a geophysical and ferromagnetic survey within the immediate vicinity of the LUST incident involving one (1) 560-gallon abandoned diesel UST.

The property was further surveyed with the GPR and no evidence of a UST was observed. There were some apparent disturbed soils in the area where borings were pre-cleared, but no definitive evidence of a tank grave was observed. Furthermore, East Coast Geophysics investigated the boiler room for evidence of an UST such as vent/fill pipes, asphalt patches, and/or ground depressions. No evidence of a UST was observed on the property.

Therefore, in order to determine if the LUST incident involving one (1) 560-gallon abandoned diesel UST has negatively affected the environmental integrity of the subject property, and to assess whether there has been a release of hazardous substances at levels that would exceed the Statewide screening-level criteria (*de minimis* levels), D3G advanced three (3) soil borings for the collection of subsurface soil (SB-1 through SB-3) for laboratory analysis. In addition, three (3) soil gas borings were advanced for the collection of soil gas samples (SG-1 through SG-3) and one (1) outdoor (ambient) air sample (OA-1).

One (1) soil gas sample was collected from temporary soil gas sampling points SG-1 through SG-3 as well as one outdoor (ambient) air sample (OA-1) and analyzed for Select VOCs via EPA Method TO-15. Elevated concentrations of Select VOC (Benzene) analyzed within the soil gas samples collected from soil gas sampling points SG-1 [22.9 ug/m3], SG-2 [51.7 ug/m3], and SG-3 [19.2 ug/m3] were identified above their respective laboratory reporting limit and above their applicable respective United States Environmental Protection (USEPA) Sub-Slab and Near Source Soil Gas Vapor Intrusion Screening Levels (VISL) and/or South Carolina Department of Health and Environmental Control Risk Based Screening Levels (SCDHEC RBSLs) for Inhalation of vapors respectively during this Limited Phase II ESA investigation.

The primary objective of risk-based screening is to identify sites or buildings unlikely to pose a health concern through the soil gas intrusion pathway. Generally, at properties where subsurface concentrations of vapor-forming chemicals, such as those in groundwater or "near source" soil gas, fall below the recommended screening levels (i.e., VISLs/SCDHEC RBSLs), no further action or study is warranted. This condition is generally true so long as the exposure assumptions match those accounted for in the calculations, and the site fulfills the conditions and assumptions of the generic conceptual model underlying the screening levels. Similarly, the results of risk-based screening can help the data review team identify areas, buildings, and/or chemicals that can be eliminated from further assessment. Subsurface vapor intrusion to indoor air from volatile compounds in sub-surface media is a potentially major exposure pathway. The USEPA VISLs for Near-source Soil Gas and USEPA VISLs for Target Indoor Air Concentrations address residential and commercial/industrial exposure scenarios and may be used for screening contaminants in indoor air. The air screening levels for volatile chemicals also have potential applications for screening soil gas data when used in concert with an appropriate attenuation factor and it is recommended that screening assessments evaluate the default attenuation factor of 0.03 for sub-slab soil gas and "near-source" exterior soil gas, released in 2015 by USEPA.

Based on the laboratory analytical results indicating an elevated concentration of Select VOC constituent (Benzene) identified within the soil gas samples collected from SG-1 through SG-3 above the applicable USEPA Target Sub-Slab and Near-source Soil Gas VISLs during this Limited Phase II ESA, D3G utilized the USEPA VISL Calculator to determine site-specific calculated Target Indoor Air Concentrations. The VISL calculator identifies chemicals that are sufficiently volatile and toxic to warrant an investigation of the soil gas intrusion pathway when they are present as subsurface contaminants. D3G input the elevated soil gas sampling analytical data and the recommended default attenuation factor for soil gas (0.03) into the USEPA VISL calculator to further evaluate calculated site-specific indoor air concentrations. After calculating estimated site-specific Target Indoor Air Concentrations from the soil gas analytical data, D3G compared these calculations against the SCDHEC RBSLs for Inhalation of vapors, dated July 2020, to determine if the identified soil gas concentrations will be detrimental to the residential structure indoor air and thus, pose a threat to the environment and to the health of existing or future tenants.

Based on the results of the EPA VISL calculator indicating calculated estimated site-specific Indoor Air Concentration of Select VOC constituent (Benzene) above the applicable SCDHEC RBSLs for inhalation of vapors, the potential inhalation exposure pathway for residential receptors is considered currently complete; therefore, a VEC currently exists (cannot currently be ruled out) at the subject property attributed to the LUST incident involving one (1) 560-gallon abandoned diesel UST within the areas investigated during this Limited Phase II ESA. D3G concludes that the identified concentrations of Select VOC (Benzene) collected within the exterior soil gas samples (SG-1 through SG-3) potentially represents a potential Vapor Intrusion Condition (VIC) within the soil gas to indoor air pathway, representing a potential unacceptable risk (currently) under HUD's toxics policy at §50.3(i) in regard to unrestricted residential use criteria suspected to be attributed to the LUST incident involving one (1) 560-gallon abandoned diesel UST within these Areas of Concern (AOCs) investigated as part of this Limited Phase II ESA investigation. However, it should be noted, the EPA VISL model is a conservative screening tool and does not account for building foundation type, size, soil gas entry rates, building exchange rates, soil type, porosity, moisture, vertical and/or lateral inclusion zones from the source and/or chemical volatilization from groundwater.

However, based on the subsurface soil samples collected from the subject property, no concentrations of Select VOC constituent (Benzene) was identified above the SCDHEC RBSLs for soils and/or the USEPA RSLs for Resident Soil within the areas investigated indicating a lack of source media (soil contamination) beneath the subject property, D3G suspects a potential vapor source migrating onto the subject property through preferential pathways (i.e. utility lines, etc.) and are most likely attributed to an off-site source.

Following submittal of this Limited Phase II ESA, in accordance with regulations set forth by the SCDHEC – Site Assessment and Revitalization Division: Bureau of Land and Waste Management, all laboratory analytical data, water levels obtained from each temporary groundwater sampling point will be submitted to the Department within thirty (30) days of the receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.a of the South Carolina Well Standards and Regulations, dated April 26, 2002.

Recommendations:

Based on the soil gas laboratory analytical results from samples collected from soil gas points SG-1 [22.9 ug/m3], SG-2 [51.7 ug/m3], and SG-3 [19.2 ug/m3] indicating the presence of Volatile Organic Compound (Benzene) above its applicable USEPA VISLs for Target Sub-Slab and Near-Source Soil-Gas Concentration (TR=1E-06, THQ=0.1) and/or SCDHEC RBSLs for Inhalation of vapors during this Limited Phase II ESA/Tier II Invasive Screen investigation, soil vapor beneath the Arrington Manor has been adversely affected with a Recognized Environmental Condition (REC) and Vapor Encroachment Condition (VEC) currently existing within subsurface media (soil gas) beneath the subject property within the areas investigated as part of this Limited Phase II ESA investigation.

In accordance with 24 CFR 970.15, A Public Housing Authority (PHA) must obtain written approval from HUD before undertaking any transaction involving demolition or disposition of PHA-owned property. Where a PHA demolishes or disposes of public housing property without HUD approval, no HUD funds may be used to fund the costs of demolition or disposition or reimburse the PHA for those costs. HUD will approve an application for demolition or disposition upon the PHA's submission of an application with the required certifications and the supporting information required by this section and §§ 970.15 or 970.17. Section 970.29 specifies criteria for disapproval of an application. Approval of the application under this part does not imply approval of a request for additional funding, which the PHA must make separately under a program that makes available funding for this purpose. The PHA shall submit the application for demolition or disposition and the timetable in a time and manner and in a form prescribed by HUD. The supporting information shall include:

- A certification that the PHA has described the demolition or disposition in the PHA Annual Plan and timetable under 24 CFR part 903 (except in the case of small or high-performing PHAs eligible for streamlined annual plan treatment), and that the description in the PHA Annual Plan is identical to the application submitted pursuant to this part and otherwise complies with section 18 of the Act (42 U.S.C. 1437p) and this part;
- A description of all identifiable property, by development, including land, dwelling units, and other improvements, involved in the proposed demolition or disposition;
- A description of the specific action proposed, such as: (i) Demolition, disposition, or demolition with disposition; (ii) If disposition is involved, the method of sale;
- A general timetable for the proposed action(s), including the initial contract for demolition, the actual demolition, and, if applicable, the closing of sale or other form of disposition;
- A statement justifying the proposed demolition or disposition under the applicable criteria of §§ 970.15 or 970.17;
- If applicable, a plan for the relocation of tenants who would be displaced by the proposed demolition or disposition (including persons with disabilities requiring reasonable accommodations and a relocation timetable as prescribed in § 970.21);
- A description with supporting evidence of the PHA's consultations with residents, any resident organizations, and the Resident Advisory Board, as required under § 903.9 of this title;
- In the case of disposition only, evidence of compliance with the offering to resident organizations, as required under § 970.9;
- In the case of disposition, an estimate of the fair market value of the property, established on the basis of one independent appraisal, unless otherwise determined by HUD, as described in § 970.19(c);
- In the case of disposition, estimates of the gross and net proceeds to be realized, with an itemization of estimated costs to be paid out of gross proceeds and the proposed use of any net proceeds in accordance with § 970.19;
- An estimate of costs for any required relocation housing, moving costs, and counseling.

- Where the PHA is requesting a waiver of the requirement for the application of proceeds for repayment of outstanding debt, the PHA must request such a waiver in its application, along with a description of the proposed use of the proceeds;
- A copy of a resolution by the PHA's Board of Commissioners approving the specific demolition or disposition application (or, in the case of the report required under § 970.27(e) for ''de minimis'' demolitions, the Board of Commissioner's resolution approving the ''de minimis'' action) for that development or developments or portions thereof. The resolution must be signed and dated after all resident and local government consultation has been completed;
- Evidence that the application was developed in consultation with appropriate government officials as defined in § 970.5, including:
  - A description of the process of consultation with local government officials, which summarizes dates, meetings, and issues raised by the local government officials and the PHA's responses to those issues;
  - A signed and dated letter in support of the application from the chief executive officer of the unit of local government that demonstrates that the PHA has consulted with the appropriate local government officials on the proposed demolition or disposition;
  - Where the local government consistently fails to respond to the PHA's attempts at consultation, including letters, requests for meetings, public notices, and other reasonable efforts, documentation of those attempts;
  - Where the PHA covers multiple jurisdictions (such as a regional housing authority), the PHA must meet these requirements for each of the jurisdictions where the PHA is proposing demolition or disposition of PHA property;
- An approved environmental review of the proposed demolition or disposition in accordance with 24 CFR parts 50 or 58 for any demolition or disposition of public housing property covered under this part, as required under 24 CFR 970.13;
- A certification that the demolition or disposition application does not violate any remedial civil rights order or agreement, voluntary compliance agreement, final judgment, consent decree, settlement agreement, or other court order or agreement;
- Any additional information necessary to support the application and assist HUD in making determinations under this part.
  - Completion of demolition/ disposition or rescissions of approval.
- HUD will consider a PHA's request to rescind an earlier approval to demolish or dispose of public housing property, where a PHA submits a resolution from the Board of Commissioners and submits documentation that the conditions that originally led to the request for demolition or disposition have significantly changed or been removed.
- The Assistant Secretary will not approve any request by the PHA to either substitute units or add units to those originally included in the approved demolition or disposition application, unless the PHA submits a new application for those units that meet the requirements of this part.

HUD reviews demolition and disposition applications in accordance with the guidance in PIH Notice 2018-04. If a Public Housing Agency (PHA) is proposing to dispose of public housing property to allow for the development of other housing, the PHA should provide detailed information to the SAC about that future housing development (i.e., name of acquiring entity, number of ACC units, number of low-income housing units, number of market-rate units, etc.). Therefore, if the subject property is being considered for future residential housing development, at a minimum, Radon mitigation measures are required to be implemented in the future project design in accordance with HUD guidelines if the subject property will be developed for unrestricted residential land use.

Typically, a minimum of two (2) rounds of soil gas data should be collected to evaluate the vapor intrusion pathway. Two (2) rounds will begin to estimate temporal and seasonal variations at the site and other site-specific factors which may influence vapor migration. Since two rounds constitute a limited database, the maximum concentration detected should be used to evaluate potential risk. Based on these results, additional samples may be required depending on the source strength, plume movement, and how soil gas concentrations compare to screening levels. If soil gas samples exceed screening values and buildings are within one hundred (100) feet of the sample location for nonpetroleum vapor-forming chemicals and within thirty (30) feet of PHC vapor-forming chemicals, then sub-slab vapor samples and/or indoor air samples should be collected to further evaluate the vapor intrusion risk pathway.

Based on the exterior soil gas sampling analytical laboratory results obtained within the soil gas samples collected from SG-1 through SG-3 indicating elevated levels of (Benzene) above the applicable SCDHEC RBSLs for Inhalation of vapors, D3G recommends the following:

- Soil gas volatile chemical levels should be used to estimate the contribution of soil gas VI sources to indoor air levels. Confirmation sampling (*i.e.*, an additional or additional rounds) may need to be conducted to estimate the contribution from the environmental release. If soil gas samples exceed screening values and buildings are within one hundred (100) feet of the sample location for nonpetroleum vapor-forming chemicals and within thirty (30) feet of PHC vapor-forming chemicals, then sub-slab vapor samples and/or indoor air samples should be collected to further evaluate the vapor intrusion risk pathway. Therefore, based on the results of the EPA VISL calculator indicating calculated estimated site-specific Indoor Air Concentrations of Select VOC (Benzene) above the applicable USEPA VISL for Target Indoor Air Concentrations, D3G concludes that the elevated levels of Select VOC (Benzene) identified within the soil gas samples collected from SG-1 through SG-3 potentially represents a VIC to existing/future tenants within 2225 College Street as investigated during this Limited Phase II ESA investigation with further Tier 2 investigations warranted (ASTM E 2600-22). However, it should be noted, the USEPA VISL model is a conservative screening tool and does not account for building foundation type, size, soil gas entry rates, building exchange rates, soil type, porosity, moisture, vertical and/or lateral inclusion zones from the source and/or chemical volatilization from groundwater. Therefore, D3G recommends a quantitative sub-slab sampling (Point of Entry to Receptor) to be conducted at the subject property (prior to disposition) further outlined herein. The supplemental quantitative Tier II invasive Vapor Encroachment Screen (VES)/supplemental vapor intrusion risk-based screening assessment is to be conducted on the subject property for the identified VEC including but not limited to sub-slab soil vapor and indoor air quality sampling within the structures located within the area of SG-1 through SG-3 (2225 College Street) for Select VOC (Benzene).

  The vapor intrusion risk-based screening will be utilized to support and evaluate human health risk using supplemental individual subsurface data (e.g., sub-slab vapor and indoor air concentrations), which would consider the magnitude of the concentration exceedance of the USEPA VISLs as outlined within SCDHEC Quality Assurance Program Plan for the UST Management Division – Revision Number 4.0, dated July 2020. The supplemental investigation will be utilized as a baseline risk assessment of exposure to residential receptors, exposure pathways, toxicity of contaminants present at the site, further characterization of human health risks, impacts or risks to the environment and the further development of a site-specific CSM. In accordance with the Office of Solid Waste and Emergency Response (OSWER) Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air – OSWER Publication 9200.2-2-154, dated June 2015, multiple lines of evidence are particularly important for supporting "no-further-action" decisions regarding the vapor intrusion pathway (e.g., pathway incomplete determinations) to reduce the chance of reaching a false-negative conclusion (i.e., concluding vapor intrusion does not pose unacceptable human health risk, when it poses an unacceptable human health risk).

Collecting and weighing multiple lines of evidence can also reduce the chance of reaching a false-positive conclusion (i.e., concluding vapor intrusion poses unacceptable human health risk, when it does not. On the other hand, parties may implement engineered exposure controls (Tier 4 mitigation in accordance with ASTM E 2600-22) for vapor intrusion, even though only limited lines of evidence or measurements may be available to characterize the overall vapor intrusion pathway. Seasonally variable conditions (e.g., moisture levels, depth to groundwater) can lead to seasonally variable concentrations and distributions of vapors in the vadose zone. Likewise, weather conditions can lead to time-variable contributions from vapor soil gas flux/intrusion (e.g., driving forces for vapor intrusion) and ambient air infiltration. Collectively, these processes cause soil vapor concentrations of vapor-forming chemicals to vary over time. An individual sample (or single round of sampling) would be insufficient to characterize seasonal variability, or variability at any other time scale. Because of variability, a soil gas/vapor sampling event, collected at a randomly chosen time, is insufficient information to estimate an average exposure. On the other hand, it is impractical to collect soil vapor samples continuously over a chronic exposure period (i.e., up to 30 years for a reasonable maximum exposure duration in a residence (EPA 2014a)), which would also entail deferring risk management decisions for a prolonged period while human exposures from vapor intrusion could occur unabated. Hence, current, and past practice has generally relied upon collecting multiple rounds of soil vapor samples for purposes of estimating long-term average (i.e., chronic) exposures and assessing human health risk. All else being equal, a longer collection sampling period for each individual sample would be expected to yield a more reliable basis for estimating long-term, time-average exposure than would one sample collection period conducted over a short sampling interval. Multiple sampling events generally are considered necessary to account for seasonal variations in climate/temperature and/or weather conditions that related risk management decisions are based upon a consideration of a reasonable maximum vapor intrusion conditions.

2.0 INTRODUCTION

On behalf of Columbia Housing, LLC (Client), D3G conducted a Limited Phase II ESA of the Arrington Manor property located at 2225 College Street in Columbia, South Carolina (subject property) on March 15, 2024. The purpose of the Limited Phase II ESA was to supplement the D3G Phase I ESA and to assess whether there has been a release of hazardous substances and/or petroleum products associated with the LUST incident involving one (1) 560-gallon abandoned diesel UST at levels that would exceed the Statewide non-site-specific criteria (*de minimis* levels).

The purpose of the Phase I ESA was to provide an appropriate inquiry into the previous ownership and uses of the subject property and identify RECs, which are the likely presence of any hazardous substances or petroleum products at the subject property under conditions that indicate an existing release, a past release, or a material threat of a release into structures (vapors), the ground (soils), groundwater, or surface water at the subject property. Based on the findings of the Draft Phase I ESA, dated November 15, 2023, the following RECs were identified in connection with the subject property:

- <u>On-site LUST/UST/VEC</u>
  Arrington Manor High Rise (Subject Property), located at the subject property, is identified as a LUST incident and UST facility in the EDR Report. According to the UST listing, the facility (Facility ID: 07323) is associated with one (1) 560-gallon abandoned diesel underground storage tank (UST). No information regarding the age of the UST was included in the EDR Report. According to the LUST listing (Facility ID #07323), a release of diesel was reported on December 20, 1991. Corrective action was initiated November 23, 1992, and a No Further Action letter was issued on January 13, 1993. D3G submitted a FOIA request with the South Carolina Department of Health and Environmental Control (SCDHEC) to obtain records regarding the adjacent LUST incident and UST facility. However, SCDHEC responded that no files were available for the on-site facility. Therefore, D3G requested that the Columbia Housing Authority provide any/all documentation related to the on-site UST facility and LUST incident. However, no information was available. Based on the lack of documentation for the adjacent LUST incident and UST facility, the adjacent facility is considered a REC, and a Vapor Encroachment Condition (VEC) currently exists on the subject property. Further investigation is warranted to further evaluate the identified VEC attributed/associated with the on-site LUST/UST.

3.0 SITE BACKGROUND

3.1 Site Description and Features

The subject property consists of one (1) six-story age-restricted apartment structure constructed in 1971. The subject property structure contains a total of fifty-eight (58) residential dwelling units and is situated on approximately 0.94 acres of land. Located within the apartment structure are laundry facilities, office areas, laundry facilities, a community room/kitchen, and mechanical areas. Exterior property improvements include sitting areas, landscaped regions, and asphalt parking areas. The subject property is serviced by electricity and municipally supplied water and sewer. The Sponsor is submitting this project through the HUD Special Applications Center (SAC), consisting of a Section 18 disposition application of the existing age-restricted apartment complex with no significant ground disturbing activities.

3.2 Physical Setting

3.2.1 Topography and Regional Surface Water

Located in Attachment 1 is a topographic map depicting subject property elevations and drainage patterns. Depth to groundwater fluctuates depending on hydrological and weather conditions. Groundwater was not encountered at an approximate depth of six (6) to seven (7) feet below ground surface within SB-1 through SB-3 during this Limited Phase II ESA.

Topography and Regional Surface Water	
ELEVATION (feet above mean sea level)	240-260
SLOPE	South-southeast
APPROXIMATE GROUNDWATER FLOW	South-southeast
REGIONAL SURFACE WATER	An intermittent tributary of the Congaree River is located approximately 0.09 miles to the south-southeast of the subject property and flows to the southwest and the Congaree River is located approximately two (2) miles to the west and flows to the southeast.
SOURCE - USGS Topographic Quadrangle – *Columbia North, South Carolina 2020*	

3.2.2 Soil Characteristics

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, accessed at http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, the subject property consists of two (2) soil types: Oranegburg-Urban land complex and urban land. Oranegburg-Urban land complex does not meet hydric criteria. Urban land consists of nearly level to moderately sloping areas where more than 85 percent of the surface is covered by asphalt, concrete, buildings, or other impervious surfaces.

The following is a generalized description, provided to highlight the major subsurface strata encountered in the borings on-site. Soil Boring Logs should be reviewed for specific information at individual boring locations and are included in Attachment 4. The soil stratification shown on the Soil Boring Logs represents conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratification represents the approximate boundary between subsurface materials and the transition may be gradual.

In general, the borings encountered one (1) type of soil. No pattern was observed in the occurrence of soil type; therefore, the following data should not be used for spatial extrapolation of soil type. Following an initial one (1) foot of asphalt, the following stratums were observed:

Depth Ranges (ft bgs)	USCS	USCS
1 – 7'	CL	CLAY; trace sand; red with grey; dense; dry.

Note: Depth ranges are an overall range of the stratums observed and do not reflect the depth intervals for each specific boring location.

The locations of the soil borings are described within Section 4.4 of this document. No pattern was observed in the occurrence of soil type; therefore, the lithologic information should not be used for spatial extrapolation of soil type. A copy of the soil boring logs is included in Attachment 4.

3.2.3 Site Geology

The subject property lies within the Cape Fear/Eutaw Formations. The Cape Fear/Eutaw Formations developed during the Cretaceous period and consists of poorly sorted clayey sand and gravel deposited in delta-dominated fluvial- and restricted marine environments. Characterized by an abundance of smoky quartz gravel, feldspar, monazite, and garnet typically concentrated in placer deposits. Generally non-marine from North Carolina to central Georgia but contains shallow-water delta-front deposits in western Georgia.

3.3 Site History and Land Use

According to the reviewed subject property historical information, the subject property consisted of single-family residential from at least 1919 until construction of the existing age-restricted residential structure in 1971.

None of the accessed data depicts underground storage tanks (USTs) at the former structures; however, there exists the possibility that the former structures utilized underground or aboveground storage tanks (USTs/ASTs). No visual evidence of USTs (fill ports/vent pipes) or ASTs was observed during the subject property inspection. If ASTs or USTs were formerly located at the subject property, they should have been removed during the demolition of the structures.

D3G reviewed aerial photographs from 1938, 1943, 1951, 1955, 1964, 1966, 1971, 1981, 1983, 1994, 2006, 2011, 2015, and 2019. According to the reviewed information, the subject property was originally depicted as single-family residential properties from 1938, until prior to conversion to the existing land use as age-restricted residential in 1971. No environmental concerns were identified on the subject property based upon a review of the aerial photography.

D3G reviewed Sanborn Fire Insurance Maps from 1919, 1950, 1956, 1965, and 1969. It should be noted that the subject property is only partially depicted in the 1956 Sanborn Map. According to the reviewed information, the subject property was originally depicted as one (1) residential dwelling. Additional dwellings and associated outbuildings were constructed on the subject property prior to 1950 and remained unchanged through 1965. The subject property was not depicted on the 1969 Sanborn. No environmental concerns were identified on the subject property based upon a review of the Sanborn Fire Insurance Maps.

3.4 Adjacent Property Land Use

D3G reviewed aerial photographs from 1938, 1943, 1951, 1955, 1964, 1966, 1971, 1981, 1983, 1994, 2006, 2011, 2015, and 2019. According to the reviewed information, the adjacent properties have consisted of residential properties. No environmental concerns were identified on the adjacent properties based upon a review of the aerial photography.

D3G reviewed Sanborn Fire Insurance Maps from 1919, 1950, 1956, 1965, and 1969. Portions of the adjacent properties are not depicted on the 1919 and 1969 Sanborn. According to the reviewed information, the adjacent properties have consisted of undeveloped vacant lots and residential properties. No environmental concerns were identified on the adjacent properties based upon a review of the Sanborn Fire Insurance Maps.

3.5 Summary of Previous Assessments

The findings of the D3G Phase I ESA for the Arrington Manor property are discussed previously in Section 2.0 of this report.

4.0 WORK PERFORMED AND RATIONALE

4.1 Objective(s)

D3G conducted a Limited Phase II ESA at the subject property in compliance with ASTM E 1903-19 – *"Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process"*. The objective of this Phase II ESA is to determine if the RECs or risks related to HUD's toxics policy identified in the Phase I ESA have resulted in the presence of hazardous substances, pollutants, contaminants, petroleum/petroleum products, controlled substances and/or constituents thereof including but not limited to those within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) indicating an unacceptable risk under HUD's toxics policy at §50.3(i) in regard to unrestricted residential use criteria.

4.2 Data Quality Objectives

The Data Quality Objectives (DQOs) for a Phase II ESA is, at a minimum, to achieve reproducible chemical testing results for target analytes in samples of environmental media collected from locations relevant to the objectives of the assessment likely to have the highest concentration of target analytes. To be consistent with scientific inquiry, D3G formulated site-specific DQOs such that another Phase II Assessor would be able to reproduce the assessment and obtain consistent results. DQOs are site-specific, Area of Concern (AOC)-specific, and/or release area-specific goals developed to ensure that a sufficient quality and quantity of data are collected to support the decisions made during site characterization and to develop and refine the Conceptual Site Model (CSM).

Based on the developed DQOs, the following summarizes the Compounds of Potential Concern (COPCs) for each site media beneath the subject property. Additional inorganic compounds associated with background conditions will be considered in the risk analysis/exposure pathway(s) but are not considered COPCs:

Compounds of Potential Concern (COPC)
Subsurface Soils
COPCs: Select VOCs and PAHs
Groundwater
COPCs: Select VOCs and PAHs
Soil Vapor
COPCs: Select VOCs
Outdoor (ambient) Air
COPCs: Select VOCs

Select VOCs – Select Volatile Organic Compounds (VOCs) – Benzene, Toluene, Ethylbenzene, Xylenes, Naphthalene, MTBE, 1,2-Dichloroethane, and 1,2-dibromoethane – EPA Method 8260/8011 (groundwater and soil) and TO-15 (soil vapor)
Polycyclic Aromatic Hydrocarbons (PAHs)– EPA Method 8270
Select Volatile Organic Compounds [VOCs]—EPA Method TO-15 – Benzene, Toluene, Ethylbenzene, Xylenes, Naphthalene, MTBE, 1,2-Dichloroethane, and 1,2-dibromoethane

Based on these suspected and/or perceived conditions, the preliminary CSM developed for the subject property as part of this Phase II ESA includes the following potential exposure pathways:

Preliminary CSM	
Potential Exposure Pathway(s)	Populations
Ingestion of Subsurface Soil Particulates	Residential
	Construction Workers
Inhalation of Fugitive Dust	Residential
	Construction Workers
Dermal Contact with Subsurface Soil	Residential
	Construction Workers
Dermal Contact with Groundwater	Residential
	Construction Workers
Inhalation of Subsurface Vapor	Residential
	Construction Workers

As the subject property is serviced by a reticulated water supply, the exposure pathways between current/future on-site residents, construction/utility workers, and groundwater are not expected to be complete. The CSM validation is further discussed within Section 6.2 of this report.

4.3 Scope of Assessment

GROUND-PENETRATING RADAR (GPR) – FERROMAGNETIC/RADIODETECTION SURVEY

On March 15, 2024, East Coast Geophysics conducted a geophysical survey at the subject property identified at 2225 College Street in Columbia, SC. The survey was conducted utilizing a RD-7100+ ElectroMagnetic Line locator, a Fisher TW-6, Split-Box locator, and a GSSI SIR-4000 Ground Penetrating Radar (GPR) unit. The survey was conducted to evaluate the property for evidence of a UST with a reported diesel release in 1991, clean up in 1992, and NFA in 1993, and to pre-clear proposed soil boring locations.

Prior to the survey East Coast Geophysics inspected the survey area and the boiler room for evidence of an UST such as vent/fill pipes, asphalt patches and/or ground depressions. No evidence of a UST was observed on the property. The property was surveyed with the Fisher TW-6, split-box locator which detects large metal objects in the subsurface and is an effective tool for searching to UST's. The split-box gave no positive responses. The property was further surveyed with GPR, and no evidence of a UST was observed. The GPR and EM locator were used to identify subsurface utilities and pre-clear proposed soil boring locations.

In addition, the GPR Survey was utilized to determine the appropriate placement of the soil borings in relation to the identified RECs. For health and safety purposes, the GPR survey was conducted in the vicinity of the soil boring locations for the primary purpose of identifying existing conduit/utilities.

The GPR profiles were conducted using a Fisher TW-6 Split-Box locater, an RD 7100+ ElectroMagnetic Line Locater, and a GSSI SIR-4000 Ground Penetrating Radar (GPR) unit. GPR are impulse systems that transmit short duration EM pulses into the ground from an antenna near the surface. These EM pulses are reflected from interfaces with contrasting electrical properties back to the receiver section of the antenna connected to the control unit for processing and display. Contrasts in electrical properties of materials in the earth cause reflections of the radar signal. These reflections occur at different soil strata, soil/rock interfaces, rock/air interfaces (voids), fractures, manmade objects (rebar, conduit, metal casings), or any interface that can create a contrast in the dielectric properties. The technique operates on the principle of transmission, reflection, and detection of short-term duration electromagnetic pluses from a transducer (antenna with transmitting and receiving electronics) that is moved across the concrete/ground surface.

SUBSURFACE INVESTIGATION

Based on the location of the LUST incident involving one (1) 560-gallon abandoned diesel UST, D3G advanced three (3) soil borings (SB-1 through SB-3) at the subject property to determine if site soils and groundwater (if encountered) have been adversely affected by the LUST incident involving one (1) 560-gallon abandoned diesel UST.

Borings were advanced to an approximate depth of six (6) to seven (7) feet below ground surface (bgs) to locate a water bearing zone with sufficient recharge for groundwater sample collection. Soil borings were advanced using a truck-mounted Geoprobe® 5410DT direct-push technology.

Soil was collected (US EPA grab and 5035 sampling methodologies) continuously with disposable clear acetate liners and the soil was screened in the field utilizing a photoionization detector (PID) to indicate the presence of total photoionizable vapors (TPVs)/VOCs.

VAPOR ENCROACHMENT CONDITON ASSESSMENT

To evaluate the VEC from the identified RECs at the subject property associated with the LUST incident involving one (1) 560-gallon abandoned diesel UST, D3G conducted a Vapor Encroachment Screen (VES)/risk-based screening assessment (Tier II Invasive Screen) on the subject property including but not limited to soil gas sampling on the subject property. The vapor intrusion risk-based screening was utilized to support and evaluate human health risk using soil gas data, which would consider the magnitude of the concentration exceedance of the soil gas screening levels and site-specific risk management benchmarks.

The Tier II Invasive Screen/vapor intrusion condition assessment was undertaken in accordance with the Environmental Protection Agency (EPA) Publication 9200.2-154 – Office of Solid Waste and Emergency Response (OSWER) Final Guidance for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Sources to Indoor Air, dated June, 2015; Standard Operating Procedure (SOP), Technical Bulletin No. 93-660 dated September 21, 1993; USEPA, Environmental Response Team, Soil Gas Sampling, SOP #2042 dated June 1, 1996 (revised May 14, 2014); USEPA Operating Procedure – Soil Gas Sampling dated, May 14, 2014; ASTM D7663 – Standard Practice for Active Soil Gas Sampling in the Vadose Zone for Vapor Intrusion Evaluations, Interstate Technology Regulatory Council (ITRC) Vapor Intrusion Pathway: A Practical Guideline dated January, 2007; the SCDHEC South Carolina Risk-Based Corrective Action for Petroleum Releases, dated May 15, 2001; and the SCDHEC Quality Assurance Program Plan for the Underground Storage Tank Management Division – February 2020.

The scope of the vapor intrusion condition assessment was comprised of:

- The collection of three (3) representative soil gas samples (SG-1 through SG-3) at the subject property using 1-Liter stainless steel Summa® canisters equipped with a five (5)-minute flow controller.
- The collection of one (1) representative outdoor (ambient) air sample (OA-1) at the subject property using 1-Liter stainless steel Summa® canisters equipped with a five (5)-minute flow controller.

SOIL GAS VAPOR POINTS

D3G advanced three (3) exterior soil gas borings at the subject property for the installation of deep subsurface soil gas samples (SG-1 through SG-3) in accordance with U.S. Environmental Protection Agency Operating Procedure – Soil Gas Sampling dated, May 14, 2014, ASTM D7663 – Standard Practice for Active Soil Gas Sampling in the Vadose Zone for Vapor Intrusion Evaluations; the SCDHEC South Carolina Risk-Based Corrective Action for Petroleum Releases, dated May 15, 2001; and the SCDHEC Quality Assurance Program Plan for the Underground Storage Tank Management Division, dated February 2020.

Soil gas borings SG-1 through SG-3 were advanced and installed at a depth of five (5) feet below ground surface using truck-mounted Geoprobe® 5410DT, direct-push technology. D3G collected one (1) soil gas sample representative of the subsurface vapor quality from each soil gas sampling point (SG-1 through SG-3) within the subsurface strata using a 1-Liter stainless steel Summa® canister via ¼" Nylaflow Tubing with soil gas drawn into the canister by pressure equilibration (approximate sampling time of five minutes).

Subsurface soils were collected (US EPA grab and 5035 sampling methodologies) continuously with disposable clear acetate liners and were screened in the field with a photoionization detector (PID) to indicate the presence of VOCs.

D3G oversaw the subcontractor install a sand pack to minimize disruption of airflow to the sampling tip. A PVC tremie-pipe was required for all soil gas wells to avoid bridging or segregation during placement of the sand pack and bentonite seal. The sand pack was approximately 1-foot thick. The probe tip was placed midway in the sand pack with 3-feet of dry granular bentonite on top of the sand pack. Following the dry bentonite, the subcontractor filled the borehole to the surface with hydrated bentonite. The bentonite was hydrated in a container at the surface and then slowly poured into the borehole. The purpose of the dry granular bentonite between the sand pack and the hydrated bentonite was to prevent hydrated bentonite from infiltrating the sand pack. A down-hole rod was used to support the well tubing in the borehole. The support rod ensured that the probe tip was placed at the proper depth. The support rod was constructed to avoid possible cross contamination or ambient air intrusion. D3G installed the sampling point within the soil gas well constructed by the subcontractor.

The summa canister samples were submitted to a South Carolina accredited laboratory under appropriate chain-of-custody procedures and analyzed for Select VOCs via EPA Method TO-15.

OUTDOOR AIR VAPOR SAMPLING

Outdoor air concentration data is useful in correlating potential air contaminant contributions and/or baseline air concentrations from ambient air sources. Therefore, EPA generally recommends collecting ambient air sample(s) using similar sampling and analysis methods, whenever soil gas samples are collected. Normally, EPA recommends one or two outdoor air sample locations to characterize the conditions of the subject property. Additional outdoor air samples may be required if the investigation warrants additional environmental concerns. EPA also recommends that sample locations be designed to characterize representative conditions in the absence of site-related subsurface contamination (e.g., avoid collecting ambient air samples near locations of known or suspected chemical release(s), including any atmospheric releases from remediation equipment). Observable potential outdoor sources of pollutants (e.g., air emissions from nearby commercial or industrial facilities) were recorded.

D3G collected one (1) outdoor (ambient) air sample from upwind of the subject property and away from any potential VOC sources to account for potential background influences. The sample was submitted to a South Carolina accredited laboratory under appropriate chain-of-custody procedures and analyzed for Select VOCs via EPA Method TO-15.

PRELIMINARY SCREENING

Preliminary screening of the sampling area(s) (ambient air) was conducted through use of a PID. Screening equipment was checked and calibrated according to manufacturers' specifications. Additional factors documented during the preliminary screening included outdoor temperature, wind speed/direction, humidity, and barometric pressure.

SAMPLING PROCEDURES

Laboratory prepared sampling apparatus, sample collection, and documentation was performed as follows:

- Use of an evacuated Summa® passivated (or equivalent) stainless-steel canister to collect the sample. The canister was provided by the laboratory, along with a flow controller equipped with a gauge. The flow controller was pre-calibrated by the laboratory for the desired flow rate or duration of sample collection. The sampling flow rate was less than 0.2 liter per minute (lpm).
- The scheduled duration of sample collection took five (5) minutes for soil gas and outdoor (ambient) air with the canister and flow controller shipped to the laboratory from which the canister was rented under proper chain-of-custody protocol the same day.

The final canister vacuum was less than atmospheric pressure to ensure that a relatively constant flow rate was maintained for the entire sampling period. Prior to the commencement of sampling activities, a private utility mark-out was conducted at the subject property within the proposed boring locations.

Drilling and sampling operations were conducted in accordance with 29 CFR 1910.120. Prior to subsurface drilling activities, the drilling subcontractor notified the utility service alert (811 of South Carolina) in accordance with local practices. Equipment decontamination, sample collection, field documentation, sample custody and laboratory analyses were performed in general accordance with methods as prescribed within the applicable guidance documents presented in Section 10.0.

Subsurface soil, soil gas, and outdoor (ambient) air samples collected during this Limited Phase II ESA investigation were analyzed by a South Carolina accredited laboratory for the following:

[1]Sampling Parameters						
Sample ID.	Area(s) of Concern (AOC)	Select VOCs[2] EPA Method 8260/8011		PAHs[3] EPA Method 8270		Select VOCs[4] TO-15
		SOIL	GROUNDWATER	SOIL	GROUNDWATER	SOIL VAPOR
SB-1	On-site LUST/UST	✓	✓	✓	✓	
SB-2		✓	✓	✓	✓	
SB-3		✓	✓	✓	✓	
SG-1						✓
SG-2						✓
SG-3						✓
OA-1	Ambient air					✓
TOTAL SAMPLES		3	0	3	0	4

[1]SCDHEC "South Carolina Risk-Based Corrective Action for Petroleum Releases," dated May 15, 2001 & R.61-68 Water Classifications and Standards, dated June 27, 2014.

[2]= Select Volatile Organic Compounds [VOCs] – EPA Method 8260 – Benzene, Toluene, Ethylbenzene, Xylenes, Naphthalene, MTBE, 1,2-Dichloroethane, and 1,2-dibromoethane

[3]= Polycyclic Aromatic Hydrocarbons [PAHs] – EPA Method 8270

[4]= Select Volatile Organic Compounds [VOCs]—EPA Method TO-15 – Benzene, Toluene, Ethylbenzene, Xylenes, Naphthalene, MTBE, 1,2-Dichloroethane, and 1,2-dibromoethane

In addition, one (1) trip blank sample for EPA Method 8260 and one (1) trip blank sample for EPA Method TO-15 was submitted for laboratory analysis of Select VOCs for QA/QC purposes. Additionally, all manufacturer specifications were adhered to for operation and maintenance of field sampling monitoring equipment.

Changes to Scope of Work:
Changes to the scope of work were implemented based upon field observations and limitations that were observed and/or encountered during field activities and are discussed below:

- D3G originally proposed to install soil gas borings (SG-1 through SG-3) at a depth of ten (10) feet bgs. However, since refusal was encountered at seven (7) feet bgs at this sampling location, D3G decided to install the soil gas sampling points at five (5) feet bgs to keep a consistent sampling media depth.

- A temporary groundwater sampling point was initially proposed to be installed within soil borings SB-1 through SB-3 on March 15, 2024. However, a static groundwater table was not encountered during borehole advancement of soil borings SB-1 through SB-3. Several attempts were made to recover available groundwater from within an underlying water-bearing stratum without success. Borehole advancement was terminated (maximum depth) at depths of six (6) to seven (7) feet bgs, at which, refusal was encountered within very dense, low plasticity CLAY [CL] stratums; therefore, no groundwater was collected from soil borings SB-1 through SB-3 for laboratory analysis.

4.4 Exploration, Sampling and Test Screening Methods

4.4.1 Soil Investigation

On March 15, 2023, D3G supervised the advancement of three (3) soil borings (SB-1 through SB-3) using hydraulically driven direct-push sampling equipment (truck-mounted Geoprobe® 5410DT). The direct-push sampling equipment was used and operated in general accordance with EPA Expedited Site Assessment Tools for Underground Storage Tank Sites: A Guide for Regulators (EPA Document #510-B-97-001), dated March 1997 and the EPA Office of Solid Waste and Emergency Response – Groundwater Sampling and Monitoring with Direct Push Technology (EPA Document #540-R-04-005), dated August 2005. The number and final placement of the boring locations were based on conditions observed in the field (i.e., underground utility locations, terrain, and drill rig access). Details pertaining to the final placement of each soil boring are listed in the following table:

Soil Boring ID	Location
SB-1	Advanced approximately 35 feet north of the 2225 College Street residential structure to address the On-site LUST/UST.
SB-2	Advanced approximately 25 feet north of the 562 2225 College Street residential structure to address the On-site LUST/UST.
SB-3	Advanced approximately 26 feet west of the 2225 College Street residential structure to address the On-site LUST/UST.

Soil borings were advanced by The Probing Company of Decatur, Georgia. Site photographs illustrating soil boring locations and advancement are included on Attachment 3.

Continuous soil samples were collected using 4-foot-long samplers fitted with new, clear acetate liners. Soil samples were screened in the field for organic vapors using a PID. PID readings and lithology descriptions for each subsurface soil sample were recorded within a field logbook. Upon retrieval, the soil was screened in the field, logged, and classified according to the Unified Soil Classification System (USCS). Soil boring logs were generated for each soil boring and are included in Attachment 4.

PID readings were collected from soil borings SB-1 through SB-3. PID measurements ranged from 0.0 to 0.2 ppm within SB-1 through SB-3. No evidence of contamination (staining/odors) was observed during the advancement of soil borings SB-1 through SB-3 during this Limited Phase II ESA investigation.

Based on field observations indicating the absence of olfactory evidence of contamination and PID readings significantly below 50 ppm within soil boring samples, soil cuttings generated from each boring during borehole advancement were placed back within their appropriate borehole and capped to the surface with a layer of grout/asphalt patch. Site photographs illustrating borehole abandonment are included in Attachment 3.

4.4.2 Groundwater Investigation

Temporary groundwater sampling points were initially proposed to be installed within soil borings (SB-1 through SB-3) using hydraulically driven direct-push sampling equipment (truck-mounted Geoprobe® 5410DT) on March 15, 2024. However, during borehole advancement, no observed water bearing zone was observed at depths measured at six (6) to seven (7) feet bgs prior to encountering refusal within very stiff, low plasticity CLAY [CL] stratum. The USEPA *Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Sites*, dated June 2015, states that for each building within the lateral inclusion zone, samples should be collected as necessary to determine the vertical separation distance. However, additional investigation is generally unnecessary if the distance to contamination is greater than six (6) feet for dissolved contamination beneath buildings of any size.

D3G concludes that any potential or perceived groundwater contamination attributed to the LUST incident involving one (1) 560-gallon abandoned diesel UST is unlikely based on the subsurface conditions encountered as part of this Limited Phase II ESA subsurface investigation. Therefore, a VEC is unlikely to exist attributed to the groundwater exposure pathway beneath the subject property within the areas of SB-1 through SB-3 as investigated as part of this Limited Phase II ESA. The preliminary CSM developed in Section 4.0 is considered validated.

4.4.3 Vapor Encroachment Condition Assessment

Soil Gas Sampling:
On March 15, 2024, D3G supervised the installation of three (3) temporary soil gas sampling points (SG-1 through SG-3) at the subject property. The three (3) soil gas samples were collected at the locations presented in the following table. The soil gas vapor sample locations are depicted on the Site Plan included in Attachment 2.

Sample ID	Sample Location
SG-1	Advanced approximately 35 feet north of the 2225 College Street residential structure to address the On-site LUST/UST.
SG-2	Advanced approximately 25 feet north of the 562 2225 College Street residential structure to address the On-site LUST/UST.
SG-3	Advanced approximately 26 feet west of the 2225 College Street residential structure to address the On-site LUST/UST.

The temporary soil gas points were installed utilizing Nylaflow tubing and a stainless-steel soil vapor implant at a depth of five (5) feet bgs for the collection of deep soil vapor. No evidence of contamination was observed during the advancement of soil gas points SG-1 through SG-3 during this Limited Phase II ESA investigation.

The stainless-steel soil vapor implant was installed and anchored at the bottom of each soil gas sampling point at a depth of five (5) feet bgs. Clean Nylaflow tubing was attached to the vapor implant to the surface. Approximately three (3) volumes, at minimum, of the Nylaflow tubing was purged from the sampling locations with a 60-cc syringe prior to attaching the tubing to a flow regulator (pre-set by the analytical laboratory for a five-minute sampling interval) and a certified pre-cleaned 1-Liter SUMMA® canister. Following sample collection, a PID was used to measure the total VOC concentrations within each soil gas sampling point and is described below.

Gas field screening was conducted following temporary gas point installation, using a calibrated PID. PID measurements were recorded on the Soil Vapor Sampling Logs. Field screening readings were obtained by connecting the meter's tubing to the monitoring port being sampled and opening the monitoring port valve. Sampling was continued until sufficient stabilized concentrations were observed. PID readings taken from SG-1 through SG-3 ranged from 0.0 to 0.6 ppm after stabilization. No olfactory evidence of contamination was observed during the soil gas sampling point installation of SG-1 through SG-3.

In addition, prior to sample collection, D3G performed a leak test [shut-in test] to evaluate whether a good seal was established in the sampling train and the sampling port. A shut-in test involves assembling the sampling train and, leaving the canister valve in the closed position, applying a vacuum to the sampling line with a hand pump. A vacuum gauge, attached to the pump or connected to the line with a "T" fitting, is observed for at least one minute. If a loss of vacuum is observed, the fittings are adjusted until the vacuum does not noticeably dissipate. After approximately one (1) minute of the applied vacuum, a loss in pressure was not observed within soil gas points SG-1 through SG-3.

Outdoor (Ambient) Air:
Outdoor (ambient) air sampling was completed on March 15, 2024, and was collected concurrently with the soil gas samples. The location of the outdoor (ambient) air sample is presented in the following table. The outdoor (ambient) air sample location is depicted on the Site Plan included in Attachment 2.

Sample ID	Sample Location
OA-1	OA-1 was placed approximately 33 feet east of the 2225 College Street residential structure.

The representative outdoor air sample was placed in an area that would minimize bias towards obvious sources of volatile chemicals and provide accurate results of background concentrations of chemicals of concern (COCs).

The sample was collected for a five (5) minute period with a five-minute flow regulator (pre-set by the analytical laboratory) using a certified pre-cleaned 1-Liter SUMMA canister. Temperature readings were recorded at the beginning and the completion of the five-minute sampling period. The provided canister label was completed to record the sample ID and location. Prior to the commencement of sampling, all canister and flow meter connections were verified for tightness. A reading was taken continuously over an approximate one (1) minute purging period to determine a stable concentration. The reading taken from OA-1 was measured at 0.0 ppm, after observed stabilization. Site photographs illustrating sampling equipment setup are included in Attachment 3.

4.5 Chemical Analytical Methods

Subsurface soil, soil gas, and outdoor (ambient) air samples were collected and analyzed in general accordance with requirements set forth within the SCDHEC R.61-71 – South Carolina Well Standards, Effective Date: April 26, 2002; Sampling of Wells and Devices Used for Ground-Water Quality Investigations (ASTM D6771); and the SCDHEC Quality Assurance Program Plan for the Underground Storage Tank Management Division, revised February 2020. Subsurface soil, soil gas, and outdoor (ambient) air analysis completed during this Limited Phase II ESA included the following:

Subsurface Soil:
One (1) unsaturated (subsurface) soil sample was collected from just above the capillary fringe within soil borings SB-1 (5-7'), SB-2 (4-6'), and SB-3 (4-6'), and analyzed for Select VOCs via EPA Method 8260/8011 and PAHs via EPA Method 8270E-SIM.

Subsurface soil samples were collected above the capillary fringe, since contamination is typically found in soil moisture above the capillary fringe, which increases with depth, resistance to downward movement of contamination will be increased and some constituents will spread laterally and accumulate above the saturated media. Therefore, it was suspected that the deeper the soil samples were collected (closer to suspected groundwater), the more likely it would be to encounter potentially contaminated media even though refusal was encountered before groundwater was observed.

Soil samples were collected with nitrile gloves and placed in clean laboratory provided glassware. The soil samples were sealed, labeled, and placed in coolers with ice and delivered to Pace National – Mt. Juliet, Tennessee location, under proper chain-of-custody protocol. A copy of the soil laboratory analytical report is included in Attachment 7.

Soil Gas and Outdoor (Ambient) Air:
One (1) soil gas sample was collected from temporary soil gas sampling points SG-1 through SG-3 as well as one outdoor (ambient) air sample (OA-1) and analyzed for Select VOCs via EPA Method TO-15.

Soil gas samples, representative of the air quality within the vadose zone located beneath the subject property, were collected into the 1-Liter stainless steel Summa® canisters via ¼" Nylaflow tubing with the soil gas drawn into the canister by pressure equilibration via a flow regulator calibrated for a sampling time of approximately five (5) minutes. Sample collection did not exceed 0.2 liters per minute. Soil gas samples were sealed, labeled, and placed in padded cardboard boxes and delivered to Pace National – Mt. Juliet, Tennessee location, under proper chain-of-custody protocol. A copy of the soil gas and outdoor (ambient) air sample laboratory analytical report is included in Attachment 7.

4.6 Evaluation Criteria

Subsurface Soil:
Subsurface soil samples analyzed for Select VOCs and PAHs were compared to the following:

- SCDHEC Risk-Based Screening Levels for Sandy Soils set forth in the South Carolina Risk Based Corrective Action for Petroleum Releases, revised February 2020 - Table D3 - RBSLs for Sandy Soil determined based on groundwater RBSLs; and

- United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for Resident Soil (TR=1E-06, THQ=0.1), dated November 2023.

Soil Gas and Outdoor (Ambient) Air:
According to the SCDHEC Quality Assurance Program Plan for the Underground Storage Tank Management Division, SCDHEC determines risk based on the exposure pathways, and outlines two specific types: Direct and Indirect. SCDHEC defines them as:

- Direct Exposure Pathway is an exposure pathway where the point of exposure is at the source without a release to any other medium (for example, inhalation of vapors or dermal contact with free product).

- Indirect Exposure Pathway is an exposure pathway with at least one intermediate release to any media between the source and the point of exposure (e.g., leaching of COCs from soil to groundwater).

Therefore, D3G compared the soil gas and outdoor ambient air results to one (1) or more of the following:

- SCDHEC Risk-Based Screening Levels for Inhalation of Vapors, set forth in the South Carolina Department of Health and Environmental Control, dated July 2020 – Table D5 – Risk Based Screening Levels (RBSLs) for Inhalation of Vapors;

- USEPA VISLs – Target Indoor Air Concentration (TR=1E-06, THQ=0.1), dated November 2023;

- USEPA VISLs for Target Sub-Slab and Near-source Soil Gas Concentrations (TR=1E-06, THQ=0.1), dated November 2023; and

- USEPA Regional Screening Levels set forth in the EPA RSL for Resident Ambient Air Table (TR=1E-06, THQ=0.1), dated November 2023.

In South Carolina, unacceptable human exposure is indicated when chemical levels represent cancer risks greater than 10^{-6} or a HQ greater than one pursuant to the SCDHEC Quality Assurance Program Plan for the Underground Storage Tank Management Division guidance, effective July 1, 2013. The Risk-Based Screening Levels (RBSLs) for soil, groundwater, and vapor were developed to evaluate continued exposure related to the direct contact, ingestion, and inhalation pathways. In general, the U.S. EPA considers unacceptable human exposures as occurring when chemical levels result in cancer risks greater than 10^{-4} to 10^{-6} or a HQ of one for noncancer effects (U.S. EPA, 2015). As many of the sites potentially have had contamination for multiple decades and complete remediation may take additional months to years, people may have had unacceptable exposure for an extended period. To address this potential exposure, RBSLs are necessary to ensure that when unacceptable exposures are identified, they are stopped as soon as possible. This is especially important when short-term exposure could result in health effects, such as in the case of developmental toxicants or mutagenic carcinogens. In addition, the U.S. EPA VI site guidance includes the need for prompt action due to human health risks at certain VI sites (U.S. EPA, 2015). Specifically, the U.S. EPA VI Guidance states: EPA has emphasized the importance of interim actions and site stabilization in the RCRA corrective action program to control or abate "ongoing risks" to human health and the environment while site characterization is underway or before a final remedy is selected (see the Federal Register of May 1, 1996 [61 FR 19446]). Interim actions encompass a wide range of institutional and physical corrective action activities to achieve stabilization and can be implemented at any time during the corrective action process. EPA recommends that interim actions, including PEM (presumptive mitigation), be employed as early in the corrective action process as possible, consistent with the human health and environmental protection objectives and priorities for the site. EPA recommends that, as further information is collected, program implementers continue to look for opportunities to conduct additional interim response action.

Copies of the applicable SCDHEC RBSLs, USEPA VISLs, and USEPA RSLs specific to this Limited Phase II ESA investigation are included in Attachment 6.

5.0 PRESENTATION AND EVALUATION OF RESULTS

5.1 Geophysical & Electromagnetic Survey Investigation

East Coast Geophysics reported to the Arrington Manor property in Columbia, South Carolina (subject property) on March 15, 2024, to perform a geophysical and ferromagnetic survey within the immediate vicinity of the reported UST with a diesel release in 1991, clean up initiated in 1992, and No Further Action Letter in 1993.

Prior to the survey East Coast Geophysics inspected the survey area and the boiler room for evidence of an UST such as vent/fill pipes, asphalt patches and/or ground depressions. No evidence of a UST was observed on the property. The property was surveyed with the Fisher TW-6, split-box locator which detects large metal objects in the subsurface and is an effective tool for searching for USTs. The split-box gave no positive responses within the area of the 560-gallon abandoned diesel UST.

Based on the results of the Geophysical/Ferromagnetic Survey within the immediate vicinity of the 560-gallon abandoned diesel UST, in order to identify a reported exterior existing orphan UST and associated ancillary piping system(s),no evidence of an UST was observed, there were some apparent disturbed soils in the area where borings were pre-cleared but no definitive evidence of a tank grave was observed.

The location of the Geophysical Survey Investigation is depicted on the Area of Concern Location included in Attachment 2 and a copy of the findings provided by East Coast Geophysics is included in Attachment 10 of this document.

5.2 Subsurface Conditions

The table below summarizes the total boring depths, depths to groundwater, and depths at which soil samples were obtained for laboratory analysis. A Site Plan depicting soil boring locations is in Attachment 2.

Boring Depth Summary				
Boring ID	Total Depth (ft. bgs)	Approximate Distance from Closest Building (in ft.)	Depth to Groundwater (ft. bgs)	Soil Sampling Depths (ft. bgs)
SB-1	7'	35'	N/A	(5-7')
SB-2	6'	25'	N/A	(4-6')
SB-3	6'	26'	N/A	(4-6')

Notes: Distances were measured from the residential building on site.

The table below summarizes the total boring depths, distance from building, screened intervals, and PID measurements for each soil vapor sample that was obtained for laboratory analysis. A Site Plan depicting soil gas boring locations is in Attachment 2.

Soil Gas Implant Summary				
Boring ID	Total Depth (ft bgs)	Approximate Distance from Closest Building (in ft.)	Screened Interval (ft bgs)	PID Measurements in parts per million (ppm)
SG-1	5’	35’	4’ to 5’	0.0
SG-2	5’	25’	4’ to 5’	0.0
SG-3	5’	26’	4’ to 5’	0.6

5.3 Subsurface Soil Sampling Analytical Results

Field Observations:
No visual or olfactory evidence of soil contamination (free product, staining and/or odor) was observed during the advancement of soil borings SB-1 through SB-3. PID readings taken during the soil screening process ranged from 0.0 to 0.2 ppm during this Limited Phase II ESA investigation.

Select VOCs:
No concentrations of Select VOCs analyzed within subsurface soil samples collected from SB-1 through SB-3 were identified above their respective laboratory reporting limits, above their applicable most stringent SCDHEC RBSLs for soils, and/or the USEPA RSLs for Resident Soil during this Limited Phase II ESA investigation.

PAHs:
No concentrations of PAHs analyzed within subsurface soil samples collected from SB-1 through SB-3 were identified above their respective laboratory reporting limits, above their applicable most stringent SCDHEC RBSLs for soils and/or the USEPA RSLs for Resident Soil during this Limited Phase II ESA investigation.

The laboratory analytical report with subsurface soil sampling results is included in Attachment 7.

5.4 Soil Gas Vapor Sampling Analytical Results

Field Observations:
No evidence of contamination (petroleum/non-petroleum odors) was observed during the advancement of soil gas borings SG-1 through SG-3. PID readings taken during soil screening and temporary soil gas probe monitoring prior to sampling SG-1 through SG-3 ranged from 0.0 to 0.6 ppm during this Limited Phase II ESA Investigation.

Select VOCs:
Elevated concentrations of Select VOC (Benzene) analyzed within the soil gas samples collected from soil gas sampling point SG-1 through SG-3 was identified above its respective laboratory reporting limits and above their applicable USEPA Sub-Slab and Near Source Soil Gas VISLs during this Limited Phase II ESA investigation.

All other concentrations of Select VOCs analyzed within soil gas samples collected from SG-1 through SG-3 were detected below their applicable laboratory reporting limits and/or below their applicable USEPA Sub-Slab and Near Source Soil Gas VISLs during this Limited Phase II ESA investigation.

Laboratory analytical reports with soil gas sampling results are included in Attachment 7. The soil gas sampling analytical results table is presented below.

Soil Gas Sampling Analytical Results Table - Reported in micrograms per cubic meter (ug/m3)									
Method	Analyte	Units	USEPA Sub-Slab and Near Source Soil Gas VISLs	SG-1		SG-2		SG-3	
				Result	RDL	Result	RDL	Result	RDL
TO-15	BENZENE	ug/m3	12	22.9	0.64	51.7	0.64	19.2	0.64
TO-15	ETHYLBENZENE	ug/m3	37.4	10.3	0.87	23.8	0.87	12.4	0.87
TO-15	M&P-XYLENE	ug/m3	348	32.9	1.73	63.3	1.73	36.9	1.73
TO-15	O-XYLENE	ug/m3	248	14.4	0.87	31.6	0.87	15.4	0.87
TO-15	TOLUENE	ug/m3	17400	84.8	1.88	360	1.88	242	1.88

USEPA Vapor Intrusion Screening Levels (VISLs) for Target Sub-Slab and Near Source Soil Gas Concentration (TR=1E-06, THQ=0.1), dated November 2023
Bolded concentrations indicate de minimis concentrations
Shaded concentrations indicate elevated concentrations

5.5 Outdoor (Ambient) Air Sampling Analytical Results

Field Observations:
No olfactory or visual evidence of contamination (petroleum/non-petroleum odors) was observed during the placement of the outdoor (ambient) air sample (OA-1). PID readings of the outdoor (ambient) air, prior to soil gas sampling, was 0.0 ppm during this Limited Phase II ESA Investigation.

Select VOCs:
An elevated concentration of Select VOC (Benzene) analyzed within the outdoor (ambient) air sample collected from outdoor (ambient) air sampling point OA-1 was identified above its respective laboratory reporting limits and above their applicable SCDHEC RBSLs for Inhalation of vapors during this Limited Phase II ESA investigation.

Laboratory analytical reports with outdoor (ambient) air sampling results are included in Attachment 7. The outdoor (ambient) air sampling analytical results table is presented below:

Outdoor (Ambient) Air Results Table - Reported in micrograms per cubic meter (ug/m3)						
Method	Analyte	Units	RBSLs for Inhalation of vapors	OA-1		
				Result	Qualifier	RDL
TO-15	BENZENE	ug/m3	0.36	0.87		0.64
TO-15	ETHYLBENZENE	ug/m3	1.1	0.88		0.87
TO-15	M&P-XYLENE	ug/m3	100	2.49		1.73
TO-15	O-XYLENE	ug/m3	100	0.89		0.87
TO-15	TOLUENE	ug/m3	5200	23.6		1.88

SCDHEC Risk-Based Screening Levels for Inhalation of Vapors, set forth in the South Carolina Department of Health and Environmental Control, dated July 2020 – Table D5 – Risk Based Screening Levels (RBSLs) for Inhalation of Vapors
Bolded concentrations indicate de minimis concentrations
Shaded concentrations indicate elevated concentrations

A Reporting Limit (RL or RDL) is the limit of detection for a specific target analyte for a specific sample after any adjustments have been made for dilutions or percent moisture. Some state regulatory programs require a laboratory to prove it can reliably "see" down to its RL by setting the RL at the lowest point on the calibration curve. In contrast, the Method Detection Limit or MDL is lower than the RL (often much lower) and is a *statistical calculation*. Since the MDL is below the point of calibration, results reported down to the MDL are not reliable and must be qualified as estimated values and, as such, carry a "J" qualifier designation.

5.6 Vapor Intrusion Screening Level [VISL] Calculator

The primary objective of risk-based screening is to identify sites or buildings unlikely to pose a health concern through the groundwater to indoor air vapor intrusion pathway. Generally, at properties where subsurface concentrations of vapor-forming chemicals, such as those in groundwater or "near source" soil gas, fall below the recommended screening levels (i.e., VISLs), no further action or study is warranted. This condition is generally true so long as the exposure assumptions match those accounted for in the calculations, and the site fulfills the conditions and assumptions of the generic conceptual model underlying the screening levels. Similarly, the results of risk-based screening can help the data review team identify areas, buildings and/or chemicals that can be eliminated from further assessment.

Subsurface vapor intrusion to indoor air from volatile compounds in sub-surface media is a potentially major exposure pathway. The USEPA VISLs for Near-source Soil Gas and USEPA VISLs for Target Indoor Air Concentrations address residential and commercial/industrial exposure scenarios and may be used for screening contaminants in indoor air. The air screening levels for volatile chemicals also have potential applications for screening soil gas data when used in concert with an appropriate attenuation factor and it is recommended that screening assessments evaluate the default attenuation factor of 0.03 for sub-slab soil gas and "near-source" exterior soil gas, released in 2015 by USEPA.

Based on the laboratory analytical results indicating elevated concentrations of Select VOC constituent (Benzene) identified within the soil gas sample collected from SG-1 through SG-3 above the applicable USEPA Target Sub-Slab and Near-source Soil Gas VISLs during this Limited Phase II ESA, D3G utilized the USEPA VISL Calculator to determine site-specific calculated Target Indoor Air Concentrations. The VISL calculator identifies chemicals that are sufficiently volatile and toxic to warrant an investigation of the soil gas intrusion pathway when they are present as subsurface contaminants.

D3G input the elevated soil gas sampling analytical data and the recommended default attenuation factor for soil gas (0.03) into the USEPA VISL calculator to further evaluate calculated site-specific indoor air concentrations. After calculating estimated site-specific Target Indoor Air Concentrations from the soil gas analytical data, the estimated Target Indoor Air Concentrations were compared against the USEPA Resident Target Indoor Air VISLs, to determine if the identified soil gas concentrations will be detrimental to the residential structure indoor air and thus, pose a threat to the environment and to the health of existing or future tenants.

The calculated estimated site-specific indoor air concentrations compared to the applicable USEPA VISLs are illustrated in the table below:

EPA VISL Comparison to Calculated Site Indoor Air Concentrations Reported in micrograms per cubic meter [ug/m^3]				
Analyte	RBSLs for Inhalation of vapors	Calculated Estimated Indoor Air Concentrations		
		SG-1	SG-2	SG-3
Benzene	0.36	.687	1.55	.576

SCDHEC Risk-Based Screening Levels for Inhalation of Vapors, set forth in the South Carolina Department of Health and Environmental Control, dated July 2020 – Table D5 – Risk Based Screening Levels (RBSLs) for Inhalation of Vapors
Bolded concentrations indicate de minimis concentrations
Shaded concentrations indicate elevated concentrations

The results of the EPA VISL calculator indicate calculated estimated site-specific Indoor Air Concentrations of Select VOC constituent (Benzene) above the applicable SCDHEC RBSLs for Inhalation of vapors. Therefore, D3G concludes that the identified Select VOC constituent (Benzene) identified within soil gas sample SG-1 through SG-3 currently represents a VEC within the area investigated during this Limited Phase II ESA investigation with supplemental Tier II invasive investigation warranted (ASTM E 2600-22).

However, based on the subsurface soil samples collected from the subject property, no concentrations of Select VOC constituent (Benzene) were identified within the source media (soil and/or groundwater) beneath the AOCs; therefore, D3G suspects a potential vapor source migrating onto the subject property through preferential pathways (i.e. utility lines, etc.) and are most likely attributed to an off-site source. In addition, it should be noted, the USEPA VISL model is a conservative screening tool and does not account for building foundation type, size, soil gas entry rates, building exchange rates, soil type, porosity, moisture, vertical and/or lateral inclusion zones from the source and/or chemical volatilization from groundwater.

Copies of the site-specific indoor air VISL calculations for soil gas are included in Attachment 9.

5.7 Quality Assurance/Quality Control Procedures

D3G adhered to industry standard procedures and processes for the collection and handling of environmental samples in accordance with those guidelines published by the SCDHEC, and the participating laboratory, Pace National – Mt. Juliet, Tennessee location. The QA/QC process is designed to ensure the analytical precision, accuracy, and representativeness of the analytical results. The QA/QC plan consists of field samples, including trip blanks, laboratory documentation and laboratory QC samples such as method blanks, matrix spikes, matrix spike duplicates, and laboratory control samples analyzed to ensure laboratory procedures and analyses were performed properly.

Trip blanks are used to identify possible sample contamination originating from sample transport, shipping, or site conditions. One (1) trip blank sample consisting of one (1) HCl preserved 40 mL glass vials and (1) 1-Liter Summa canister, provided by the laboratory, was submitted along with the Limited Phase II ESA samples. The trip blank samples were shipped with the sample containers to the field, stored with the sample containers, and returned to the laboratory with the sample containers and analyzed for Select VOCs via EPA Method 8260 (soil/groundwater) and EPA Method TO-15 (soil gas). The trip blank samples were shipped with the soil and air samples and transported the same day to the Pace National – Mt. Juliet, Tennessee location under proper chain-of-custody protocol.

No concentrations of Select VOCs were detected within the trip blank samples above their respective laboratory method detection limits during this Limited Phase II ESA investigation. Therefore, sample handling and transport procedures were appropriate to demonstrate cross-contamination has not occurred. A copy of the laboratory analytical reports is included in Attachment 7.

6.0 INTERPRETATION AND CONCLUSIONS

6.1 Recognized Environmental Condition/Potential Release Area(s)

Based on the findings of the D3G Draft Phase I ESA dated November 15, 2023, the Areas of Concern (AOCs) and probable location of potential on-site contamination, if present, is suspected to be located beneath the following portions of the subject property:

Recognized Environmental Conditions [RECs]		Areas of Concern (AOC) at the subject property
On-site LUST/UST/VEC	Arrington Manor High Rise (Subject Property), located at the subject property, is identified as a LUST incident and UST facility in the EDR Report. According to the UST listing, the facility (Facility ID: 07323) is associated with one (1) 560-gallon abandoned diesel underground storage tank (UST). No information regarding the age of the UST was included in the EDR Report. According to the LUST listing (Facility ID #07323), a release of diesel was reported on December 20, 1991. Clean up was initiated November 23, 1992, and a No Further Action letter was issued on January 13, 1993. D3G submitted a FOIA request with the South Carolina Department of Health and Environmental Control (SCDHEC) to obtain records regarding the adjacent LUST incident and UST facility. However, SCDHEC responded that no files were available for the on-site facility. Therefore, D3G requested that the Columbia Housing Authority provide any/all documentation related to the on-site UST facility and LUST incident. However, no information was available. Based on the lack of documentation for the adjacent LUST incident and UST facility, the adjacent facility is considered a REC, and a Vapor Encroachment Condition (VEC) currently exists on the subject property. Further investigation is warranted to further evaluate the identified VEC attributed/associated with the on-site LUST/UST.	Underneath the subject property

6.2 Conceptual Site Model (CSM) Validation

For Limited Phase II Environmental Subsurface Investigations performed in accordance with ASTM Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (Designation E 1903-19), and the All-Appropriate Inquiries: Final Rule and HUD Multifamily Accelerated Processing Guide: Chapter 9 Environmental Review and Requirements, environmental sampling efforts must be validated. Validation is necessary to ensure reliable analytical results and an accurate Conceptual Site Model (CSM).

The CSM reviews the available site information (history, sources of hazardous substances and potentially exposed or exposed populations) to determine if any unacceptable or potentially unacceptable risks to site occupants are present. Exposure pathways are means by which hazardous substances move through the environment from a source to a point of contact with people. A complete exposure pathway must have four (4) parts:

- Source of contamination;
- A mechanism for transport of a substance from the source to the air, surface water, groundwater and/or soil;
- A point where people come in contact with contaminated air, surface water, groundwater or soil; and
- A route of entry into the body.

Routes of entry can be eating or drinking contaminated materials, breathing contaminated air, or absorbing contaminants through the skin. Risks can be assessed when an exposure pathway is complete. If any part of an exposure pathway is absent, the pathway is incomplete, and no exposure or risk is possible. In some cases, although a pathway is complete, the likelihood that significant exposure will occur is very small. Risk assessments include a "pathways analysis" to identify those pathways that are complete and most likely to produce significant exposure.

Subsurface Soil Exposure Pathways:

Based on the lack of visual and olfactory evidence of contamination as well as the subsurface soil laboratory analytical results indicating concentrations of Select VOCs and PAHs below their applicable, most stringent SCDHEC RBSLs for soils and/or the USEPA RSLs for Resident Soil within soil borings SB-1 through SB-3 during this Limited Phase II ESA investigation, D3G concludes that hazardous substances and petroleum constituents as defined by CERCLA have not been identified above Statewide, non-site specific criteria, and that a REC and a VEC does not exist on the subject property attributed to the LUST incident involving one (1) 560-gallon abandoned diesel UST within the areas investigated during this Limited Phase II ESA. Therefore, the exposure pathways for dermal contact, incidental ingestion, and inhalation for current/future residential receptors and/or construction/utility workers are considered incomplete. The preliminary CSM developed in Section 4.0 is considered validated.

Groundwater Exposure Pathways:

A temporary groundwater sampling point was initially proposed to be installed within soil borings (SB-1 through SB-3) using hydraulically driven direct-push sampling equipment (truck-mounted Geoprobe® 5410DT Series Model) on March 15, 2024. However, during borehole advancement, no observed water bearing zone was observed at depths measured at six (6) to seven (7) feet bgs prior to encountering refusal. The USEPA *Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Sites*, dated June 2015, states that for each building within the lateral inclusion zone, samples should be collected as necessary to determine the vertical separation distance. However, additional investigation is generally unnecessary if the distance to contamination is greater than six (6) feet for dissolved contamination beneath buildings of any size.

D3G concludes that any potential or perceived groundwater contamination attributed to the LUST incident involving one (1) 560-gallon abandoned diesel UST is unlikely based on the subsurface conditions encountered as part of this Limited Phase II ESA subsurface investigation. Therefore, a VEC is unlikely to exist attributed to the groundwater exposure pathway beneath the subject property within the areas of SB-1 through SB-3 as investigated as part of this Limited Phase II ESA. The preliminary CSM developed in Section 4.0 is considered validated.

Outdoor (Ambient) Air Exposure Pathways:

VOC concentrations within the outdoor (ambient) air sampling point OA-1 were below the laboratory detection limits and the applicable SCDHEC RBSLs for Inhalation of vapors. However, elevated concentrations of Select VOC (Benzene) were identified within the outdoor (ambient) air sampling point OA-1 during this Limited Phase II ESA investigation. The outdoor (ambient) air sample was collected approximately 167 feet west of an active main road (College Street). The possibility exists that the elevated Benzene concentrations is a result of organic vapors, such as vehicle exhaust. Therefore, D3G concludes the exposure pathways for inhalation for future/current residential receptors and construction/utility workers are considered incomplete for outdoor (ambient) air vapor inhalation with the identified Benzene concentrations most likely due to automotive emissions due to the subject property's urban environment setting.

It is unlikely that any known or perceived on-site and/or off-site contamination will further migrate on to the subject property from any up-gradient, adjacent, and/or vicinity properties as investigated as part of the D3G Limited Phase II ESA conducted on March 15, 2024

7.0 CONCLUSIONS

East Coast Geophysics reported to the Arrington Manor property in Columbia, South Carolina (subject property) on March 15, 2024, to perform a geophysical and ferromagnetic survey within the immediate vicinity of the LUST incident involving one (1) 560-gallon abandoned diesel UST.

The property was further surveyed with the GPR and no evidence of a UST was observed. There were some apparent disturbed soils in the area where borings were pre-cleared, but no definitive evidence of a tank grave was observed. Furthermore, East Coast Geophysics investigated the boiler room for evidence of an UST such as vent/fill pipes, asphalt patches, and/or ground depressions. No evidence of a UST was observed on the property.

Therefore, in order to determine if the LUST incident involving one (1) 560-gallon abandoned diesel UST has negatively affected the environmental integrity of the subject property, and to assess whether there has been a release of hazardous substances at levels that would exceed the Statewide screening-level criteria (*de minimis* levels), D3G advanced three (3) soil borings for the collection of subsurface soil (SB-1 through SB-3) for laboratory analysis. In addition, three (3) soil gas borings were advanced for the collection of soil gas samples (SG-1 through SG-3) and one (1) outdoor (ambient) air sample (OA-1).

One (1) soil gas sample was collected from temporary soil gas sampling points SG-1 through SG-3 as well as one outdoor (ambient) air sample (OA-1) and analyzed for Select VOCs via EPA Method TO-15. Elevated concentrations of Select VOC (Benzene) analyzed within the soil gas samples collected from soil gas sampling points SG-1 [22.9 ug/m3], SG-2 [51.7 ug/m3], and SG-3 [19.2 ug/m3] were identified above their respective laboratory reporting limit and above their applicable respective United States Environmental Protection (USEPA) Sub-Slab and Near Source Soil Gas Vapor Intrusion Screening Levels (VISL) and/or SCDHEC RBSLs for Inhalation of vapors respectively during this Limited Phase II ESA investigation.

The primary objective of risk-based screening is to identify sites or buildings unlikely to pose a health concern through the soil gas intrusion pathway. Generally, at properties where subsurface concentrations of vapor-forming chemicals, such as those in groundwater or "near source" soil gas, fall below the recommended screening levels (i.e., VISLs/SCDHEC RBSLs), no further action or study is warranted. This condition is generally true so long as the exposure assumptions match those accounted for in the calculations, and the site fulfills the conditions and assumptions of the generic conceptual model underlying the screening levels. Similarly, the results of risk-based screening can help the data review team identify areas, buildings, and/or chemicals that can be eliminated from further assessment. Subsurface vapor intrusion to indoor air from volatile compounds in sub-surface media is a potentially major exposure pathway. The USEPA VISLs for Near-source Soil Gas and USEPA VISLs for Target Indoor Air Concentrations address residential and commercial/industrial exposure scenarios and may be used for screening contaminants in indoor air. The air screening levels for volatile chemicals also have potential applications for screening soil gas data when used in concert with an appropriate attenuation factor and it is recommended that screening assessments evaluate the default attenuation factor of 0.03 for sub-slab soil gas and "near-source" exterior soil gas, released in 2015 by USEPA.

Based on the laboratory analytical results indicating an elevated concentration of Select VOC constituent (Benzene) identified within the soil gas samples collected from SG-1 through SG-3 above the applicable USEPA Target Sub-Slab and Near-source Soil Gas VISLs during this Limited Phase II ESA, D3G utilized the USEPA VISL Calculator to determine site-specific calculated Target Indoor Air Concentrations. The VISL calculator identifies chemicals that are sufficiently volatile and toxic to warrant an investigation of the soil gas intrusion pathway when they are present as subsurface contaminants. D3G input the elevated soil gas sampling analytical data and the recommended default attenuation factor for soil gas (0.03) into the USEPA VISL calculator to further evaluate calculated site-specific indoor air concentrations. After calculating estimated site-specific Target Indoor Air Concentrations from the soil gas analytical data, D3G compared these calculations against the SCDHEC RBSLs for Inhalation of vapors, dated July 2020, to determine if the identified soil gas concentrations will be detrimental to the residential structure indoor air and thus, pose a threat to the environment and to the health of existing or future tenants.

Based on the results of the EPA VISL calculator indicating calculated estimated site-specific Indoor Air Concentration of Select VOC constituent (Benzene) above the applicable SCDHEC RBSLs for inhalation of vapors, the potential inhalation exposure pathway for residential receptors is considered currently complete; therefore, a VEC currently exists (cannot currently be ruled out) at the subject property attributed to the LUST incident involving one (1) 560-gallon abandoned diesel UST within the areas investigated during this Limited Phase II ESA. D3G concludes that the identified concentrations of Select VOC (Benzene) collected within the exterior soil gas samples (SG-1 through SG-3) potentially represents a potential Vapor Intrusion Condition (VIC) within the soil gas to indoor air pathway, representing a potential unacceptable risk (currently) under HUD's toxics policy at §50.3(i) in regard to unrestricted residential use criteria suspected to be attributed to the LUST incident involving one (1) 560-gallon abandoned diesel UST within these Areas of Concern (AOCs) investigated as part of this Limited Phase II ESA investigation. However, it should be noted, the EPA VISL model is a conservative screening tool and does not account for building foundation type, size, soil gas entry rates, building exchange rates, soil type, porosity, moisture, vertical and/or lateral inclusion zones from the source and/or chemical volatilization from groundwater.

However, based on the subsurface soil samples collected from the subject property, no concentrations of Select VOC constituent (Benzene) was identified above the SCDHEC RBSLs for soils and/or the USEPA RSLs for Resident Soil within the areas investigated indicating a lack of source media (soil contamination) beneath the subject property, D3G suspects a potential vapor source migrating onto the subject property through preferential pathways (i.e. utility lines, etc.) and are most likely attributed to an off-site source.

Following submittal of this Limited Phase II ESA, in accordance with regulations set forth by the SCDHEC – Site Assessment and Revitalization Division: Bureau of Land and Waste Management, all laboratory analytical data, water levels obtained from each temporary groundwater sampling point will be submitted to the Department within thirty (30) days of the receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.a of the South Carolina Well Standards and Regulations, dated April 26, 2002.

8.0 RECOMMENDATIONS

Based on the soil gas laboratory analytical results from samples collected from soil gas points SG-1 [22.9 ug/m3], SG-2 [51.7 ug/m3], and SG-3 [19.2 ug/m3] indicating the presence of Volatile Organic Compound (Benzene) above its applicable USEPA VISLs for Target Sub-Slab and Near-Source Soil-Gas Concentration (TR=1E-06, THQ=0.1) and/or SCDHEC RBSLs for Inhalation of vapors during this Limited Phase II ESA/Tier II Invasive Screen investigation, soil vapor beneath the Arrington Manor has been adversely affected with a Recognized Environmental Condition (REC) and Vapor Encroachment Condition (VEC) currently existing within subsurface media (soil gas) beneath the subject property within the areas investigated as part of this Limited Phase II ESA investigation.

In accordance with 24 CFR 970.15, A Public Housing Authority (PHA) must obtain written approval from HUD before undertaking any transaction involving demolition or disposition of PHA-owned property. Where a PHA demolishes or disposes of public housing property without HUD approval, no HUD funds may be used to fund the costs of demolition or disposition or reimburse the PHA for those costs. HUD will approve an application for demolition or disposition upon the PHA's submission of an application with the required certifications and the supporting information required by this section and §§ 970.15 or 970.17. Section 970.29 specifies criteria for disapproval of an application. Approval of the application under this part does not imply approval of a request for additional funding, which the PHA must make separately under a program that makes available funding for this purpose. The PHA shall submit the application for demolition or disposition and the timetable in a time and manner and in a form prescribed by HUD. The supporting information shall include:

- A certification that the PHA has described the demolition or disposition in the PHA Annual Plan and timetable under 24 CFR part 903 (except in the case of small or high-performing PHAs eligible for streamlined annual plan treatment), and that the description in the PHA Annual Plan is identical to the application submitted pursuant to this part and otherwise complies with section 18 of the Act (42 U.S.C. 1437p) and this part;
- A description of all identifiable property, by development, including land, dwelling units, and other improvements, involved in the proposed demolition or disposition;
- A description of the specific action proposed, such as: (i) Demolition, disposition, or demolition with disposition; (ii) If disposition is involved, the method of sale;
- A general timetable for the proposed action(s), including the initial contract for demolition, the actual demolition, and, if applicable, the closing of sale or other form of disposition;

- A statement justifying the proposed demolition or disposition under the applicable criteria of §§ 970.15 or 970.17;
- If applicable, a plan for the relocation of tenants who would be displaced by the proposed demolition or disposition (including persons with disabilities requiring reasonable accommodations and a relocation timetable as prescribed in § 970.21);
- A description with supporting evidence of the PHA's consultations with residents, any resident organizations, and the Resident Advisory Board, as required under § 903.9 of this title;
- In the case of disposition only, evidence of compliance with the offering to resident organizations, as required under § 970.9;
- In the case of disposition, an estimate of the fair market value of the property, established on the basis of one independent appraisal, unless otherwise determined by HUD, as described in § 970.19(c);
- In the case of disposition, estimates of the gross and net proceeds to be realized, with an itemization of estimated costs to be paid out of gross proceeds and the proposed use of any net proceeds in accordance with § 970.19;
- An estimate of costs for any required relocation housing, moving costs, and counseling.
- Where the PHA is requesting a waiver of the requirement for the application of proceeds for repayment of outstanding debt, the PHA must request such a waiver in its application, along with a description of the proposed use of the proceeds;
- A copy of a resolution by the PHA's Board of Commissioners approving the specific demolition or disposition application (or, in the case of the report required under § 970.27(e) for ''de minimis'' demolitions, the Board of Commissioner's resolution approving the ''de minimis'' action) for that development or developments or portions thereof. The resolution must be signed and dated after all resident and local government consultation has been completed;
- Evidence that the application was developed in consultation with appropriate government officials as defined in § 970.5, including:
  - A description of the process of consultation with local government officials, which summarizes dates, meetings, and issues raised by the local government officials and the PHA's responses to those issues;
  - A signed and dated letter in support of the application from the chief executive officer of the unit of local government that demonstrates that the PHA has consulted with the appropriate local government officials on the proposed demolition or disposition;
  - Where the local government consistently fails to respond to the PHA's attempts at consultation, including letters, requests for meetings, public notices, and other reasonable efforts, documentation of those attempts;
  - Where the PHA covers multiple jurisdictions (such as a regional housing authority), the PHA must meet these requirements for each of the jurisdictions where the PHA is proposing demolition or disposition of PHA property;
- An approved environmental review of the proposed demolition or disposition in accordance with 24 CFR parts 50 or 58 for any demolition or disposition of public housing property covered under this part, as required under 24 CFR 970.13;

- A certification that the demolition or disposition application does not violate any remedial civil rights order or agreement, voluntary compliance agreement, final judgment, consent decree, settlement agreement, or other court order or agreement;
- Any additional information necessary to support the application and assist HUD in making determinations under this part.
    - Completion of demolition/ disposition or rescissions of approval.
- HUD will consider a PHA's request to rescind an earlier approval to demolish or dispose of public housing property, where a PHA submits a resolution from the Board of Commissioners and submits documentation that the conditions that originally led to the request for demolition or disposition have significantly changed or been removed.
- The Assistant Secretary will not approve any request by the PHA to either substitute units or add units to those originally included in the approved demolition or disposition application, unless the PHA submits a new application for those units that meet the requirements of this part.

HUD reviews demolition and disposition applications in accordance with the guidance in PIH Notice 2018-04. If a Public Housing Agency (PHA) is proposing to dispose of public housing property to allow for the development of other housing, the PHA should provide detailed information to the SAC about that future housing development (i.e., name of acquiring entity, number of ACC units, number of low-income housing units, number of market-rate units, etc.). Therefore, if the subject property is being considered for future residential housing development, at a minimum, Radon mitigation measures are required to be implemented in the future project design in accordance with HUD guidelines if the subject property will be developed for unrestricted residential land use.

Typically, a minimum of two (2) rounds of soil gas data should be collected to evaluate the vapor intrusion pathway. Two (2) rounds will begin to estimate temporal and seasonal variations at the site and other site-specific factors which may influence vapor migration. Since two rounds constitute a limited database, the maximum concentration detected should be used to evaluate potential risk. Based on these results, additional samples may be required depending on the source strength, plume movement, and how soil gas concentrations compare to screening levels. If soil gas samples exceed screening values and buildings are within one hundred (100) feet of the sample location for nonpetroleum vapor-forming chemicals and within thirty (30) feet of PHC vapor-forming chemicals, then sub-slab vapor samples and/or indoor air samples should be collected to further evaluate the vapor intrusion risk pathway.

Based on the exterior soil gas sampling analytical laboratory results obtained within the soil gas samples collected from SG-1 through SG-3 indicating elevated levels of (Benzene) above the applicable SCDHEC RBSLs for Inhalation of vapors, D3G recommends the following:

- Soil gas volatile chemical levels should be used to estimate the contribution of soil gas VI sources to indoor air levels. Confirmation sampling (*i.e.*, an additional or additional rounds) may need to be conducted to estimate the contribution from the environmental release. If soil gas samples exceed screening values and buildings are within one hundred (100) feet of the sample location for nonpetroleum vapor-forming chemicals and within thirty (30) feet of PHC vapor-forming chemicals, then sub-slab vapor samples and/or indoor air samples should be collected to further evaluate the vapor intrusion risk pathway. Therefore, based on the results of the EPA VISL calculator indicating calculated estimated site-specific Indoor Air Concentrations of Select VOC (Benzene) above the applicable USEPA VISL for Target Indoor Air Concentrations, D3G concludes that the elevated levels of Select VOC (Benzene) identified within the soil gas samples collected from SG-1 through SG-3 potentially represents a VIC to existing/future tenants within 2225 College Street as investigated during this Limited Phase II ESA investigation with further Tier 2 investigations warranted (ASTM E 2600-22). However, it should be noted, the USEPA VISL model is a conservative screening tool and does not account for building foundation type, size, soil gas entry rates, building exchange rates, soil type, porosity, moisture, vertical and/or lateral inclusion zones from the source and/or chemical volatilization from groundwater. Therefore, D3G recommends a quantitative sub-slab sampling (Point of Entry to Receptor) to be conducted at the subject property (prior to disposition) further outlined herein. The supplemental quantitative Tier II invasive Vapor Encroachment Screen (VES)/supplemental vapor intrusion risk-based screening assessment is to be conducted on the subject property for the identified VEC including but not limited to sub-slab soil vapor and indoor air quality sampling within the structures located within the area of SG-1 through SG-3 (2225 College Street) for Select VOC (Benzene).

The vapor intrusion risk-based screening will be utilized to support and evaluate human health risk using supplemental individual subsurface data (e.g., sub-slab vapor and indoor air concentrations), which would consider the magnitude of the concentration exceedance of the USEPA VISLs as outlined within SCDHEC Quality Assurance Program Plan for the UST Management Division – Revision Number 4.0, dated July 2020. The supplemental investigation will be utilized as a baseline risk assessment of exposure to residential receptors, exposure pathways, toxicity of contaminants present at the site, further characterization of human health risks, impacts or risks to the environment and the further development of a site-specific CSM. In accordance with the Office of Solid Waste and Emergency Response (OSWER) Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air – OSWER Publication 9200.2-2-154, dated June 2015, multiple lines of evidence are particularly important for supporting "no-further-action" decisions regarding the vapor intrusion pathway (e.g., pathway incomplete determinations) to reduce the chance of reaching a false-negative conclusion (i.e., concluding vapor intrusion does not pose unacceptable human health risk, when it poses an unacceptable human health risk).

Collecting and weighing multiple lines of evidence can also reduce the chance of reaching a false-positive conclusion (i.e., concluding vapor intrusion poses unacceptable human health risk, when it does not. On the other hand, parties may implement engineered exposure controls (Tier 4 mitigation in accordance with ASTM E 2600-22) for vapor intrusion, even though only limited lines of evidence or measurements may be available to characterize the overall vapor intrusion pathway. Seasonally variable conditions (e.g., moisture levels, depth to groundwater) can lead to seasonally variable concentrations and distributions of vapors in the vadose zone. Likewise, weather conditions can lead to time-variable contributions from vapor soil gas flux/intrusion (e.g., driving forces for vapor intrusion) and ambient air infiltration. Collectively, these processes cause soil vapor concentrations of vapor-forming chemicals to vary over time. An individual sample (or single round of sampling) would be insufficient to characterize seasonal variability, or variability at any other time scale. Because of variability, a soil gas/vapor sampling event, collected at a randomly chosen time, is insufficient information to estimate an average exposure. On the other hand, it is impractical to collect soil vapor samples continuously over a chronic exposure period (i.e., up to 30 years for a reasonable maximum exposure duration in a residence (EPA 2014a)), which would also entail deferring risk management decisions for a prolonged period while human exposures from vapor intrusion could occur unabated. Hence, current, and past practice has generally relied upon collecting multiple rounds of soil vapor samples for purposes of estimating long-term average (i.e., chronic) exposures and assessing human health risk. All else being equal, a longer collection sampling period for each individual sample would be expected to yield a more reliable basis for estimating long-term, time-average exposure than would one sample collection period conducted over a short sampling interval. Multiple sampling events generally are considered necessary to account for seasonal variations in climate/temperature and/or weather conditions that related risk management decisions are based upon a consideration of a reasonable maximum vapor intrusion conditions.

9.0 CERTIFICATIONS

Data presented in this report is factual to the best of D3G's knowledge. Available sources of data were comprehensively researched to provide a complete Limited Phase II ESA of the subject property. The Limited Phase II ESA consisted of subsurface soil, soil gas, and outdoor (ambient) air sample collection and analysis. The subsurface soil, soil gas, and outdoor (ambient) air sampling was conducted in general accordance with the EPA Office of Solid Waste and Emergency Response – Expedited Site Assessment Tools for Underground Storage Tank Sites: A guide for Regulators (EPA Document #510-B-91-001), (March 1997); the EPA Office of Solid Waste and Emergency Response – Groundwater Sampling and Monitoring with Direct Push Technology (EPA Document #540-R-04-005), (August 2005); ASTM E 1903 (currently 1903-19), "Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process," as amended; ASTM E 2600-15, "Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions"; ASTM D 6235-04, "Practice for Expedited Site Characterization of Vadose Zone and Ground Water Contamination at Hazardous Waste Contaminated Sites"; ASTM E 1689-95 "Standard Guide for Developing Conceptual Site Models for Contaminated Sites"; ASTM E 1912-98, "Guide for Accelerated Site Characterization for Confirmed or Suspected Petroleum Releases"; and ASTM D 6725-04, 2010 "Standard Practice for Direct Push Installation of Prepacked Screen Monitoring Wells in Unconsolidated Aquifers"; SCDHEC Analytical Methodology for Groundwater and Soil Assessment Guidelines, dated July 14, 2014; SCDHEC Quality Assurance Program Plan for the Underground Storage Tank Management Division – February 2020; SCDHEC R 61-92 – Underground Storage Tank Control Regulations, dated August 25, 2017; SCDHEC R 61-68 Water Classifications and Standards, dated June 27, 2014; and the SCDHEC R 61-71 – Well Standards, dated June 24, 2016.

D3G understands that this Phase II ESA will be relied upon by the User to document to the U.S. Department of HUD that the SAC Lender's future application for FHA multifamily mortgage insurance with conversion through the HUD SAC Program and SCSHFDA was prepared in accordance with HUD SAC requirements. D3G has no financial interest or family relationship with the officers, directors, stockholders or partners of the Borrower, the general contractor, any subcontractors, the buyer or seller of the proposed property or engage in any business that might present a conflict of interest.

D3G is employed under contract for this specific assignment and has no other side deals, agreements, or financial considerations with the SAC Lender or others in connection with this transaction.

Respectfully Submitted,

Ian Court
Site Assessor/Staff Environmental Scientist — Signature

Brett Diehl, P.G.
Senior Geologist — Signature

Ron James, P.G., C.E.M.
Technical Director of Environmental Services — Signature

10.0 LIMITATIONS OF ASSESSMENT

The professional services were performed in accordance with practices generally accepted by other appropriate environmental professionals, geologists, hydrologists, hydrogeologists, geophysicists, engineers, or environmental scientists practicing in this field and directed by the client. No other warranty, either expressed or implied, is made. D3G is not an insurer and makes no guarantee or warranty that the services supplied will avert or mitigate occurrences, or the consequences of occurrences, that the services are intended to prevent or ameliorate. As with all environmental assessments, there is no guarantee that the work conducted identified any and all sources or locations of petroleum and/or non-petroleum constituents in the soil, soil vapor, and outdoor (ambient) air.

This project included a Geophysical GPR survey. The absence of detected signatures does not preclude the possibility that targets may exist. To the extent the client desires more definitive conclusions than are warranted by the currently available facts; it is specifically D3G's intent that the conclusions stated herein will be intended as guidance. GPR may not always be able to detect the thickness of a base layer if there is insufficient contrast between the layer in question and the base below. In actual practice soil attenuation may restrict the use of GPR to shallow depths

The Client shall cause all tests and inspections of the site, materials and work performed by D3G or others to be timely and properly performed in accordance with the plans, specifications and contract documents and D3G's recommendations. No claims for loss, damage, or injury shall be brought against D3G by Client or any third party unless all tests and inspections have been performed and unless D3G's recommendations have been followed. Client's reliance on or use of the professional services provided by D3G constitutes an agreement to indemnify, defend, and hold D3G, its officers, employees and agents harmless from any and all claims, suits, losses, costs and expenses, including but not limited to, court costs and reasonable attorney's fees in the event that all such tests and inspections are not so performed or D3G's recommendations are not so followed except to the extent that such failure is the result of the negligence, willful or wanton act or omission of D3G, its officers, agents or employees, subject to the limitation contained in paragraph 9.

Seasonally variable conditions (e.g., moisture levels, depth to groundwater) can lead to seasonally variable concentrations and distributions of vapors in the vadose zone. Likewise, weather conditions and building operations can lead to time-variable contributions from vapor intrusion (e.g., driving forces for vapor intrusion) and ambient air infiltration. Collectively, these processes cause soil gas concentrations of vapor-forming chemicals to vary over time. An individual sample (or single round of sampling) would be insufficient to characterize seasonal variability, or variability at any other time scale. Because of variability, a single soil vapor sampling event, collected at a randomly chosen time, is insufficient information to estimate an average exposure. Multiple sampling events generally are considered necessary to account for seasonal variations within soil gas concentration within the vadose zone and ensure that related risk management decisions are based upon a consideration of a reasonable maximum vapor intrusion conditions.

Vapor intrusion occurs when vapors from volatile contaminants in soil or groundwater diffuse through the soil, through building foundations and into overlying homes or other buildings. Soil gas can flow or be drawn into a building due to several factors, including barometric pressure changes, wind load, thermal currents, or depressurization from building exhaust fans. The rate of movement of the vapors into the building is a difficult value to quantify and depends on soil type, chemical properties, building design and condition, and the pressure differential. Once inside the building, vapors mix with and contaminate the indoor air and may pose a chronic or acute health risk to inhabitants. Vapor intrusion may be a completed exposure pathway even in cases where ingestion or dermal contact are not completed pathways. Both diffusion and advection are mechanisms of transport of subsurface soil gas into the indoor air environment. Diffusion is the mechanism by which soil gas moves from high concentration to low concentration due to a concentration gradient. Advection is the transport mechanism by which soil-gas moves due to differences in pressure. These pressure differences can be generated by atmospheric pressure changes, temperature changes creating natural convection in the soil, or forced pressure changes due to building ventilation systems. Advective transport is likely to be the most significant in the region very close to a basement or a foundation, and soil gas velocities decrease rapidly with increasing distance from the structure. Once soil gases enter the “building zone of influence,” they are generally swept into the building through foundation cracks by advection due to the indoor-outdoor building pressure differential. The reach of the “building zone of influence” on soil gas flow is usually less than a few feet, vertically and horizontally.

11.0 REFERENCES AND SOURCES OF INFORMATION

- Web Soil Survey accessed at http://websoilsurvey.nrcs.usda.gov/app/
- USGS Topographic Quadrangle – *North Columbia, South Carolina 2020*
- Delorme Street Atlas USA® 2015
- Google Earth
- All Appropriate Inquiries: Final Rule
- U.S. Housing and Urban Development (HUD) Multifamily Accelerated Processing Guide: (2020): Chapter 9 Environmental Review and Requirements, as amended
- U.S. Environmental Protection Agency (EPA);
- ASTM E 2600-15, "Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions";
- ASTM E 1903 (currently 1903-19), "Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process," as amended;
- ASTM D 6235-04, "Practice for Expedited Site Characterization of Vadose Zone and Ground Water Contamination at Hazardous Waste Contaminated Sites";
- ASTM E 1689-95 "Standard Guide for developing Conceptual Site Models for Contaminated Sites";
- ASTM E 1912-98, "Guide for Accelerated Site Characterization for Confirmed or Suspected Petroleum Releases";
- ASTM D 6725-04, 2010 "Standard Practice for Direct Push Installation of Prepacked Screen Monitoring Wells in Unconsolidated Aquifers";
- Interstate Technology Regulatory Council, The Use of Direct Push Well Technology for Long-Term Environmental Monitoring in Groundwater Investigations, March 2006
- (OSWER) Final Guidance for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Sources to Indoor Air, dated June 2015;
- Standard Operating Procedure (SOP), Technical Bulletin No. 93-660 dated September 21, 1993;
- Interstate Technology Regulatory Council (ITRC) Vapor Intrusion Pathway: A Practical Guideline dated January 2007;
- SCDHEC Analytical Methodology for Groundwater and Soil Assessment Guidelines, dated July 14, 2014;
- SCDHEC Quality Assurance Program Plan for the UST Management Division – Revision Number 4.0, dated July 2020;
- SCDHEC R 61-92 – Underground Storage Tank Control Regulations, dated August 25, 2017;
- SCDHEC South Carolina Risk-Based Corrective Action for Petroleum Releases, dated May 15, 2001;
- SCDHEC Quality Assurance Program Plan for the Underground Storage Tank Management Division – February 2020;
- SCDHEC R 61-68 Water Classifications and Standards, dated June 27, 2014;
- SCDHEC R 61-71 – Well Standards, dated June 24, 2016;
- Cape Fear/Eutaw Formations. Retrieved from Cape Fear/Eutaw Formations (SCKcfe;1) (usgs.gov).
- South Carolina Housing Financing/Building SC – Environmental Review Manual updated October 1, 2020

12.0 ATTACHMENTS

Attachment 1: Site (Vicinity) Maps

Attachment 2: Boring and Sampling Location Plan

Attachment 3: Site Photographs

Attachment 4: Soil Boring Logs, Soil Map, and USCS Classification System

Attachment 5: Qualifications for Environmental Professionals

Attachment 6: SCDHEC Risk-Based Screening Levels, USEPA VISLs, and USEPA RSLs

Attachment 7: Laboratory Analytical Reports

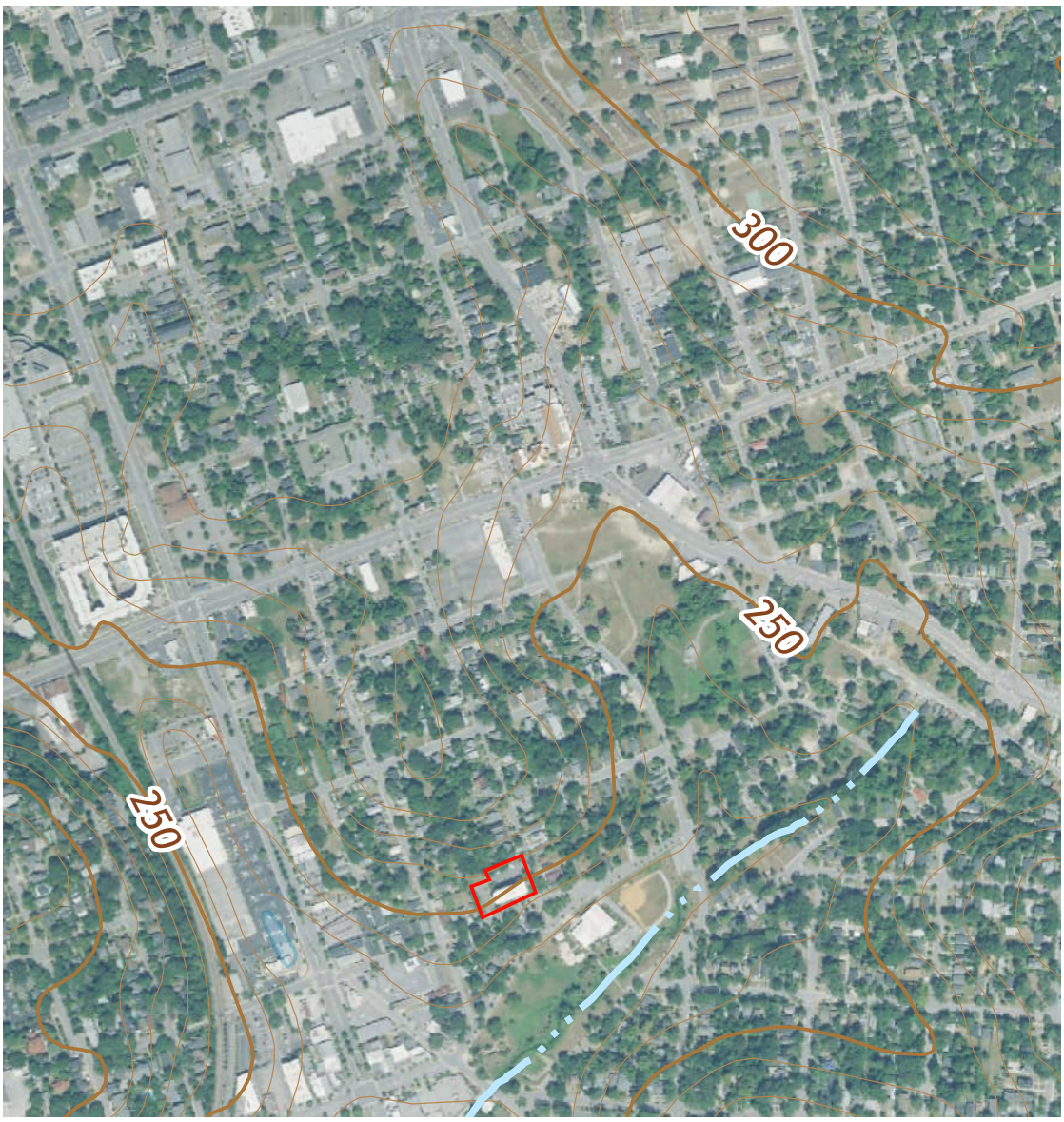
Attachment 8: Soil Vapor Sampling Logs

Attachment 9: USEPA VISL Calculator Results (SG-1 through SG-3)

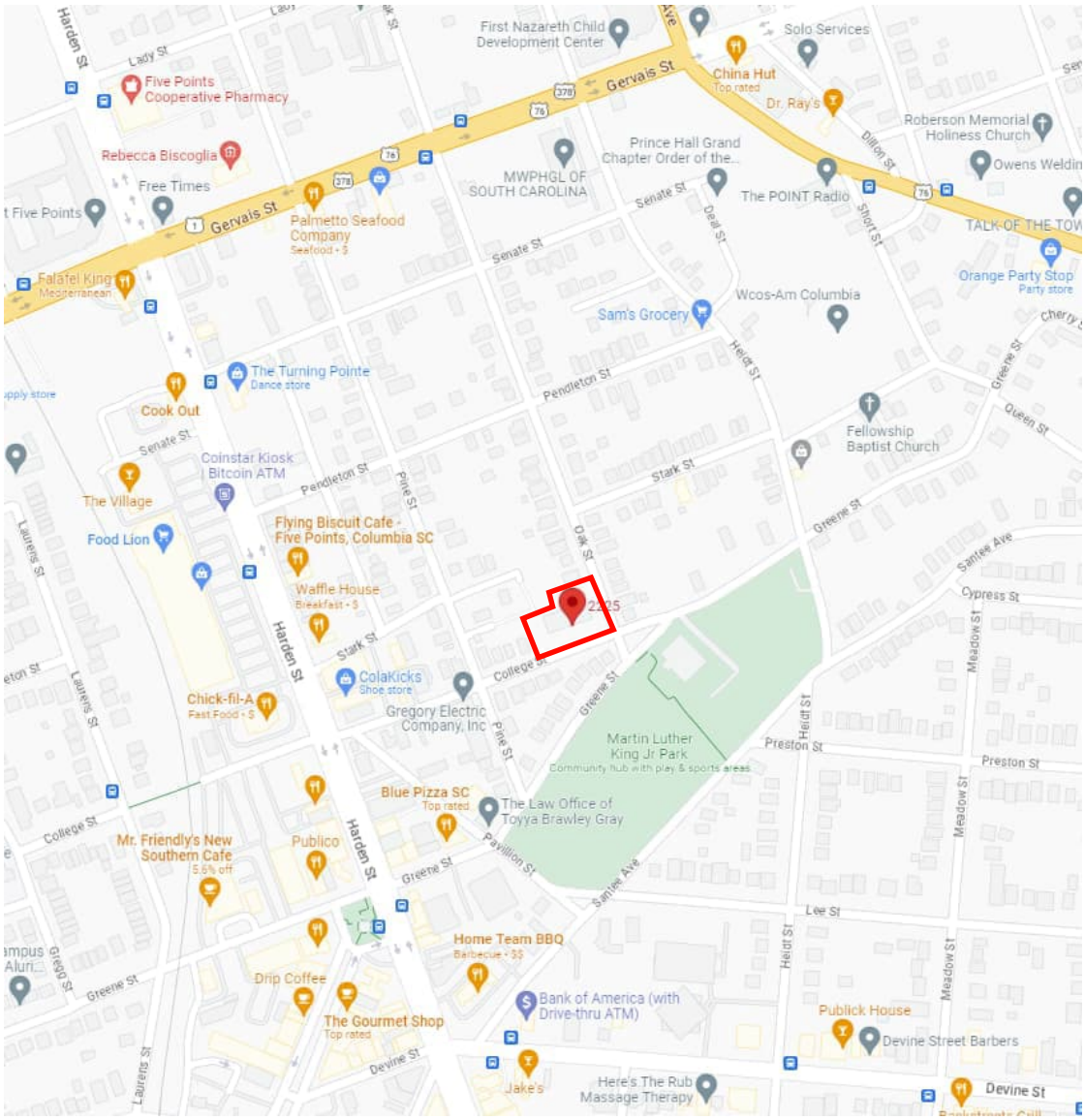
Attachment 10: Geophysical/Ferromagnetic Survey Investigation Report

Attachment 1

Site (Vicinity) Maps



Appendix A Site Topographic Map	↑ N	Arrington Manor 2225 College Street Columbia, South Carolina *Topographic Quadrangle:* *Columbia North, South Carolina 2020*	**DOMINION DUE DILIGENCE GROUP**



Friday, May 19, 2023 10:31:41 AM - 2225 College St - Google Maps

Appendix A Site Locator Map	↑ N	Arrington Manor 2225 College Street Columbia, South Carolina	**DOMINION DUE DILIGENCE GROUP**

ATTACHMENT 2

Boring and Sampling Location Plan

BORING LOCATION PLAN – ARRINGTON MANOR – COLUMBIA, SOUTH CAROLINA

Legend

= Soil & Groundwater Sample | = Soil Gas Sample | = Outdoor (Ambient) Air Sample | = GPR investigation for UST/LUST

NORTH

Final boring locations will be selected by a D3G geologist.

drafted by I. Court on 3/28/2024

DG DOMINION Due Diligence Group

Boring Location Plan
Arrington Manor
Columbia, South Carolina

Attachment 3

Site Photographs

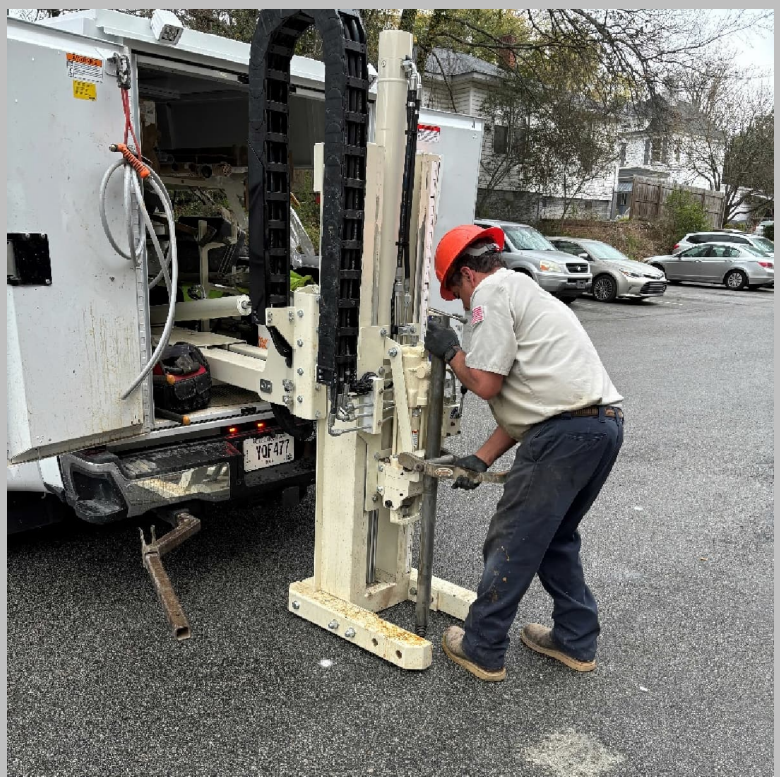
PHOTO #1

Photograph of drilling operations for SB-3.

PHOTO #2

Photograph of drilling operations for SB-1.

PHOTO #3



Photograph of drilling operations for SB-2.

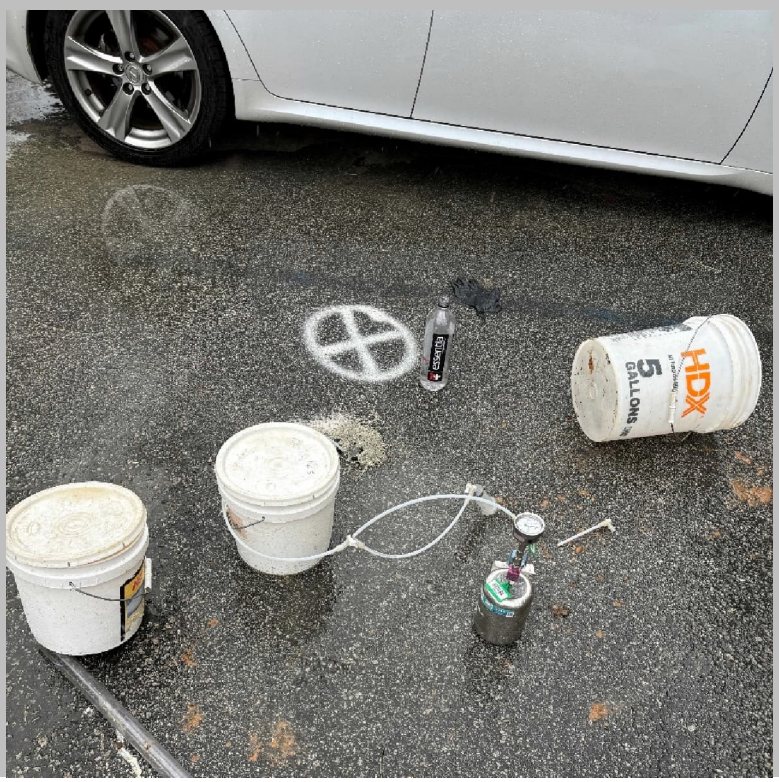
PHOTO #4

Photograph of soil vapor sampling for SG-3.

PHOTO #5

Photograph of soil vapor sampling for SG-2.

PHOTO #6



Photograph of soil vapor sampling for SG-1.

PHOTO #7

Photograph of Outdoor (Ambient) air sampling OA-1.

ATTACHMENT 4

Soil Boring Logs, Soil Map, and USCS Classification System

Soil Boring SB-1

D3G PROJECT NUMBER 2024-00564
PROJECT NAME Arringotn Manor
CLIENT Columbia Housing
ADDRESS 2225 College Street, Columbia, South Carolina 29205

DRILLING COMPANY The Probing Company
DRILLER Jim Cole
DRILL RIG Geoprobe 5410DT
DRILLING METHOD Direct Push
TOTAL DEPTH 7 feet bgs
DIAMETER 1.5 inches

LOGGED BY Ian Court
CHECKED BY Ron James
DRILLING DATE 3/15/24

COMMENTS SB-1 is located approximately 35 feet north of the 2225 College Street residential structure.

Depth (ft)	PID	% Recovery	Samples	Graphic Log	Material Description	Additional Observations
0.5	0.2	70			Asphalt	No Visual or olfactory evidence of contamination was observed during borehole advancement. Borehole was backfilled with soil cuttings and capped at the surface with grout.
1					(CL) CLAY; red with grey; dense; dry.	
1.5						
2	0.0					
2.5						
3						
3.5						
4	0.0	70				
4.5						
5			Sampled SB-1 at 1224.			
5.5						
6	0.0					
6.5						
7						
7.5					Borehole terminated at seven (7) feet below ground surface per encountered refusal.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.

Soil Boring SB-2

D3G PROJECT NUMBER 2024-00564
PROJECT NAME Arringotn Manor
CLIENT Columbia Housing
ADDRESS 2225 College Street, Columbia, South Carolina 29205

DRILLING COMPANY The Probing Company
DRILLER Jim Cole
DRILL RIG Geoprobe 5410DT
DRILLING METHOD Direct Push
TOTAL DEPTH 6 feet bgs
DIAMETER 1.5 inches

LOGGED BY Ian Court
CHECKED BY Ron James
DRILLING DATE 3/15/24

COMMENTS SB-2 is located approximately 25 feet north of the 2225 College Street residential structure.

Depth (ft)	PID	% Recovery	Samples	Graphic Log	Material Description	Additional Observations
0.5	0.0	70			Asphalt	No Visual or olfactory evidence of contamination was observed during borehole advancement. Borehole was backfilled with soil cuttings and capped at the surface with grout.
1					(CL) CLAY; red; dense; dry.	
1.5						
2	0.0					
2.5						
3						
3.5						
4	0.0	70	Sampled SB-2 at 1247.			
4.5						
5						
5.5						
6					Borehole terminated at six (6) feet below ground surface per encountered refusal.	
6.5						

Disclaimer This bore log is intended for environmental not geotechnical purposes.

Soil Boring SB-3

D3G PROJECT NUMBER 2024-00564
PROJECT NAME Arringotn Manor
CLIENT Columbia Housing
ADDRESS 2225 College Street, Columbia, South Carolina 29205

DRILLING COMPANY The Probing Company
DRILLER Jim Cole
DRILL RIG Geoprobe 5410DT
DRILLING METHOD Direct Push
TOTAL DEPTH 6 feet bgs
DIAMETER 1.5 inches

LOGGED BY Ian Court
CHECKED BY Ron James
DRILLING DATE 3/15/24

COMMENTS SB-3 is located approximately 26 feet west of the 2225 College Street residential structure.

Depth (ft)	PID	% Recovery	Samples	Graphic Log	Material Description	Additional Observations
0.5	0.0	70			Asphalt	No Visual or olfactory evidence of contamination was observed during borehole advancement. Borehole was backfilled with soil cuttings and capped at the surface with grout.
1					(CL) CLAY; trace sand; red; dense; dry.	
1.5						
2	0.0					
2.5						
3						
3.5						
4	0.0	70	Sampled SB-3 at 1159.			
4.5						
5						
5.5						
6					Borehole terminated at six (6) feet below ground surface per encountered refusal.	
6.5						

Disclaimer This bore log is intended for environmental not geotechnical purposes.

USDA Natural Resources Conservation Service

Web Soil Survey
National Cooperative Soil Survey

5/17/2023
Page 1 of 3

Appendix A Site Soils Map	↑ N	Arrington Manor 2225 College Street Columbia, South Carolina *http://websoilsurvey.nrcs.usda.gov/app/*	**DOMINION DUE DILIGENCE GROUP**

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Richland County, South Carolina

Map Unit: OgD—Orangeburg-Urban land complex, 6 to 15 percent slopes

Component: Orangeburg (55%)

The Orangeburg component makes up 55 percent of the map unit. Slopes are 6 to 15 percent. This component is on marine terraces on coastal plains. The parent material consists of loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Urban land (45%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Map Unit: Ur—Urban land

Component: Urban land (100%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Data Source Information

Soil Survey Area: Richland County, South Carolina
Survey Area Data: Version 25, Sep 7, 2022

UNIFIED SOIL CLASSIFICATION
INCLUDING IDENTIFICATION AND DESCRIPTION

	FIELD IDENTIFICATION PROCEDURES (excluding particles larger than 3 inches and basing fractions on stimated weights)			GROUP SYMBOLS	TYPICAL NAMES	INFORMATION REQUIRED FOR DESCRIBING SOILS
COARSE GRAINED SOILS More than half materials is larger than No. 200 sieve size	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size (For visual classification, the 1/4" size may be used as equivalent for the No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate particle sizes	GW	Well graded gravels, gravel-sand mixtures, little or no fines	Give typical name; indicate approximate percentage of sand and gravel, max. size; angularity, surface condition, and hardness of the coarse grains; local or geological name and other pertinent descriptive information, and symbol in parentheses For undisturbed soils add information on stratification, degree of compactness, cementation, moisture conditions and drainage characteristics EXAMPLE Silty sand gravelly; about 20% hard, angular gravel particle 1/2 - in maximum size; rounded and subangular sand grains coarse to fine; about 15% non-plastic fines with low dry strength; well compacted and moist in place; alluvial sand; (SM)
			Predominantly one size or a range of sizes with same intermediate sizes missing	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	
		GRAVELS WITH FINES (Appreciables amount of fines)	Non-plastic fines (for identification procedures see ML below)	GM	Silty gravel, poorly graded gravel-sand silt mixtures	
			Plastic fines (for identification procedures see CL below)	GC	Clayey gravels, poorly graded gravel-sand clay mixtures	
	SANDS More than half of coarse fraction is smaller than No. 4 sieve size (For visual classification, the 1/4" size may be used as equivalent for the No. 4 sieve size)	CLEAN SANDS (Little or no fines)	Wide range in grain sizes and substantial amount of all intermediate particle sizes	SW	Well graded sands, gravelly sands, little or no fines	
			Predominantly one size or a range of sizes with some intermediate sizes missing	SP	Poorly graded sand, gravelly sands, little or no fines	
		SANDS WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see CL below)	SM	Silty sand, poorly graded sand-silt mixtures	
			Plastic fines (for identification procedures see CL below)	SC	Clayey sand, poorly graded sand-clay mixtures	
FINE GRAINED SOILS More than half materials is smaller than No. 200 sieve size (The No. 200 sieve size es about the smallest particle visible to the naked eye)	IDENTIFICATION PROCEDURES ON FRACTION SMALLER THAN No 40 SIEVE SIZE	DRY STRENGTH (CRUSHING CHARACTERISTICS)	DILATANCY (REACTION TO SHAKING)	TOUGHNESS (CONSISTENCY NEAR PLASTIC LIMIT)		
	SILTS AND CLAYS Liquid limit less than 50	None to slight	Quick to slow	None	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sand with slight plasticity
		Medium to high	None to very slow	Medium	OL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		Slight to medium	Slow	Slight	MN	Organic silts and organic silt-clays of low plasticity
	SILTS AND CLAYS Liquid limit greater than 50	Slight to medium	Slow to none	Slight to medium	OL	Inorganic silt, micaceous or diatomaceus fine sandy or silty soils, elastic silts
		High to very high	None	High	CH	Inorganic clays of high organic plasticity
		Medium to high	None to very slow	Slight to medium	OH	Organic clays of medium to high plasticity
HIGHLY ORGANIC SOILS	Readily identified by color, odor, spongy feel and frequently by fibrous texture			Pt	Peat and other organic soils	

Use grain size curve in indentifying the fractions as given under field identification

LABORATORY CLASSIFICATION CRITERIA

Determine percentages of gravel and sand from grain size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size) coarse grained soils are classified as follow :

Less than 5% GW, GP, SW, SP.
More than 12% GM, GC, SM, SC.
5% to 12% Borderline cases requiring use of dual symbols

$C_u = \frac{D_{60}}{D_{10}}$ Greater than 4

$C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between one and 3

Not meeting all gradation requirements for GW

Atterberg limits above "A" line with PI greater than 7	Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols
Atterberg limits below "A" line or PI greater than 7	

$C_u = \frac{D_{60}}{D_{10}}$ Greater than 6

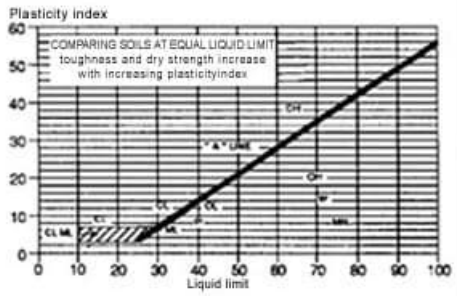
$C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between one and 3

Not meeting all gradation requirements for SW

Atterberg limits below "A" line or PI less than 4	Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols
Atterberg limits above "A" line with PI greater than 7	

PLASTICITY CHART

FOR LABORATORY CLASSIFICATION OF FINE GRAINED SOILS



DOMINION
Due Diligence Group

UNIFIED SOIL CLASSIFICATION SYSTEM

Attachment 5

Qualifications for Environmental Professionals

Environmental Phase II Team

DOMINION Due Diligence Group

PRINCIPAL GEOLOGIST – DIRECTOR OF TECHNICAL ENVIRONMENTAL SERVICES

Ron A. James, P.G., C.E.M. | r.james@d3g.com | 804-665-2911

Ron is your Technical Director for Environmental Services, holding numerous Professional Geologist and Certified Environmental Manager (CEM) licenses in good standing with multiple state jurisdictions and has been with D3G since 2013. In leading the technical staff and the Phase II Department, he is responsible for guiding you through your technical questions and nuances related to overall processes, timing, and protocols through multiple financing platforms (HUD/FHA, Freddie Mac, Fannie Mae, ASTM).

PROJECT GEOLOGIST

Brett Diehl, P.G. | b.diehl@d3g.com | 570-772-5264

Brett is your Project Geologist with over 8 years of experience in developing, coordinating, and technical oversight of advanced environmental and geological services, including subsurface explorations, groundwater permeability testing, and multimedia sampling for site investigations. He has supervised teams conducting multimedia investigations and remedial actions and performed groundwater and vapor intrusion investigations and compliance monitoring, in addition to laboratory data evaluation and validation for compliance report submission.

STAFF GEOLOGIST

Michael Antal | m.antal@d3g.com | 570-504-4671

Michael is your Staff Geologist with over 4 years of experience in environmental and geological services. He is responsible for identifying environmental concerns, interpreting historical documentation, report writing, and assisting in overseeing Phase II projects. Michael's experience in project management related to environmental investigations and remediation ensure projects meet federal, state, and local regulations needed for on-time project delivery.

PHASE II ENVIRONMENTAL FIELD TECHNICIAN

Ian Court | i.court@d3g.com | 804-665-2751

Ian is your Phase II Environmental Field Technician with one year of experience in conducting field investigations, multi-media sampling, and monitoring. He is responsible for subcontractor retention, multimedia sampling, reviewing/analyzing data to develop site-specific conceptual models for technical report generation and on-time project delivery.

Ian Court

Phase II Environmental Field Technician
I.court@d3g.com / 703-340-5773

EDUCATION

Longwood University — B.S. in Environmental Planning and Management

CERTIFICATIONS/REGISTRATIONS/TRAINING

- VDOT Soils and Aggregate Compaction
- HUD Web-based Instructional System for Environmental Reviews (WISER) Modules Completion
- OSHA-40 Hour HAZWOPER Training

SUMMARY OF EXPERIENCE

Ian is your Phase II Environmental Field Technician with one (1) year of experience in conducting field investigations multi-media sampling and monitoring. Mr. Court has been involved in the planning, sampling, and field investigations for Phase II ESAs conducted in general accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (Designation E 1903-19),

As a Phase II Environmental Field Technician, Mr. Court is responsible for development, coordination, and technical oversight of advanced environmental and geological services, including subsurface explorations, groundwater permeability testing and multi-media sampling for site investigations for real-estate transactions, site development, characterization and hydrogeological modeling. Projects include the coordination of field crews for installation and development of monitoring wells, sampling and laboratory analysis of soil, groundwater and air samples, interpretation of data, technical report preparation with the development of site-specific conceptual models to assess cleanup methods and cost analysis.

SAMPLE PROJECTS

HUD MAP 223(f)

- Festival Park
  (Chester, VA)
- Blue Ridge Terrace
  (Marion, NC)
- Paxton 365
  (Salt Lake City, UT)
- Loft 27
  (Lowell, MA)
- Hammond Village
  (Columbia, SC)
- Forest Hill House
  (Newark, NJ)

HUD MAP 221(d)

- Proposed Bonney Road Apartments
  (Virginia Beach, VA)
- The Ellison
  (Kansas City, MO)

HUD RAD 1

- Proposed 500 E. Main Street
  (Durham, NC)
- Rhea Mims Hotel Building (60-9)
  (Newport, TN)
- J. Ross Hunt Towers
  (Middletown, OH)
- The Townhouse
  (Middletown, OH)
- Riverside Homes
  (Hamilton, OH)

HUD PRAC

Grand Street Senior Housing
(New York, NY)

DOMINION
Due Diligence Group

Ian Court

Phase II Environmental Field Technician
I.court@d3g.com / 703-340-5773

ASTM General

Laurel Hill Chapel
(Lorton, VA)

HUD SVC

Phoenix Rising LLC (formerly Ussery Homes)
(Dothan, AL)

HUD SAC

Dogwood Terrace)
(Augusta, GA)

HUD General

2331 9th Avenue North
(St Petersburg, FL)

Brett Diehl

Project Geologist

b.diehl@d3g.com / 570-772-5264

EDUCATION

Bloomsburg University of Pennsylvania, B.S. Environmental Geoscience

CERTIFICATIONS/REGISTRATIONS/TRAINING

- OSHA 40-Hour HAZWOPER Training
- OSHA 10-Hour General Construction Training
- First Aid/CPR Certified
- GSSI StructureScan ProSIR

SUMMARY OF EXPERIENCE

Mr. Diehl is an experienced Environmental Project Geologist with 6 years of experience in the field conducting site investigations, multi-media sampling and monitoring, and remediation operations and maintenance. Mr. Diehl has been involved in the planning, sampling, and field investigations for Phase II ESAs conducted in general accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (Designation E 1903-19), ASTM Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions (Designation E2600-15), the Standards and Practices for all Appropriate Inquiries: Final Rule and the U.S. Department of HUD Multifamily Accelerated Processing Map Guide, with specific HUD protocols including, but not limited to: MAP 221d4 New Construction, 223f refinance, 221d4 Substantial Rehabilitation, 202/223f Refinance, HUD Rental Assistance Demonstration (RAD) and HUD Special Applications Center (SAC). Mr. Diehl also has extensive experience with developing and executing groundwater and vapor intrusion investigations as well as conducting operations and maintenance of remediation systems per site-specific Corrective Action programs.

SAMPLE PROJECTS

ASTM General

- Iluka Resources – *Stoney Creek, VA*
- Bondale Apartments – *Norfolk, VA*
- Proposed East Bank Flats – *South Bend, Indiana*
- Proposed Boulder Lakeside Apartments – *Richmond, Virginia*
- 4610 Colley Avenue – *Norfolk, Virginia*
- Proposed Palmer's Creek Apartments – *Fredericksburg, Virginia*
- 22-02 Hampton Street & 22-02 Rock Street – *Rock Hill, South Carolina*

HUD MAP 223(f)

- Allapattah Gardens – *Miami, Florida*
- The Meadows – *Bakersfield, California*
- Kirby Manor of Villa St. Rose – *Cleveland, Ohio*
- Majestic Apartments – *Lowell, Massachusetts*
- Mansion Apartments – *Pine Hill, New Jersey*
- George Mason Square Townhomes – *Richmond, Virginia*
- Golden Age Apartments – *Norwich, New York*
- King's Manor Apartments – *Tampa. Florida*
- North Hill Farms 1 & 2 – *Pontiac, Michigan*
- Lexington Court (Met Paca I and II) – Scattered Site – *New York, New York*
- The Press – *Lafayette, Indiana*
- Commerce Apartments – *Roxbury, Massachusetts*
- The Villages at Marley Station – *Glen Burnie, Maryland*
- The Terraces at Arboretum – *Sugar Land, Texas*
- Clarendon Hill Towers – *Somerville, Massachusetts*
- Heritage Place – *Grand Rapids, Michigan*
- Apthorp Tower – *Cleveland, Ohio*
- Miles-Elmarge – *Cleveland Ohio*

Brett Diehl

Project Geologist

b.diehl@d3g.com / 570-772-5264

SUMMARY OF EXPERIENCE *(cont'd)*

As a Project Geologist, Mr. Diehl is responsible for the development, coordination, and technical oversight of advanced environmental and geological services. These environmental and geological services include subsurface explorations, groundwater permeability testing, multi-media sampling for site investigations involved in real-estate transactions, site development, characterization, and hydrogeological modeling. Projects include the coordination of field crews for installation and development of monitoring wells, sampling and laboratory analysis of soil, groundwater and air samples, interpretation of data, technical report preparation with the development of site-specific conceptual models to assess cleanup methods and cost analysis. Mr. Diehl has supervised technical team(s) conducting multi-media investigations and remedial actions on U.S. Environmental Protection Superfund Sites under State and Federal guidance. Mr. Diehl has conducted multimedia investigations and remedial actions, performed groundwater investigations and compliance monitoring within the Solid Waste Industry, conducted extensive vapor intrusion investigations as well as performed laboratory data evaluation and validation for compliance report submission.

Mr. Diehl's duties as Project Geologist for Dominion Due Diligence Group (D3G) include assisting the Phase II Department in coordinating, conducting, and generating reports for Phase II Environmental Site Assessments (HUD, Freddie Mac, Fannie Mae, CHFA, and ASTM E 1903-19) throughout the United States, and client contact relations.

SAMPLE PROJECTS

HUD Rental Assistance Demonstration

- Villages of East Lake – *Atlanta, Georgia – GA DCA*
- Divide Hill Apartments – *Morehead, Kentucky*
- Samuel Melton Heights – *Cleveland, Tennessee*
- Randolph Apartments – *Richmond, Virginia (VHDA)*
- Old Brook Circle – *Richmond, Virginia (VHDA)*
- McMinnville Housing Authority – *McMinnville, Tennessee*
- West Boulevard – *Cleveland, Ohio*
- Riverview Tower – *Cleveland, Ohio*
- Belmont Heights Estates – *Tampa, Florida*
- Englewood Apartments – *Coldwater, Michigan*

HUD MAP 232/223 (NC)

- Proposed Rain Dance Winter Haven – *Winter Haven, Florida*
- Proposed Highlands East – *Albuquerque, New Mexico*
- Proposed Calumet Park – *Calumet Park, Illinois*
- Proposed Southdale – *Scottsdale, Arizona*

HUD MAP 221 (d)(4) SR

- South Street Family – *Frederick, Maryland*
- Kiawah Homes – *Charleston, South Carolina*
- Whitefield Commons Apartments – *Arlington, Virginia*

Geophysical Investigations

- Creighton Road & Sandy Lane – *Richmond, Virginia*
- The Villages at Marley Station – *Glen Burnie, Maryland*
- Randolph – *Richmond, Virginia*

Ron A. James, PG, CEM, EP

Technical Director of Environmental Services
r.james@d3g.com / 804-665-2911

EDUCATION

Radford University — B.S. in Engineering Geology

CERTIFICATIONS/REGISTRATIONS/TRAINING

- Certified Professional Geologist – Commonwealth of Virginia
- Certified Professional Geologist – State of Florida
- Professional Geologist – State of Georgia
- Certified Professional Geologist – State of Louisiana
- Professional Geologist – State of Alabama
- Professional Geologist – Commonwealth of Kentucky
- Certified Environmental Manager – State of Nevada
- American Concrete Institute (ACI) Certification Level II
- OSHA 40 Hour Hazardous Waste Certification
- Nuclear Density Gauge Office/Instructor
- Virginia Department of Transportation Soils Compaction Certification Asbestos Designers Licensee, Virginia
- VDOT Asphalt; VDOT Flagger; and VDOT GRIT (Guardrail)
- DCR Soil and Erosion Sediment Control - Inspector
- GSSI Structural Optical Scan – Geophysical, GSSI Advanced Geophysical GPR Certified

SUMMARY OF EXPERIENCE

Ron James is a highly experienced environmental and technical professional with more than 25 years of experience as a Professional Geologist qualifying as an Environmental Professional as defined under ASTM E 1527 Section 4.3 - Appendix X2 and 40 CFR Part 312.10(b). He has been involved in the planning, sampling and field investigations of numerous Phase II ESAs conducted in general accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (Designation E 1903-19), the Standards and Practices for all Appropriate Inquiries: Final Rule and the U.S. Department of HUD Multifamily Accelerated Processing Map Guide in the following States: North Carolina, South Carolina, Georgia, Alabama, Florida, Louisiana, Virginia, Texas, Missouri, Mississippi, Pennsylvania, New Jersey, Michigan, Maryland, Massachusetts, New Hampshire, Connecticut, New York, Maine, Colorado New Hampshire, Utah, Nevada and North Dakota. HUD Programs consisted of: MAP 221d4 New Construction, 223f refinance, 221d4 Substantial Rehabilitation, 202/223f Refinance, HUD Rental Assistance Demonstration (RAD), and 232 Refinance.

SAMPLE PROJECTS

HUD MAP 223(f)

- Colonial Arms Apartments (Virginia Beach, VA)
- Bella Vista I, II & III (New Haven, CT)
- Villa Paree Apartments (Indianapolis, IN)
- Aspen Apartments Phase II (Shreveport, LA)
- Eberhart Place (Austin, TX)
- Balcones Haus (New Braunfels, TX)
- Montgomery Landing (Savannah, GA)
- Sabal Chase Apartments (Fort Pierce, FL)
- Mill House Apartments (Greenfield, MA)

HUD MAP 221 (d)(4) NC

- Fontaine Towers (Rochester, MN)
- Beasley Mill Apartments (Athens, OH)
- Proposed Azalia Gardens (Philadelphia, PA)
- Proposed Westridge Apartments (Jacksonville, FL)
- Savo Island Cooperative (Berkely, CA)
- Domsey Residential (Brooklyn, NY)
- Proposed Point Ruston Apartments (Denver, CO)
- Proposed Point Ruston Apartments (Tacoma, WA)
- Proposed Inman Mills (Inman, SC)
- Proposed Sole Mia (North Miami, FL)

HUD SPECIAL APP. CENTER

- *Collegeville Center – Phase I & II (Birmingham, AL)*
- *Carver Park (Cleveland, OH)*
- *Stokes Mall (Cleveland, OH)*

Ron A. James, PG, CEM, EP

Technical Director of Environmental Services

r.james@d3g.com / 804-665-2911

SUMMARY OF EXPERIENCE *(cont'd)*

As a Principal Geologist and Technical Director of Environmental Services, Ron is responsible for development, coordination, and technical oversight of advanced environmental and geological services, including subsurface explorations, field permeability testing, evaluation of potential borrow and cover materials, and geophysical investigations including Ground Penetrating Radar (GPR), Electrical Resistivity (ER), Electro Magnetic (EM) and Ferromagnetic non-invasive investigations for real-estate transactions, site development, characterization and hydrogeological modeling of select sites in suburban metropolitan areas throughout the United States. The projects included the coordination of field crews for installation and development of monitoring wells, sampling and laboratory analysis of soil and groundwater samples, interpretation of data, technical report preparation with the development of site-specific conceptual models to assess cleanup methods and cost analysis. Ron is proficient in developing statistical sample plans to adequately characterize subsurface conditions with contaminant plumes with proficiency in several technical fields including environmental site assessments (ESAs) and underground storage tanks (USTs) having assessed and managed remedial design for numerous release incidents with demonstrated success. He has supervised technical team(s) performing hazardous waste assessments and remediation under criteria established by CERCLA, RCRA, CWA, TSCA, SDWA, OSHA and other recognized standards. He has performed Tier I and Tier II fate and transport analysis by determining the horizontal and vertical extent of Chemicals of Concern (COCs), established exposure points, transport evaluation media and potential receptors with site specific target levels in accordance with ASTM Risk-Based Corrective Action Guidance within selected jurisdictions throughout the United States.

Ron is a licensed Professional Geologist in good standing within the Commonwealth of Virginia, Kentucky, Alabama, Florida, Georgia and Louisiana. He is certified as a State of Nevada Certified Environmental Manager (CEM) through the Nevada Division of Environmental Protection. His duties as Principal Geologist and Technical Director for Environmental Services for Dominion Due Diligence Group (D3G) include coordinating, conducting and reviewing Phase II Environmental Site Assessments (HUD, Freddie Mac, Fannie Mae, CHFA, and ASTM E 1903-19) throughout the United States, managing the D3G Phase II ESA Department and client contact.

SAMPLE PROJECTS

HUD MAP 223 (f) & 202/223(f)

- *Enon Plaza (Dayton, OH)*
- *Bixby Brockton Apartments (Brockton, MA)*
- *Golden Rule Plaza (Washington, D.C.)*
- *Revitz House (Rockville, MD)*

HUD RENTAL ASSISTANCE DEMONSTRATION

- *Belmont Heights Estates (Tampa, FL)*
- *Sparta Housing Authority (Sparta, TN)*
- *Housing Authority of the City of Georgiana (Georgiana, AL)*
- *Proposed Taft Homes (Peoria, IL)*

ASTM/AAI Environmental Projects

- Virginia State University Steam Plant (Petersburg, VA)
- Spotsylvania Town Center (Fredericksburg, VA)
- Mall Properties (Hampton, VA)
- Paracelsus Medical Center (Arlington, VA)
- Virginia Department of Mental Health Annual Contract (Virginia)

GEOPHYSICAL INVESTIGATIONS

- *Proposed New Middle School – Hull Street (Richmond, VA)*
- *Creighton Road & Sandy Lane (Richmond, VA)*
- *The Estates at Horsepen (Richmond, VA)*

Attachment 6

SCDHEC Risk-Based Screening Levels, USEPA VISLs,
and USEPA, RSLs

Table D1
RBSLs for Groundwater

Chemical of Concern	Concentration (µg/L)
Benzene	5
Toluene	1,000
Ethylbenzene	700
Xylenes	10,000
Total PAHs#	25
MTBE	40
Naphthalene	25
1,2-DCA	5
EDB □	0.05
Lead □	15
Arsenic **	10
Barium **	2,000
Cadmium **	5
Chromium **	100
Mercury **	2
Selenium **	50
Silver **	5

In calculating SSTLs for individual PAHs (Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, and Dibenz(a,h)anthracene), please use an RBSL of 10 µg/L for each CoC.

□ UST system was in operation prior to 1991.

** For waste oil UST releases only.

Table D2
Action Levels for Groundwater (Oxygenates)

Chemical of Concern	Concentration (µg/L)
EtBE (Ethyl tert-Butyl Ether)	47
tAME (tert-Amyl Methyl Ether)	128
DIPE (di-Isopropyl Ether)	150
tBA (tert-Butyl Alcohol)	1,400
tAA (tert-Amyl Alcohol)	240
Ethanol	10,000
tBF (tert-Butyl Formate)	None
3,3-Dimethyl-1-Butanol	None

Table D3
RBSLs for Sandy Soil determined based on groundwater RBSLs

Chemical of Concern	RBSL (mg/kg) (for all separation distances)
Benzene	0.007
Toluene	1.45
Ethylbenzene	1.15
Xylenes	14.5
Naphthalene	0.036
Benzo(a)anthracene*	0.066
Benzo(b)fluoranthene*	0.066
Benzo(k)fluoranthene*	0.066
Chrysene*	0.066
Dibenz(a,h)anthracene*	0.066

* **Limits are increased to levels above the calculated values to reasonably attainable laboratory reporting limits.**

Table D4
RBSLs for Clay-rich Soil (mg/kg)

Separation Distance → **↓ Chemical of Concern**	**<10 ft**	**10-15 ft**	**15-20 ft**	**20-25 ft**	**25-30 ft**	**>30 ft**
Benzene	0.003	0.008	0.037	0.187	1.010	5.665
Toluene	0.627	1.167	3.630	12.085	41.885	149.125
Ethylbenzene	1.551	6.168	76.950	1114.5	-	-
Xylenes	13.010	22.495	61.250	176.800	529.000	-
Naphthalene	0.047	0.069	0.139	0.292	0.625	1.350
Benzo(a)anthracene	0.066*	-	-	-	-	-
Benzo(b)fluoranthene	0.066*	7439.0	-	-	-	-
Benzo(k)fluoranthene	0.066*	-	-	-	-	-
Chrysene	0.066*	13.099	59.800	298.550	1573.000	-
Dibenz(a,h)anthracene	0.066*	-	-	-	-	-

Note: Separation Distance is measured from the depth of the worst-case soil sample to the top of the water table.

*** RBSLs are increased to levels above the calculated values to reasonably attainable laboratory reporting limits.**

- Indicates that the values are above saturation levels

Table D5
RBSLs for Inhalation of vapors

Chemical of Concern	RBSL ($\mu g/m^3$)
Benzene	0.36
Toluene	5200
Ethylbenzene	1.1
Xylene	100
Methyl Tert-Butyl Ether	11
1,2-DCA	0.11
EDB	0.1*

Note: RBSLs for the PAHs are not of concern because of their low volatility.

*** RBSL is increased to levels above the calculated values to reasonably attainable laboratory reporting limits.**

Table D6
RBSLs for Soil Ingestion and Dermal Contact

Chemical of Concern	Residential (mg/kg)		Industrial (mg/kg)	
	Ingestion	Dermal	Ingestion	Dermal
Benzene	13	None	59	None
Toluene	6,300	None	93,000	None
Ethylbenzene	63	None	300	None
Xylene	16,000	None	230,000	None
Methyl Tert-Butyl Ether	390	None	1,800	None
Naphthalenes	1,600	5,100	23,000	42,000
Benzo(a)anthracene	0.21	0.63	4.5	8.1
Benzo(b)fluoranthene	0.21	0.63	4.5	8.1
Benzo(k)fluoranthene	2.1	6.3	45	81
Chrysene	21	63	450	810
Dibenzo(a,h)anthracene	0.021	0.063	0.45	0.81
1,2-DCA	7.6	None	36	None
EDB	0.35	None	1.6	None

APPENDIX: WATER QUALITY NUMERIC CRITERIA FOR THE PROTECTION OF AQUATIC LIFE AND HUMAN HEALTH

This appendix contains three charts (priority pollutants, nonpriority pollutants, and organoleptic effects) of numeric criteria for the protection of human health and aquatic life. The appendix also contains three attachments which address hardness conversions and application of ammonia criteria. Footnotes specific to each chart follow the chart. General footnotes pertaining to all are at the end of the charts prior to the attachments. The numeric criteria developed and published by EPA are hereby incorporated into this regulation. Please refer to the text of the regulation for other general information and specifications in applying these numeric criteria.

PRIORITY TOXIC POLLUTANTS

Priority Pollutant		CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source
			CMC (µg/L)	CCC (µg/L)	CMC (µg/L)	CCC (µg/L)	For Consumption of: Water & Organism (µg/L)	Organism Only (µg/L)	MCL (µg/L)	
1	Antimony	7440360					5.6 B, ee	640 B, ee	6 ee	65FR66443 SDWA
2	Arsenic	7440382	340 A, D, K	150 A, D, K	69 A, D, Y	36 A, D, Y	10 C	10 C	10 C	65FR31682 57FR60848 SDWA
3	Beryllium	7440417					J, ee	J, ee	4 ee	65FR31682 SDWA
4	Cadmium	7440439	0.53 D, E, K	0.10 D, E, K	43 D, Y	9.3 D, Y	J, ee	J, ee	5 ee	65FR31682 SDWA
5a	Chromium III	16065831	580 D, E, K	28 D, E, K			J, ee	J, ee	100 Total ee	EPA820/B-96-001 65FR31682 SDWA
5b	Chromium VI	18540299	16 D, K	11 D, K	1,100 D, Y	50 D, Y	J, ee	J, ee	100 Total ee	65FR31682 SDWA
6	Copper	7440508	3.8 D, E, K, Z, ll	2.9 D, E, K, Z, ll	5.8 D, Z, Y, cc	3.7 D, Z, Y, cc	1,300 T, ee			65FR31682
7	Lead	7439921	14 D, E, Y	0.54 D, E, Y	220 D, Y	8.5 D, Y				65FR31682
8	Mercury	7439976	1.6 D, K, dd	0.91 D, K, dd	2.1 D, bb, dd	1.1 D, bb, dd	0.050 B, ee	0.051 B, ee	2 ee	65FR31682 SDWA

9	Nickel	7440020	150 D, E, K	16 D, E, K	75 D, Y	8.3 D, Y	610 B, ee	4, 600 B, ee		65FR31682
10	Selenium	7782492	L, Q, S	5.0 S	290 D, aa	71 D, aa	170 Z, ee	4,200 ee	50 ee	65FR31682 65FR66443 SDWA
11	Silver	7440224	0.37 D, E, G		2.3 D, G					65FR31682
12	Thallium	7440280					0.24	0.47	2 ee	68FR75510 SDWA
13	Zinc	7440666	37 D, E, K	37 D, E, K	95 D, Y	86 D, Y	7,400 T, ee	26,000 T, ee		65FR31682 65FR66443
14	Cyanide	57125	22 K, P	5.2 K, P	1 P, Y	1 P, Y	140 ee, jj	140 ee, jj	200 ee	EPA820/B-96-001 57FR60848 68FR75510 SDWA
15	Asbestos	1332214							7 million fibers/L I, ee	57FR60848
16	2, 3, 7, 8-TCDD (Dioxin)	1746016						0.046 ppq O, C	30ppq O, C	State Standard SDWA
17	Acrolein	107028	3	3			6 ee, nn	9 ee, nn		74FR27535 74FR46587
18	Acrylonitrile	107131					0.051 B, C	0.25 B, C		65FR66443
19	Benzene	71432					2.2 B, C	51 B, C	5 C	IRIS 01/19/00 65FR66443 SDWA
20	Bromate	15541454							10 C	SDWA
21	Bromoform	75252					4.3 B, C	140 B, C	80 Total THMs C	65FR66443 SDWA
22	Bromoacetic acid	79083							60 Total HAA5 C,mm	SDWA
23	Carbon Tetrachloride	56235					0.23 B, C	1.6 B, C	5 C	65FR66443 SDWA
24	Chlorite	67481							100	SDWA

25	Chlorobenzene	108907			130T, ee	1,600 T, ee	100 T, ee	68FR75510 SDWA
26	Chlorodibromomethane	124481			0.40 B, C	13 B, C	80 Total THMs C	65FR66443 SDWA
27	Chloroform	67663			5.7 B, C, hh	470 B, C, hh	80 Total THMs C	62FR42160 SDWA
28	Dibromoacetic acid	631641					60 Total HAA5 C, mm	SDWA
29	Dichloroacetic acid	79436					60 Total HAA5 C,mm	SDWA
30	Dichlorobromomethane	75274			0.55 B, C	17 B, C	80 Total THMs C	65FR66443 SDWA
31	1, 2-Dichloroethane	107062			0.38 B, C	37 B, C	5 C	65FR66443 SDWA
32	1, 1-Dichloroethylene	75354			330 ee	7,100 ee	7 C	68FR75510 SDWA
33	1, 2-Dichloropropane	78875			0.50 B, C	15 B, C	5 C	65FR66443 SDWA
34	1, 3-Dichloropropene	542756			0.34 ee	21 ee		68FR75510
35	Ethylbenzene	100414			530 ee	2,100 ee	700 ee	68FR75510 SDWA
36	Methyl Bromide	74839			47 B, ee	1,500 B, ee		65FR66443
37	Methylene Chloride	75092			4.6 B, C	590 B, C	5 C	65FR66443 SDWA
38	Monochloroacetic acid	79118					60 Total HAA5 C,mm	SDWA
39	1, 1, 2, 2-Tetrachloroethane	79345			0.17 B, C	4.0 B, C		65FR66443

40	Tetrachloroethylene	127184					0.69 C	3.3 C	5 C	65FR66443 SDWA
41	Toluene	108883					1,300 ee	15,000 ee	1000 ee	68FR75510 SDWA
42	1,2-Trans-Dichloroethylene	156605					140 ee	10,000 ee	100 ee	68FR75510 SDWA
43	Trichloroacetic acid	79039							60 Total HAA5 C,mm	SDWA
44	1, 1, 1-Trichloroethane	71556					J, ee	J, ee	200 ee	65FR31682 SDWA
45	1, 1, 2-Trichloroethane	79005					0.59 B, C	16 B, C	5 C	65FR66443 SDWA
46	Trichloroethylene	79016					2.5 C	30 C	5 C	65FR66443 SDWA
47	Vinyl Chloride	75014					0.025 kk	2.4 kk	2 C	68FR75510 SDWA
48	2-Chlorophenol	95578					81 B, T, ee	150 B, T, ee		65FR66443
49	2, 4-Dichlorophenol	120832					77 B, T, ee	290 B, T, ee		65FR66443
50	2, 4-Dimethylphenol	105679					380 B, T, ee	850 B, T, ee		65FR66443
51	2-Methyl- 4, 6-Dinitrophenol	534521					13 ee	280 ee		65FR66443
52	2, 4-Dinitrophenol	51285					69 B, ee	5,300 B, ee		65FR66443
53	Pentachlorophenol	87865	19 F, K	15 F, K	13 Y	7.9 Y	0.27 B, C	3.0 B, C, H	1 C	65FR31682 65FR66443 SDWA
54	Phenol	108952					10,000 T, ee, nn	860,000 T, ee, nn		74FR27535 74FR46587
55	2, 4, 6-Trichlorophenol	88062					1.4 B, C, T	2.4 B, C		65FR66443

56	Acenaphthene	83329					670 B, T, ee	990 B, T, ee	65FR66443
57	Anthracene	120127					8,300 B, ee	40,000 B, ee	65FR66443
58	Benzidine	92875					0.000086 B, C	0.00020 B, C	65FR66443
59	Benzo (a) Anthracene	56553					0.0038 B, C	0.018 B, C	65FR66443
60	Benzo (a) Pyrene	50328					0.0038 B, C	0.018 B, C	0.2 C 65FR66443 SDWA
61	Benzo (b) Fluoranthene	205992					0.0038 B, C	0.018 B, C	65FR66443
62	Benzo (k) Fluoranthene	207089					0.0038 B, C	0.018 B, C	65FR66443
63	Bis-2-Chloroethyl Ether	111444					0.030 B, C	0.53 B, C	65FR66443
64	Bis-2-Chloroisopropyl Ether	108601					1,400 B, ee	65,000 B, ee	65FR66443
65	Bi-s2-Ethylhexyl Phthalate (DEHP)	117817	V	V	V	V	1.2 B, C	2.2 B, C	6 C 65FR66443 SDWA
66	Butylbenzene Phthalate	85687	ii	ii	ii	ii	1,500 B, ee	1,900 B, ee	65FR66443
67	2-Chloronaphthalene	91587					1,000 B, ee	1,600 B, ee	65FR66443
68	Chrysene	218019					0.0038 B, C	0.018 B, C	65FR66443
69	Dibenzo(a,h)Anthracene	53703					0.0038 B, C	0.018 B, C	65FR66443

70	1, 2-Dichlorobenzene	95501			420 ee	1,300 ee	600 ee	68FR75510 SDWA
71	1, 3-Dichlorobenzene	541731			320 ee	960 ee		65FR66443
72	1, 4-Dichlorobenzene	106467			63 ee	190 ee	75 ee	68FR75510 SDWA
73	3, 3'-Dichlorobenzidine	91941			0.021 B, C	0.028 B, C		65FR66443
74	Diethyl Phthalate	84662	ii ii	ii ii	17,000 B, ee	44,000 B, ee		65FR66443
75	Dimethyl Phthalate	13113	ii ii	ii ii	270,000 B, ee	1,100,000 B, ee		64FR66443
76	Di-n-butyl Phthalate	84742	ii ii	ii ii	2,000 B, ee	4,500 B, ee		65FR66443
77	2, 4-Dinitrotoluene	121142			0.11 C	3.4 C		65FR66443
78	1, 2-Diphenylhydrazine	122667			0.036 B, C	0.20 B, C		65FR66443
79	Fluoranthene	206440			130 B, ee	140 B, ee		65FR66443
80	Fluorene	86737			1,100 B, ee	5,300 B, ee		65FR66443
81	Hexachlorobenzene	118741			0.00028 B, C	0.00029 B, C	1 C	65FR66443 SDWA
82	Hexachlorobutadiene	87683			0.44 B, C	18 B, C		65FR66443
83	Hexachlorocyclo-pentadiene	77474			40 T, ee	1100 T, ee	50 ee	68FR75510 SDWA
84	Hexachloroethane	67721			1.4 B, C	3.3 B, C		65FR66443
85	Indeno 1,2,3(cd) Pyrene	193395			0.0038 B, C	0.018 B, C		65FR66443

86	Isophorone	78591					35 B, C	960 B, C			65FR66443
87	Nitrobenzene	98953					17 B, ee	690 B, H, T, ee			65FR66443
88	N-Nitrosodimethylamine	62759					0.00069 B, C	3.0 B, C			65FR66443
89	N-Nitrosodi-n-Propylamine	621647					0.0050 B, C	0.51 B, C			65FR66443
90	N-Nitrosodiphenylamine	86306					3.3 B, C	6.0 B, C			65FR66443
91	Pyrene	129000					830 B, ee	4,000 B, ee			65FR66443
92	1, 2, 4-Trichlorobenzene	120821					35 ee	70 ee	70 ee		68FR75510 SDWA
93	Aldrin	309002	3.0 G, X		1.3 G, X		0.000049 B, C	0.000050 B, C			65FR31682 65FR66443
94	alpha-BHC	319846					0.0026 B, C	0.0049 B, C			65FR66443
95	beta-BHC	319857					0.0091 B, C	0.017 B, C			65FR66443
96	gamma-BHC (Lindane)	58899	0.95 K		0.16 G		0.98 ee	1.8 ee	0.2 C		65FR31682 68FR75510 SDWA
97	Chlordane	57749	2.4 G	0.0043 G, X	0.09 G	0.004 G, X	0.00080 B, C	0.00081 B, C	2 C		65FR31682 65FR66443 SDWA
98	4, 4'-DDT	50293	1.1 G, gg	0.001 G, X, gg	0.13 G, gg	0.001 G, X, gg	0.00022 B, C	0.00022 B, C			65FR31682 65FR66443
99	4, 4'-DDE	72559					0.00022 B, C	0.00022 B, C			65FR66443
100	4, 4'-DDD	72548					0.00031 B, C	0.00031 B, C			65FR66443

101	Dieldrin	60571	0.24 K	0.056 K, N	0.71 G	0.0019 G, X	0.000052 B, C	0.000054 B, C		65FR31682 65FR66443
102	alpha-Endosulfan	959988	0.22 G, W	0.056 G, W	0.034 G, W	0.0087 G, W	62 B, ee	89 B, ee		65FR31682 65FR66443
103	beta-Endosulfan	33213659	0.22 G, W	0.056 G, W	0.034 G, W	0.0087 G, W	62 B, ee	89 B, ee		65FR31682 65FR66443
104	Endosulfan Sulfate	1031078					62 B, ee	89 B, ee		65FR31682 65FR66443
105	Endrin	72208	0.086 K	0.036 K, N	0.037 G	0.0023 G, X	0.059 ee	0.060 ee	2 ee	68FR75510 SDWA
106	Endrin Aldehyde	7421934					0.29 B, ee	0.30 B, H, ee		65FR66443
107	Heptachlor	76448	0.52 G	0.0038 G, X	0.053 G	0.0036 G, X	0.000079 B, C	0.000079 B, C	0.4 C	65FR31682 65FR66443 SDWA
108	Heptachlor Epoxide	1024573	0.52 G, U	0.0038 G, U, X	0.053 G, U	0.0036 G, U, X	0.000039 B, C	0.000039B, C	0.2 C	65FR31682 65FR66443 SDWA
109	Polychlorinated Biphenyls PCBs	--		0.014 M, X		0.03 M, X	0.000064 B, C, M	0.000064 B, C, M	0.5 C	65FR31682 65FR66443 SDWA
110	Toxaphene	8001352	0.73	0.0002 X	0.21	0.0002 X	0.00028 B, C	0.00028 B, C	3 C	65FR31682 65FR66443 SDWA

Footnotes:

A This water quality criterion was derived from data for arsenic (III), but is applied here to total arsenic, which might imply that arsenic (III) and arsenic (V) are equally toxic to aquatic life and that their toxicities are additive. In the arsenic criteria document (EPA 440/5-84-033, January 1985), Species Mean Acute Values are given for both arsenic (III) and arsenic (V) for five species and the ratios of the SMAVs for each species range from 0.6 to 1.7. Chronic values are available for both arsenic (III) and arsenic (V) for one species; for the fathead minnow, the chronic value for arsenic (V) is 0.29 times the chronic value for arsenic (III). No data are known to be available concerning whether the toxicities of the forms of arsenic to aquatic organisms are additive.

B This criterion has been revised to reflect The Environmental Protection Agency's q1* or RfD, as contained in the Integrated Risk Information System (IRIS) as of May 17, 2002. The fish tissue bioconcentration factor (BCF) from the 1980 Ambient Water Quality Criteria document was retained in each case.

C This criterion is based on carcinogenicity of 10^{-6} risk. As prescribed in Section E of this regulation, application of this criterion for permit effluent limitations requires the use annual average flow or comparable tidal condition as determined by the Department.

D Freshwater and saltwater criteria for metals are expressed in terms of total recoverable metals. As allowed in Section E of this regulation, these criteria may be expressed as dissolved metal for the purposes of deriving permit effluent limitations. The dissolved metal water quality criteria value may be calculated by using these 304(a) aquatic life criteria expressed in terms of total recoverable metal, and multiplying it by a conversion factor (CF). The term "Conversion Factor" (CF) represents the conversion factor for

converting a metal criterion expressed as the total recoverable fraction in the water column to a criterion expressed as the dissolved fraction in the water column. (Conversion Factors for saltwater CCCs are not currently available. Conversion factors derived for saltwater CMCs have been used for both saltwater CMCs and CCCs). See "Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria", October 1, 1993, by Martha G. Prothro, Acting Assistant Administrator for Water, available from the Water Resource center, USEPA, 401 M St., SW, mail code RC4100, Washington, DC 20460; and 40CFR§131.36(b)(1). Conversion Factors can be found in Attachment 1 – Conversion Factors for Dissolved Metals.

E The freshwater criterion for this metal is expressed as a function of hardness (mg/L) in the water column. The value given here corresponds to a hardness of 25 mg/L as expressed as $CaCO_3$. Criteria values for other hardness may be calculated from the following: CMC (dissolved) = $\exp\{m_A [\ln(\text{hardness})] + b_A\}$ (CF), or CCC (dissolved) = $\exp\{m_C [\ln(\text{hardness})] + b_C\}$ (CF) and the parameters specified in Attachment 2 – Parameters for Calculating Freshwater Dissolved Metals Criteria That Are Hardness-Dependent. As noted in footnote D above, the values in this appendix are expressed as total recoverable, the criterion may be calculated from the following: CMC (total) = $\exp\{m_A [\ln(\text{hardness})] + b_A\}$, or CCC (total) = $\exp\{m_C [\ln(\text{hardness})] + b_C\}$.

F Freshwater aquatic life values for pentachlorophenol are expressed as a function of pH, and are calculated as follows: CMC = exp(1.005(pH)-4.869); CCC = exp(1.005(pH)-5.134). Values displayed in table correspond to a pH of 7.8.

G This criterion is based on 304(a) aquatic life criterion issued in 1980, and was issued in one of the following documents: Aldrin/Dieldrin (EPA 440/5-80-019), Chlordane (EPA 440/5-80-027), DDT (EPA 440/5-80-038), Endosulfan (EPA 440/5-80-046), Endrin (EPA 440/5-80-047), Heptachlor (440/5-80-052), Hexachlorocyclohexane (EPA 440/5-80-054), Silver (EPA 440/5-80-071). The Minimum Data Requirements and derivation procedures were different in the 1980 Guidelines than in the 1985 Guidelines. For example, a "CMC" derived using the 1980 Guidelines was derived to be used as an instantaneous maximum. If assessment is to be done using an averaging period, the values given should be divided by 2 to obtain a value that is more comparable to a CMC derived using the 1985 Guidelines.

H No criterion for protection of human health from consumption of aquatic organisms excluding water was presented in the 1980 criteria document or in the *1986 Quality Criteria for Water*. Nevertheless, sufficient information was presented in the 1980 document to allow the calculation of a criterion, even though the results of such a calculation were not shown in the document.

I This criterion for asbestos is the Maximum Contaminant Level (MCL) developed under the Safe Drinking Water Act (SDWA) and the National Primary Drinking Water Regulation (NPDWR).

J EPA has not calculated a 304(a) human health criterion for this contaminant. The criterion is the Maximum Contaminant Level developed under the Safe Drinking Water Act (SDWA) and the National Primary Drinking Water Regulation (NPDWR).

K This criterion is based on a 304(a) aquatic life criterion that was issued in the *1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water*, (EPA-820-B-96-001, September 1996). This value was derived using the GLI Guidelines (60FR15393-15399, March 23, 1995; 40CFR132 Appendix A); the difference between the 1985 Guidelines and the GLI Guidelines are explained on page iv of the 1995 Updates. None of the decisions concerning the derivation of this criterion were affected by any considerations that are specific to the Great Lakes.

L The CMC = 1/[(f1/CMC1) + (f2/CMC2)] where f1 and f2 are the fractions of total selenium that are treated as selenite and selenate, respectively, and CMC1 and CMC2 are 185.9 µg /l and 12.82 µg /l, respectively.

M This criterion applies to total PCBs, (e.g., the sum of all congener or all isomer or homolog or Aroclor analyses.)

N The derivation of the CCC for this pollutant did not consider exposure through the diet, which is probably important for aquatic life occupying upper trophic levels.

O This state criterion is also based on a total fish consumption rate of 0.0175 kg/day.

P This water quality criterion is expressed asµg free cyanide (as CN)/L.

Q This value was announced (61FR58444-58449, November 14, 1996) as a proposed GLI 303 I aquatic life criterion

S This water quality criterion for selenium is expressed in terms of total recoverable metal in the water column. It is scientifically acceptable to use the conversion factor (0.996 – CMC or 0.922 – CCC) that was used in the GLI to convert this to a value that is expressed in terms of dissolved metal.

T The organoleptic effect criterion is more stringent than the value for priority toxic pollutants.

U This value was derived from data for heptachlor and the criteria document provides insufficient data to estimate the relative toxicities of heptachlor and heptachlor epoxide.

V There is a full set of aquatic life toxicity data that show that DEHP is not toxic to aquatic organisms at or below its solubility limit.

W This value was derived from data for endosulfan and is most appropriately applied to the sum of alpha-endosulfan and beta-endosulfan.

X This criterion is based on a 304(a) aquatic life criterion issued in 1980 or 1986, and was issued in one of the following documents: Aldrin/Dieldrin (EPA440/5-80-019), Chlordane (EPA 440/5-80-027), DDT (EPA 440/5-80-038), Endrin (EPA 440/5-80-047), Heptachlor (EPA 440/5-80-052), Polychlorinated Biphenyls (EPA 440/5- 80-068), Toxaphene (EPA 440/5-86-006). This CCC is based on the Final Residue value procedure in the 1985 Guidelines. Since the publication of the Great Lakes Aquatic Life Criteria Guidelines in 1995 (60FR15393-15399, March 23, 1995), the EPA no longer uses the Final Residue value procedure for deriving CCCs for new or revised 304(a) aquatic life criteria.

Y This water quality criterion is based on a 304(a) aquatic life criterion that was derived using the 1985 Guidelines (*Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses*, PB85-227049, January 1985) and was issued in one of the following criteria documents: Arsenic (EPA 440/5-84-033), Cadmium (EPA 440/5-84-032), Chromium (EPA 440/5-84-029), Copper (EPA 440/5-84-031), Cyanide (EPA 440/5-84-028), Lead (EPA 440/5-84-027), Nickel (EPA 440/5-86-004), Pentachlorophenol (EPA 440/5-86-009), Toxaphene, (EPA 440/5-86-006), Zinc (EPA 440/5-87- 003).

Z When the concentration of dissolved organic carbon is elevated, copper is substantially less toxic and use of Water-Effect Ratios might be appropriate.

aa The selenium criteria document (EPA 440/5-87-006, September 1987) provides that if selenium is as toxic to saltwater fishes in the field as it is to freshwater fishes in the field, the status of the fish community should be monitored whenever the concentration of selenium exceeds 5.0 7g/L in salt water because the saltwater CCC does not take into account uptake via the food chain.

bb This water quality criterion was derived on page 43 of the mercury criteria document (EPA 440/5-84-026, January 1985). The saltwater CCC of 0.025 ug/L given on page 23 of the criteria document is based on the Final Residue value procedure in the 1985 Guidelines. Since the publication of the Great Lakes Aquatic Life criteria Guidelines in 1995 (60FR15393-15399, March 23, 1995), the EPA no longer uses the Final Residue value procedure for deriving CCCs for new or revised 304(a) aquatic life criteria.

cc This water quality criterion was derived in *Ambient Water Quality Criteria Saltwater Copper Addendum* (Draft, April 14, 1995) and was promulgated in the Interim Final National Toxics Rule (60FR22228-222237, May 4, 1995).

dd This water quality criterion was derived from data for inorganic mercury (II), but is applied here to total mercury. If a substantial portion of the mercury in the water column is methylmercury, this criterion will probably be under protective. In addition, even though inorganic mercury is converted to methylmercury and methylmercury bioaccumulates to a great extent, this criterion does not account for uptake via the food chain because sufficient data were not available when the criterion was derived.

ee This criterion is a noncarcinogen. As prescribed in Section E of this regulation, application of this criterion for determining permit effluent limitations requires the use of 7Q10 or comparable tidal condition as determined by the Department.

gg This criterion applies to DDT and its metabolites (i.e., the total concentration of DDT and its metabolites should not exceed this value).

hh Although a new RfD is available in IRIS, the surface water criteria will not be revised until the National Primary Drinking Water Regulations: Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) is completed, since public comment on the relative source contribution (RSC) for chloroform is anticipated.

ii Although EPA has not published a completed criteria document for phthalate, it is EPA's understanding that sufficient data exist to allow calculation of aquatic life criteria.

jj This recommended water quality criterion is expressed as total cyanide, even though the IRIS RfD the EPA used to derive the criterion is based on free cyanide. The multiple forms of cyanide that are present in ambient water have significant differences in toxicity due to their abilities to liberate the CN-moiety. Some complex cyanides require even more extreme conditions than refluxing with sulfuric acid to liberate the CN-moiety. Thus, these complex cyanides are expected to have little or no 'bioavailalbility' to humans. If a substantial fraction of the cyanide present in a water body is present in a complexed form (e.g.,$FE_4[FE(CN)_6]_3$), this criterion may be overly conservative.

kk This recommended water quality criterion was derived using the cancer slope factor of 1.4 (Linear multi-stage model (LMS) exposure from birth).

ll Freshwater copper criteria may be calculated utilizing the procedures identified in EPA-822-R-07-001.

mm HAA5 means five haloacetic acids (monochloracitic acid, dichloroacetic acid, trichloroacetic acid, bromoacetic acid and dibromoaccetic acid).

nn This criterion has been revised to reflect the EPA's cancer slope factor (CSF) or reference dose (RfD), as contained in the Integrated Risk Information System (IRIS) as of (Final FR Notice June 10, 2009). The fish tissue bioconcentration factor (BCF) from the 1980 Ambient Water Quality Criteria document was retained in each case.

NON PRIORITY POLLUTANTS

	Non Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/Source
							For Consumption of:			
			CMC (µg/L)	CCC (µg/L)	CMC (µg/L)	CCC (µg/L)	Water & Organism (µg/L)	Organism Only (µg/L)	MCL (µg/L)	
1	Alachlor								2 M	SDWA

2	Ammonia	7664417	CRITERIA ARE pH AND TEMPERATURE DEPENDENT - SEE DOCUMENT FOR DETAILS C							EPA822-R99-014 EPA440/5-88-004
3	Aesthetic Qualities		NARRATIVE STATEMENT AND NUMERIC CRITERIA – SEE TEXT							Gold Book
4	Atrazine								3 M	SDWA
5	Bacteria		FOR PRIMARY CONTACT RECREATION AND SHELLFISH USES – SEE TEXT							Gold Book
6	Barium	7440393					1,000 A, L		2,000 L	Gold Book
7	Carbofuran	1563662							40 L	SDWA
8	Chlorine	7782505	19	11	13	7.5			G	Gold Book SDWA
9	Chlorophenoxy Herbicide 2, 4, 5, -TP	93721					10 A, L		50 L	Gold Book SDWA
10	Chlorophenoxy Herbicide 2, 4-D	94757					100 A, L		70 L	Gold Book SDWA
11	Chlorophyll *a*		NARRATIVE STATEMENT AND NUMERIC CRITERIA – SEE TEXT							State Standard
12	Chloropyrifos	2921882	0.083 F	0.041 F	0.011 F	0.0056 F				Gold Book
13	Color		NARRATIVE STATEMENT – SEE TEXT							State Standard
14	Dalapon	75990							200 L	SDWA
15	Demeton	8065483		0.1 E		0.1 E				Gold Book
16	1,2-Dibromo-3-chloropropane (DBCP)	96128							0.2 M	SDWA
17	Di(2-ethylhexyl) adipate	103231							400 L	SDWA
18	Dinoseb	88857							7 L	SDWA

19	Dinitrophenols	25550587					69 L	5,300 L		65FR66443
20	Nonylphenol	1044051	28	6.6	7.0	1.7				71FR9337
21	Diquat	85007							20 L	SDWA
22	Endothall	145733							100 L	SDWA
23	Ether, Bis Chloromethyl	542881					0.00010 D, M	0.00029 D, M		65FR66443
24	Cis-1, 2-dichloroethylene	156592							70 L	SDWA
25	Ethylene dibromide								0.05 M	SDWA
26	Fluoride	7681494							4000 L	SDWA
27	Glyphosate	1071836							700 L	SDWA
28	Guthion	86500		0.01 E		0.01 E				Gold Book
29	Hexachlorocyclo-hexane-Technical	319868					0.0123 L	0.0414 L		Gold Book
30	Malathion	121755		0.1 E		0.1 E				Gold Book
31	Methoxychlor	72435		0.03 E		0.03 E	100 A, L		40 L	Gold Book SDWA
32	Mirex	2385855		0.001 E		0.001 E				Gold Book
33	Nitrates	14797558					10, 000 L		10, 000 L	SDWA Gold Book

34	Nitrites	14797650							1,000 L	SDWA
35	Nitrogen, Total		NARRATIVE STATEMENT AND NUMERIC CRITERIA - SEE TEXT							State Standard
36	Nitrosamines						0.0008 L	1.24 L		Gold Book
37	Nitrosodibutylamine, N	924163					0.0063 A, M	0.22 A, M		65FR66443
38	Nitrosodiethylamine, N	55185					0.0008 A, M	1.24 A, M		Gold Book
39	Nitrosopyrrolidine, N	930552					0.016 M	34 M		65FR66443
40	Oil and Grease		NARRATIVE STATEMENT – SEE TEXT							Gold Book
41	Oxamyl	23135220							200 L	SDWA
42	Oxygen, Dissolved	7782447	WARMWATER, COLDWATER, AND EXCEPTIONS FOR NATURAL CONDITIONS - SEE TEXT K							Gold Book State Standard
43	Diazinon	333415	0.17	0.17	0.82	0.82				71FR9336
44	Parathion	56382	0.065 H	0.013 H						Gold Book
45	Pentachlorobenzene	608935					1.4 E	1.5 E		65FR66443
46	pH		SEE TEXT I							Gold Book State Standard
47	Phosphorus, Total		NARRATIVE STATEMENT AND NUMERIC CRITERIA - SEE TEXT							State Standard
48	Picloram	1918021							500 L	SDWA
49	Salinity		NARRATIVE STATEMENT - SEE TEXT							Gold Book
50	Simazine	122349							4 L	SDWA

51	Solids,Suspended,and Turbidity		NARRATIVE STATEMENT AND NUMERIC CRITERIA - SEE TEXT							Gold Book State Standard
52	Styrene	100425							100 L	SDWA
53	Sulfide-Hydrogen Sulfide	7783064		2.0 E		2.0 E				Gold Book
54	Tainting Substances		NARRATIVE STATEMENT - SEE TEXT							Gold Book
55	Temperature		SPECIES DEPENDENT CRITERIA - SEE TEXT J							Red Book
56	1, 2, 4, 5-Tetrachlorobenzene	95943					0.97 D	1.1 D		65FR66443
57	Tributyltin (TBT)	688733	0.46	0.063	0.37	0.010				EPA 822-F-00-008
58	2, 4, 5-Trichlorophenol	95954					1,800 B, D	3,600 B, D		65FR66443
59	Xylenes, Total								10, 000 L	SDWA
60	Uranium								30	SDWA
61	Beta particles and photon emitters								4 Millirems/ yr	SDWA
62	Gross alpha particle activity								15 picocuries per liter (pCi/l)	SDWA
63	Radium 226 and Radium 228 (combined)								5 pCi/l	SDWA

Footnotes:

A This human health criterion is the same as originally published in the Red Book which predates the 1980 methodology and did not utilize the fish ingestion BCF approach. This same criterion value is now published in the Gold Book.

B The organoleptic effect criterion is more stringent than the value presented in the non priority pollutants table.

C According to the procedures described in the *Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses*, except possibly where a very sensitive species is important at a site, freshwater aquatic life should be protected if both conditions specified in Attachment 3 - Calculation of Freshwater Ammonia Criterion are satisfied.

D This criterion has been revised to reflect The Environmental Protection Agency's q1* or RfD, as contained in the Integrated Risk Information System (IRIS) as of April 8, 1998. The fish tissue bioconcentration factor (BCF) used to derive the original criterion was retained in each case.

E The derivation of this value is presented in the Red Book (EPA 440/9-76-023, July, 1976).

F This value is based on a 304(a) aquatic life criterion that was derived using the 1985 Guidelines (*Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses*, PB85-227049, January 1985) and was issued in the following criteria document: Chloropyrifos (EPA 440/5-86-005).

G A more stringent Maximum Residual Disinfection Level (MRDL) has been issued by EPA under the Safe Drinking Water Act. Refer to S.C. Regulation 61-58, *State Primary Drinking Water Regulations*.

H This value is based on a 304(a) aquatic life criterion that was issued in the *1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water* (EPA-820-B-96-001). This value was derived using the GLI Guidelines (60FR15393-15399, March 23, 1995; 40CFR132 Appendix A); the differences between the 1985 Guidelines and the GLI Guidelines are explained on page iv of the 1995 Updates. No decision concerning this criterion was affected by any considerations that are specific to the Great Lakes.

I South Carolina has established some site-specific standards for pH. These site-specific standards are listed in S.C. Regulation 61-69, *Classified Waters*.

J U.S. EPA, 1976, Quality Criteria for Water 1976.

K South Carolina has established numeric criteria in Section G for waters of the State based on the protection of warmwater and coldwater species. For the exception to be used for waters of the State that do not meet the numeric criteria established for the waterbody due to natural conditions, South Carolina has specified the allowable deficit in Section D.4. and used the following document as a source. U.S. EPA, 1986, Ambient Water Quality Criteria for Dissolved Oxygen, EPA 440/5-86-003, National Technical Information Service, Springfield, VA. South Carolina has established some site-specific standards for DO. These site-specific standards are listed in S.C. Regulation 61-69, *Classified Waters.*

L This criterion is a noncarcinogen. As prescribed in Section E of this regulation, application of this criterion for determining permit effluent limitations requires the use of 7Q10 or comparable tidal condition as determined by the Department

M This criterion is based on an added carcinogenicity risk. As prescribed in Section E of this regulation, application of this criterion for permit effluent limitations requires the use annual average flow or comparable tidal condition as determined by the Department.

ORGANOLEPTIC EFFECTS

	Pollutant	CAS Number	Organoleptic Effect Criteria (µg/L)	FR Cite/Source
1	Acenaphthene	83329	20	Gold Book
2	Chlorobenzene	108907	20	Gold Book
3	3-Chlorophenol		0.1	Gold Book
4	4-Chlorophenol	106489	0.1	Gold Book
5	2, 3-Dichlorophenol		0.04	Gold Book

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information															Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
				3.0E-04	O						1.36E+09		1	0.1	Acephate	30560-19-1					2.3E+00	9.9E+00		1.9E+00
		2.2E-06	I			9.0E-03	I	V		1.07E+05	1.36E+09	8.72E+03	1		Acetaldehyde	75-07-0			1.1E+01	1.1E+01			8.2E+00	8.2E+00
				2.0E-02							1.36E+09		1	0.1	Acetochlor	34256-82-1					1.6E+02	6.6E+02		1.3E+02
				9.0E-01	I			V		1.14E+05	1.36E+09	1.37E+04	1		Acetone	67-64-1					7.0E+03			7.0E+03
						2.0E-03	X				1.36E+09		1	0.1	Acetone Cyanohydrin	75-86-5							2.8E+05	2.8E+05
				6.0E-02	I			V		1.28E+05	1.36E+09	1.30E+04	1		Acetonitrile	75-05-8							8.1E+01	8.1E+01
				1.0E-01	I			V		2.52E+03	1.36E+09	5.97E+04	1		Acetophenone	98-86-2					7.8E+02			7.8E+02
3.8E+00	C	1.3E-03	C								1.36E+09		1	0.1	Acetylaminofluorene, 2-	53-96-3	1.8E-01	6.5E-01	2.9E+03	1.4E-01				
				5.0E-04	I	2.0E-05	I	V		2.27E+04	1.36E+09	6.91E+03	1		Acrolein	107-02-8					3.9E+00		1.4E-02	1.4E-02
5.0E-01	I	1.0E-04	I	2.0E-03	I	6.0E-03	I		M		1.36E+09		1	0.1	Acrylamide	79-06-1	3.1E-01	1.2E+00	1.4E+04	2.4E-01	1.6E+01	6.6E+01	8.5E+05	1.3E+01
				5.0E-01	I	2.0E-04	P	V		1.09E+05	1.36E+09	9.53E+04	1		Acrylic Acid	79-10-7					3.9E+03		2.0E+00	2.0E+00
5.4E-01	I	6.8E-05	I	1.0E-03	H	2.0E-03	I	V		1.13E+04	1.36E+09	7.69E+03	1		Acrylonitrile	107-13-1	1.3E+00		3.2E-01	2.5E-01	7.8E+00		1.6E+00	1.3E+00
						6.0E-03	P				1.36E+09		1	0.1	Adiponitrile	111-69-3							8.5E+05	8.5E+05
5.6E-02	C			1.0E-02	I						1.36E+09		1	0.1	Alachlor	15972-60-8	1.2E+01	4.4E+01		9.7E+00	7.8E+01	3.3E+02		6.3E+01
				1.0E-03	I						1.36E+09		1	0.1	Aldicarb	116-06-3					7.8E+00	3.3E+01		6.3E+00
				1.0E-03	I						1.36E+09		1	0.1	Aldicarb Sulfone	1646-88-4					7.8E+00	3.3E+01		6.3E+00
											1.36E+09		1	0.1	Aldicarb sulfoxide	1646-87-3								
1.7E+01	I	4.9E-03	I	3.0E-05	I			V			1.36E+09	1.72E+06	1		Aldrin	309-00-2	4.1E-02		9.8E-01	3.9E-02	2.3E-01			2.3E-01
				4.0E-03	P	1.0E-04	X	V		1.11E+05	1.36E+09	3.42E+04	1		Allyl Alcohol	107-18-6					3.1E+01		3.6E-01	3.5E-01
2.1E-02	C	6.0E-06	C			1.0E-03	I	V		1.42E+03	1.36E+09	1.58E+03	1		Allyl Chloride	107-05-1	3.3E+01		7.4E-01	7.2E-01			1.7E-01	1.7E-01
				1.0E+00	P	5.0E-03	P				1.36E+09		1		Aluminum	7429-90-5					7.8E+03		7.1E+05	7.7E+03
				4.0E-04	I						1.36E+09		1		Aluminum Phosphide	20859-73-8					3.1E+00			3.1E+00
				9.0E-03	I						1.36E+09		1	0.1	Ametryn	834-12-8					7.0E+01	3.0E+02		5.7E+01
2.1E+01	C	6.0E-03	C								1.36E+09		1	0.1	Aminobiphenyl, 4-	92-67-1	3.3E-02	1.2E-01	6.4E+02	2.6E-02				
				8.0E-02	P						1.36E+09		1	0.1	Aminophenol, m-	591-27-5					6.3E+02	2.6E+03		5.1E+02
				4.0E-03	X						1.36E+09		1	0.1	Aminophenol, o-	95-55-6					3.1E+01	1.3E+02		2.5E+01
				2.0E-02	P						1.36E+09		1	0.1	Aminophenol, p-	123-30-8					1.6E+02	6.6E+02		1.3E+02
				2.5E-03	I						1.36E+09		1	0.1	Amitraz	33089-61-1					2.0E+01	8.2E+01		1.6E+01
						5.0E-01	I	V					1		Ammonia	7664-41-7								
				2.0E-03	X						1.36E+09		1	0.1	Ammonium Picrate	131-74-8					1.6E+01	6.6E+01		1.3E+01
				2.0E-01	I						1.36E+09		1		Ammonium Sulfamate	7773-06-0					1.6E+03			1.6E+03
						3.0E-03	X	V		1.37E+04	1.36E+09	2.62E+04	1		Amyl Alcohol, tert-	75-85-4							8.2E+00	8.2E+00
5.7E-03	I	1.6E-06	C	7.0E-03	P	1.0E-03	I				1.36E+09		1	0.1	Aniline	62-53-3	1.2E+02	4.3E+02	2.4E+06	9.5E+01	5.5E+01	2.3E+02	1.4E+05	4.4E+01
4.0E-02	P			2.0E-03	X						1.36E+09		1	0.1	Anthraquinone, 9,10-	84-65-1	1.7E+01	6.2E+01		1.4E+01	1.6E+01	6.6E+01		1.3E+01
				4.0E-04	I	3.0E-04	A				1.36E+09		0.15		Antimony (metallic)	7440-36-0					3.1E+00		4.3E+04	3.1E+00
				5.0E-04	H						1.36E+09		0.15		Antimony Pentoxide	1314-60-9					3.9E+00			3.9E+00
				4.0E-04	H						1.36E+09		0.15		Antimony Tetroxide	1332-81-6					3.1E+00			3.1E+00
						2.0E-04	I				1.36E+09		0.15		Antimony Trioxide	1309-64-4							2.8E+04	2.8E+04
1.5E+00	I	4.3E-03	I	3.0E-04	I	1.5E-05	C				1.36E+09		1	0.03	Arsenic, Inorganic	7440-38-2	7.7E-01	5.5E+00	8.9E+02	6.8E-01	3.9E+00	3.3E+01	2.1E+03	3.5E+00
				3.5E-06	C	5.0E-05	I				1.36E+09		1		Arsine	7784-42-1					2.7E-02		7.1E+03	2.7E-02
													1		Asbestos (units in fibers)	1332-21-4								
				3.6E-01	O						1.36E+09		1	0.1	Asulam	3337-71-1					2.8E+03	1.2E+04		2.3E+03
2.3E-01	C			3.0E-03	A						1.36E+09		1	0.1	Atrazine	1912-24-9	3.0E+00	1.1E+01		2.4E+00	2.3E+01	9.9E+01		1.9E+01
8.8E-01	C	2.5E-04	C								1.36E+09		1	0.1	Auramine	492-80-8	7.9E-01	2.8E+00	1.5E+04	6.2E-01				
				4.0E-04	I						1.36E+09		1	0.1	Avermectin B1	65195-55-3					3.1E+00	1.3E+01		2.5E+00
				3.0E-03	A	1.0E-02	A				1.36E+09		1	0.1	Azinphos-methyl	86-50-0					2.3E+01	9.9E+01	1.4E+06	1.9E+01
1.1E-01	I	3.1E-05	I					V			1.36E+09	5.23E+05	1		Azobenzene	103-33-3	6.3E+00		4.7E+01	5.6E+00				
				1.0E+00	P	7.0E-06	P				1.36E+09		1	0.1	Azodicarbonamide	123-77-3					7.8E+03	3.3E+04	9.9E+02	8.6E+02
				2.0E-01	I	5.0E-04	H				1.36E+09		0.07		Barium	7440-39-3					1.6E+03		7.1E+04	1.5E+03
				5.0E-03	O			V			1.36E+09	3.07E+05	1		Benfluralin	1861-40-1					3.9E+01			3.9E+01
				5.0E-02	I						1.36E+09		1	0.1	Benomyl	17804-35-2					3.9E+02	1.6E+03		3.2E+02
				2.0E-01	I						1.36E+09		1	0.1	Bensulfuron-methyl	83055-99-6					1.6E+03	6.6E+03		1.3E+03
				3.0E-02	I						1.36E+09		1	0.1	Bentazon	25057-89-0					2.3E+02	9.9E+02		1.9E+02
4.0E-03	P			1.0E-01	I			V		1.16E+03	1.36E+09	2.25E+04	1		Benzaldehyde	100-52-7	1.7E+02			1.7E+02	7.8E+02			7.8E+02
5.5E-02	I	7.8E-06	I	4.0E-03	I	3.0E-02	I	V		1.82E+03	1.36E+09	3.54E+03	1		Benzene	71-43-2	1.3E+01		1.3E+00	1.2E+00	3.1E+01		1.1E+01	8.2E+00
1.0E-01	X			3.0E-04	X						1.36E+09		1	0.1	Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1	7.0E+00	2.5E+01		5.4E+00	2.3E+00	9.9E+00		1.9E+00
				1.0E-03	P			V		1.26E+03	1.36E+09	1.94E+04	1		Benzenethiol	108-98-5					7.8E+00			7.8E+00
2.3E+02	I	6.7E-02	I	3.0E-03	I				M		1.36E+09		1	0.1	Benzidine	92-87-5	6.7E-04	2.6E-03	2.1E+01	5.3E-04	2.3E+01	9.9E+01		1.9E+01
				4.0E+00	I						1.36E+09		1	0.1	Benzoic Acid	65-85-0					3.1E+04	1.3E+05		2.5E+04
1.3E+01	I							V		3.24E+02	1.36E+09	6.76E+04	1		Benzotrichloride	98-07-7	5.3E-02			5.3E-02				
				1.0E-01	P						1.36E+09		1	0.1	Benzyl Alcohol	100-51-6					7.8E+02	3.3E+03		6.3E+02
1.7E-01	I	4.9E-05	C	2.0E-03	P	1.0E-03	P	V		1.46E+03	1.36E+09	2.55E+04	1		Benzyl Chloride	100-44-7	4.1E+00		1.5E+00	1.1E+00	1.6E+01		2.7E+00	2.3E+00
		2.4E-03	I	2.0E-05	I						1.36E+09		0.007		Beryllium and compounds	7440-41-7			1.6E+03	1.6E+03	1.6E+01		2.8E+03	1.6E+01
				9.0E-03	P						1.36E+09		1	0.1	Bifenox	42576-02-3					7.0E+01	3.0E+02		5.7E+01
				1.5E-02	I						1.36E+09		1	0.1	Biphenthrin	82657-04-3					1.2E+02	4.9E+02		9.5E+01
8.0E-03	I			5.0E-01	I	4.0E-04	X	V			1.36E+09	1.14E+05	1		Biphenyl, 1,1'-	92-52-4	8.7E+01			8.7E+01	3.9E+03		4.8E+00	4.7E+00
				4.0E-02	I			V		1.02E+03	1.36E+09	3.50E+04	1		Bis(2-chloro-1-methylethyl) ether	108-60-1					3.1E+02			3.1E+02
				3.0E-03	P						1.36E+09		1	0.1	Bis(2-chloroethoxy)methane	111-91-1					2.3E+01	9.9E+01		1.9E+01
1.1E+00	I	3.3E-04	I					V		5.05E+03	1.36E+09	4.25E+04	1		Bis(2-chloroethyl)ether	111-44-4	6.3E-01		3.6E-01	2.3E-01				
2.2E+02	I	6.2E-02	I					V		4.22E+03	1.36E+09	1.88E+03	1		Bis(chloromethyl)ether	542-88-1	3.2E-03		8.5E-05	8.3E-05				
				5.0E-02	I						1.36E+09		1	0.1	Bisphenol A	80-05-7					3.9E+02	1.6E+03		3.2E+02
				2.0E-01	I	2.0E-02	H				1.36E+09		1		Boron And Borates Only	7440-42-8					1.6E+03		2.8E+06	1.6E+03
				2.0E+00	P	2.0E-02	P	V			1.36E+09		1		Boron Trichloride	10294-34-5					1.6E+04		2.8E+06	1.6E+04
				4.0E-02	C	1.3E-02	C	V			1.36E+09		1		Boron Trifluoride	7637-07-2					3.1E+02		1.8E+06	3.1E+02
7.0E-01	I	1.4E-04	C	4.0E-03	I						1.36E+09		1		Bromate	15541-45-4	9.9E-01		2.7E+04	9.9E-01	3.1E+01			3.1E+01
				1.0E-04	X	6.0E-05	X	V		2.38E+03	1.36E+09	5.92E+03	1		Bromo-2-chloroethane, 1-	107-04-0					7.8E-01		3.7E-02	3.5E-02
				3.0E-04	X			V		8.96E+02	1.36E+09	1.12E+04	1		Bromo-3-fluorobenzene, 1-	1073-06-9					2.3E+00			2.3E+00
				3.0E-04	X			V		3.23E+02	1.36E+09	1.14E+04	1		Bromo-4-fluorobenzene, 1-	460-00-4					2.3E+00			2.3E+00
				1.7E-03	C						1.36E+09		1	0.1	Bromoacetic acid	79-08-3					1.3E+01	5.6E+01		1.1E+01
				8.0E-03	I	6.0E-02	I	V		6.79E+02	1.36E+09	8.37E+03	1		Bromobenzene	108-86-1					6.3E+01		5.2E+01	2.9E+01
						4.0E-02	X	V		4.04E+03	1.36E+09	3.58E+03	1		Bromochloromethane	74-97-5							1.5E+01	1.5E+01
6.2E-02	I	3.7E-05	C	8.0E-03	P			V		9.32E+02	1.36E+09	3.97E+03	1		Bromodichloromethane	75-27-4	1.1E+01		3.0E-01	2.9E-01	6.3E+01			6.3E+01
7.9E-03	I	1.1E-06	I	2.0E-02	I			V		9.15E+02	1.36E+09	9.70E+03	1		Bromoform	75-25-2	8.8E+01		2.5E+01	1.9E+01	1.6E+02			1.6E+02

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information																Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
				1.4E-03	I	5.0E-03	I	V		3.59E+03	1.36E+09	1.40E+03	1		Bromomethane	74-83-9					1.1E+01		7.3E-01	6.8E-01
				5.0E-03	H			V			1.36E+09	1.24E+05	1		Bromophos	2104-96-3					3.9E+01			3.9E+01
		3.7E-06	C			1.0E-01	A	V		9.66E+02	1.36E+09	2.14E+03	1		Bromopropane, 1-	106-94-5			1.6E+00	1.6E+00			2.2E+01	2.2E+01
1.0E-01	O			1.5E-02	O						1.36E+09		1	0.1	Bromoxynil	1689-84-5	6.7E+00	2.4E+01		5.3E+00	1.2E+02	4.9E+02		9.5E+01
1.0E-01	O			1.5E-02	O			V			1.36E+09	4.74E+05	1		Bromoxynil Octanoate	1689-99-2	6.7E+00			6.7E+00	1.2E+02			1.2E+02
6.0E-01	C	3.0E-05	I			2.0E-03	I	V		6.67E+02	1.36E+09	8.66E+02	1		Butadiene, 1,3-	106-99-0	1.2E+00		8.1E-02	7.6E-02			1.8E-01	1.8E-01
				1.0E-01	I			V		7.64E+03	1.36E+09	3.00E+04	1		Butanol, N-	71-36-3					7.8E+02			7.8E+02
5.0E-04	I			4.0E-01	I	5.0E+00	I	V			1.36E+09	2.87E+04	1		Butyl Alcohol, t-	75-65-0	1.4E+03			1.4E+03	3.1E+03		1.5E+04	2.6E+03
				2.0E+00	P	3.0E+01	P	V		2.13E+04	1.36E+09	2.92E+04	1		Butyl alcohol, sec-	78-92-2					1.6E+04		9.1E+04	1.3E+04
				5.0E-02	I			V			1.36E+09	8.63E+04	1		Butylate	2008-41-5					3.9E+02			3.9E+02
2.0E-04	C	5.7E-08	C								1.36E+09		1	0.1	Butylated hydroxyanisole	25013-16-5	3.5E+03	1.2E+04	6.7E+07	2.7E+03				
3.6E-03	P			3.0E-01	P						1.36E+09		1	0.1	Butylated hydroxytoluene	128-37-0	1.9E+02	6.9E+02		1.5E+02	2.3E+03	9.9E+03		1.9E+03
				5.0E-02	P			V		1.08E+02	1.36E+09	8.14E+03	1		Butylbenzene, n-	104-51-8					3.9E+02			3.9E+02
				1.0E-01	X			V		1.45E+02	1.36E+09	7.35E+03	1		Butylbenzene, sec-	135-98-8					7.8E+02			7.8E+02
				1.0E-01	X			V		1.83E+02	1.36E+09	7.36E+03	1		Butylbenzene, tert-	98-06-6					7.8E+02			7.8E+02
				2.0E-02	A						1.36E+09		1	0.1	Cacodylic Acid	75-60-5					1.6E+02	6.6E+02		1.3E+02
		1.8E-03	I	1.0E-04	A	1.0E-05	A				1.36E+09		0.025	0.001	Cadmium (Diet)	7440-43-9			2.1E+03	2.1E+03	7.8E-01	8.2E+00	1.4E+03	7.1E-01
		1.8E-03	I	1.0E-04	A	1.0E-05	A						0.05	0.001	Cadmium (Water)	7440-43-9								
				5.0E-01	I	2.2E-03	C				1.36E+09		1	0.1	Caprolactam	105-60-2					3.9E+03	1.6E+04	3.1E+05	3.1E+03
1.5E-01	C	4.3E-05	C	2.0E-03	I						1.36E+09		1	0.1	Captafol	2425-06-1	4.6E+00	1.6E+01	8.9E+04	3.6E+00	1.6E+01	6.6E+01		1.3E+01
2.3E-03	C	6.6E-07	C	1.3E-01	I						1.36E+09		1	0.1	Captan	133-06-2	3.0E+02	1.1E+03	5.8E+06	2.4E+02	1.0E+03	4.3E+03		8.2E+02
				1.0E-01	I						1.36E+09		1	0.1	Carbaryl	63-25-2					7.8E+02	3.3E+03		6.3E+02
				5.0E-03	I						1.36E+09		1	0.1	Carbofuran	1563-66-2					3.9E+01	1.6E+02		3.2E+01
				1.0E-01	I	7.0E-01	I	V		7.38E+02	1.36E+09	1.17E+03	1		Carbon Disulfide	75-15-0					7.8E+02		8.5E+01	7.7E+01
7.0E-02	I	6.0E-06	I	4.0E-03	I	1.0E-01	I	V		4.58E+02	1.36E+09	1.49E+03	1		Carbon Tetrachloride	56-23-5	9.9E+00		7.0E-01	6.5E-01	3.1E+01		1.6E+01	1.0E+01
						1.0E-01	P	V		5.89E+03	1.36E+09	6.46E+02	1		Carbonyl Sulfide	463-58-1							6.7E+00	6.7E+00
				1.0E-02	I						1.36E+09		1	0.1	Carbosulfan	55285-14-8					7.8E+01	3.3E+02		6.3E+01
				1.0E-01	I						1.36E+09		1	0.1	Carboxin	5234-68-4					7.8E+02	3.3E+03		6.3E+02
						9.0E-04	I				1.36E+09		1		Ceric oxide	1306-38-3							1.3E+05	1.3E+05
				1.0E-01	I			V			1.36E+09	1.45E+05	1		Chloral Hydrate	302-17-0					7.8E+02			7.8E+02
				1.5E-02	I						1.36E+09		1	0.1	Chloramben	133-90-4					1.2E+02	4.9E+02		9.5E+01
											1.36E+09		1	0.1	Chloramines, Organic	E701235								
4.0E-01	H										1.36E+09		1	0.1	Chloranil	118-75-2	1.7E+00	6.1E+00		1.3E+00				
				5.0E-04	G			V			1.36E+09	1.49E+06	1	0.04	Chlordane (alpha)	5103-71-9					3.9E+00	4.1E+01		3.6E+00
				5.0E-04	G			V			1.36E+09	1.49E+06	1	0.04	Chlordane (gamma)	5103-74-2					3.9E+00	4.1E+01		3.6E+00
3.5E-01	I	1.0E-04	I	5.0E-04	I	7.0E-04	I	V			1.36E+09	1.53E+06	1	0.04	Chlordane (technical mixture)	12789-03-6	2.0E+00	1.8E+01	4.3E+01	1.7E+00	3.9E+00	4.1E+01	1.1E+02	3.5E+00
1.0E+01	I	4.6E-03	C	3.0E-04	I						1.36E+09		1	0.1	Chlordecone (Kepone)	143-50-0	7.0E-02	2.5E-01	8.3E+02	5.4E-02	2.3E+00	9.9E+00		1.9E+00
				7.0E-04	A						1.36E+09		1	0.1	Chlorfenvinphos	470-90-6					5.5E+00	2.3E+01		4.4E+00
				9.0E-02	O						1.36E+09		1	0.1	Chlorimuron, Ethyl-	90982-32-4					7.0E+02	3.0E+03		5.7E+02
				1.0E-01	I	1.5E-04	A	V		2.78E+03	1.36E+09	1.22E+03	1		Chlorine	7782-50-5					7.8E+02		1.8E-02	1.8E-02
				3.0E-02	I	2.0E-04	I	V			1.36E+09		1		Chlorine Dioxide	10049-04-4					2.3E+02		2.8E+04	2.3E+02
				3.0E-02	I						1.36E+09		1		Chlorite (Sodium Salt)	7758-19-2					2.3E+02			2.3E+02
						5.0E+01	I	V		1.15E+03	1.36E+09	1.03E+03	1		Chloro-1,1-difluoroethane, 1-	75-68-3							5.4E+03	5.4E+03
		3.0E-04	I	2.0E-02	H	2.0E-02	I	V		7.86E+02	1.36E+09	1.08E+03	1		Chloro-1,3-butadiene, 2- (Chloroprene)	126-99-8			1.0E-02	1.0E-02	1.6E+02		2.2E+00	2.2E+00
4.6E-01	H										1.36E+09		1	0.1	Chloro-2-methylaniline HCl, 4-	3165-93-3	1.5E+00	5.4E+00		1.2E+00				
1.0E-01	P	7.7E-05	C	3.0E-03	X						1.36E+09		1	0.1	Chloro-2-methylaniline, 4-	95-69-2	7.0E+00	2.5E+01	5.0E+04	5.4E+00	2.3E+01	9.9E+01		1.9E+01
2.7E-01	X							V		1.18E+04	1.36E+09	1.62E+04	1		Chloroacetaldehyde, 2-	107-20-0	2.6E+00			2.6E+00				
				3.5E-03	C						1.36E+09		1	0.1	Chloroacetic Acid	79-11-8					2.7E+01	1.2E+02		2.2E+01
						3.0E-05	I				1.36E+09		1	0.1	Chloroacetophenone, 2-	532-27-4							4.3E+03	4.3E+03
2.0E-01	P			5.0E-04	P						1.36E+09		1	0.1	Chloroaniline, p-	106-47-8	3.5E+00	1.2E+01		2.7E+00	3.9E+00	1.6E+01		3.2E+00
				2.0E-02	I	5.0E-02	P	V		7.61E+02	1.36E+09	6.45E+03	1		Chlorobenzene	108-90-7					1.6E+02		3.4E+01	2.8E+01
				1.0E-01	X						1.36E+09		1	0.1	Chlorobenzene sulfonic acid, p-	98-66-8					7.8E+02	3.3E+03		6.3E+02
1.1E-01	C	3.1E-05	C	2.0E-02	I						1.36E+09		1	0.1	Chlorobenzilate	510-15-6	6.3E+00	2.2E+01	1.2E+05	4.9E+00	1.6E+02	6.6E+02		1.3E+02
				3.0E-02	X						1.36E+09		1	0.1	Chlorobenzoic Acid, p-	74-11-3					2.3E+02	9.9E+02		1.9E+02
		8.6E-06	C	3.0E-03	P	3.0E-01	P	V		2.90E+02	1.36E+09	6.76E+03	1		Chlorobenzotrifluoride, 4-	98-56-6			2.2E+00	2.2E+00	2.3E+01		2.1E+02	2.1E+01
				4.0E-02	P			V		7.28E+02	1.36E+09	1.76E+03	1		Chlorobutane, 1-	109-69-3					3.1E+02			3.1E+02
						5.0E+01	I	V		1.68E+03	1.36E+09	9.38E+02	1		Chlorodifluoromethane	75-45-6							4.9E+03	4.9E+03
				2.0E-02	P			V		1.11E+05	1.36E+09	7.81E+04	1		Chloroethanol, 2-	107-07-3					1.6E+02			1.6E+02
3.1E-02	C	2.3E-05	I	1.0E-02	I	9.8E-02	A	V		2.54E+03	1.36E+09	2.63E+03	1		Chloroform	67-66-3	2.2E+01		3.2E-01	3.2E-01	7.8E+01		2.7E+01	2.0E+01
						9.0E-02	I	V		1.32E+03	1.36E+09	1.18E+03	1		Chloromethane	74-87-3							1.1E+01	1.1E+01
2.4E+00	C	6.9E-04	C					V		9.32E+03	1.36E+09	5.33E+03	1		Chloromethyl Methyl Ether	107-30-2	2.9E-01		2.2E-02	2.0E-02				
3.0E-01	P			3.0E-03	P	1.0E-05	X				1.36E+09		1	0.1	Chloronitrobenzene, o-	88-73-3	2.3E+00	8.2E+00		1.8E+00	2.3E+01	9.9E+01	1.4E+03	1.9E+01
6.0E-02	P			7.0E-04	P	2.0E-03	P				1.36E+09		1	0.1	Chloronitrobenzene, p-	100-00-5	1.2E+01	4.1E+01		9.0E+00	5.5E+00	2.3E+01	2.8E+05	4.4E+00
				5.0E-03	I			V		2.74E+04	1.36E+09	1.39E+05	1		Chlorophenol, 2-	95-57-8					3.9E+01			3.9E+01
						4.0E-04	C	V		6.17E+02	1.36E+09	4.68E+03	1		Chloropicrin	76-06-2							2.0E-01	2.0E-01
1.7E-02	C			1.5E-02	I						1.36E+09		1	0.1	Chlorothalonil	1897-45-6	4.1E+01	1.5E+02		3.2E+01	1.2E+02	4.9E+02		9.5E+01
				2.0E-02	I			V		9.07E+02	1.36E+09	8.12E+03	1		Chlorotoluene, o-	95-49-8					1.6E+02			1.6E+02
				2.0E-02	X			V		2.53E+02	1.36E+09	7.29E+03	1		Chlorotoluene, p-	106-43-4					1.6E+02			1.6E+02
2.4E+02	C	6.9E-02	C								1.36E+09		1	0.1	Chlorozotocin	54749-90-5	2.9E-03	1.0E-02	5.5E+01	2.3E-03				
				5.0E-03	O						1.36E+09		1	0.1	Chlorpropham	101-21-3					3.9E+01	1.6E+02		3.2E+01
				1.0E-03	A						1.36E+09		1	0.1	Chlorpyrifos	2921-88-2					7.8E+00	3.3E+01		6.3E+00
				1.0E-02	H						1.36E+09		1	0.1	Chlorpyrifos Methyl	5598-13-0					7.8E+01	3.3E+02		6.3E+01
				5.0E-02	O						1.36E+09		1	0.1	Chlorsulfuron	64902-72-3					3.9E+02	1.6E+03		3.2E+02
				1.0E-02	I						1.36E+09		1	0.1	Chlorthal-dimethyl	1861-32-1					7.8E+01	3.3E+02		6.3E+01
				8.0E-04	H						1.36E+09		1	0.1	Chlorthiophos	60238-56-4					6.3E+00	2.6E+01		5.1E+00
						6.0E-05	C				1.36E+09		1		Chromium(III) (Soluble Compounds)	16065-83-1							8.5E+03	8.5E+03
				1.5E+00	I						1.36E+09		0.013		Chromium(III), Insoluble Salts	16065-83-1					1.2E+04			1.2E+04
5.0E-01	C	8.4E-02	G	3.0E-03	I	1.0E-04	I		M		1.36E+09		0.025		Chromium(VI)	18540-29-9	3.1E-01		1.6E+01	3.0E-01	2.3E+01		1.4E+04	2.3E+01
											1.36E+09		0.013		Chromium, Total	7440-47-3								
				1.3E-02	I						1.36E+09		1	0.1	Clofentezine	74115-24-5					1.0E+02	4.3E+02		8.2E+01
		9.0E-03	P	3.0E-04	P	6.0E-06	P				1.36E+09		1		Cobalt	7440-48-4			4.2E+02	4.2E+02	2.3E+00		8.5E+02	2.3E+00
		6.2E-04	I					V	M				1		Coke Oven Emissions	E649830								
				4.0E-02	H						1.36E+09		1		Copper	7440-50-8					3.1E+02			3.1E+02

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information														Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
				5.0E-02	I	6.0E-01	C				1.36E+09		1	0.1	Cresol, m-	108-39-4					3.9E+02	1.6E+03	8.5E+07	3.2E+02
				5.0E-02	I	6.0E-01	C				1.36E+09		1	0.1	Cresol, o-	95-48-7					3.9E+02	1.6E+03	8.5E+07	3.2E+02
				2.0E-02	P	6.0E-01	C				1.36E+09		1	0.1	Cresol, p-	106-44-5					1.6E+02	6.6E+02	8.5E+07	1.3E+02
				1.0E-01	A						1.36E+09		1	0.1	Cresol, p-chloro-m-	59-50-7					7.8E+02	3.3E+03		6.3E+02
				1.0E-01	A	6.0E-01	C				1.36E+09		1	0.1	Cresols	1319-77-3					7.8E+02	3.3E+03	8.5E+07	6.3E+02
1.9E+00	H			1.0E-03	P			V		1.66E+04	1.36E+09	1.89E+04	1		Crotonaldehyde, trans-	123-73-9	3.7E-01			3.7E-01	7.8E+00			7.8E+00
				1.0E-01	I	4.0E-01	I	V		2.68E+02	1.36E+09	6.21E+03	1		Cumene	98-82-8					7.8E+02		2.6E+02	1.9E+02
2.2E-01	C	6.3E-05	C								1.36E+09		1	0.1	Cupferron	135-20-6	3.2E+00	1.1E+01	6.1E+04	2.5E+00				
8.4E-01	H			2.0E-03	H						1.36E+09		1	0.1	Cyanazine	21725-46-2	8.3E-01	2.9E+00		6.5E-01	1.6E+01	6.6E+01		1.3E+01
															Cyanides									
				1.0E-03	I	9.0E-03	C				1.36E+09		1		~Calcium Cyanide	592-01-8					7.8E+00		1.3E+06	7.8E+00
				5.0E-03	I						1.36E+09		1		~Copper Cyanide	544-92-3					3.9E+01			3.9E+01
				6.0E-04	I	8.0E-04	G	V		9.54E+05	1.36E+09	5.33E+04	1		~Cyanide (CN-)	57-12-5					4.7E+00		4.4E+00	2.3E+00
				1.0E-03	I			V			1.36E+09		1		~Cyanogen	460-19-5					7.8E+00			7.8E+00
				9.0E-02	I			V			1.36E+09		1		~Cyanogen Bromide	506-68-3					7.0E+02			7.0E+02
				5.0E-02	I			V			1.36E+09		1		~Cyanogen Chloride	506-77-4					3.9E+02			3.9E+02
				6.0E-04	I	8.0E-04	I	V		1.00E+07	1.36E+09	5.22E+04	1		~Hydrogen Cyanide	74-90-8					4.7E+00		4.4E+00	2.3E+00
				2.0E-03	I	9.0E-03	C				1.36E+09		1		~Potassium Cyanide	151-50-8					1.6E+01		1.3E+06	1.6E+01
				5.0E-03	I						1.36E+09		0.04		~Potassium Silver Cyanide	506-61-6					3.9E+01			3.9E+01
				1.0E-01	I						1.36E+09		0.04		~Silver Cyanide	506-64-9					7.8E+02			7.8E+02
				1.0E-03	I	9.0E-03	C				1.36E+09		1		~Sodium Cyanide	143-33-9					7.8E+00		1.3E+06	7.8E+00
				2.0E-04	P						1.36E+09		1		~Thiocyanates	E1790665					1.6E+00			1.6E+00
				2.0E-04	X			V			1.36E+09		1		~Thiocyanic Acid	463-56-9					1.6E+00			1.6E+00
				5.0E-02	I						1.36E+09		1		~Zinc Cyanide	557-21-1					3.9E+02			3.9E+02
						6.0E+00	I	V		1.17E+02	1.36E+09	1.04E+03	1		Cyclohexane	110-82-7							6.5E+02	6.5E+02
2.0E-02	X			2.0E-02	X						1.36E+09		1	0.1	Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	3.5E+01	1.2E+02		2.7E+01	1.6E+02	6.6E+02		1.3E+02
				5.0E+00	I	7.0E-01	P	V		5.11E+03	1.36E+09	4.17E+04	1		Cyclohexanone	108-94-1					3.9E+04		3.0E+03	2.8E+03
				5.0E-03	P	1.0E+00	X	V		2.83E+02	1.36E+09	1.46E+03	1		Cyclohexene	110-83-8					3.9E+01		1.5E+02	3.1E+01
				2.0E-01	I			V		2.93E+05	1.36E+09	7.46E+04	1		Cyclohexylamine	108-91-8					1.6E+03			1.6E+03
				2.5E-02	I						1.36E+09		1	0.1	Cyfluthrin	68359-37-5					2.0E+02	8.2E+02		1.6E+02
				5.0E-01	O						1.36E+09		1	0.1	Cyromazine	66215-27-8					3.9E+03	1.6E+04		3.2E+03
				3.0E-02	I						1.36E+09		1	0.1	Dalapon	75-99-0					2.3E+02	9.9E+02		1.9E+02
1.8E-02	C	5.1E-06	C	1.5E-01	I						1.36E+09		1	0.1	Daminozide	1596-84-5	3.9E+01	1.4E+02	7.5E+05	3.0E+01	1.2E+03	4.9E+03		9.5E+02
7.0E-04	I			7.0E-03	I						1.36E+09		1	0.1	Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	9.9E+02	3.5E+03		7.8E+02	5.5E+01	2.3E+02		4.4E+01
				4.0E-05	I						1.36E+09		1	0.1	Demeton	8065-48-3					3.1E-01	1.3E+00		2.5E-01
1.2E-03	I			6.0E-01	I						1.36E+09		1	0.1	Di(2-ethylhexyl)adipate	103-23-1	5.8E+02	2.1E+03		4.5E+02	4.7E+03	2.0E+04		3.8E+03
6.1E-02	H										1.36E+09		1	0.1	Diallate	2303-16-4	1.1E+01	4.1E+01		8.9E+00				
				7.0E-04	A						1.36E+09		1	0.1	Diazinon	333-41-5					5.5E+00	2.3E+01		4.4E+00
8.0E-01	P	6.0E-03	P	2.0E-04	P	2.0E-04	I	V	M	9.79E+02	1.36E+09	3.20E+04	1		Dibromo-3-chloropropane, 1,2-	96-12-8	1.9E-01		5.4E-03	5.3E-03	1.6E+00		6.7E-01	4.7E-01
2.5E-01	C			3.0E-04	C						1.36E+09		1	0.1	Dibromoacetic acid	631-64-1	2.8E+00	9.9E+00		2.2E+00	2.3E+00	9.9E+00		1.9E+00
				4.0E-04	X			V		1.59E+02	1.36E+09	1.93E+04	1		Dibromobenzene, 1,3-	108-36-1					3.1E+00			3.1E+00
				1.0E-02	I			V			1.36E+09	2.20E+04	1		Dibromobenzene, 1,4-	106-37-6					7.8E+01			7.8E+01
8.4E-02	I			2.0E-02	I			V		8.02E+02	1.36E+09	7.95E+03	1		Dibromochloromethane	124-48-1	8.3E+00			8.3E+00	1.6E+02			1.6E+02
2.0E+00	I	6.0E-04	I	9.0E-03	I	9.0E-03	I	V		1.34E+03	1.36E+09	8.64E+03	1		Dibromoethane, 1,2-	106-93-4	3.5E-01		4.0E-02	3.6E-02	7.0E+01		8.1E+00	7.3E+00
						4.0E-03	X	V		2.82E+03	1.36E+09	5.64E+03	1		Dibromomethane (Methylene Bromide)	74-95-3							2.4E+00	2.4E+00
				3.0E-04	P						1.36E+09		1	0.1	Dibutyltin Compounds	E1790661					2.3E+00	9.9E+00		1.9E+00
				3.0E-02	I						1.36E+09		1	0.1	Dicamba	1918-00-9					2.3E+02	9.9E+02		1.9E+02
											1.36E+09		1	0.1	Dichloramine	3400-09-7								
		4.2E-03	P					V		5.54E+02	1.36E+09	3.21E+03	1		Dichloro-2-butene, 1,4-	764-41-0			2.1E-03	2.1E-03				
		4.2E-03	P					V		5.19E+02	1.36E+09	1.11E+04	1		Dichloro-2-butene, cis-1,4-	1476-11-5			7.4E-03	7.4E-03				
		4.2E-03	P					V		7.60E+02	1.36E+09	1.11E+04	1		Dichloro-2-butene, trans-1,4-	110-57-6			7.4E-03	7.4E-03				
5.0E-02	I			4.0E-03	I						1.36E+09		1	0.1	Dichloroacetic Acid	79-43-6	1.4E+01	4.9E+01		1.1E+01	3.1E+01	1.3E+02		2.5E+01
				9.0E-02	I	2.0E-01	H	V		3.76E+02	1.36E+09	1.17E+04	1		Dichlorobenzene, 1,2-	95-50-1					7.0E+02		2.4E+02	1.8E+02
5.4E-03	C	1.1E-05	C	7.0E-02	A	8.0E-01	I	V			1.36E+09	1.04E+04	1		Dichlorobenzene, 1,4-	106-46-7	1.3E+02		2.7E+00	2.6E+00	5.5E+02		8.7E+02	3.4E+02
4.5E-01	I	3.4E-04	C								1.36E+09		1	0.1	Dichlorobenzidine, 3,3'-	91-94-1	1.5E+00	5.5E+00	1.1E+04	1.2E+00				
				9.0E-03	X						1.36E+09		1	0.1	Dichlorobenzophenone, 4,4'-	90-98-2					7.0E+01	3.0E+02		5.7E+01
				2.0E-01	I	1.0E-01	X	V		8.45E+02	1.36E+09	8.41E+02	1		Dichlorodifluoromethane	75-71-8					1.6E+03		8.8E+00	8.7E+00
2.4E-01	I	6.9E-05	C	5.0E-04	A						1.36E+09		1	0.1	Dichlorodiphenyldichloroethane, p,p`- (DDD)	72-54-8	2.9E+00	1.0E+01	5.5E+04	2.3E+00	3.9E+00	1.6E+01		3.2E+00
3.4E-01	I	9.7E-05	C	5.0E-04	A			V			1.36E+09	2.10E+06	1		Dichlorodiphenyldichloroethylene, p,p`- (DDE)	72-55-9	2.0E+00		6.1E+01	2.0E+00	3.9E+00			3.9E+00
3.4E-01	I	9.7E-05	I	5.0E-04	I						1.36E+09		1	0.03	Dichlorodiphenyltrichloroethane, p,p`- (DDT)	50-29-3	2.0E+00	2.4E+01	3.9E+04	1.9E+00	3.9E+00	5.5E+01		3.7E+00
5.7E-03	C	1.6E-06	C	2.0E-01	P			V		1.69E+03	1.36E+09	2.08E+03	1		Dichloroethane, 1,1-	75-34-3	1.2E+02		3.7E+00	3.6E+00	1.6E+03			1.6E+03
9.1E-02	I	2.6E-05	I	6.0E-03	X	7.0E-03	P	V		2.98E+03	1.36E+09	4.57E+03	1		Dichloroethane, 1,2-	107-06-2	7.6E+00		4.9E-01	4.6E-01	4.7E+01		3.3E+00	3.1E+00
				5.0E-02	I	2.0E-01	I	V		1.19E+03	1.36E+09	1.16E+03	1		Dichloroethylene, 1,1-	75-35-4					3.9E+02		2.4E+01	2.3E+01
				2.0E-03	I	4.0E-02	X	V		2.37E+03	1.36E+09	2.50E+03	1		Dichloroethylene, cis-1,2-	156-59-2					1.6E+01		1.0E+01	6.3E+00
				2.0E-02	I	4.0E-02	X	V		1.85E+03	1.36E+09	1.75E+03	1		Dichloroethylene, trans-1,2-	156-60-5					1.6E+02		7.3E+00	7.0E+00
				3.0E-03	I						1.36E+09		1	0.1	Dichlorophenol, 2,4-	120-83-2					2.3E+01	9.9E+01		1.9E+01
				1.0E-02	I						1.36E+09		1	0.05	Dichlorophenoxy Acetic Acid, 2,4-	94-75-7					7.8E+01	6.6E+02		7.0E+01
3.7E-02	P	3.7E-06	P	4.0E-02	P	4.0E-03	I	V		1.36E+03	1.36E+09	3.79E+03	1		Dichloropropane, 1,2-	78-87-5	1.9E+01		2.9E+00	2.5E+00	3.1E+02		1.6E+00	1.6E+00
				2.0E-02	P			V		1.49E+03	1.36E+09	6.76E+03	1		Dichloropropane, 1,3-	142-28-9					1.6E+02			1.6E+02
				3.0E-03	I						1.36E+09		1	0.1	Dichloropropanol, 2,3-	616-23-9					2.3E+01	9.9E+01		1.9E+01
1.0E-01	I	4.0E-06	I	3.0E-02	I	2.0E-02	I	V		1.57E+03	1.36E+09	3.55E+03	1		Dichloropropene, 1,3-	542-75-6	7.0E+00		2.5E+00	1.8E+00	2.3E+02		7.4E+00	7.2E+00
2.9E-01	I	8.3E-05	C	5.0E-04	I	5.0E-04	I				1.36E+09		1	0.1	Dichlorvos	62-73-7	2.4E+00	8.5E+00	4.6E+04	1.9E+00	3.9E+00	1.6E+01	7.1E+04	3.2E+00
				3.0E-05	O						1.36E+09		1	0.1	Dicrotophos	141-66-2					2.3E-01	9.9E-01		1.9E-01
				8.0E-02	P	3.0E-04	X	V		2.56E+02	1.36E+09	4.11E+03	1		Dicyclopentadiene	77-73-6					6.3E+02		1.3E-01	1.3E-01
1.6E+01	I	4.6E-03	I	5.0E-05	I						1.36E+09		1	0.1	Dieldrin	60-57-1	4.3E-02	1.5E-01	8.3E+02	3.4E-02	3.9E-01	1.6E+00		3.2E-01
		3.0E-04	C			5.0E-03	I						1	0.1	Diesel Engine Exhaust	E17136615								
				2.0E-03	P	2.0E-04	P				1.36E+09		1	0.1	Diethanolamine	111-42-2					1.6E+01	6.6E+01	2.8E+04	1.3E+01
				3.0E-02	P	1.0E-04	P				1.36E+09		1	0.1	Diethylene Glycol Monobutyl Ether	112-34-5					2.3E+02	9.9E+02	1.4E+04	1.9E+02
				6.0E-02	P	3.0E-04	P				1.36E+09		1	0.1	Diethylene Glycol Monoethyl Ether	111-90-0					4.7E+02	2.0E+03	4.3E+04	3.8E+02
				1.0E-03	P			V		1.12E+05	1.36E+09	1.39E+05	1		Diethylformamide	617-84-5					7.8E+00			7.8E+00
3.5E+02	C	1.0E-01	C								1.36E+09		1	0.1	Diethylstilbestrol	56-53-1	2.0E-03	7.1E-03	3.8E+01	1.6E-03				
				8.3E-02	O						1.36E+09		1	0.1	Difenzoquat	43222-48-6					6.5E+02	2.7E+03		5.2E+02
				2.0E-02	I						1.36E+09		1	0.1	Diflubenzuron	35367-38-5					1.6E+02	6.6E+02		1.3E+02

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information															Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
						4.0E+01	I	V		1.43E+03	1.36E+09	1.15E+03	1		Difluoroethane, 1,1-	75-37-6							4.8E+03	4.8E+03
						3.0E+01	X	V		6.91E+02	1.36E+09	7.58E+02	1		Difluoropropane, 2,2-	420-45-1							2.4E+03	2.4E+03
4.4E-02	C	1.3E-05	C					V			1.36E+09	1.23E+05	1		Dihydrosafrole	94-58-6	1.6E+01		2.7E+01	9.9E+00				
						7.0E-01	P	V		2.26E+03	1.36E+09	3.06E+03	1		Diisopropyl Ether	108-20-3							2.2E+02	2.2E+02
				8.0E-02	I			V		5.30E+02	1.36E+09	3.81E+04	1		Diisopropyl Methylphosphonate	1445-75-6					6.3E+02			6.3E+02
				2.2E-02	O						1.36E+09		1	0.1	Dimethipin	55290-64-7					1.7E+02	7.2E+02		1.4E+02
				2.2E-03	O						1.36E+09		1	0.1	Dimethoate	60-51-5					1.7E+01	7.3E+01		1.4E+01
1.6E+00	P	1.4E-01	C								1.36E+09		1	0.1	Dimethoxybenzidine, 3,3'-	119-90-4	4.3E-01	1.5E+00	2.7E+01	3.3E-01				
1.7E-03	P			6.0E-02	P						1.36E+09		1	0.1	Dimethyl methylphosphonate	756-79-6	4.1E+02	1.5E+03		3.2E+02	4.7E+02	2.0E+03		3.8E+02
4.6E+00	C	1.3E-03	C								1.36E+09		1	0.1	Dimethylamino azobenzene [p-]	60-11-7	1.5E-01	5.4E-01	2.9E+03	1.2E-01				
5.8E-01	H										1.36E+09		1	0.1	Dimethylaniline HCl, 2,4-	21436-96-4	1.2E+00	4.3E+00		9.4E-01				
2.0E-01	P			2.0E-03	X						1.36E+09		1	0.1	Dimethylaniline, 2,4-	95-68-1	3.5E+00	1.2E+01		2.7E+00	1.6E+01	6.6E+01		1.3E+01
2.7E-02	P			2.0E-03	I			V		8.30E+02	1.36E+09	3.13E+04	1		Dimethylaniline, N,N-	121-69-7	2.6E+01			2.6E+01	1.6E+01			1.6E+01
1.1E+01	P										1.36E+09		1	0.1	Dimethylbenzidine, 3,3'-	119-93-7	6.3E-02	2.2E-01		4.9E-02				
				1.0E-01	P	3.0E-02	I	V		1.06E+05	1.36E+09	1.28E+05	1		Dimethylformamide	68-12-2					7.8E+02		4.0E+02	2.6E+02
				1.0E-04	X	2.0E-06	X	V		1.72E+05	1.36E+09	2.77E+04	1		Dimethylhydrazine, 1,1-	57-14-7					7.8E-01		5.8E-03	5.7E-03
5.5E+02	C	1.6E-01	C					V		1.89E+05	1.36E+09	1.68E+05	1		Dimethylhydrazine, 1,2-	540-73-8	1.3E-03		2.9E-03	8.8E-04				
				2.0E-02	I						1.36E+09		1	0.1	Dimethylphenol, 2,4-	105-67-9					1.6E+02	6.6E+02		1.3E+02
				6.0E-04	I						1.36E+09		1	0.1	Dimethylphenol, 2,6-	576-26-1					4.7E+00	2.0E+01		3.8E+00
				1.0E-03	I						1.36E+09		1	0.1	Dimethylphenol, 3,4-	95-65-8					7.8E+00	3.3E+01		6.3E+00
4.5E-02	C	1.3E-05	C					V		4.73E+02	1.36E+09	5.48E+03	1		Dimethylvinylchloride	513-37-1	1.5E+01		1.2E+00	1.1E+00				
				8.0E-05	X						1.36E+09		1	0.1	Dinitro-o-cresol, 4,6-	534-52-1					6.3E-01	2.6E+00		5.1E-01
				2.0E-03	I						1.36E+09		1	0.1	Dinitro-o-cyclohexyl Phenol, 4,6-	131-89-5					1.6E+01	6.6E+01		1.3E+01
				4.0E-04	X	2.0E-03	X				1.36E+09		1	0.1	Dinitroaniline, 3,5-	618-87-1					3.1E+00	1.3E+01	2.8E+05	2.5E+00
				1.0E-04	P						1.36E+09		1	0.1	Dinitrobenzene, 1,2-	528-29-0					7.8E-01	3.3E+00		6.3E-01
				1.0E-04	I						1.36E+09		1	0.1	Dinitrobenzene, 1,3-	99-65-0					7.8E-01	3.3E+00		6.3E-01
				1.0E-04	P						1.36E+09		1	0.1	Dinitrobenzene, 1,4-	100-25-4					7.8E-01	3.3E+00		6.3E-01
				2.0E-03	I						1.36E+09		1	0.1	Dinitrophenol, 2,4-	51-28-5					1.6E+01	6.6E+01		1.3E+01
6.8E-01	I										1.36E+09		1	0.1	Dinitrotoluene Mixture, 2,4/2,6-	E1615210	1.0E+00	3.6E+00		8.0E-01				
3.1E-01	C	8.9E-05	C	2.0E-03	I						1.36E+09		1	0.102	Dinitrotoluene, 2,4-	121-14-2	2.2E+00	7.8E+00	4.3E+04	1.7E+00	1.6E+01	6.5E+01		1.3E+01
1.5E+00	P			3.0E-04	X						1.36E+09		1	0.099	Dinitrotoluene, 2,6-	606-20-2	4.6E-01	1.7E+00		3.6E-01	2.3E+00	1.0E+01		1.9E+00
				1.0E-04	X						1.36E+09		1	0.006	Dinitrotoluene, 2-Amino-4,6-	35572-78-2					7.8E-01	5.5E+01		7.7E-01
				1.0E-04	X						1.36E+09		1	0.009	Dinitrotoluene, 4-Amino-2,6-	19406-51-0					7.8E-01	3.7E+01		7.7E-01
4.5E-01	X			9.0E-04	X						1.36E+09		1	0.1	Dinitrotoluene, Technical grade	25321-14-6	1.5E+00	5.5E+00		1.2E+00	7.0E+00	3.0E+01		5.7E+00
				1.0E-03	I						1.36E+09		1	0.1	Dinoseb	88-85-7					7.8E+00	3.3E+01		6.3E+00
1.0E-01	I	5.0E-06	I	3.0E-02	I	3.0E-02	I	V		1.16E+05	1.36E+09	3.96E+04	1		Dioxane, 1,4-	123-91-1	7.0E+00		2.2E+01	5.3E+00	2.3E+02		1.2E+02	8.1E+01
															Dioxins									
6.2E+03	I	1.3E+00	I								1.36E+09		1	0.03	~Hexachlorodibenzo-p-dioxin, Mixture	34465-46-8	1.1E-04	1.3E-03	2.9E+00	1.0E-04				
1.3E+05	C	3.8E+01	C	7.0E-10	I	4.0E-08	C	V			1.36E+09	1.96E+06	1	0.03	~TCDD, 2,3,7,8-	1746-01-6	5.3E-06	6.3E-05	1.4E-04	4.8E-06	5.5E-06	7.7E-05	8.2E-03	5.1E-06
				3.0E-02	I						1.36E+09		1	0.1	Diphenamid	957-51-7					2.3E+02	9.9E+02		1.9E+02
						4.0E-04	X	V			1.36E+09	8.06E+04	1		Diphenyl Ether	101-84-8							3.4E+00	3.4E+00
				8.0E-04	X						1.36E+09		1	0.1	Diphenyl Sulfone	127-63-9					6.3E+00	2.6E+01		5.1E+00
				1.0E-01	O						1.36E+09		1	0.1	Diphenylamine	122-39-4					7.8E+02	3.3E+03		6.3E+02
8.0E-01	I	2.2E-04	I								1.36E+09		1	0.1	Diphenylhydrazine, 1,2-	122-66-7	8.7E-01	3.1E+00	1.7E+04	6.8E-01				
				2.2E-03	I						1.36E+09		1	0.1	Diquat	2764-72-9					1.7E+01	7.3E+01		1.4E+01
7.4E+00	C	2.1E-03	C								1.36E+09		1	0.1	Direct Black 38	1937-37-7	9.4E-02	3.3E-01	1.8E+03	7.3E-02				
7.4E+00	C	2.1E-03	C								1.36E+09		1	0.1	Direct Blue 6	2602-46-2	9.4E-02	3.3E-01	1.8E+03	7.3E-02				
6.7E+00	C	1.9E-03	C								1.36E+09		1	0.1	Direct Brown 95	16071-86-6	1.0E-01	3.7E-01	2.0E+03	8.1E-02				
				4.0E-05	I						1.36E+09		1	0.1	Disulfoton	298-04-4					3.1E-01	1.3E+00		2.5E-01
				1.0E-02	I			V			1.36E+09	4.54E+04	1		Dithiane, 1,4-	505-29-3					7.8E+01			7.8E+01
				2.0E-03	I						1.36E+09		1	0.1	Diuron	330-54-1					1.6E+01	6.6E+01		1.3E+01
				2.0E-02	O						1.36E+09		1	0.1	Dodine	2439-10-3					1.6E+02	6.6E+02		1.3E+02
				5.0E-02	O			V			1.36E+09	1.17E+05	1		EPTC	759-94-4					3.9E+02			3.9E+02
				6.0E-03	I			V			1.36E+09	4.10E+05	1		Endosulfan	115-29-7					4.7E+01			4.7E+01
				6.0E-03	P						1.36E+09		1	0.1	Endosulfan Sulfate	1031-07-8					4.7E+01	2.0E+02		3.8E+01
				2.0E-02	I						1.36E+09		1	0.1	Endothall	145-73-3					1.6E+02	6.6E+02		1.3E+02
				3.0E-04	I						1.36E+09		1	0.1	Endrin	72-20-8					2.3E+00	9.9E+00		1.9E+00
9.9E-03	I	1.2E-06	I	6.0E-03	P	1.0E-03	I	V		1.05E+04	1.36E+09	1.89E+04	1		Epichlorohydrin	106-89-8	7.0E+01		4.4E+01	2.7E+01	4.7E+01		2.0E+00	1.9E+00
						2.0E-02	I	V		1.53E+04	1.36E+09	7.66E+03	1		Epoxybutane, 1,2-	106-88-7							1.6E+01	1.6E+01
				4.0E-02	P						1.36E+09		1	0.1	Ethanol, 2-(2-methoxyethoxy)-	111-77-3					3.1E+02	1.3E+03		2.5E+02
				5.0E-03	I						1.36E+09		1	0.1	Ethephon	16672-87-0					3.9E+01	1.6E+02		3.2E+01
				5.0E-04	I						1.36E+09		1	0.1	Ethion	563-12-2					3.9E+00	1.6E+01		3.2E+00
				1.0E-01	P	6.0E-02	P	V		2.38E+04	1.36E+09	6.15E+04	1		Ethoxyethanol Acetate, 2-	111-15-9					7.8E+02		3.8E+02	2.6E+02
				9.0E-02	P	4.0E-02	P	V		1.06E+05	1.36E+09	9.84E+04	1		Ethoxyethanol, 2-	110-80-5					7.0E+02		4.1E+02	2.6E+02
				7.0E-01	P	7.0E-02	P	V		1.08E+04	1.36E+09	8.62E+03	1		Ethyl Acetate	141-78-6					5.5E+03		6.3E+01	6.2E+01
				5.0E-03	P	8.0E-03	P	V		2.50E+03	1.36E+09	6.34E+03	1		Ethyl Acrylate	140-88-5					3.9E+01		5.3E+00	4.7E+00
						4.0E+00	P	V		2.12E+03	1.36E+09	1.29E+03	1		Ethyl Chloride (Chloroethane)	75-00-3							5.4E+02	5.4E+02
				2.0E-01	I			V		1.01E+04	1.36E+09	3.12E+03	1		Ethyl Ether	60-29-7					1.6E+03			1.6E+03
						3.0E-01	P	V		1.10E+03	1.36E+09	5.77E+03	1		Ethyl Methacrylate	97-63-2							1.8E+02	1.8E+02
		8.0E-08	I	1.0E+00	I	4.0E+01	I	V		2.87E+03	1.36E+09	3.67E+03	1		Ethyl Tertiary Butyl Ether (ETBE)	637-92-3			1.3E+02	1.3E+02	7.8E+03		1.5E+04	5.2E+03
				1.0E-05	I						1.36E+09		1	0.1	Ethyl-p-nitrophenyl Phosphonate	2104-64-5					7.8E-02	3.3E-01		6.3E-02
1.1E-02	C	2.5E-06	C	5.0E-02	P	1.0E+00	I	V		4.80E+02	1.36E+09	5.67E+03	1		Ethylbenzene	100-41-4	6.3E+01		6.4E+00	5.8E+00	3.9E+02		5.9E+02	2.4E+02
				7.0E-02	P						1.36E+09		1	0.1	Ethylene Cyanohydrin	109-78-4					5.5E+02	2.3E+03		4.4E+02
				9.0E-02	P			V		1.89E+05	1.36E+09	1.80E+05	1		Ethylene Diamine	107-15-3					7.0E+02			7.0E+02
				8.0E-01	A	4.0E-01	C				1.36E+09		1	0.1	Ethylene Glycol	107-21-1					6.3E+03	2.6E+04	5.7E+07	5.1E+03
				1.0E-01	I	1.6E+00	I				1.36E+09		1	0.1	Ethylene Glycol Monobutyl Ether	111-76-2					7.8E+02	3.3E+03	2.3E+08	6.3E+02
3.1E-01	C	3.0E-03	I			3.0E-02	C	V	M	1.21E+05	1.36E+09	6.09E+03	1		Ethylene Oxide	75-21-8	4.9E-01		2.1E-03	2.0E-03			1.9E+01	1.9E+01
4.5E-02	C	1.3E-05	C	8.0E-05	I						1.36E+09		1	0.1	Ethylene Thiourea	96-45-7	1.5E+01	5.5E+01	2.9E+05	1.2E+01	6.3E-01	2.6E+00		5.1E-01
6.5E+01	C	1.9E-02	C					V		1.54E+05	1.36E+09	2.39E+04	1		Ethyleneimine	151-56-4	1.1E-02		3.5E-03	2.7E-03				
				3.0E+00	I						1.36E+09		1	0.1	Ethylphthalyl Ethyl Glycolate	84-72-0					2.3E+04	9.9E+04		1.9E+04
				2.5E-04	I						1.36E+09		1	0.1	Fenamiphos	22224-92-6					2.0E+00	8.2E+00		1.6E+00
				2.5E-02	I						1.36E+09		1	0.1	Fenpropathrin	39515-41-8					2.0E+02	8.2E+02		1.6E+02
				2.5E-02	I						1.36E+09		1	0.1	Fenvalerate	51630-58-1					2.0E+02	8.2E+02		1.6E+02

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information														Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
				1.3E-02	I						1.36E+09		1	0.1	Fluometuron	2164-17-2					1.0E+02	4.3E+02		8.2E+01
				4.0E-02	C	1.3E-02	C				1.36E+09		1		Fluoride	16984-48-8					3.1E+02		1.8E+06	3.1E+02
				6.0E-02	I	1.3E-02	C				1.36E+09		1		Fluorine (Soluble Fluoride)	7782-41-4					4.7E+02		1.8E+06	4.7E+02
				8.0E-02	I						1.36E+09		1	0.1	Fluridone	59756-60-4					6.3E+02	2.6E+03		5.1E+02
				4.0E-02	O						1.36E+09		1	0.1	Flurprimidol	56425-91-3					3.1E+02	1.3E+03		2.5E+02
				2.0E-03	O						1.36E+09		1	0.1	Flusilazole	85509-19-9					1.6E+01	6.6E+01		1.3E+01
				5.0E-01	O						1.36E+09		1	0.1	Flutolanil	66332-96-5					3.9E+03	1.6E+04		3.2E+03
				1.0E-02	I						1.36E+09		1	0.1	Fluvalinate	69409-94-5					7.8E+01	3.3E+02		6.3E+01
				9.0E-02	O						1.36E+09		1	0.1	Folpet	133-07-3					7.0E+02	3.0E+03		5.7E+02
				1.0E-02	O						1.36E+09		1	0.1	Fomesafen	72178-02-0					7.8E+01	3.3E+02		6.3E+01
				2.0E-03	I						1.36E+09		1	0.1	Fonofos	944-22-9					1.6E+01	6.6E+01		1.3E+01
2.1E-02	C	1.3E-05	I	2.0E-01	I	9.8E-03	A	V		4.24E+04	1.36E+09	7.77E+04	1		Formaldehyde	50-00-0	3.3E+01		1.7E+01	1.1E+01	1.6E+03		8.0E+01	7.6E+01
				9.0E-01	P	3.0E-04	X	V		1.06E+05	1.36E+09	9.30E+04	1		Formic Acid	64-18-6					7.0E+03		2.9E+00	2.9E+00
				2.5E+00	O						1.36E+09		1	0.1	Fosetyl-AL	39148-24-8					2.0E+04	8.2E+04		1.6E+04
															Furans									
				1.0E-03	X			V			1.36E+09	1.56E+05	1		~Dibenzofuran	132-64-9					7.8E+00			7.8E+00
				1.0E-03	I			V		6.22E+03	1.36E+09	2.62E+03	1		~Furan	110-00-9					7.8E+00			7.8E+00
				9.0E-01	I	2.0E+00	I	V		1.65E+05	1.36E+09	1.20E+04	1		~Tetrahydrofuran	109-99-9					7.0E+03		2.5E+03	1.8E+03
3.8E+00	H										1.36E+09		1	0.1	Furazolidone	67-45-8	1.8E-01	6.5E-01		1.4E-01				
				3.0E-03	I	5.0E-02	H	V		1.01E+04	1.36E+09	4.86E+04	1		Furfural	98-01-1					2.3E+01		2.5E+02	2.1E+01
1.5E+00	C	4.3E-04	C								1.36E+09		1	0.1	Furium	531-82-8	4.6E-01	1.6E+00	8.9E+03	3.6E-01				
3.0E-02	I	8.6E-06	C								1.36E+09		1	0.1	Furmecyclox	60568-05-0	2.3E+01	8.2E+01	4.4E+05	1.8E+01				
				6.0E-03	O						1.36E+09		1	0.1	Glufosinate, Ammonium	77182-82-2					4.7E+01	2.0E+02		3.8E+01
				1.0E-01	A	8.0E-05	C				1.36E+09		1	0.1	Glutaraldehyde	111-30-8					7.8E+02	3.3E+03	1.1E+04	6.0E+02
				4.0E-04	I	1.0E-03	X	V		1.06E+05	1.36E+09	8.43E+04	1		Glycidaldehyde	765-34-4					3.1E+00		8.8E+00	2.3E+00
				1.0E-01	I						1.36E+09		1	0.1	Glyphosate	1071-83-6					7.8E+02	3.3E+03		6.3E+02
				1.0E-02	X			V			1.36E+09	1.45E+05	1		Guanidine	113-00-8					7.8E+01			7.8E+01
				2.0E-02	P						1.36E+09		1	0.1	Guanidine Chloride	50-01-1					1.6E+02	6.6E+02		1.3E+02
				3.0E-02	X						1.36E+09		1	0.1	Guanidine Nitrate	506-93-4					2.3E+02	9.9E+02		1.9E+02
				5.0E-05	I						1.36E+09		1	0.1	Haloxyfop, Methyl	69806-40-2					3.9E-01	1.6E+00		3.2E-01
4.5E+00	I	1.3E-03	I	1.0E-04	A			V			1.36E+09	4.79E+05	1		Heptachlor	76-44-8	1.5E-01		1.0E+00	1.3E-01	7.8E-01			7.8E-01
9.1E+00	I	2.6E-03	I	1.3E-05	I			V			1.36E+09	8.43E+05	1		Heptachlor Epoxide	1024-57-3	7.6E-02		9.1E-01	7.0E-02	1.0E-01			1.0E-01
						3.0E-03	X	V		2.09E+02	1.36E+09	7.80E+03	1		Heptanal, n-	111-71-7							2.4E+00	2.4E+00
				3.0E-04	X	4.0E-01	P	V		5.79E+01	1.36E+09	8.95E+02	1		Heptane, N-	142-82-5					2.3E+00		3.7E+01	2.2E+00
				2.0E-03	I			V			1.36E+09	3.80E+05	1		Hexabromobenzene	87-82-1					1.6E+01			1.6E+01
				2.0E-04	I						1.36E+09		1	0.1	Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2					1.6E+00	6.6E+00		1.3E+00
1.6E+00	I	4.6E-04	I	1.0E-05	P			V			1.36E+09	6.80E+04	1		Hexachlorobenzene	118-74-1	4.3E-01		4.1E-01	2.1E-01	7.8E-02			7.8E-02
7.8E-02	I	2.2E-05	I	1.0E-03	P			V		1.68E+01	1.36E+09	1.08E+04	1		Hexachlorobutadiene	87-68-3	8.9E+00		1.4E+00	1.2E+00	7.8E+00			7.8E+00
6.3E+00	I	1.8E-03	I								1.36E+09		1	0.1	Hexachlorocyclohexane, Alpha-	319-84-6	1.1E-01	3.9E-01	2.1E+03	8.6E-02				
1.8E+00	I	5.3E-04	I								1.36E+09		1	0.1	Hexachlorocyclohexane, Beta-	319-85-7	3.9E-01	1.4E+00	7.2E+03	3.0E-01				
1.1E+00	C	3.1E-04	C	3.0E-04	I						1.36E+09		1	0.04	Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	6.3E-01	5.6E+00	1.2E+04	5.7E-01	2.3E+00	2.5E+01		2.1E+00
1.8E+00	I	5.1E-04	I								1.36E+09		1	0.1	Hexachlorocyclohexane, Technical	608-73-1	3.9E-01	1.4E+00	7.5E+03	3.0E-01				
				6.0E-03	I	2.0E-04	I	V		1.57E+01	1.36E+09	8.51E+03	1		Hexachlorocyclopentadiene	77-47-4					4.7E+01		1.8E-01	1.8E-01
4.0E-02	I	1.1E-05	C	7.0E-04	I	3.0E-02	I	V			1.36E+09	8.01E+03	1		Hexachloroethane	67-72-1	1.7E+01		2.0E+00	1.8E+00	5.5E+00		2.5E+01	4.5E+00
				3.0E-04	I						1.36E+09		1	0.1	Hexachlorophene	70-30-4					2.3E+00	9.9E+00		1.9E+00
8.0E-02	I			4.0E-03	I						1.36E+09		1	0.015	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	8.7E+00	2.1E+02		8.3E+00	3.1E+01	8.8E+02		3.0E+01
						1.0E-05	I	V		3.39E+03	1.36E+09	3.00E+05	1		Hexamethylene Diisocyanate, 1,6-	822-06-0							3.1E-01	3.1E-01
						4.0E-04	C				1.36E+09		1	0.1	Hexamethylene diisocyanate biuret	4035-89-6							5.7E+04	5.7E+04
						4.0E-04	C				1.36E+09		1	0.1	Hexamethylene diisocyanate isocyanurate	3779-63-3							5.7E+04	5.7E+04
				4.0E-04	P						1.36E+09		1	0.1	Hexamethylphosphoramide	680-31-9					3.1E+00	1.3E+01		2.5E+00
		2.0E-07	X			6.0E-01	P	V		1.41E+02	1.36E+09	8.29E+02	1		Hexane, Commercial	E5241997			1.2E+01	1.2E+01			5.2E+01	5.2E+01
						7.0E-01	I	V		1.41E+02	1.36E+09	8.29E+02	1		Hexane, N-	110-54-3							6.1E+01	6.1E+01
				2.0E+00	P						1.36E+09		1	0.1	Hexanedioic Acid	124-04-9					1.6E+04	6.6E+04		1.3E+04
9.5E-03	P			7.0E-02	P	4.0E-04	P	V		2.74E+02	1.36E+09	3.62E+04	1		Hexanol, 1-,2-ethyl- (2-Ethyl-1-hexanol)	104-76-7	7.3E+01			7.3E+01	5.5E+02		1.5E+00	1.5E+00
				5.0E-03	I	3.0E-02	I	V		3.28E+03	1.36E+09	1.33E+04	1		Hexanone, 2-	591-78-6					3.9E+01		4.2E+01	2.0E+01
				3.3E-02	I						1.36E+09		1	0.1	Hexazinone	51235-04-2					2.6E+02	1.1E+03		2.1E+02
				2.5E-02	I						1.36E+09		1	0.1	Hexythiazox	78587-05-0					2.0E+02	8.2E+02		1.6E+02
				1.7E-02	O						1.36E+09		1	0.1	Hydramethylnon	67485-29-4					1.3E+02	5.6E+02		1.1E+02
3.0E+00	I	4.9E-03	I			3.0E-05	P	V		1.12E+05	1.36E+09	6.52E+04	1		Hydrazine	302-01-2	2.3E-01		3.7E-02	3.2E-02			2.0E-01	2.0E-01
3.0E+00	I	4.9E-03	I								1.36E+09		1		Hydrazine Sulfate	10034-93-2	2.3E-01		7.8E+02	2.3E-01				
						2.0E-02	I	V			1.36E+09		1		Hydrogen Chloride	7647-01-0							2.8E+06	2.8E+06
				4.0E-02	C	1.4E-02	C	V			1.36E+09		1		Hydrogen Fluoride	7664-39-3					3.1E+02		2.0E+06	3.1E+02
						2.0E-03	I	V			1.36E+09		1		Hydrogen Sulfide	7783-06-4							2.8E+05	2.8E+05
6.0E-02	P			4.0E-02	P						1.36E+09		1	0.1	Hydroquinone	123-31-9	1.2E+01	4.1E+01		9.0E+00	3.1E+02	1.3E+03		2.5E+02
6.1E-02	O			1.1E-01	O						1.36E+09		1	0.1	Imazalil	35554-44-0	1.1E+01	4.0E+01		8.9E+00	8.4E+02	3.6E+03		6.8E+02
				2.5E-01	I						1.36E+09		1	0.1	Imazaquin	81335-37-7					2.0E+03	8.2E+03		1.6E+03
				2.5E+00	O						1.36E+09		1	0.1	Imazethapyr	81335-77-5					2.0E+04	8.2E+04		1.6E+04
				1.0E-02	A						1.36E+09		1		Iodine	7553-56-2					7.8E+01			7.8E+01
				4.0E-02	I						1.36E+09		1	0.1	Iprodione	36734-19-7					3.1E+02	1.3E+03		2.5E+02
				7.0E-01	P						1.36E+09		1		Iron	7439-89-6					5.5E+03			5.5E+03
				3.0E-01	I	4.0E-01	X	V		1.00E+04	1.36E+09	2.81E+04	1		Isobutyl Alcohol	78-83-1					2.3E+03		1.2E+03	7.8E+02
9.5E-04	I			2.0E-01	I	2.0E+00	C				1.36E+09		1	0.1	Isophorone	78-59-1	7.3E+02	2.6E+03		5.7E+02	1.6E+03	6.6E+03	2.8E+08	1.3E+03
				1.5E-02	I			V			1.36E+09	4.20E+05	1		Isopropalin	33820-53-0					1.2E+02			1.2E+02
				2.0E+00	P	2.0E-01	P	V		1.09E+05	1.36E+09	2.77E+04	1		Isopropanol	67-63-0					1.6E+04		5.8E+02	5.6E+02
				1.0E-01	I						1.36E+09		1	0.1	Isopropyl Methyl Phosphonic Acid	1832-54-8					7.8E+02	3.3E+03		6.3E+02
				5.0E-02	I						1.36E+09		1	0.1	Isoxaben	82558-50-7					3.9E+02	1.6E+03		3.2E+02
						3.0E-01	A	V			1.36E+09		1		Jet propulsion fuel 7 (JP-7)	E1737665							4.3E+07	4.3E+07
				8.0E-03	O						1.36E+09		1	0.1	Lactofen	77501-63-4					6.3E+01	2.6E+02		5.1E+01
				2.0E-04	X						1.36E+09		1	0.1	Lactonitrile	78-97-7					1.6E+00	6.6E+00		1.3E+00
				5.0E-05	P						1.36E+09		1		Lanthanum	7439-91-0					3.9E-01			3.9E-01
				2.1E-05	P						1.36E+09		1	0.1	Lanthanum Acetate Hydrate	100587-90-4					1.6E-01	6.9E-01		1.3E-01
				1.9E-05	P						1.36E+09		1		Lanthanum Chloride Heptahydrate	10025-84-0					1.5E-01			1.5E-01
				2.8E-05	P						1.36E+09		1		Lanthanum Chloride, Anhydrous	10099-58-8					2.2E-01			2.2E-01

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information															Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
				1.6E-05	P						1.36E+09		1		Lanthanum Nitrate Hexahydrate	10277-43-7					1.3E-01			1.3E-01
															Lead Compounds									
8.5E-03	C	1.2E-05	C								1.36E+09		1		~Lead Phosphate	7446-27-7	8.2E+01		3.2E+05	8.2E+01				
2.1E-01	C	8.0E-05	C								1.36E+09		1	0.1	~Lead acetate	301-04-2	3.3E+00	1.2E+01	4.8E+04	2.6E+00				
											1.36E+09		1		~Lead and Compounds	7439-92-1								4.0E+02
3.8E-02	C	1.1E-05	C								1.36E+09		1	0.1	~Lead subacetate	1335-32-6	1.8E+01	6.5E+01	3.5E+05	1.4E+01				
				1.0E-07	I			V		2.43E+00	1.36E+09	1.91E+03	1		~Tetraethyl Lead	78-00-2					7.8E-04			7.8E-04
				5.0E-06	P			V		3.83E+02	1.36E+09	2.55E+04	1		Lewisite	541-25-3					3.9E-02			3.9E-02
				7.7E-03	O						1.36E+09		1	0.1	Linuron	330-55-2					6.0E+01	2.5E+02		4.9E+01
				2.0E-03	P						1.36E+09		1		Lithium	7439-93-2					1.6E+01			1.6E+01
				5.0E-04	I						1.36E+09		1	0.1	MCPA	94-74-6					3.9E+00	1.6E+01		3.2E+00
				4.4E-02	O						1.36E+09		1	0.1	MCPB	94-81-5					3.4E+02	1.5E+03		2.8E+02
				1.0E-03	I						1.36E+09		1	0.1	MCPP	93-65-2					7.8E+00	3.3E+01		6.3E+00
				2.0E-02	I						1.36E+09		1	0.1	Malathion	121-75-5					1.6E+02	6.6E+02		1.3E+02
				1.0E-01	I	7.0E-04	C				1.36E+09		1	0.1	Maleic Anhydride	108-31-6					7.8E+02	3.3E+03	9.9E+04	6.3E+02
				5.0E-01	I						1.36E+09		1	0.1	Maleic Hydrazide	123-33-1					3.9E+03	1.6E+04		3.2E+03
				1.0E-04	P						1.36E+09		1	0.1	Malononitrile	109-77-3					7.8E-01	3.3E+00		6.3E-01
				3.0E-02	H						1.36E+09		1	0.1	Mancozeb	8018-01-7					2.3E+02	9.9E+02		1.9E+02
				5.0E-03	I						1.36E+09		1	0.1	Maneb	12427-38-2					3.9E+01	1.6E+02		3.2E+01
				1.4E-01	I	5.0E-05	I						1		Manganese (Diet)	7439-96-5								
				2.4E-02	G	5.0E-05	I				1.36E+09		0.04		Manganese (Non-diet)	7439-96-5					1.9E+02		7.1E+03	1.8E+02
				9.0E-05	H						1.36E+09		1	0.1	Mephosfolan	950-10-7					7.0E-01	3.0E+00		5.7E-01
				3.0E-02	I						1.36E+09		1	0.1	Mepiquat Chloride	24307-26-4					2.3E+02	9.9E+02		1.9E+02
1.1E-02	P			4.0E-03	P						1.36E+09		1	0.1	Mercaptobenzothiazole, 2-	149-30-4	6.3E+01	2.2E+02		4.9E+01	3.1E+01	1.3E+02		2.5E+01
															Mercury Compounds									
				3.0E-04	I	3.0E-04	G				1.36E+09		0.07		~Mercuric Chloride (and other Mercury salts)	7487-94-7					2.3E+00		4.3E+04	2.3E+00
						3.0E-04	I	V		3.13E+00	1.36E+09	3.47E+04	1		~Mercury (elemental)	7439-97-6							1.1E+00	1.1E+00
				1.0E-04	I						1.36E+09		1		~Methyl Mercury	22967-92-6					7.8E-01			7.8E-01
				8.0E-05	I						1.36E+09		1	0.1	~Phenylmercuric Acetate	62-38-4					6.3E-01	2.6E+00		5.1E-01
				3.0E-05	I			V			1.36E+09	1.94E+06	1		Merphos	150-50-5					2.3E-01			2.3E-01
				6.0E-02	I						1.36E+09		1	0.1	Metalaxyl	57837-19-1					4.7E+02	2.0E+03		3.8E+02
				1.0E-04	I	3.0E-02	P	V		4.58E+03	1.36E+09	6.79E+03	1		Methacrylonitrile	126-98-7					7.8E-01		2.1E+01	7.5E-01
				5.0E-05	I						1.36E+09		1	0.1	Methamidophos	10265-92-6					3.9E-01	1.6E+00		3.2E-01
				2.0E+00	I	2.0E+01	I	V		1.06E+05	1.36E+09	2.90E+04	1		Methanol	67-56-1					1.6E+04		6.1E+04	1.2E+04
				1.5E-03	O						1.36E+09		1	0.1	Methidathion	950-37-8					1.2E+01	4.9E+01		9.5E+00
				2.5E-02	I						1.36E+09		1	0.1	Methomyl	16752-77-5					2.0E+02	8.2E+02		1.6E+02
4.9E-02	C										1.36E+09		1	0.1	Methoxy-5-nitroaniline, 2-	99-59-2	1.4E+01	5.0E+01		1.1E+01				
				5.0E-03	I						1.36E+09		1	0.1	Methoxychlor	72-43-5					3.9E+01	1.6E+02		3.2E+01
				8.0E-03	P	1.0E-03	P	V		1.15E+05	1.36E+09	1.24E+05	1		Methoxyethanol Acetate, 2-	110-49-6					6.3E+01		1.3E+01	1.1E+01
				5.0E-03	P	7.0E-03	P	V		1.06E+05	1.36E+09	1.01E+05	1		Methoxyethanol, 2-	109-86-4					3.9E+01		7.4E+01	2.6E+01
				1.0E+00	X			V		2.90E+04	1.36E+09	8.12E+03	1		Methyl Acetate	79-20-9					7.8E+03			7.8E+03
						2.0E-02	P	V		6.75E+03	1.36E+09	6.97E+03	1		Methyl Acrylate	96-33-3							1.5E+01	1.5E+01
				6.0E-01	I	5.0E+00	I	V		2.84E+04	1.36E+09	1.22E+04	1		Methyl Ethyl Ketone (2-Butanone)	78-93-3					4.7E+03		6.4E+03	2.7E+03
		1.0E-03	X	1.0E-03	P	2.0E-05	X	V		1.80E+05	1.36E+09	5.04E+04	1		Methyl Hydrazine	60-34-4			1.4E-01	1.4E-01	7.8E+00		1.1E-01	1.0E-01
						3.0E+00	I	V		3.36E+03	1.36E+09	1.06E+04	1		Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1							3.3E+03	3.3E+03
						1.0E-03	C	V		1.01E+04	1.36E+09	4.42E+03	1		Methyl Isocyanate	624-83-9							4.6E-01	4.6E-01
				1.4E+00	I	7.0E-01	I	V		2.36E+03	1.36E+09	6.33E+03	1		Methyl Methacrylate	80-62-6					1.1E+04		4.6E+02	4.4E+02
				2.5E-04	I						1.36E+09		1	0.1	Methyl Parathion	298-00-0					2.0E+00	8.2E+00		1.6E+00
				6.0E-02	X						1.36E+09		1	0.1	Methyl Phosphonic Acid	993-13-5					4.7E+02	2.0E+03		3.8E+02
				6.0E-03	H	4.0E-02	H	V		3.93E+02	1.36E+09	2.43E+04	1		Methyl Styrene (Mixed Isomers)	25013-15-4					4.7E+01		1.0E+02	3.2E+01
9.9E-02	C	2.8E-05	C								1.36E+09		1	0.1	Methyl methanesulfonate	66-27-3	7.0E+00	2.5E+01	1.4E+05	5.5E+00				
1.8E-03	C	2.6E-07	C			3.0E+00	I	V		8.87E+03	1.36E+09	4.90E+03	1		Methyl tert-Butyl Ether (MTBE)	1634-04-4	3.9E+02		5.3E+01	4.7E+01			1.5E+03	1.5E+03
				3.0E-04	X						1.36E+09		1	0.1	Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2					2.3E+00	9.9E+00		1.9E+00
						3.0E+00	X	V		2.45E+03	1.36E+09	1.72E+04	1		Methyl-2-Pentanol, 4-	108-11-2							5.4E+03	5.4E+03
9.0E-03	P			2.0E-02	X						1.36E+09		1	0.1	Methyl-5-Nitroaniline, 2-	99-55-8	7.7E+01	2.7E+02		6.0E+01	1.6E+02	6.6E+02		1.3E+02
8.3E+00	C	2.4E-03	C								1.36E+09		1	0.1	Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	8.4E-02	3.0E-01	1.6E+03	6.5E-02				
1.3E-01	C	3.7E-05	C								1.36E+09		1	0.1	Methylaniline Hydrochloride, 2-	636-21-5	5.3E+00	1.9E+01	1.0E+05	4.2E+00				
				1.0E-02	A						1.36E+09		1	0.1	Methylarsonic acid	124-58-3					7.8E+01	3.3E+02		6.3E+01
				2.0E-04	X						1.36E+09		1	0.1	Methylbenzene,1-4-diamine monohydrochloride, 2-	74612-12-7					1.6E+00	6.6E+00		1.3E+00
1.0E-01	X			3.0E-04	X						1.36E+09		1	0.1	Methylbenzene-1,4-diamine sulfate, 2-	615-50-9	7.0E+00	2.5E+01		5.4E+00	2.3E+00	9.9E+00		1.9E+00
2.2E+01	C	6.3E-03	C						M		1.36E+09		1	0.1	Methylcholanthrene, 3-	56-49-5	7.0E-03	2.7E-02	2.2E+02	5.5E-03				
						9.5E-02	X	V		6.76E+01	1.36E+09	9.90E+02	1		Methylcyclohexane	108-87-2							9.8E+00	9.8E+00
2.0E-03	I	1.0E-08	I	6.0E-03	I	6.0E-01	I	V	M	3.32E+03	1.36E+09	2.19E+03	1		Methylene Chloride	75-09-2	7.7E+01		2.2E+02	5.7E+01	4.7E+01		1.4E+02	3.5E+01
1.0E-01	P	4.3E-04	C	2.0E-03	P				M		1.36E+09		1	0.1	Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	1.5E+00	6.0E+00	3.2E+03	1.2E+00	1.6E+01	6.6E+01		1.3E+01
4.6E-02	I	1.3E-05	C								1.36E+09		1	0.1	Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-61-1	1.5E+01	5.4E+01	2.9E+05	1.2E+01				
1.6E+00	C	4.6E-04	C			2.0E-02	C				1.36E+09		1	0.1	Methylenebisbenzenamine, 4,4'-	101-77-9	4.3E-01	1.5E+00	8.3E+03	3.4E-01			2.8E+06	2.8E+06
						6.0E-04	I				1.36E+09		1	0.1	Methylenediphenyl Diisocyanate	101-68-8							8.5E+04	8.5E+04
				7.0E-02	H			V		5.00E+02	1.36E+09	1.28E+04	1		Methylstyrene, Alpha-	98-83-9					5.5E+02			5.5E+02
				1.5E-01	I						1.36E+09		1	0.1	Metolachlor	51218-45-2					1.2E+03	4.9E+03		9.5E+02
				2.5E-02	I						1.36E+09		1	0.1	Metribuzin	21087-64-9					2.0E+02	8.2E+02		1.6E+02
				2.5E-01	I						1.36E+09		1	0.1	Metsulfuron-methyl	74223-64-6					2.0E+03	8.2E+03		1.6E+03
		4.5E-06	X	1.0E-02	X	1.0E-01	P	V		6.86E+00	1.36E+09	1.04E+03	1		Midrange Aliphatic Hydrocarbon Streams	E1790669			6.5E-01	6.5E-01	7.8E+01		1.1E+01	9.6E+00
				3.0E+00	P			V		3.42E-01	1.36E+09	1.38E+03	1		Mineral oils	8012-95-1					2.3E+04			2.3E+04
1.8E+01	C	5.1E-03	C	2.0E-04	I			V			1.36E+09	8.58E+05	1		Mirex	2385-85-5	3.9E-02		4.7E-01	3.6E-02	1.6E+00			1.6E+00
				2.0E-03	I						1.36E+09		1	0.1	Molinate	2212-67-1					1.6E+01	6.6E+01		1.3E+01
				5.0E-03	I	2.0E-03	A				1.36E+09		1		Molybdenum	7439-98-7					3.9E+01		2.8E+05	3.9E+01
				1.0E-01	I						1.36E+09		1		Monochloramine	10599-90-3					7.8E+02			7.8E+02
				2.0E-03	P						1.36E+09		1	0.1	Monomethylaniline	100-61-8					1.6E+01	6.6E+01		1.3E+01
				2.5E-02	I						1.36E+09		1	0.1	Myclobutanil	88671-89-0					2.0E+02	8.2E+02		1.6E+02
				3.0E-04	X						1.36E+09		1	0.1	N,N'-Diphenyl-1,4-benzenediamine	74-31-7					2.3E+00	9.9E+00		1.9E+00
				2.0E-03	I			V			1.36E+09	5.70E+04	1		Naled	300-76-5					1.6E+01			1.6E+01
				3.0E-02	X	1.0E-01	P	V			1.36E+09		1		Naphtha, High Flash Aromatic (HFAN)	64742-95-6					2.3E+02		1.4E+07	2.3E+02
1.8E+00	C	0.0E+00	C								1.36E+09		1	0.1	Naphthylamine, 2-	91-59-8	3.9E-01	1.4E+00		3.0E-01				

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information														Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
				1.2E-01	O						1.36E+09		1	0.1	Napropamide	15299-99-7					9.4E+02	4.0E+03		7.6E+02
		2.6E-04	C	1.1E-02	C	1.4E-05	C				1.36E+09		1	0.1	Nickel Acetate	373-02-4			1.5E+04	1.5E+04	8.6E+01	3.6E+02	2.0E+03	6.7E+01
		2.6E-04	C	1.1E-02	C	1.4E-05	C				1.36E+09		1	0.1	Nickel Carbonate	3333-67-3			1.5E+04	1.5E+04	8.6E+01	3.6E+02	2.0E+03	6.7E+01
		2.6E-04	C	1.1E-02	C	1.4E-05	C	V			1.36E+09		1		Nickel Carbonyl	13463-39-3			1.5E+04	1.5E+04	8.6E+01		2.0E+03	8.2E+01
		2.6E-04	C	1.1E-02	C	1.4E-05	C				1.36E+09		0.04		Nickel Hydroxide	12054-48-7			1.5E+04	1.5E+04	8.6E+01		2.0E+03	8.2E+01
		2.6E-04	C	1.1E-02	C	2.0E-05	C				1.36E+09		0.04		Nickel Oxide	1313-99-1			1.5E+04	1.5E+04	8.6E+01		2.8E+03	8.4E+01
		2.4E-04	I	1.1E-02	C	1.4E-05	C				1.36E+09		0.04		Nickel Refinery Dust	E715532			1.6E+04	1.6E+04	8.6E+01		2.0E+03	8.2E+01
		2.6E-04	C	2.0E-02	I	1.4E-05	C				1.36E+09		0.04		Nickel Soluble Salts	7440-02-0			1.5E+04	1.5E+04	1.6E+02		2.0E+03	1.4E+02
1.7E+00	C	4.8E-04	I	1.1E-02	C	1.4E-05	C				1.36E+09		0.04		Nickel Subsulfide	12035-72-2	4.1E-01		8.0E+03	4.1E-01	8.6E+01		2.0E+03	8.2E+01
9.1E-01	C	2.6E-04	C	1.1E-02	C	1.4E-05	C				1.36E+09		1	0.1	Nickelocene	1271-28-9	7.6E-01	2.7E+00	1.5E+04	6.0E-01	8.6E+01	3.6E+02	2.0E+03	6.7E+01
				1.6E+00	I						1.36E+09		1		Nitrate (measured as nitrogen)	14797-55-8					1.3E+04			1.3E+04
											1.36E+09		1		Nitrate + Nitrite (measured as nitrogen)	E701177								
				1.0E-01	I						1.36E+09		1		Nitrite (measured as nitrogen)	14797-65-0					7.8E+02			7.8E+02
				1.0E-02	X	5.0E-05	X				1.36E+09		1	0.1	Nitroaniline, 2-	88-74-4					7.8E+01	3.3E+02	7.1E+03	6.3E+01
2.0E-02	P			4.0E-03	P	6.0E-03	P				1.36E+09		1	0.1	Nitroaniline, 4-	100-01-6	3.5E+01	1.2E+02		2.7E+01	3.1E+01	1.3E+02	8.5E+05	2.5E+01
		4.0E-05	I	2.0E-03	I	9.0E-03	I	V		3.05E+03	1.36E+09	7.32E+04	1		Nitrobenzene	98-95-3			5.1E+00	5.1E+00	1.6E+01		6.9E+01	1.3E+01
				3.0E+03	P						1.36E+09		1	0.1	Nitrocellulose	9004-70-0					2.3E+07	9.9E+07		1.9E+07
				7.0E-02	H						1.36E+09		1	0.1	Nitrofurantoin	67-20-9					5.5E+02	2.3E+03		4.4E+02
1.3E+00	C	3.7E-04	C								1.36E+09		1	0.1	Nitrofurazone	59-87-0	5.3E-01	1.9E+00	1.0E+04	4.2E-01				
1.7E-02	P			1.0E-04	P						1.36E+09		1	0.1	Nitroglycerin	55-63-0	4.1E+01	1.5E+02		3.2E+01	7.8E-01	3.3E+00		6.3E-01
				1.0E-01	I						1.36E+09		1	0.1	Nitroguanidine	556-88-7					7.8E+02	3.3E+03		6.3E+02
		8.8E-06	P			5.0E-03	P	V		1.80E+04	1.36E+09	1.69E+04	1		Nitromethane	75-52-5			5.4E+00	5.4E+00			8.8E+00	8.8E+00
		5.8E-04	X			2.0E-02	I	V		4.86E+03	1.36E+09	1.31E+04	1		Nitropropane, 2-	79-46-9			6.4E-02	6.4E-02			2.7E+01	2.7E+01
2.7E+01	C	7.7E-03	C						M		1.36E+09		1	0.1	Nitroso-N-ethylurea, N-	759-73-9	5.7E-03	2.2E-02	1.8E+02	4.5E-03				
1.2E+02	C	3.4E-02	C						M		1.36E+09		1	0.1	Nitroso-N-methylurea, N-	684-93-5	1.3E-03	5.0E-03	4.1E+01	1.0E-03				
5.4E+00	I	1.6E-03	I					V			1.36E+09	2.43E+05	1		Nitroso-di-N-butylamine, N-	924-16-3	1.3E-01		4.3E-01	9.9E-02				
7.0E+00	I	2.0E-03	C								1.36E+09		1	0.1	Nitroso-di-N-propylamine, N-	621-64-7	9.9E-02	3.5E-01	1.9E+03	7.8E-02				
2.8E+00	I	8.0E-04	C								1.36E+09		1	0.1	Nitrosodiethanolamine, N-	1116-54-7	2.5E-01	8.8E-01	4.8E+03	1.9E-01				
1.5E+02	I	4.3E-02	I						M		1.36E+09		1	0.1	Nitrosodiethylamine, N-	55-18-5	1.0E-03	4.0E-03	3.2E+01	8.1E-04				
5.1E+01	I	1.4E-02	I	8.0E-06	P	4.0E-05	X	V	M	2.37E+05	1.36E+09	8.23E+04	1		Nitrosodimethylamine, N-	62-75-9	3.0E-03		6.0E-03	2.0E-03	6.3E-02		3.4E-01	5.3E-02
4.9E-03	I	2.6E-06	C								1.36E+09		1	0.1	Nitrosodiphenylamine, N-	86-30-6	1.4E+02	5.0E+02	1.5E+06	1.1E+02				
2.2E+01	I	6.3E-03	C					V		1.08E+05	1.36E+09	1.21E+05	1		Nitrosomethylethylamine, N-	10595-95-6	3.2E-02		5.4E-02	2.0E-02				
6.7E+00	C	1.9E-03	C								1.36E+09		1	0.1	Nitrosomorpholine [N-]	59-89-2	1.0E-01	3.7E-01	2.0E+03	8.1E-02				
9.4E+00	C	2.7E-03	C								1.36E+09		1	0.1	Nitrosopiperidine [N-]	100-75-4	7.4E-02	2.6E-01	1.4E+03	5.8E-02				
2.1E+00	I	6.1E-04	I								1.36E+09		1	0.1	Nitrosopyrrolidine, N-	930-55-2	3.3E-01	1.2E+00	6.3E+03	2.6E-01				
				1.0E-04	X						1.36E+09		1	0.1	Nitrotoluene, m-	99-08-1					7.8E-01	3.3E+00		6.3E-01
2.2E-01	P			9.0E-04	P			V		1.51E+03	1.36E+09	1.37E+05	1		Nitrotoluene, o-	88-72-2	3.2E+00			3.2E+00	7.0E+00			7.0E+00
1.6E-02	P			4.0E-03	P						1.36E+09		1	0.1	Nitrotoluene, p-	99-99-0	4.3E+01	1.5E+02		3.4E+01	3.1E+01	1.3E+02		2.5E+01
				3.0E-04	X	2.0E-02	P	V		6.86E+00	1.36E+09	1.04E+03	1		Nonane, n-	111-84-2					2.3E+00		2.2E+00	1.1E+00
				1.5E-03	O						1.36E+09		1	0.1	Norflurazon	27314-13-2					1.2E+01	4.9E+01		9.5E+00
				3.0E-03	I						1.36E+09		1	0.1	Octabromodiphenyl Ether	32536-52-0					2.3E+01	9.9E+01		1.9E+01
				5.0E-02	I						1.36E+09		1	0.006	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0					3.9E+02	2.7E+04		3.9E+02
				2.0E-03	H						1.36E+09		1	0.1	Octamethylpyrophosphoramide	152-16-9					1.6E+01	6.6E+01		1.3E+01
7.8E-03	O			1.9E-01	O						1.36E+09		1	0.1	Oryzalin	19044-88-3	8.9E+01	3.2E+02		7.0E+01	1.5E+03	6.3E+03		1.2E+03
				5.0E-03	I						1.36E+09		1	0.1	Oxadiazon	19666-30-9					3.9E+01	1.6E+02		3.2E+01
				2.5E-02	I						1.36E+09		1	0.1	Oxamyl	23135-22-0					2.0E+02	8.2E+02		1.6E+02
7.3E-02	O			4.0E-02	O						1.36E+09		1	0.1	Oxyfluorfen	42874-03-3	9.5E+00	3.4E+01		7.4E+00	3.1E+02	1.3E+03		2.5E+02
				1.3E-02	I						1.36E+09		1	0.1	Paclobutrazol	76738-62-0					1.0E+02	4.3E+02		8.2E+01
				4.5E-03	I						1.36E+09		1	0.1	Paraquat Dichloride	1910-42-5					3.5E+01	1.5E+02		2.8E+01
				6.0E-03	H						1.36E+09		1	0.1	Parathion	56-38-2					4.7E+01	2.0E+02		3.8E+01
				5.0E-02	H			V			1.36E+09	4.49E+04	1		Pebulate	1114-71-2					3.9E+02			3.9E+02
				3.0E-01	O						1.36E+09		1	0.1	Pendimethalin	40487-42-1					2.3E+03	9.9E+03		1.9E+03
				2.0E-03	I			V		3.12E-01	1.36E+09	5.13E+05	1		Pentabromodiphenyl Ether	32534-81-9					1.6E+01			1.6E+01
				1.0E-04	I						1.36E+09		1	0.1	Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	60348-60-9					7.8E-01	3.3E+00		6.3E-01
				8.0E-04	I			V			1.36E+09	8.12E+04	1		Pentachlorobenzene	608-93-5					6.3E+00			6.3E+00
9.0E-02	P							V			4.57E+02	1.36E+09	9.65E+03	1	Pentachloroethane	76-01-7	7.7E+00			7.7E+00				
2.6E-01	H			3.0E-03	I			V				1.36E+09	4.32E+05	1	Pentachloronitrobenzene	82-68-8	2.7E+00			2.7E+00	2.3E+01			2.3E+01
4.0E-01	I	5.1E-06	C	5.0E-03	I						1.36E+09		1	0.25	Pentachlorophenol	87-86-5	1.7E+00	2.5E+00	7.5E+05	1.0E+00	3.9E+01	6.6E+01		2.5E+01
4.3E-03	X			9.0E-03	P						1.36E+09		1	0.1	Pentaerythritol tetranitrate (PETN)	78-11-5	1.6E+02	5.7E+02		1.3E+02	7.0E+01	3.0E+02		5.7E+01
				1.0E-04	X						1.36E+09		1	0.1	Pentamethylphosphoramide (PMPA)	10159-46-3					7.8E-01	3.3E+00		6.3E-01
						1.0E+00	P	V		3.88E+02	1.36E+09	7.79E+02	1		Pentane, n-	109-66-0							8.1E+01	8.1E+01
															Per- and Polyfluoroalkyl Substances (PFAS)									
				3.0E-06	D						1.36E+09		1	0.1	~Ammonium perfluoro-2-methyl-3-oxahexanoate	62037-80-3					2.3E-02	9.9E-02		1.9E-02
				1.0E-03	I			V		2.68E+02	1.36E+09	5.98E+04	1		~Ammonium perfluorobutanoate	10495-86-0					7.8E+00			7.8E+00
				5.0E-04	I						1.36E+09		1	0.1	~Ammonium perfluorohexanoate	21615-47-4					3.9E+00	1.6E+01		3.2E+00
				3.0E-04	R			V			1.36E+09	5.53E+04	1		~Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3					2.3E+00			2.3E+00
				3.0E-06	D			V		1.92E+06	1.36E+09	4.97E+04	1		~Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6					2.3E-02			2.3E-02
				3.0E-04	R			V			1.36E+09	5.41E+04	1		~Lithium bis[(trifluoromethyl)sulfonyl]azanide	90076-65-6					2.3E+00			2.3E+00
				3.0E-04	P						1.36E+09		1	0.1	~Perfluorobutanesulfonate	45187-15-3					2.3E+00	9.9E+00		1.9E+00
				3.0E-04	P						1.36E+09		1	0.1	~Perfluorobutanesulfonic acid (PFBS)	375-73-5					2.3E+00	9.9E+00		1.9E+00
				1.0E-03	I			V		2.56E+03	1.36E+09	5.85E+04	1		~Perfluorobutanoate	45048-62-2					7.8E+00			7.8E+00
				1.0E-03	I			V		2.57E+03	1.36E+09	3.82E+04	1		~Perfluorobutanoic acid (PFBA)	375-22-4					7.8E+00			7.8E+00
				5.0E-05	N						1.36E+09		1	0.1	~Perfluorododecanoic acid (PFDoDA)	307-55-1					3.9E-01	1.6E+00		3.2E-01
				2.0E-05	A						1.36E+09		1	0.1	~Perfluorohexanesulfonate	108427-53-8					1.6E-01	6.6E-01		1.3E-01
				2.0E-05	A						1.36E+09		1	0.1	~Perfluorohexanesulfonic acid (PFHxS)	355-46-4					1.6E-01	6.6E-01		1.3E-01
				5.0E-04	I						1.36E+09		1	0.1	~Perfluorohexanoate	92612-52-7					3.9E+00	1.6E+01		3.2E+00
				5.0E-04	I						1.36E+09		1	0.1	~Perfluorohexanoic acid (PFHxA)	307-24-4					3.9E+00	1.6E+01		3.2E+00
				3.0E-06	A						1.36E+09		1	0.1	~Perfluorononanoate	72007-68-2					2.3E-02	9.9E-02		1.9E-02
				3.0E-06	A						1.36E+09		1	0.1	~Perfluorononanoic acid (PFNA)	375-95-1					2.3E-02	9.9E-02		1.9E-02
				4.0E-02	N						1.36E+09		1	0.1	~Perfluorooctadecanoic acid (PFODA)	16517-11-6					3.1E+02	1.3E+03		2.5E+02
				2.0E-06	A						1.36E+09		1	0.1	~Perfluorooctanesulfonate	45298-90-6					1.6E-02	6.6E-02		1.3E-02
				2.0E-06	A						1.36E+09		1	0.1	~Perfluorooctanesulfonic acid (PFOS)	1763-23-1					1.6E-02	6.6E-02		1.3E-02
7.0E-02	D			3.0E-06	A						1.36E+09		1	0.1	~Perfluorooctanoate	45285-51-6	9.9E+00	3.5E+01		7.8E+00	2.3E-02	9.9E-02		1.9E-02

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information															Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
7.0E-02	D			3.0E-06	A						1.36E+09		1	0.1	~Perfluorooctanoic acid (PFOA)	335-67-1	9.9E+00	3.5E+01		7.8E+00	2.3E-02	9.9E-02		1.9E-02
				5.0E-04	R			V		1.36E+04	1.36E+09	2.65E+04	1		~Perfluoropropanoic acid (PFPrA)	422-64-0					3.9E+00			3.9E+00
				1.0E-03	N						1.36E+09		1	0.1	~Perfluorotetradecanoic acid (PFTetA)	376-06-7					7.8E+00	3.3E+01		6.3E+00
				3.0E-04	N						1.36E+09		1	0.1	~Perfluoroundecanoic acid (PFUDA)	2058-94-8					2.3E+00	9.9E+00		1.9E+00
				2.0E-03	I			V		9.61E+04	1.36E+09	6.13E+04	1		~Potassium heptafluorobutanoate	2966-54-3					1.6E+01			1.6E+01
				3.0E-04	P						1.36E+09		1	0.1	~Potassium perfluorobutanesulfonate	29420-49-3					2.3E+00	9.9E+00		1.9E+00
				2.0E-06	A						1.36E+09		1	0.1	~Potassium perfluorooctanesulfonate	2795-39-3					1.6E-02	6.6E-02		1.3E-02
				1.0E-03	I			V		8.99E+04	1.36E+09	6.02E+04	1		~Sodium perfluorobutanoate	2218-54-4					7.8E+00			7.8E+00
				5.0E-04	I						1.36E+09		1	0.1	~Sodium perfluorohexanoate	2923-26-4					3.9E+00	1.6E+01		3.2E+00
															Perchlorates									
				7.0E-04	I						1.36E+09		1		~Ammonium Perchlorate	7790-98-9					5.5E+00			5.5E+00
				7.0E-04	I						1.36E+09		1		~Lithium Perchlorate	7791-03-9					5.5E+00			5.5E+00
				7.0E-04	I						1.36E+09		1		~Perchlorate and Perchlorate Salts	14797-73-0					5.5E+00			5.5E+00
				7.0E-04	I						1.36E+09		1		~Potassium Perchlorate	7778-74-7					5.5E+00			5.5E+00
				7.0E-04	I						1.36E+09		1		~Sodium Perchlorate	7601-89-0					5.5E+00			5.5E+00
				5.0E-02	I						1.36E+09		1	0.1	Permethrin	52645-53-1					3.9E+02	1.6E+03		3.2E+02
2.2E-03	C	6.3E-07	C								1.36E+09		1	0.1	Phenacetin	62-44-2	3.2E+02	1.1E+03	6.1E+06	2.5E+02				
				2.4E-01	O						1.36E+09		1	0.1	Phenmedipham	13684-63-4					1.9E+03	7.9E+03		1.5E+03
				3.0E-01	I	2.0E-01	C				1.36E+09		1	0.1	Phenol	108-95-2					2.3E+03	9.9E+03	2.8E+07	1.9E+03
				4.0E-03	I						1.36E+09		1	0.1	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1					3.1E+01	1.3E+02		2.5E+01
				5.0E-04	X						1.36E+09		1	0.1	Phenothiazine	92-84-2					3.9E+00	1.6E+01		3.2E+00
				2.0E-04	X			V		1.29E+02	1.36E+09	7.06E+03	1		Phenyl Isothiocyanate	103-72-0					1.6E+00			1.6E+00
				6.0E-03	I						1.36E+09		1	0.1	Phenylenediamine, m-	108-45-2					4.7E+01	2.0E+02		3.8E+01
1.2E-01	P			4.0E-03	P						1.36E+09		1	0.1	Phenylenediamine, o-	95-54-5	5.8E+00	2.1E+01		4.5E+00	3.1E+01	1.3E+02		2.5E+01
				1.0E-03	X						1.36E+09		1	0.1	Phenylenediamine, p-	106-50-3					7.8E+00	3.3E+01		6.3E+00
1.9E-03	H										1.36E+09		1	0.1	Phenylphenol, 2-	90-43-7	3.6E+02	1.3E+03		2.8E+02				
				2.0E-04	H						1.36E+09		1	0.1	Phorate	298-02-2					1.6E+00	6.6E+00		1.3E+00
						3.0E-04	I	V		1.61E+03	1.36E+09	9.81E+02	1		Phosgene	75-44-5							3.1E-02	3.1E-02
				2.0E-02	I						1.36E+09		1	0.1	Phosmet	732-11-6					1.6E+02	6.6E+02		1.3E+02
															Phosphates, Inorganic									
				2.9E+00	X						1.36E+09		1		~Aluminum metaphosphate	13776-88-0					2.3E+04			2.3E+04
				3.0E-01	X						1.36E+09		1		~Aluminum salts of inorganic phosphates	E524680405					2.3E+03			2.3E+03
				1.0E+00	P						1.36E+09		1		~Dipotassium phosphate	7758-11-4					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Disodium phosphate	7558-79-4					7.8E+03			7.8E+03
				3.5E+00	X						1.36E+09		1		~Monoaluminum phosphate	13530-50-2					2.8E+04			2.8E+04
				1.0E+00	P						1.36E+09		1		~Monopotassium phosphate	7778-77-0					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Monosodium phosphate	7558-80-7					7.8E+03			7.8E+03
				1.4E+00	X						1.36E+09		1	0.1	~Phosphoric acid, aluminum salt (1:1) [aluminum phosphate]	7784-30-7					1.1E+04	4.5E+04		8.6E+03
				4.3E+00	X						1.36E+09		1		~Phosphoric acid, aluminum sodium salt (1:X:X) [sodium aluminum phosphate acidic (acidic SALP)]	7785-88-8					3.3E+04			3.3E+04
				1.0E+00	P						1.36E+09		1		~Polyphosphoric acid	8017-16-1					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Potassium salts of inorganic phosphates	E524680403					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Potassium tripolyphosphate	13845-36-8					7.8E+03			7.8E+03
				5.0E+00	X						1.36E+09		1		~Sodium aluminum phosphate (anhydrous)	10279-59-1					3.9E+04			3.9E+04
				3.5E+00	X						1.36E+09		1		~Sodium aluminum phosphate (tetrahydrate)	10305-76-7					2.8E+04			2.8E+04
				1.0E+00	P						1.36E+09		1		~Sodium hexametaphosphate	10124-56-8					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Sodium polyphosphate	68915-31-1					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Sodium pyrophosphate	7758-16-9					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Sodium salts of inorganic phosphates	E524680404					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Sodium trimetaphosphate	7785-84-4					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Sodium tripolyphosphate	7758-29-4					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Tetrapotassium phosphate	7320-34-5					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Tetrasodium pyrophosphate	7722-88-5					7.8E+03			7.8E+03
				3.3E+00	X						1.36E+09		1		~Trialuminum sodium tetra decahydroqenoctaorthophosphate (dihydrate)	15136-87-5					2.5E+04			2.5E+04
				3.1E+00	X						1.36E+09		1	0.1	~Triphosphoric acid, aluminum salt (1:1) [aluminum triphosphate]	13939-25-8					2.4E+04	1.0E+05		2.0E+04
				1.0E+00	P						1.36E+09		1		~Tripotassium phosphate	7778-53-2					7.8E+03			7.8E+03
				1.0E+00	P						1.36E+09		1		~Trisodium phosphate	7601-54-9					7.8E+03			7.8E+03
				3.0E-04	I	3.0E-04	I	V			1.36E+09		1		Phosphine	7803-51-2					2.3E+00		4.3E+04	2.3E+00
				1.0E+00	P	1.0E-02	I				1.36E+09		1		Phosphoric Acid	7664-38-2					7.8E+03		1.4E+06	7.8E+03
				2.0E-05	I			V			1.36E+09	6.92E+03	1		Phosphorus, White	7723-14-0					1.6E-01			1.6E-01
															Phthalates									
1.4E-02	I	2.4E-06	C	2.0E-02	I						1.36E+09		1	0.1	~Bis(2-ethylhexyl)phthalate	117-81-7	5.0E+01	1.8E+02	1.6E+06	3.9E+01	1.6E+02	6.6E+02		1.3E+02
1.9E-03	P			2.0E-01	I						1.36E+09		1	0.1	~Butyl Benzyl Phthalate	85-68-7	3.7E+02	1.3E+03		2.9E+02	1.6E+03	6.6E+03		1.3E+03
				1.0E+00	I						1.36E+09		1	0.1	~Butylphthalyl Butylglycolate	85-70-1					7.8E+03	3.3E+04		6.3E+03
				1.0E-01	I						1.36E+09		1	0.1	~Dibutyl Phthalate	84-74-2					7.8E+02	3.3E+03		6.3E+02
				8.0E-01	I						1.36E+09		1	0.1	~Diethyl Phthalate	84-66-2					6.3E+03	2.6E+04		5.1E+03
				1.0E-01	I			V			1.36E+09	2.13E+04	1		~Dimethylterephthalate	120-61-6					7.8E+02			7.8E+02
				1.0E-02	P						1.36E+09		1	0.1	~Octyl Phthalate, di-N-	117-84-0					7.8E+01	3.3E+02		6.3E+01
				5.0E-01	X						1.36E+09		1	0.1	~Phthalic Acid, p-	100-21-0					3.9E+03	1.6E+04		3.2E+03
				2.0E+00	I	2.0E-02	C				1.36E+09		1	0.1	~Phthalic Anhydride	85-44-9					1.6E+04	6.6E+04	2.8E+06	1.3E+04
				7.0E-02	I						1.36E+09		1	0.1	Picloram	1918-02-1					5.5E+02	2.3E+03		4.4E+02
				1.0E-04	X						1.36E+09		1	0.1	Picramic Acid (2-Amino-4,6-dinitrophenol)	96-91-3					7.8E-01	3.3E+00		6.3E-01
				2.0E-03	X						1.36E+09		1	0.1	Picric Acid (2,4,6-Trinitrophenol)	88-89-1					1.6E+01	6.6E+01		1.3E+01
				7.3E-04	O						1.36E+09		1	0.1	Pirimiphos, Methyl	29232-93-7					5.7E+00	2.4E+01		4.6E+00
3.0E+01	C	8.6E-03	C	7.0E-06	H						1.36E+09		1	0.1	Polybrominated Biphenyls	36355-01-8	2.3E-02	8.2E-02	4.4E+02	1.8E-02	5.5E-02	2.3E-01		4.4E-02
															Polychlorinated Biphenyls (PCBs)									
7.0E-02	G	2.0E-05	G	7.0E-05	I			V			1.36E+09	5.86E+05	1	0.14	~Aroclor 1016	12674-11-2	9.9E+00	2.5E+01	8.2E+01	6.6E+00	5.5E-01	1.6E+00		4.1E-01
2.0E+00	G	5.7E-04	G					V			1.36E+09	2.04E+05	1	0.14	~Aroclor 1221	11104-28-2	3.5E-01	8.8E-01	1.0E+00	2.0E-01				
2.0E+00	G	5.7E-04	G					V			1.36E+09	1.12E+05	1	0.14	~Aroclor 1232	11141-16-5	3.5E-01	8.8E-01	5.5E-01	1.7E-01				
2.0E+00	G	5.7E-04	G					V			1.36E+09	5.91E+05	1	0.14	~Aroclor 1242	53469-21-9	3.5E-01	8.8E-01	2.9E+00	2.3E-01				
2.0E+00	G	5.7E-04	G					V			1.36E+09	5.14E+05	1	0.14	~Aroclor 1248	12672-29-6	3.5E-01	8.8E-01	2.5E+00	2.3E-01				
2.0E+00	G	5.7E-04	G	2.0E-05	I			V			1.36E+09	8.43E+05	1	0.14	~Aroclor 1254	11097-69-1	3.5E-01	8.8E-01	4.1E+00	2.4E-01	1.6E-01	4.7E-01		1.2E-01
2.0E+00	G	5.7E-04	G					V			1.36E+09	1.31E+06	1	0.14	~Aroclor 1260	11096-82-5	3.5E-01	8.8E-01	6.5E+00	2.4E-01				
				6.0E-04	X			V			1.36E+09	1.15E+06	1	0.14	~Aroclor 5460	11126-42-4					4.7E+00	1.4E+01		3.5E+00

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information															Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V			1.36E+09	2.43E+06	1	0.14	~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.8E-01	4.5E-01	6.0E+00	1.3E-01	1.8E-01	5.5E-01	3.4E+02	1.4E-01
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V			1.36E+09	1.58E+06	1	0.14	~Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.8E-01	4.5E-01	3.9E+00	1.2E-01	1.8E-01	5.5E-01	2.2E+02	1.4E-01
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V			1.36E+09	1.04E+06	1	0.14	~Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	69782-90-7	1.8E-01	4.5E-01	2.6E+00	1.2E-01	1.8E-01	5.5E-01	1.4E+02	1.4E-01
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V			1.36E+09	1.11E+06	1	0.14	~Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.8E-01	4.5E-01	2.7E+00	1.2E-01	1.8E-01	5.5E-01	1.5E+02	1.4E-01
3.9E+03	W	1.1E+00	W	2.3E-08	W	1.3E-06	W	V			1.36E+09	1.58E+06	1	0.14	~Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	1.8E-04	4.5E-04	3.9E-03	1.2E-04	1.8E-04	5.5E-04	2.2E-01	1.4E-04
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V			1.36E+09	7.33E+05	1	0.14	~Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.8E-01	4.5E-01	1.8E+00	1.2E-01	1.8E-01	5.5E-01	1.0E+02	1.4E-01
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V			1.36E+09	5.90E+05	1	0.14	~Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.8E-01	4.5E-01	1.5E+00	1.2E-01	1.8E-01	5.5E-01	8.2E+01	1.4E-01
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V			1.36E+09	6.01E+05	1	0.14	~Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.8E-01	4.5E-01	1.5E+00	1.2E-01	1.8E-01	5.5E-01	8.4E+01	1.4E-01
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V			1.36E+09	1.05E+06	1	0.14	~Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.8E-01	4.5E-01	2.6E+00	1.2E-01	1.8E-01	5.5E-01	1.5E+02	1.4E-01
1.3E+04	W	3.8E+00	W	7.0E-09	W	4.0E-07	W	V			1.36E+09	7.26E+05	1	0.14	~Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	5.3E-05	1.4E-04	5.4E-04	3.6E-05	5.5E-05	1.6E-04	3.0E-02	4.1E-05
2.0E+00	I	5.7E-04	I					V			1.36E+09	5.32E+05	1	0.14	~Polychlorinated Biphenyls (high risk)	1336-36-3	3.5E-01	8.8E-01	2.6E+00	2.3E-01				
4.0E-01	I	1.0E-04	I					V					1	0.14	~Polychlorinated Biphenyls (low risk)	1336-36-3								
7.0E-02	I	2.0E-05	I					V					1	0.14	~Polychlorinated Biphenyls (lowest risk)	1336-36-3								
1.3E+01	W	3.8E-03	W	7.0E-06	W	4.0E-04	W				1.36E+09		1	0.14	~Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	5.3E-02	1.4E-01	1.0E+03	3.8E-02	5.5E-02	1.6E-01	5.7E+04	4.1E-02
3.9E+01	W	1.1E-02	W	2.3E-06	W	1.3E-04	W	V			1.36E+09	5.09E+05	1	0.14	~Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	1.8E-02	4.5E-02	1.3E-01	1.2E-02	1.8E-02	5.5E-02	7.1E+00	1.4E-02
						6.0E-04	I				1.36E+09		1	0.1	Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9							8.5E+04	8.5E+04
															Polynuclear Aromatic Hydrocarbons (PAHs)									
				6.0E-02	I			V			1.36E+09	1.41E+05	1	0.13	~Acenaphthene	83-32-9					4.7E+02	1.5E+03		3.6E+02
				3.0E-01	I			V			1.36E+09	5.23E+05	1	0.13	~Anthracene	120-12-7					2.3E+03	7.6E+03		1.8E+03
1.0E-01	E	6.0E-05	E					V	M		1.36E+09	4.41E+06	1	0.13	~Benz[a]anthracene	56-55-3	1.5E+00	4.6E+00	7.4E+01	1.1E+00				
				9.0E-05	X	2.0E-06	X				1.36E+09		1	0.1	~Benzo(e)pyrene	192-97-2					7.0E-01	3.0E+00	2.8E+02	5.7E-01
1.2E+00	C	1.1E-04	C								1.36E+09		1	0.13	~Benzo(j)fluoranthene	205-82-3	5.8E-01	1.6E+00	3.5E+04	4.2E-01				
1.0E+00	I	6.0E-04	I	3.0E-04	I	2.0E-06	I		M		1.36E+09		1	0.13	~Benzo[a]pyrene	50-32-8	1.5E-01	4.6E-01	2.3E+03	1.1E-01	2.3E+00	7.6E+00	2.8E+02	1.8E+00
1.0E-01	E	6.0E-05	E						M		1.36E+09		1	0.13	~Benzo[b]fluoranthene	205-99-2	1.5E+00	4.6E+00	2.3E+04	1.1E+00				
1.0E-02	E	6.0E-06	E						M		1.36E+09		1	0.13	~Benzo[k]fluoranthene	207-08-9	1.5E+01	4.6E+01	2.3E+05	1.1E+01				
				8.0E-02	I			V			1.36E+09	7.99E+04	1	0.13	~Chloronaphthalene, Beta-	91-58-7					6.3E+02	2.0E+03		4.8E+02
1.0E-03	E	6.0E-07	E						M		1.36E+09		1	0.13	~Chrysene	218-01-9	1.5E+02	4.6E+02	2.3E+06	1.1E+02				
1.0E+00	E	6.0E-04	E						M		1.36E+09		1	0.13	~Dibenz[a,h]anthracene	53-70-3	1.5E-01	4.6E-01	2.3E+03	1.1E-01				
1.2E+01	C	1.1E-03	C								1.36E+09		1	0.13	~Dibenzo(a,e)pyrene	192-65-4	5.8E-02	1.6E-01	3.5E+03	4.2E-02				
2.5E+02	C	7.1E-02	C						M		1.36E+09		1	0.13	~Dimethylbenz(a)anthracene, 7,12-	57-97-6	6.1E-04	1.8E-03	1.9E+01	4.6E-04				
				4.0E-02	I						1.36E+09		1	0.13	~Fluoranthene	206-44-0					3.1E+02	1.0E+03		2.4E+02
				4.0E-02	I			V			1.36E+09	2.81E+05	1	0.13	~Fluorene	86-73-7					3.1E+02	1.0E+03		2.4E+02
1.0E-01	E	6.0E-05	E						M		1.36E+09		1	0.13	~Indeno[1,2,3-cd]pyrene	193-39-5	1.5E+00	4.6E+00	2.3E+04	1.1E+00				
2.9E-02	P			7.0E-02	A			V		3.94E+02	1.36E+09	5.86E+04	1	0.13	~Methylnaphthalene, 1-	90-12-0	2.4E+01	6.6E+01		1.8E+01	5.5E+02	1.8E+03		4.2E+02
				4.0E-03	I			V			1.36E+09	5.80E+04	1	0.13	~Methylnaphthalene, 2-	91-57-6					3.1E+01	1.0E+02		2.4E+01
1.2E-01	C	3.4E-05	C	2.0E-02	I	3.0E-03	I	V			1.36E+09	4.63E+04	1	0.13	~Naphthalene	91-20-3	5.8E+00	1.6E+01	3.8E+00	2.0E+00	1.6E+02	5.1E+02	1.4E+01	1.3E+01
1.2E+00	C	1.1E-04	C								1.36E+09		1	0.13	~Nitropyrene, 4-	57835-92-4	5.8E-01	1.6E+00	3.5E+04	4.2E-01				
				9.0E-05	X	2.0E-06	X				1.36E+09		1	0.13	~Perylene	198-55-0					7.0E-01	2.3E+00	2.8E+02	5.4E-01
				3.0E-02	I			V			1.36E+09	2.38E+06	1	0.13	~Pyrene	129-00-0					2.3E+02	7.6E+02		1.8E+02
1.5E-01	I			9.0E-03	I						1.36E+09		1	0.1	Prochloraz	67747-09-5	4.6E+00	1.6E+01		3.6E+00	7.0E+01	3.0E+02		5.7E+01
				6.0E-03	H			V			1.36E+09	4.20E+05	1		Profluralin	26399-36-0					4.7E+01			4.7E+01
				1.5E-02	I						1.36E+09		1	0.1	Prometon	1610-18-0					1.2E+02	4.9E+02		9.5E+01
				4.0E-02	O						1.36E+09		1	0.1	Prometryn	7287-19-6					3.1E+02	1.3E+03		2.5E+02
				7.5E-02	I						1.36E+09		1	0.1	Pronamide	23950-58-5					5.9E+02	2.5E+03		4.7E+02
				1.3E-02	I						1.36E+09		1	0.1	Propachlor	1918-16-7					1.0E+02	4.3E+02		8.2E+01
				5.0E-03	I						1.36E+09		1	0.1	Propanil	709-98-8					3.9E+01	1.6E+02		3.2E+01
1.9E-01	O			4.0E-02	O						1.36E+09		1	0.1	Propargite	2312-35-8	3.6E+00	1.3E+01		2.8E+00	3.1E+02	1.3E+03		2.5E+02
				2.0E-03	I			V		1.11E+05	1.36E+09	6.27E+04	1		Propargyl Alcohol	107-19-7					1.6E+01			1.6E+01
				2.0E-02	I						1.36E+09		1	0.1	Propazine	139-40-2					1.6E+02	6.6E+02		1.3E+02
				2.0E-02	I						1.36E+09		1	0.1	Propham	122-42-9					1.6E+02	6.6E+02		1.3E+02
				1.0E-01	O						1.36E+09		1	0.1	Propiconazole	60207-90-1					7.8E+02	3.3E+03		6.3E+02
						8.0E-03	I	V		3.26E+04	1.36E+09	8.94E+03	1		Propionaldehyde	123-38-6							7.5E+00	7.5E+00
				1.0E-01	X	1.0E+00	X	V		2.64E+02	1.36E+09	6.99E+03	1		Propyl benzene	103-65-1					7.8E+02		7.3E+02	3.8E+02
						3.0E+00	C	V		3.49E+02	1.36E+09	7.04E+02	1		Propylene	115-07-1							2.2E+02	2.2E+02
				2.0E+01	P						1.36E+09		1	0.1	Propylene Glycol	57-55-6					1.6E+05	6.6E+05		1.3E+05
						2.7E-04	A				1.36E+09		1	0.1	Propylene Glycol Dinitrate	6423-43-4							3.9E+04	3.9E+04
				7.0E-01	H	2.0E+00	I	V		1.06E+05	1.36E+09	7.83E+04	1		Propylene Glycol Monomethyl Ether	107-98-2					5.5E+03		1.6E+04	4.1E+03
2.4E-01	I	3.7E-06	I			3.0E-02	I	V		7.77E+04	1.36E+09	1.03E+04	1		Propylene Oxide	75-56-9	2.9E+00		7.8E+00	2.1E+00			3.2E+01	3.2E+01
				1.0E-03	I			V		5.30E+05	1.36E+09	5.54E+04	1		Pyridine	110-86-1					7.8E+00			7.8E+00
				5.0E-04	I						1.36E+09		1	0.1	Quinalphos	13593-03-8					3.9E+00	1.6E+01		3.2E+00
3.0E+00	I										1.36E+09		1	0.1	Quinoline	91-22-5	2.3E-01	8.2E-01		1.8E-01				
				9.0E-03	I						1.36E+09		1	0.1	Quizalofop-ethyl	76578-14-8					7.0E+01	3.0E+02		5.7E+01
						3.0E+04	A						1		Refractory Ceramic Fibers (units in fibers)	E715557								
				3.0E-02	I						1.36E+09		1	0.1	Resmethrin	10453-86-8					2.3E+02	9.9E+02		1.9E+02
				5.0E-02	H			V			1.36E+09	4.65E+05	1		Ronnel	299-84-3					3.9E+02			3.9E+02
				4.0E-03	I						1.36E+09		1	0.1	Rotenone	83-79-4					3.1E+01	1.3E+02		2.5E+01
2.2E-01	C	6.3E-05	C						M		1.36E+09		1	0.1	Safrole	94-59-7	7.0E-01	2.7E+00	2.2E+04	5.5E-01				
				5.0E-03	I						1.36E+09		1		Selenious Acid	7783-00-8					3.9E+01			3.9E+01
				5.0E-03	I	2.0E-02	C				1.36E+09		1		Selenium	7782-49-2					3.9E+01		2.8E+06	3.9E+01
				5.0E-03	C	2.0E-02	C				1.36E+09		1		Selenium Sulfide	7446-34-6					3.9E+01		2.8E+06	3.9E+01
				1.4E-01	O						1.36E+09		1	0.1	Sethoxydim	74051-80-2					1.1E+03	4.6E+03		8.8E+02
						3.0E-03	C				1.36E+09		1		Silica (crystalline, respirable)	7631-86-9							4.3E+05	4.3E+05
				5.0E-03	I						1.36E+09		0.04		Silver	7440-22-4					3.9E+01			3.9E+01
1.2E-01	H			5.0E-03	I						1.36E+09		1	0.1	Simazine	122-34-9	5.8E+00	2.1E+01		4.5E+00	3.9E+01	1.6E+02		3.2E+01
				1.3E-02	I						1.36E+09		1	0.1	Sodium Acifluorfen	62476-59-9					1.0E+02	4.3E+02		8.2E+01
				4.0E-03	I						1.36E+09		1		Sodium Azide	26628-22-8					3.1E+01			3.1E+01
2.7E-01	H			3.0E-02	I						1.36E+09		1	0.1	Sodium Diethyldithiocarbamate	148-18-5	2.6E+00	9.2E+00		2.0E+00	2.3E+02	9.9E+02		1.9E+02
				5.0E-02	A	1.4E-02	C				1.36E+09		1		Sodium Fluoride	7681-49-4					3.9E+02		2.0E+06	3.9E+02
				2.0E-05	I						1.36E+09		1	0.1	Sodium Fluoroacetate	62-74-8					1.6E-01	6.6E-01		1.3E-01
				1.0E-03	H						1.36E+09		1		Sodium Metavanadate	13718-26-8					7.8E+00			7.8E+00
				8.0E-04	P						1.36E+09		1		Sodium Tungstate	13472-45-2					6.3E+00			6.3E+00
				8.0E-04	P						1.36E+09		1		Sodium Tungstate Dihydrate	10213-10-2					6.3E+00			6.3E+00
2.4E-02	H			3.0E-02	I						1.36E+09		1	0.1	Stirofos (Tetrachlorovinphos)	961-11-5	2.9E+01	1.0E+02		2.3E+01	2.3E+02	9.9E+02		1.9E+02

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information														Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO $(mg/kg\text{-}day)^{-1}$	key	IUR $(ug/m^3)^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
				6.0E-01	I						1.36E+09		1		Strontium, Stable	7440-24-6					4.7E+03			4.7E+03
				3.0E-04	I						1.36E+09		1	0.1	Strychnine	57-24-9					2.3E+00	9.9E+00		1.9E+00
				2.0E-01	I	1.0E+00	I	V		8.67E+02	1.36E+09	9.35E+03	1		Styrene	100-42-5					1.6E+03		9.7E+02	6.0E+02
				3.0E-03	P						1.36E+09		1	0.1	Styrene-Acrylonitrile (SAN) Trimer (THNA isomer)	57964-39-3					2.3E+01	9.9E+01		1.9E+01
				3.0E-03	P						1.36E+09		1	0.1	Styrene-Acrylonitrile (SAN) Trimer (THNP isomer)	57964-40-6					2.3E+01	9.9E+01		1.9E+01
				1.0E-03	P	2.0E-03	X				1.36E+09		1	0.1	Sulfolane	126-33-0					7.8E+00	3.3E+01	2.8E+05	6.3E+00
				8.0E-04	P						1.36E+09		1	0.1	Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9					6.3E+00	2.6E+01		5.1E+00
						1.0E-03	C	V			1.36E+09		1		Sulfur Trioxide	7446-11-9							1.4E+05	1.4E+05
						1.0E-03	C				1.36E+09		1		Sulfuric Acid	7664-93-9							1.4E+05	1.4E+05
2.5E-02	I	7.1E-06	I	5.0E-02	H						1.36E+09		1	0.1	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	2.8E+01	9.9E+01	5.4E+05	2.2E+01	3.9E+02	1.6E+03		3.2E+02
				7.0E-02	I						1.36E+09		1	0.1	Tebuthiuron	34014-18-1					5.5E+02	2.3E+03		4.4E+02
				2.0E-02	H						1.36E+09		1	0.1	Temephos	3383-96-8					1.6E+02	6.6E+02		1.3E+02
				1.3E-02	I						1.36E+09		1	0.1	Terbacil	5902-51-2					1.0E+02	4.3E+02		8.2E+01
				2.5E-05	H			V		3.09E+01	1.36E+09	2.64E+05	1		Terbufos	13071-79-9					2.0E-01			2.0E-01
				1.0E-03	I						1.36E+09		1	0.1	Terbutryn	886-50-0					7.8E+00	3.3E+01		6.3E+00
5.0E-03	C	1.3E-06	C					V			1.36E+09	3.99E+03	1		Tert-Butyl Acetate	540-88-5	1.4E+02		8.6E+00	8.1E+00				
				1.0E-04	I						1.36E+09		1	0.1	Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	5436-43-1					7.8E-01	3.3E+00		6.3E-01
				3.0E-05	P			V			1.36E+09	5.07E+04	1		Tetrachlorobenzene, 1,2,4,5-	95-94-3					2.3E-01			2.3E-01
2.6E-02	I	7.4E-06	I	3.0E-02	I			V		6.80E+02	1.36E+09	5.68E+03	1		Tetrachloroethane, 1,1,1,2-	630-20-6	2.7E+01		2.2E+00	2.0E+00	2.3E+02			2.3E+02
2.0E-01	I	5.8E-05	C	2.0E-02	I			V		1.90E+03	1.36E+09	1.51E+04	1		Tetrachloroethane, 1,1,2,2-	79-34-5	3.5E+00		7.3E-01	6.0E-01	1.6E+02			1.6E+02
2.1E-03	I	2.6E-07	I	6.0E-03	I	4.0E-02	I	V		1.66E+02	1.36E+09	2.35E+03	1		Tetrachloroethylene	127-18-4	3.3E+02		2.5E+01	2.4E+01	4.7E+01		9.8E+00	8.1E+00
				3.0E-02	I						1.36E+09		1	0.1	Tetrachlorophenol, 2,3,4,6-	58-90-2					2.3E+02	9.9E+02		1.9E+02
1.6E+01	X			6.0E-05	X			V			1.36E+09	1.05E+05	1		Tetrachlorotoluene, p- alpha, alpha, alpha-	5216-25-1	4.3E-02			4.3E-02	4.7E-01			4.7E-01
				5.0E-04	I						1.36E+09		1	0.1	Tetraethyl Dithiopyrophosphate	3689-24-5					3.9E+00	1.6E+01		3.2E+00
						8.0E+01	I	V		2.05E+03	1.36E+09	1.22E+03	1		Tetrafluoroethane, 1,1,1,2-	811-97-2							1.0E+04	1.0E+04
				1.0E-04	X						1.36E+09		1	0.1	Tetramethylphosphoramide, -N,N,N',N" (TMPA)	16853-36-4					7.8E-01	3.3E+00		6.3E-01
				2.0E-03	P						1.36E+09		1	0.00065	Tetryl (Trinitrophenylmethylnitramine)	479-45-8					1.6E+01	1.0E+04		1.6E+01
				2.0E-05	G						1.36E+09		1		Thallic Oxide	1314-32-5					1.6E-01			1.6E-01
				1.0E-05	X						1.36E+09		1		Thallium (I) Nitrate	10102-45-1					7.8E-02			7.8E-02
				1.0E-05	X						1.36E+09		1		Thallium (Soluble Salts)	7440-28-0					7.8E-02			7.8E-02
				1.0E-05	X			V			1.36E+09	1.40E+05	1		Thallium Acetate	563-68-8					7.8E-02			7.8E-02
				2.0E-05	X						1.36E+09		1	0.1	Thallium Carbonate	6533-73-9					1.6E-01	6.6E-01		1.3E-01
				1.0E-05	X						1.36E+09		1		Thallium Chloride	7791-12-0					7.8E-02			7.8E-02
				1.0E-05	G						1.36E+09		1		Thallium Selenite	12039-52-0					7.8E-02			7.8E-02
				2.0E-05	X						1.36E+09		1		Thallium Sulfate	7446-18-6					1.6E-01			1.6E-01
				4.3E-02	O						1.36E+09		1	0.1	Thifensulfuron-methyl	79277-27-3					3.4E+02	1.4E+03		2.7E+02
				1.0E-02	I						1.36E+09		1	0.1	Thiobencarb	28249-77-6					7.8E+01	3.3E+02		6.3E+01
				3.0E-02	H						1.36E+09		1	0.1	Thiocyanic acid, (2-benzothiazolylthio)methyl ester (TCMTB)	21564-17-0					2.3E+02	9.9E+02		1.9E+02
				7.0E-02	X						1.36E+09		1	0.0075	Thiodiglycol	111-48-8					5.5E+02	3.1E+04		5.4E+02
				3.0E-04	H						1.36E+09		1	0.1	Thiofanox	39196-18-4					2.3E+00	9.9E+00		1.9E+00
1.2E-02	O			1.6E-01	O						1.36E+09		1	0.1	Thiophanate, Methyl	23564-05-8	6.0E+01	2.1E+02		4.7E+01	1.3E+03	5.3E+03		1.0E+03
				1.5E-02	O						1.36E+09		1	0.1	Thiram	137-26-8					1.2E+02	4.9E+02		9.5E+01
				6.0E-01	H						1.36E+09		1		Tin	7440-31-5					4.7E+03			4.7E+03
						1.0E-04	A	V			1.36E+09		1		Titanium Tetrachloride	7550-45-0							1.4E+04	1.4E+04
				8.0E-02	I	5.0E+00	I	V		8.18E+02	1.36E+09	4.29E+03	1		Toluene	108-88-3					6.3E+02		2.2E+03	4.9E+02
3.9E-02	C	1.1E-05	C			8.0E-06	C	V			1.36E+09	7.62E+05	1		Toluene-2,4-diisocyanate	584-84-9	1.8E+01		1.9E+02	1.6E+01			6.4E-01	6.4E-01
3.9E-02	C	1.1E-05	C			8.0E-06	C	V		1.71E+03	1.36E+09	6.32E+05	1		Toluene-2,6-diisocyanate	91-08-7	1.8E+01		1.6E+02	1.6E+01			5.3E-01	5.3E-01
				1.0E-04	X						1.36E+09		1	0.1	Toluenediamine, 2,3-	2687-25-4					7.8E-01	3.3E+00		6.3E-01
1.8E-01	X			2.0E-04	X						1.36E+09		1	0.1	Toluenediamine, 2,5-	95-70-5	3.9E+00	1.4E+01		3.0E+00	1.6E+00	6.6E+00		1.3E+00
				1.0E-04	X						1.36E+09		1	0.1	Toluenediamine, 3,4-	496-72-0					7.8E-01	3.3E+00		6.3E-01
				5.0E-03	P						1.36E+09		1	0.1	Toluic Acid, p-	99-94-5					3.9E+01	1.6E+02		3.2E+01
1.6E-02	P	5.1E-05	C								1.36E+09		1	0.1	Toluidine, o- (Methylaniline, 2-)	95-53-4	4.3E+01	1.5E+02	7.5E+04	3.4E+01				
3.0E-02	P			4.0E-03	X						1.36E+09		1	0.1	Toluidine, p-	106-49-0	2.3E+01	8.2E+01		1.8E+01	3.1E+01	1.3E+02		2.5E+01
				3.0E+00	P			V		3.42E-01	1.36E+09	1.38E+03	1		Total Petroleum Hydrocarbons (Aliphatic High)	E1790670					2.3E+04			2.3E+04
				5.0E-03	P	4.0E-01	P	V		1.12E+02	1.36E+09	1.65E+03	1		Total Petroleum Hydrocarbons (Aliphatic Low)	E1790666					3.9E+01		6.9E+01	2.5E+01
				1.0E-02	X	1.0E-01	P	V		6.86E+00	1.36E+09	1.04E+03	1		Total Petroleum Hydrocarbons (Aliphatic Medium)	E1790668					7.8E+01		1.1E+01	9.6E+00
				3.0E-04	P	2.0E-06	P		M		1.36E+09		1	0.13	Total Petroleum Hydrocarbons (Aromatic High)	E1790676					2.3E+00	7.6E+00	2.8E+02	1.8E+00
				1.0E-02	P	6.0E-02	P	V		2.31E+02	1.36E+09	7.75E+03	1		Total Petroleum Hydrocarbons (Aromatic Medium)	E1790674					7.8E+01		4.8E+01	3.0E+01
1.1E+00	I	3.2E-04	I	9.0E-05	P						1.36E+09		1	0.1	Toxaphene	8001-35-2	6.3E-01	2.2E+00	1.2E+04	4.9E-01	7.0E-01	3.0E+00		5.7E-01
				3.0E-05	X						1.36E+09		1	0.1	Toxaphene, Weathered	E1841606					2.3E-01	9.9E-01		1.9E-01
				7.5E-03	I						1.36E+09		1	0.1	Tralomethrin	66841-25-6					5.9E+01	2.5E+02		4.7E+01
				3.0E-04	A			V			1.36E+09	3.36E+03	1		Tri-n-butyltin	688-73-3					2.3E+00			2.3E+00
				8.0E+01	X						1.36E+09		1	0.1	Triacetin	102-76-1					6.3E+05	2.6E+06		5.1E+05
				3.4E-02	O						1.36E+09		1	0.1	Triadimefon	43121-43-3					2.7E+02	1.1E+03		2.1E+02
7.2E-02	O			2.5E-02	O			V			1.36E+09	3.62E+05	1		Triallate	2303-17-5	9.7E+00			9.7E+00	2.0E+02			2.0E+02
				1.0E-02	I						1.36E+09		1	0.1	Triasulfuron	82097-50-5					7.8E+01	3.3E+02		6.3E+01
				8.0E-03	I						1.36E+09		1	0.1	Tribenuron-methyl	101200-48-0					6.3E+01	2.6E+02		5.1E+01
				5.0E-03	I			V			1.36E+09	4.83E+04	1		Tribromobenzene, 1,2,4-	615-54-3					3.9E+01			3.9E+01
				9.0E-03	X						1.36E+09		1	0.1	Tribromophenol, 2,4,6-	118-79-6					7.0E+01	3.0E+02		5.7E+01
				2.0E-04	O						1.36E+09		1	0.1	Tribufos	78-48-8					1.6E+00	6.6E+00		1.3E+00
9.0E-03	P			1.0E-02	P						1.36E+09		1	0.1	Tributyl Phosphate	126-73-8	7.7E+01	2.7E+02		6.0E+01	7.8E+01	3.3E+02		6.3E+01
				3.0E-04	P						1.36E+09		1	0.1	Tributyltin Compounds	E1790679					2.3E+00	9.9E+00		1.9E+00
				3.0E-04	I						1.36E+09		1	0.1	Tributyltin Oxide	56-35-9					2.3E+00	9.9E+00		1.9E+00
											1.36E+09		1	0.1	Trichloramine	10025-85-1								
				3.0E+01	I	5.0E+00	P	V		9.10E+02	1.36E+09	1.29E+03	1		Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1					2.3E+05		6.7E+02	6.7E+02
7.0E-02	I			2.0E-02	I						1.36E+09		1	0.1	Trichloroacetic Acid	76-03-9	9.9E+00	3.5E+01		7.8E+00	1.6E+02	6.6E+02		1.3E+02
2.9E-02	H										1.36E+09		1	0.1	Trichloroaniline HCl, 2,4,6-	33663-50-2	2.4E+01	8.5E+01		1.9E+01				
7.0E-03	X			3.0E-05	X						1.36E+09		1	0.1	Trichloroaniline, 2,4,6-	634-93-5	9.9E+01	3.5E+02		7.8E+01	2.3E-01	9.9E-01		1.9E-01
				8.0E-04	X			V			1.36E+09	3.22E+04	1		Trichlorobenzene, 1,2,3-	87-61-6					6.3E+00			6.3E+00
2.9E-02	P			1.0E-02	I	2.0E-03	P	V		4.04E+02	1.36E+09	2.99E+04	1		Trichlorobenzene, 1,2,4-	120-82-1	2.4E+01			2.4E+01	7.8E+01		6.2E+00	5.8E+00
				2.0E+00	I	5.0E+00	I	V		6.40E+02	1.36E+09	1.65E+03	1		Trichloroethane, 1,1,1-	71-55-6					1.6E+04		8.6E+02	8.1E+02
5.7E-02	I	1.6E-05	I	4.0E-03	I	2.0E-04	X	V		2.16E+03	1.36E+09	7.22E+03	1		Trichloroethane, 1,1,2-	79-00-5	1.2E+01		1.3E+00	1.1E+00	3.1E+01		1.5E-01	1.5E-01
4.6E-02	I	4.1E-06	I	5.0E-04	I	2.0E-03	I	V	M	6.92E+02	1.36E+09	2.21E+03	1		Trichloroethylene	79-01-6	8.8E+00		1.1E+00	9.4E-01	3.9E+00		4.6E-01	4.1E-01

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user's guide; c = cancer; n = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded; V = volatile; M = mutagen.

Toxicity and Chemical-specific Information														Contaminant		Carcinogenic Target Risk (TR) = 1E-06				Noncancer Child Hazard Index (HI) = 0.1			
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	C_{sat} (mg/kg)	PEF (m^3/kg)	VF (m^3/kg)	GIABS	ABS_d	Analyte	CAS No.	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=0.1 (mg/kg)	Dermal SL Child THQ=0.1 (mg/kg)	Inhalation SL Child THQ=0.1 (mg/kg)	Noncarcinogenic SL Child THI=0.1 (mg/kg)
				3.0E-01	I			V		1.23E+03	1.36E+09	1.04E+03	1		Trichlorofluoromethane	75-69-4					2.3E+03			2.3E+03
				1.0E-01	I						1.36E+09		1	0.1	Trichlorophenol, 2,4,5-	95-95-4					7.8E+02	3.3E+03		6.3E+02
1.1E-02	I	3.1E-06	I	1.0E-03	P						1.36E+09		1	0.1	Trichlorophenol, 2,4,6-	88-06-2	6.3E+01	2.2E+02	1.2E+06	4.9E+01	7.8E+00	3.3E+01		6.3E+00
				1.0E-02	I						1.36E+09		1	0.1	Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5					7.8E+01	3.3E+02		6.3E+01
				8.0E-03	I						1.36E+09		1	0.1	Trichlorophenoxypropionic acid, -2,4,5	93-72-1					6.3E+01	2.6E+02		5.1E+01
				5.0E-03	I			V		1.28E+03	1.36E+09	1.50E+04	1		Trichloropropane, 1,1,2-	598-77-6					3.9E+01			3.9E+01
3.0E+01	I			4.0E-03	I	3.0E-04	I	V	M	1.40E+03	1.36E+09	1.57E+04	1		Trichloropropane, 1,2,3-	96-18-4	5.1E-03			5.1E-03	3.1E+01		4.9E-01	4.8E-01
				3.0E-03	X	3.0E-04	P	V		3.11E+02	1.36E+09	2.34E+03	1		Trichloropropene, 1,2,3-	96-19-5					2.3E+01		7.3E-02	7.3E-02
				2.0E-02	A						1.36E+09		1	0.1	Tricresyl Phosphate (TCP)	1330-78-5					1.6E+02	6.6E+02		1.3E+02
				3.0E-03	I						1.36E+09		1	0.1	Tridiphane	58138-08-2					2.3E+01	9.9E+01		1.9E+01
						7.0E-03	I	V		2.79E+04	1.36E+09	1.58E+04	1		Triethylamine	121-44-8							1.2E+01	1.2E+01
				2.0E+00	P						1.36E+09		1	0.1	Triethylene Glycol	112-27-6					1.6E+04	6.6E+04		1.3E+04
						2.0E+01	P	V		4.81E+03	1.36E+09	7.12E+02	1		Trifluoroethane, 1,1,1-	420-46-2							1.5E+03	1.5E+03
7.7E-03	I			7.5E-03	I			V			1.36E+09	5.13E+05	1		Trifluralin	1582-09-8	9.0E+01			9.0E+01	5.9E+01			5.9E+01
2.0E-02	P			1.0E-02	P						1.36E+09		1	0.1	Trimethyl Phosphate	512-56-1	3.5E+01	1.2E+02		2.7E+01	7.8E+01	3.3E+02		6.3E+01
				1.0E-02	I	6.0E-02	I	V		2.93E+02	1.36E+09	9.44E+03	1		Trimethylbenzene, 1,2,3-	526-73-8					7.8E+01		5.9E+01	3.4E+01
				1.0E-02	I	6.0E-02	I	V		2.19E+02	1.36E+09	7.91E+03	1		Trimethylbenzene, 1,2,4-	95-63-6					7.8E+01		5.0E+01	3.0E+01
				1.0E-02	I	6.0E-02	I	V		1.82E+02	1.36E+09	6.61E+03	1		Trimethylbenzene, 1,3,5-	108-67-8					7.8E+01		4.1E+01	2.7E+01
				1.0E-02	X			V		2.96E+01	1.36E+09	1.00E+03	1		Trimethylpentene, 2,4,4-	25167-70-8					7.8E+01			7.8E+01
				3.0E-02	I						1.36E+09		1	0.019	Trinitrobenzene, 1,3,5-	99-35-4					2.3E+02	5.2E+03		2.2E+02
3.0E-02	I			5.0E-04	I						1.36E+09		1	0.032	Trinitrotoluene, 2,4,6-	118-96-7	2.3E+01	2.6E+02		2.1E+01	3.9E+00	5.2E+01		3.6E+00
				2.0E-02	P						1.36E+09		1	0.1	Triphenylphosphine Oxide	791-28-6					1.6E+02	6.6E+02		1.3E+02
				2.0E-02	A						1.36E+09		1	0.1	Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8					1.6E+02	6.6E+02		1.3E+02
				1.0E-02	X						1.36E+09		1	0.1	Tris(1-chloro-2-propyl)phosphate	13674-84-5					7.8E+01	3.3E+02		6.3E+01
2.3E+00	C	6.6E-04	C					V		4.67E+02	1.36E+09	9.03E+05	1		Tris(2,3-dibromopropyl)phosphate	126-72-7	3.0E-01		3.8E+00	2.8E-01				
2.0E-02	P			7.0E-03	P						1.36E+09		1	0.1	Tris(2-chloroethyl)phosphate	115-96-8	3.5E+01	1.2E+02		2.7E+01	5.5E+01	2.3E+02		4.4E+01
3.2E-03	P			1.0E-01	P						1.36E+09		1	0.1	Tris(2-ethylhexyl)phosphate	78-42-2	2.2E+02	7.7E+02		1.7E+02	7.8E+02	3.3E+03		6.3E+02
				8.0E-04	P						1.36E+09		1		Tungsten	7440-33-7					6.3E+00			6.3E+00
				2.0E-04	A	4.0E-05	A				1.36E+09		1		Uranium	7440-61-1					1.6E+00		5.7E+03	1.6E+00
1.0E+00	C	2.9E-04	C						M		1.36E+09		1	0.1	Urethane	51-79-6	1.5E-01	6.0E-01	4.8E+03	1.2E-01				
		8.3E-03	P	9.0E-03	I	7.0E-06	P				1.36E+09		0.026		Vanadium Pentoxide	1314-62-1			4.6E+02	4.6E+02	7.0E+01		9.9E+02	6.6E+01
				5.0E-03	G	1.0E-04	A				1.36E+09		0.026		Vanadium and Compounds	7440-62-2					3.9E+01		1.4E+04	3.9E+01
				1.0E-03	I			V			1.36E+09	1.23E+05	1		Vernolate	1929-77-7					7.8E+00			7.8E+00
				1.2E-03	O						1.36E+09		1	0.1	Vinclozolin	50471-44-8					9.4E+00	4.0E+01		7.6E+00
				1.0E+00	H	2.0E-01	I	V		2.75E+03	1.36E+09	4.40E+03	1		Vinyl Acetate	108-05-4					7.8E+03		9.2E+01	9.1E+01
		1.5E-05	P			3.0E-03	I	V		2.47E+03	1.36E+09	1.37E+03	1		Vinyl Bromide	593-60-2			2.6E-01	2.6E-01			4.3E-01	4.3E-01
7.2E-01	I	4.4E-06	I	3.0E-03	I	1.0E-01	I	V	M	3.92E+03	1.36E+09	9.56E+02	1		Vinyl Chloride	75-01-4	9.4E-02		1.6E-01	5.9E-02	2.3E+01		1.0E+01	7.0E+00
				3.0E-04	I						1.36E+09		1	0.1	Warfarin	81-81-2					2.3E+00	9.9E+00		1.9E+00
				2.0E-01	G	1.0E-01	G	V		3.88E+02	1.36E+09	5.47E+03	1		Xylene, m-	108-38-3					1.6E+03		5.7E+01	5.5E+01
				2.0E-01	G	1.0E-01	G	V		4.34E+02	1.36E+09	6.45E+03	1		Xylene, o-	95-47-6					1.6E+03		6.7E+01	6.4E+01
				2.0E-01	G	1.0E-01	G	V		3.90E+02	1.36E+09	5.58E+03	1		Xylene, p-	106-42-3					1.6E+03		5.8E+01	5.6E+01
				2.0E-01	I	1.0E-01	I	V		2.60E+02	1.36E+09	5.74E+03	1		Xylenes	1330-20-7					1.6E+03		6.0E+01	5.8E+01
				3.0E-04	I						1.36E+09		1		Zinc Phosphide	1314-84-7					2.3E+00			2.3E+00
				3.0E-01	I						1.36E+09		1		Zinc and Compounds	7440-66-6					2.3E+03			2.3E+03
				5.0E-02	I						1.36E+09		1	0.1	Zineb	12122-67-7					3.9E+02	1.6E+03		3.2E+02
				8.0E-05	X						1.36E+09		1		Zirconium	7440-67-7					6.3E-01			6.3E-01

Resident Vapor Intrusion Screening Levels (VISL)
/HTML"User's Guide Variable References
/HTML"Corresponding Equations

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; U = user provided; G = see RSL User's Guide Section 5; CA = cancer; NC = noncancer.

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	Does the chemical have inhalation toxicity data? (IUR and/or RfC)	IsChemicalSufficiently Volatileand Toxicto PoseInhalation Risk Via VaporIntrusion from SoilSource? (C_{vp} > $C_{i,at}$Target?)	Is ChemicalSufficiently Volatile andToxic to PoseInhalationRisk Via VaporIntrusionfrom GroundwaterSource? (C_{hc} > $C_{i,at}$Target?)	Target Indoor Air Concentration (TCR=1E-06or THQ=0.1) MIN($C_{ia,cr}$,$C_{ia,nc}$) (µg/m³)	Toxicity Basis	Target Sub-Slab and Near-sourceSoil Gas Concentration (TCR=1E-06or THQ=0.1) C_{sg},Target (µg/m³)	Target Groundwater Concentration (TCR=1E-06or THQ=0.1) C_{gw},Target (µg/L)	Is Target Groundwater Concentration < MCL? (C_{gw} < MCL?)	Pure Phase Vapor Concentration C_{vp} (26.41 ℃) (µg/m³)	Maximum Groundwater Vapor Concentration C_{hc} (µg/m³)	Temperature for Maximum Groundwater Vapor Concentration (℃)	Lower Explosive Limit LEL (% by volume)	LEL Ref	IUR (ug/m³)⁻¹	IUR Ref	RfC (mg/m³)	RfC Ref	Mutagenic Indicator	Carcinogenic VISL TCR=1E-06 $C_{ia,c}$(µg/m³)	Noncarcinogenic VISL THQ=0.1 $C_{ia,nc}$(µg/m³)
Acenaphthene	83-32-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.78E+04	3.31E+04	2.64E+01	8.00E-01	YAWS	-		-		No	-	-
Acenaphthylene	208-96-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.47E+04	8.46E+04	2.64E+01	-		-		-		No	-	-
Acephate	30560-19-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.67E+01	1.68E+01	2.64E+01	-		-		-		No	-	-
Acetaldehyde	75-07-0	Yes	Yes	Yes	Yes	9.39E-01	NC	3.13E+01	3.30E+02	--	2.14E+09	2.85E+09	2.64E+01	4.00E+00	CRC	2.20E-06	I	9.00E-03	I	No	1.28E+00	9.39E-01
Acetochlor	34256-82-1	No	No	No (not volatile)	No (not volatile)	-		-	-		4.06E+02	2.03E+02	2.64E+01	-		-		-		No	-	-
Acetone	67-64-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.23E+08	1.51E+09	2.64E+01	2.50E+00	CRC	-		-		No	-	-
Acetone Cyanohydrin	75-86-5	No	Yes	No (not volatile)	No (not volatile)	2.09E-01		-	-		1.56E+06	8.83E+04	2.64E+01	2.20E+00	CRC	-		2.00E-03	X	No	-	2.09E-01
Acetonitrile	75-05-8	Yes	Yes	Yes	Yes	6.26E+00	NC	2.09E+02	4.19E+03	--	1.96E+08	1.49E+09	2.64E+01	3.00E+00	CRC	-		6.00E-02	I	No	-	6.26E+00
Acetophenone	98-86-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.57E+06	2.88E+06	2.64E+01	1.10E+00	YAWS	-		-		No	-	-
Acetylaminofluorene, 2-	53-96-3	No	Yes	No (not volatile)	No (not volatile)	2.16E-03		-	-		1.13E+00	4.34E-02	2.64E+01	-		1.30E-03	C	-		No	2.16E-03	-
Acifluorofen	50594-66-6	No	No	No (not volatile)	No (not volatile)	-		-	-		2.98E-01	2.96E-01	2.64E+01	-		-		-		No	-	-
Acridine	260-94-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.30E+03	7.14E+02	2.64E+01	-		-		-		No	-	-
Acrolein	107-02-8	Yes	Yes	Yes	Yes	2.09E-03	NC	6.95E-02	3.97E-01	--	8.26E+08	1.11E+09	2.64E+01	2.80E+00	CRC	-		2.00E-05	I	No	-	2.09E-03
Acrylamide	79-06-1	No	Yes	No (not volatile)	No (not volatile)	1.01E-02		-	-		2.68E+04	3.19E+04	2.64E+01	2.70E+00	YAWS	1.00E-04	I	6.00E-03	I	Mut	1.01E-02	6.26E-01
Acrylic Acid	79-10-7	Yes	Yes	Yes	Yes	2.09E-02	NC	6.95E-01	1.25E+03	--	1.54E+07	1.67E+07	2.64E+01	2.40E+00	CRC	-		2.00E-04	P	No	-	2.09E-02
Acrylonitrile	107-13-1	Yes	Yes	Yes	Yes	4.13E-02	CA	1.38E+00	6.87E+00	--	3.10E+08	4.47E+08	2.64E+01	3.00E+00	CRC	6.80E-05	I	2.00E-03	I	No	4.13E-02	2.09E-01
Adiponitrile	111-69-3	No	Yes	No (not volatile)	No (not volatile)	6.26E-01		-	-		3.95E+03	4.59E+03	2.64E+01	1.00E+00	CRC	-		6.00E-03	P	No	-	6.26E-01
Alachlor	15972-60-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.19E+02	8.16E+01	2.64E+01	-		-		-		No	-	-
Aldicarb	116-06-3	No	No	No (not volatile)	No (not volatile)	-		-	-		3.55E+02	3.55E+02	2.64E+01	-		-		-		No	-	-
Aldicarb Sulfone	1646-88-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.08E+03	1.38E+03	2.64E+01	-		-		-		No	-	-
Aldicarb sulfoxide	1646-87-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.11E+03	1.11E+03	2.64E+01	-		-		-		No	-	-
Aldrin	309-00-2	Yes	Yes	Yes	Yes	5.73E-04	CA	1.91E-02	2.26E-01	--	2.36E+03	4.30E+01	2.64E+01	-		4.90E-03	I	-		No	5.73E-04	-
Alizarin Red Compounds	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Allyl Alcohol	107-18-6	Yes	Yes	Yes	Yes	1.04E-02	NC	3.48E-01	4.71E+01	--	8.15E+07	2.21E+08	2.64E+01	2.50E+00	CRC	-		1.00E-04	X	No	-	1.04E-02
Allyl Chloride	107-05-1	Yes	Yes	Yes	Yes	1.04E-01	NC	3.48E+00	2.20E-01	--	1.51E+09	1.60E+09	2.64E+01	2.90E+00	CRC	6.00E-06	C	1.00E-03	I	No	4.68E-01	1.04E-01
Aluminum	7429-90-5	No	Yes	No (not volatile)	No (not volatile)	5.21E-01		-	-		0.00E+00	-	2.64E+01	-		-		5.00E-03	P	No	-	5.21E-01
Aluminum Phosphide	20859-73-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Aluminum metaphosphate	13776-88-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Aluminum salts of inorganic phosphates	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Ametryn	834-12-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.35E+01	2.08E+01	2.64E+01	-		-		-		No	-	-
Amino-4-chlorobenzotrifluoride, 3-	121-50-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.02E+06	5.65E+04	2.64E+01	-		-		-		No	-	-
Aminoazobenzene, p-	60-09-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.49E+01	1.35E-01	2.64E+01	-		-		-		No	-	-
Aminobiphenyl, 4-	92-67-1	No	Yes	No (not volatile)	No (not volatile)	4.68E-04		-	-		1.06E+03	1.53E+03	2.64E+01	7.00E-01	YAWS	6.00E-03	C	-		No	4.68E-04	-
Aminophenol, m-	591-27-5	No	No	No (not volatile)	No (not volatile)	-		-	-		5.61E+04	2.41E+02	2.64E+01	-		-		-		No	-	-
Aminophenol, o-	95-55-6	No	No	No (not volatile)	No (not volatile)	-		-	-		5.61E+04	1.62E+02	2.64E+01	-		-		-		No	-	-
Aminophenol, p-	123-30-8	No	No	No (not volatile)	No (not volatile)	-		-	-		2.35E+02	2.61E+02	2.64E+01	-		-		-		No	-	-
Aminopyridine, 4-	504-24-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.72E+03	9.57E+03	2.64E+01	-		-		-		No	-	-

Amitraz	33089-61-1	No	No	No (not volatile)	No (not volatile)	-		-	-		3.16E+01	4.04E+02	2.64E+01	-		-		-		No	-	-
Ammonia	7664-41-7	Yes	Yes	Yes	Yes	5.21E+01	NC	1.74E+03	7.66E+04	--	6.88E+09	3.28E+08	2.64E+01	1.60E+01	CRC	-		5.00E-01	I	No	-	5.21E+01
Ammonium Perchlorate	7790-98-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Ammonium Picrate	131-74-8	No	No	No (not volatile)	No (not volatile)	-		-	-		9.24E+00	8.83E+00	2.64E+01	-		-		-		No	-	-
Ammonium Sulfamate	7773-06-0	No	No	No (not volatile)	No (not volatile)	-		-	-		0.00E+00	-	2.64E+01	-		-		-		No	-	-
Ammonium perfluoro-2-methyl-3-oxahexanoate	62037-80-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Ammonium perfluorobutanoate	10495-86-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.21E+08	9.90E+05	2.64E+01	-		-		-		No	-	-
Ammonium perfluorohexanoate	21615-47-4	No	No	No (not volatile)	No (not volatile)	-		-	-		-	1.07E+01	2.64E+01	-		-		-		No	-	-
Ammonium polyphosphate	68333-79-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Amyl Alcohol, tert-	75-85-4	Yes	Yes	Yes	Yes	3.13E-01	NC	1.04E+01	5.11E+02	--	7.92E+07	6.73E+07	2.64E+01	1.20E+00	CRC	-		3.00E-03	X	No	-	3.13E-01
Aniline	62-53-3	No	Yes	No (not volatile)	No (not volatile)	1.04E-01		-	-		3.34E+06	3.26E+06	2.64E+01	1.30E+00	CRC	1.60E-06	C	1.00E-03	I	No	1.75E+00	1.04E-01
Anilinobenzothiazole	1843-21-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Anthracene	120-12-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.26E+01	1.13E+02	2.64E+01	6.00E-01	CRC	-		-		No	-	-
Anthraquinone, 9,10-	84-65-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.30E+00	1.53E+00	2.64E+01	-		-		-		No	-	-
Antimony (metallic)	7440-36-0	No	Yes	No (not volatile)	No (not volatile)	3.13E-02		-	-		0.00E+00	-	2.64E+01	-		-		3.00E-04	A	No	-	3.13E-02
Antimony Pentoxide	1314-60-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Antimony Potassium Tartrate	11071-15-1	No	No	No (not volatile)	No (not volatile)	-		-	-		4.16E-06	-	2.64E+01	-		-		-		No	-	-
Antimony Tetroxide	1332-81-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Antimony Trichloride	10025-91-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.23E+06	-	2.64E+01	-		-		-		No	-	-
Antimony Trioxide	1309-64-4	Indeterminate	Yes	No (not volatile)	No (not volatile)	2.09E-02		-	-		-	-	2.64E+01	-		-		2.00E-04	I	No	-	2.09E-02
Aroclor 1016	12674-11-2	Yes	Yes	Yes	Yes	1.40E-01	CA	4.68E+00	1.72E+01	--	5.54E+03	3.43E+03	2.64E+01	-		2.00E-05	G	-		No	1.40E-01	-
Aroclor 1221	11104-28-2	Yes	Yes	Yes	Yes	4.91E-03	CA	1.64E-01	5.27E-01	--	6.80E+04	1.40E+05	2.64E+01	-		5.71E-04	G	-		No	4.91E-03	-
Aroclor 1232	11141-16-5	Yes	Yes	Yes	Yes	4.91E-03	CA	1.64E-01	1.63E-01	--	4.12E+04	4.36E+04	2.64E+01	-		5.71E-04	G	-		No	4.91E-03	-
Aroclor 1242	53469-21-9	Yes	Yes	Yes	Yes	4.91E-03	CA	1.64E-01	3.04E-01	--	1.36E+03	4.47E+03	2.64E+01	-		5.71E-04	G	-		No	4.91E-03	-
Aroclor 1248	12672-29-6	Yes	Yes	Yes	Yes	4.91E-03	CA	1.64E-01	2.73E-01	--	7.76E+03	1.80E+03	2.64E+01	-		5.71E-04	G	-		No	4.91E-03	-
Aroclor 1254	11097-69-1	Yes	Yes	Yes	Yes	4.91E-03	CA	1.64E-01	3.67E-01	--	1.35E+03	5.75E+02	2.64E+01	-		5.71E-04	G	-		No	4.91E-03	-
Aroclor 1260	11096-82-5	Yes	Yes	Yes	Yes	4.91E-03	CA	1.64E-01	3.58E-01	--	8.61E+02	1.98E+02	2.64E+01	-		5.71E-04	G	-		No	4.91E-03	-
Aroclor 5460	11126-42-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.46E+02	2.72E+02	2.64E+01	-		-		-		No	-	-
Arsenic Salts	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Arsenic, Inorganic	7440-38-2	Indeterminate	Yes	No (not volatile)	No (not volatile)	6.53E-04		-	-		-	-	2.64E+01	-		4.30E-03	I	1.50E-05	C	No	6.53E-04	1.56E-03
Arsine	7784-42-1	Indeterminate	Yes	No (not volatile)	No (not volatile)	5.21E-03		-	-		-	-	2.64E+01	5.10E+00	YAWS	-		5.00E-05	I	No	-	5.21E-03
Asulam	3337-71-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.78E+01	3.50E-01	2.64E+01	-		-		-		No	-	-
Atrazine	1912-24-9	No	No	No (not volatile)	No (not volatile)	-		-	-		3.35E+00	3.35E+00	2.64E+01	-		-		-		No	-	-
Auramine	492-80-8	No	Yes	No (not volatile)	No (not volatile)	1.12E-02		-	-		1.86E+01	8.68E+00	2.64E+01	-		2.50E-04	C	-		No	1.12E-02	-
Avermectin B1	65195-55-3	No	No	No (not volatile)	No (not volatile)	-		-	-		6.87E-23	1.89E-23	2.64E+01	-		-		-		No	-	-
Azinphos-methyl	86-50-0	No	Yes	No (not volatile)	No (not volatile)	1.04E+00		-	-		2.73E+01	2.04E+01	2.64E+01	-		-		1.00E-02	A	No	-	1.04E+00
Azobenzene	103-33-3	Yes	Yes	Yes	Yes	9.06E-02	CA	3.02E+00	1.46E+02	--	3.54E+03	3.97E+03	2.64E+01	-		3.10E-05	I	-		No	9.06E-02	-
Azodicarbonamide	123-77-3	No	Yes	No (not volatile)	No (not volatile)	7.30E-04		-	-		1.17E-03	1.17E-03	2.64E+01	-		-		7.00E-06	P	No	-	7.30E-04
Barium	7440-39-3	Indeterminate	Yes	No (not volatile)	No (not volatile)	5.21E-02		-	-		-	-	2.64E+01	-		-		5.00E-04	H	No	-	5.21E-02
Barium Cyanide	542-62-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Benfluralin	1861-40-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.18E+03	1.19E+03	2.64E+01	-		-		-		No	-	-
Benomyl	17804-35-2	No	No	No (not volatile)	No (not volatile)	-		-	-		5.78E-02	7.66E-04	2.64E+01	-		-		-		No	-	-
Bensulfuron-methyl	83055-99-6	No	No	No (not volatile)	No (not volatile)	-		-	-		4.64E-07	1.85E-05	2.64E+01	-		-		-		No	-	-
Bentazon	25057-89-0	No	No	No (not volatile)	No (not volatile)	-		-	-		4.46E+01	4.46E+01	2.64E+01	-		-		-		No	-	-
Benz[a]anthracene	56-55-3	Yes	Yes	Yes	Yes	1.69E-02	CA	5.63E-01	2.87E+01	--	2.58E+00	5.53E+00	2.64E+01	-		6.00E-05	E	-		Mut	1.69E-02	-
Benzaldehyde	100-52-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.25E+06	8.31E+06	2.64E+01	1.40E+00	YAWS	-		-		No	-	-
Benzene	71-43-2	Yes	Yes	Yes	Yes	3.60E-01	CA	1.20E+01	1.50E+00	Yes (5)	3.98E+08	4.31E+08	2.64E+01	1.20E+00	CRC	7.80E-06	I	3.00E-02	I	No	3.60E-01	3.13E+00
Benzene, Ethyldimethyl	29224-55-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.49E+06	7.39E+06	2.64E+01	-		-		-		No	-	-
Benzene, Ethylmethyl	25550-14-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.59E+07	1.53E+07	2.64E+01	-		-		-		No	-	-
Benzene, Methylpropenyl	768-00-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.34E+06	1.52E+07	2.64E+01	-		-		-		No	-	-
Benzene, Methylpropyl	28729-54-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-

Benzene, Trimethyl	25551-13-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.07E+07	1.89E+07	2.64E+01	-		-		-		No	-	-
Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1	No	No	No (not volatile)	No (not volatile)	-		-	-		3.44E-07	8.86E-10	2.64E+01	-		-		-		No	-	-
Benzenethiol	108-98-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.14E+07	1.24E+07	2.64E+01	1.20E+00	YAWS	-		-		No	-	-
Benzidine	92-87-5	No	Yes	No (not volatile)	No (not volatile)	1.51E-05		-	-		8.90E+00	8.01E-01	2.64E+01	1.40E+00	YAWS	6.70E-02	I	-		Mut	1.51E-05	-
Benzo(e)pyrene	192-97-2	No	Yes	No (not volatile)	No (not volatile)	2.09E-04		-	-		7.74E-02	7.66E-02	2.64E+01	-		-		2.00E-06	X	No	-	2.09E-04
Benzo(j)fluoranthene	205-82-3	No	Yes	No (not volatile)	No (not volatile)	2.55E-02		-	-		3.56E-01	2.07E-02	2.64E+01	-		1.10E-04	C	-		No	2.55E-02	-
Benzo[a]pyrene	50-32-8	No	Yes	No (not volatile)	No (not volatile)	2.09E-04		-	-		7.45E-02	3.63E-02	2.64E+01	-		6.00E-04	I	2.00E-06	I	Mut	1.69E-03	2.09E-04
Benzo[b]fluoranthene	205-99-2	No	Yes	No (not volatile)	No (not volatile)	1.69E-02		-	-		6.79E+00	4.76E-02	2.64E+01	-		6.00E-05	E	-		Mut	1.69E-02	-
Benzo[g,h,i]perylene	191-24-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.49E-03	4.27E-03	2.64E+01	-		-		-		No	-	-
Benzo[k]fluoranthene	207-08-9	No	Yes	No (not volatile)	No (not volatile)	1.69E-01		-	-		1.31E-02	2.31E-02	2.64E+01	-		6.00E-06	E	-		Mut	1.69E-01	-
Benzofluoranthenes, total	56832-73-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Benzofluorene, 2,3-	243-17-4	No	No	No (not volatile)	No (not volatile)	-		-	-		6.40E-01	6.39E-01	2.64E+01	-		-		-		No	-	-
Benzoic Acid	65-85-0	No	No	No (not volatile)	No (not volatile)	-		-	-		4.60E+03	5.98E+03	2.64E+01	1.40E+00	YAWS	-		-		No	-	-
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.94E+03	2.28E+02	2.64E+01	-		-		-		No	-	-
Benzothiazole	95-16-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.04E+05	6.57E+04	2.64E+01	-		-		-		No	-	-
Benzotrichloride	98-07-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.35E+06	6.18E+05	2.64E+01	1.60E+00	YAWS	-		-		No	-	-
Benzyl Alcohol	100-51-6	No	No	No (not volatile)	No (not volatile)	-		-	-		5.47E+05	6.62E+05	2.64E+01	1.30E+00	YAWS	-		-		No	-	-
Benzyl Chloride	100-44-7	Yes	Yes	Yes	Yes	5.73E-02	CA	1.91E+00	3.14E+00	--	8.37E+06	9.57E+06	2.64E+01	1.10E+00	CRC	4.90E-05	C	1.00E-03	P	No	5.73E-02	1.04E-01
Beryllium and compounds	7440-41-7	No	Yes	No (not volatile)	No (not volatile)	1.17E-03		-	-		0.00E+00	-	2.64E+01	-		2.40E-03	I	2.00E-05	I	No	1.17E-03	2.09E-03
Bifenox	42576-02-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.84E+00	1.76E+00	2.64E+01	-		-		-		No	-	-
Biphenthrin	82657-04-3	No	No	No (not volatile)	No (not volatile)	-		-	-		4.09E+00	4.09E-02	2.64E+01	-		-		-		No	-	-
Biphenyl, 1,1'-	92-52-4	Yes	Yes	Yes	Yes	4.17E-02	NC	1.39E+00	2.98E+00	--	7.41E+04	1.05E+05	2.64E+01	6.00E-01	CRC	-		4.00E-04	X	No	-	4.17E-02
Bis(2-chloro-1-methylethyl) ether	108-60-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.15E+06	5.64E+06	2.64E+01	-		-		-		No	-	-
Bis(2-chloroethoxy)methane	111-91-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.23E+06	1.35E+06	2.64E+01	-		-		-		No	-	-
Bis(2-chloroethyl)ether	111-44-4	Yes	Yes	Yes	Yes	8.51E-03	CA	2.84E-01	1.11E+01	--	1.19E+07	1.32E+07	2.64E+01	2.70E+00	CRC	3.30E-04	I	-		No	8.51E-03	-
Bis(2-ethylhexyl)phthalate	117-81-7	No	Yes	No (not volatile)	No (not volatile)	1.17E+00		-	-		2.98E+00	3.54E+00	2.64E+01	3.00E-01	YAWS	2.40E-06	C	-		No	1.17E+00	-
Bis(Octanoyloxy)Di-N-Butyl Stannane	4731-77-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.17E+00	6.90E+02	2.64E+01	-		-		-		No	-	-
Bis(chloromethyl)ether	542-88-1	Yes	Yes	Yes	Yes	4.53E-05	CA	1.51E-03	2.37E-04	--	1.82E+08	4.21E+09	2.64E+01	6.50E+00	YAWS	6.20E-02	I	-		No	4.53E-05	-
Bis(oleoyloxy)dibutyl tin	13323-62-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.78E-08	2.19E-05	2.64E+01	-		-		-		No	-	-
Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.08E+06	3.39E+08	2.64E+01	-		-		-		No	-	-
Bisphenol A	80-05-7	No	No	No (not volatile)	No (not volatile)	-		-	-		4.80E+00	5.98E-02	2.64E+01	6.00E-01	YAWS	-		-		No	-	-
Boron And Borates Only	7440-42-8	Indeterminate	Yes	No (not volatile)	No (not volatile)	2.09E+00		-	-		-	-	2.64E+01	-		-		2.00E-02	H	No	-	2.09E+00
Boron Trichloride	10294-34-5	Yes	Yes	Yes		2.09E+00		6.95E+01	-		6.30E+06	-	2.64E+01	-		-		2.00E-02	P	No	-	2.09E+00
Boron Trifluoride	7637-07-2	Yes	Yes	Yes		1.36E+00		4.52E+01	-		1.33E+11	-	2.64E+01	-		-		1.30E-02	C	No	-	1.36E+00
Bromacil	314-40-9	No	No	No (not volatile)	No (not volatile)	-		-	-		4.31E+00	4.30E+00	2.64E+01	-		-		-		No	-	-
Bromate	15541-45-4	Indeterminate	Yes	No (not volatile)	No (not volatile)	2.01E-02		-	-		-	-	2.64E+01	-		1.40E-04	C	-		No	2.01E-02	-
Bromine	7726-95-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.82E+09	-	2.64E+01	-		-		-		No	-	-
Bromo-2-chloroethane, 1-	107-04-0	Yes	Yes	Yes	Yes	6.26E-03	NC	2.09E-01	1.56E-01	--	2.55E+08	2.77E+08	2.64E+01	-		-		6.00E-05	X	No	-	6.26E-03
Bromo-3-fluorobenzene, 1-	1073-06-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.67E+07	4.17E+07	2.64E+01	-		-		-		No	-	-
Bromo-4-Ethylbenzene, 1-	1585-07-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.97E+06	2.99E+06	2.64E+01	-		-		-		No	-	-
Bromo-4-fluorobenzene, 1-	460-00-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.67E+07	1.51E+07	2.64E+01	-		-		-		No	-	-
Bromoacetic acid	79-08-3	No	No	No (not volatile)	No (not volatile)	-		-	-		8.86E+05	4.66E+05	2.64E+01	-		-		-		No	-	-
Bromoacetophenone, 3-	2142-63-4	No	No	No (not volatile)	No (not volatile)	-		-	-		3.30E+05	5.50E+04	2.64E+01	-		-		-		No	-	-
Bromobenzene	108-86-1	Yes	Yes	Yes	Yes	6.26E+00	NC	2.09E+02	5.64E+01	--	3.53E+07	4.95E+07	2.64E+01	1.50E+00	YAWS	-		6.00E-02	I	No	-	6.26E+00
Bromochloromethane	74-97-5	Yes	Yes	Yes	Yes	4.17E+00	NC	1.39E+02	6.61E+01	--	9.92E+08	1.05E+09	2.64E+01	-		-		4.00E-02	X	No	-	4.17E+00
Bromodichloromethane	75-27-4	Yes	Yes	Yes	Yes	7.59E-02	CA	2.53E+00	8.22E-01	Yes (80)	4.41E+08	2.80E+08	2.64E+01	-		3.70E-05	C	-		No	7.59E-02	-
Bromodiphenyl Ether, p-	101-55-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.01E+04	6.93E+03	2.64E+01	-		-		-		No	-	-
Bromoform	75-25-2	Yes	Yes	Yes	Yes	2.55E+00	CA	8.51E+01	1.08E+02	No (80)	7.34E+07	7.35E+07	2.64E+01	-		1.10E-06	I	-		No	2.55E+00	-
Bromomethane	74-83-9	Yes	Yes	Yes	Yes	5.21E-01	NC	1.74E+01	1.67E+00	--	8.25E+09	4.74E+09	2.64E+01	1.00E+01	CRC	-		5.00E-03	I	No	-	5.21E-01
Bromophenol, p-	106-41-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.09E+05	8.64E+04	2.64E+01	-		-		-		No	-	-
Bromophenyl-phenyl phthalate, 4-	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-

Bromophos	2104-96-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.51E+03	2.51E+03	2.64E+01	-		-		-		No	-	-
Bromopropane, 1-	106-94-5	Yes	Yes	Yes	Yes	7.59E-01	CA	2.53E+01	2.40E+00	--	7.33E+08	7.76E+08	2.64E+01	-		3.70E-06	C	1.00E-01	A	No	7.59E-01	1.04E+01
Bromopyridine, 2-	109-04-6	No	No	No (not volatile)	No (not volatile)	-		-	-		6.54E+06	6.55E+06	2.64E+01	-		-		-		No	-	-
Bromotrichloromethane	75-62-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.16E+08	1.40E+07	2.64E+01	-		-		-		No	-	-
Bromoxynil	1689-84-5	No	No	No (not volatile)	No (not volatile)	-		-	-		7.03E-01	7.02E-01	2.64E+01	-		-		-		No	-	-
Bromoxynil Octanoate	1689-99-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.04E+02	1.04E+02	2.64E+01	-		-		-		No	-	-
Butadiene, 1,3-	106-99-0	Yes	Yes	Yes	Yes	9.36E-02	CA	3.12E+00	3.00E-02	--	6.13E+09	2.29E+09	2.64E+01	2.00E+00	CRC	3.00E-05	I	2.00E-03	I	No	9.36E-02	2.09E-01
Butanediol, 2,3-	513-85-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.18E+06	1.29E+06	2.64E+01	-		-		-		No	-	-
Butanoic acid, 4-(2,4-dichlorophenoxy)-	94-82-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.49E+02	4.31E+00	2.64E+01	-		-		-		No	-	-
Butanol	35296-72-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.34E+07	4.63E+07	2.64E+01	-		-		-		No	-	-
Butanol, N-	71-36-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.67E+07	2.50E+07	2.64E+01	1.40E+00	CRC	-		-		No	-	-
Butanone-2, 4-chloro-4,4-difluoro	1515-16-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Butyl Alcohol, t-	75-65-0	Yes	Yes	Yes	Yes	5.21E+02	NC	1.74E+04	1.30E+06	--	1.62E+08	4.01E+08	2.64E+01	2.40E+00	CRC	-		5.00E+00	I	No	-	5.21E+02
Butyl Benzyl Phthalate	85-68-7	No	No	No (not volatile)	No (not volatile)	-		-	-		1.39E+02	1.59E+02	2.64E+01	-		-		-		No	-	-
Butyl Formate, tert-	762-75-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.75E+08	3.34E+08	2.64E+01	-		-		-		No	-	-
Butyl acrylate, n-	141-32-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.76E+07	5.83E+07	2.64E+01	1.70E+00	CRC	-		-		No	-	-
Butyl alcohol, sec-	78-92-2	Yes	Yes	Yes	Yes	3.13E+03	NC	1.04E+05	7.76E+06	--	7.31E+07	7.30E+07	2.64E+01	1.70E+00	CRC	-		3.00E+01	P	No	-	3.13E+03
Butylacetate	123-86-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.19E+07	1.04E+08	2.64E+01	1.70E+00	CRC	-		-		No	-	-
Butylate	2008-41-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.52E+05	1.55E+05	2.64E+01	-		-		-		No	-	-
Butylated hydroxyanisole	25013-16-5	No	Yes	No (not volatile)	No (not volatile)	4.93E+01		-	-		4.81E+04	1.14E+04	2.64E+01	-		5.70E-08	C	-		No	4.93E+01	-
Butylated hydroxytoluene	128-37-0	No	No	No (not volatile)	No (not volatile)	-		-	-		6.12E+04	1.16E+02	2.64E+01	5.00E-01	YAWS	-		-		No	-	-
Butylbenzene, n-	104-51-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.68E+06	8.37E+06	2.64E+01	8.00E-01	CRC	-		-		No	-	-
Butylbenzene, sec-	135-98-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.26E+07	1.41E+07	2.64E+01	8.00E-01	YAWS	-		-		No	-	-
Butylbenzene, tert-	98-06-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.59E+07	1.77E+07	2.64E+01	7.00E-01	CRC	-		-		No	-	-
Butylchloride, t-	507-20-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.50E+09	1.58E+09	2.64E+01	1.90E+00	YAWS	-		-		No	-	-
Butylphthalyl Butylglycolate	85-70-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.28E+02	7.41E+00	2.64E+01	-		-		-		No	-	-
Butyltin	78763-54-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.33E+08	1.45E+10	2.64E+01	-		-		-		No	-	-
Cacodylic Acid	75-60-5	No	No	No (not volatile)	No (not volatile)	-		-	-		7.42E-01	1.47E+00	2.64E+01	-		-		-		No	-	-
Cadmium (Diet)	7440-43-9	No	Yes	No (not volatile)	No (not volatile)	1.04E-03		-	-		0.00E+00	-	2.64E+01	-		1.80E-03	I	1.00E-05	A	No	1.56E-03	1.04E-03
Cadmium (Water)	7440-43-9	No	Yes	No (not volatile)	No (not volatile)	1.04E-03		-	-		0.00E+00	-	2.64E+01	-		1.80E-03	I	1.00E-05	A	No	1.56E-03	1.04E-03
Calcium	7440-70-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Calcium Cyanide	592-01-8	Indeterminate	Yes	No (not volatile)	No (not volatile)	9.39E-01		-	-		-	-	2.64E+01	-		-		9.00E-03	C	No	-	9.39E-01
Calcium hydroxide phosphate	12167-74-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Calcium pyrophosphate	7790-76-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Calcium salts of inorganic phosphates	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Caprolactam	105-60-2	No	Yes	No (not volatile)	No (not volatile)	2.29E-01		-	-		9.74E+03	9.08E+05	2.64E+01	3.00E-01	YAWS	-		2.20E-03	C	No	-	2.29E-01
Captafol	2425-06-1	No	Yes	No (not volatile)	No (not volatile)	6.53E-02		-	-		2.82E-01	2.82E-01	2.64E+01	-		4.30E-05	C	-		No	6.53E-02	-
Captan	133-06-2	No	Yes	No (not volatile)	No (not volatile)	4.25E+00		-	-		1.45E+00	1.46E+00	2.64E+01	-		6.60E-07	C	-		No	4.25E+00	-
Carbaryl	63-25-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.47E+01	1.47E+01	2.64E+01	-		-		-		No	-	-
Carbazole	86-74-8	No	No	No (not volatile)	No (not volatile)	-		-	-		6.74E+00	9.91E+00	2.64E+01	-		-		-		No	-	-
Carbofuran	1563-66-2	No	No	No (not volatile)	No (not volatile)	-		-	-		5.77E+01	4.04E+01	2.64E+01	-		-		-		No	-	-
Carbon Disulfide	75-15-0	Yes	Yes	Yes	Yes	7.30E+01	NC	2.43E+03	1.18E+02	--	1.47E+09	1.33E+09	2.64E+01	1.30E+00	CRC	-		7.00E-01	I	No	-	7.30E+01
Carbon Monoxide	630-08-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.34E+14	1.28E+09	2.64E+01	1.25E+01	CRC	-		-		No	-	-
Carbon Tetrachloride	56-23-5	Yes	Yes	Yes	Yes	4.68E-01	CA	1.56E+01	3.92E-01	Yes (5)	9.51E+08	9.47E+08	2.64E+01	-		6.00E-06	I	1.00E-01	I	No	4.68E-01	1.04E+01
Carbonyl Sulfide	463-58-1	Yes	Yes	Yes	Yes	1.04E+01	NC	3.48E+02	4.20E-01	--	3.04E+10	3.03E+10	2.64E+01	1.20E+01	CRC	-		1.00E-01	P	No	-	1.04E+01
Carbosulfan	55285-14-8	No	No	No (not volatile)	No (not volatile)	-		-	-		6.28E+00	6.28E+00	2.64E+01	-		-		-		No	-	-
Carboxin	5234-68-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.90E+00	1.92E+00	2.64E+01	-		-		-		No	-	-
Catechol	120-80-9	No	No	No (not volatile)	No (not volatile)	-		-	-		2.17E+04	2.57E+04	2.64E+01	1.60E+00	YAWS	-		-		No	-	-

Ceric oxide	1306-38-3	Indeterminate	Yes	No (not volatile)	No (not volatile)	9.39E-02		-	-		-	-	2.64E+01	-		-		9.00E-04	I	No	-	9.39E-02
Cerium, Stable	7440-45-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chloral	75-87-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.96E+08	3.82E+03	2.64E+01	-		-		-		No	-	-
Chloral Hydrate	302-17-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.33E+08	1.97E+05	2.64E+01	-		-		-		No	-	-
Chloramben	133-90-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.11E+00	1.11E+00	2.64E+01	-		-		-		No	-	-
Chloramine	127-65-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chloramines, Organic	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chloranil	118-75-2	No	No	No (not volatile)	No (not volatile)	-		-	-		3.02E+01	3.34E+00	2.64E+01	-		-		-		No	-	-
Chlorate (ClO3) as	14866-68-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chlordane (alpha)	5103-71-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.93E+02	1.11E+02	2.64E+01	-		-		-		No	-	-
Chlordane (gamma)	5103-74-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.11E+03	1.11E+02	2.64E+01	-		-		-		No	-	-
Chlordane (technical mixture)	12789-03-6	Yes	Yes	Yes	Yes	2.81E-02	CA	9.36E-01	1.10E+01	No (2)	2.20E+02	1.43E+02	2.64E+01	-		1.00E-04	I	7.00E-04	I	No	2.81E-02	7.30E-02
Chlordecone (Kepone)	143-50-0	No	Yes	No (not volatile)	No (not volatile)	6.10E-04		-	-		5.94E+00	5.94E+00	2.64E+01	-		4.60E-03	C	-		No	6.10E-04	-
Chlorfenvinphos	470-90-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.45E+02	1.47E+02	2.64E+01	-		-		-		No	-	-
Chloride	16887-00-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chlorimuron, Ethyl-	90982-32-4	No	No	No (not volatile)	No (not volatile)	-		-	-		8.92E-05	8.93E-05	2.64E+01	-		-		-		No	-	-
Chlorinated Hydrocarbons (total)	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chlorine	7782-50-5	Yes	Yes	Yes	Yes	1.51E-02	NC	5.04E-01	3.07E-02	Yes (4000)	2.23E+10	3.10E+09	2.64E+01	-		-		1.45E-04	A	No	-	1.51E-02
Chlorine Dioxide	10049-04-4	Yes	Yes	Yes	Yes	2.09E-02	NC	6.95E-01	1.21E-02	Yes (800)	2.75E+09	1.38E+10	2.64E+01	-		-		2.00E-04	I	No	-	2.09E-02
Chlorite	14998-27-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chlorite (Sodium Salt)	7758-19-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chloro-1,1-difluoroethane, 1-	75-68-3	Yes	Yes	Yes	Yes	5.21E+03	NC	1.74E+05	1.49E+03	--	1.38E+10	4.91E+09	2.64E+01	6.00E+00	CRC	-		5.00E+01	I	No	-	5.21E+03
Chloro-1,3-butadiene, 2- (Chloroprene)	126-99-8	Yes	Yes	Yes	Yes	9.36E-03	CA	3.12E-01	3.83E-03	--	1.03E+09	2.14E+09	2.64E+01	4.00E+00	CRC	3.00E-04	I	2.00E-02	I	No	9.36E-03	2.09E+00
Chloro-2-methylaniline HCl, 4-	3165-93-3	No	No	No (not volatile)	No (not volatile)	-		-	-		3.91E+05	6.08E+04	2.64E+01	-		-		-		No	-	-
Chloro-2-methylaniline, 4-	95-69-2	No	Yes	No (not volatile)	No (not volatile)	3.65E-02		-	-		3.11E+05	8.61E+04	2.64E+01	-		7.70E-05	C	-		No	3.65E-02	-
Chloro-2-methylphenol, 4-	1570-64-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.84E+05	1.85E+05	2.64E+01	-		-		-		No	-	-
Chloro-4-methylphenol	35421-08-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chloro-6-fluorophenol, 2-	2040-90-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chloroacetaldehyde, 2-	107-20-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.71E+08	1.16E+08	2.64E+01	5.70E+00	YAWS	-		-		No	-	-
Chloroacetamide	79-07-2	No	No	No (not volatile)	No (not volatile)	-		-	-		2.60E+05	1.45E+04	2.64E+01	-		-		-		No	-	-
Chloroacetic Acid	79-11-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.30E+05	3.59E+05	2.64E+01	-		-		-		No	-	-
Chloroacetophenone, 2-	532-27-4	No	Yes	No (not volatile)	No (not volatile)	3.13E-03		-	-		4.49E+04	1.73E+05	2.64E+01	-		-		3.00E-05	I	No	-	3.13E-03
Chloroaniline	27134-26-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.40E+06	1.80E+06	2.64E+01	-		-		-		No	-	-
Chloroaniline, 3-	108-42-9	No	No	No (not volatile)	No (not volatile)	-		-	-		4.53E+05	2.45E+05	2.64E+01	1.50E+00	YAWS	-		-		No	-	-
Chloroaniline, p-	106-47-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.85E+05	2.07E+05	2.64E+01	2.20E+00	YAWS	-		-		No	-	-
Chlorobenzene	108-90-7	Yes	Yes	Yes	Yes	5.21E+00	NC	1.74E+02	3.82E+01	Yes (100)	7.25E+07	6.80E+07	2.64E+01	1.30E+00	CRC	-		5.00E-02	P	No	-	5.21E+00
Chlorobenzene sulfonic acid, p-	98-66-8	No	No	No (not volatile)	No (not volatile)	-		-	-		4.43E+01	2.33E+04	2.64E+01	-		-		-		No	-	-
Chlorobenzilate	510-15-6	No	Yes	No (not volatile)	No (not volatile)	9.06E-02		-	-		3.85E+01	3.85E+01	2.64E+01	-		3.10E-05	C	-		No	9.06E-02	-
Chlorobenzoic Acid, 2-	118-91-2	No	No	No (not volatile)	No (not volatile)	-		-	-		5.56E+03	6.38E+03	2.64E+01	1.50E+00	YAWS	-		-		No	-	-
Chlorobenzoic Acid, p-	74-11-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.96E+04	2.36E+02	2.64E+01	-		-		-		No	-	-
Chlorobenzotrifluoride, 3-nitro-4-	121-17-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.43E+06	2.25E+05	2.64E+01	-		-		-		No	-	-
Chlorobenzotrifluoride, 4-	98-56-6	Yes	Yes	Yes	Yes	3.26E-01	CA	1.09E+01	2.13E-01	--	7.41E+07	4.45E+07	2.64E+01	1.80E+00	YAWS	8.60E-06	C	3.00E-01	P	No	3.26E-01	3.13E+01
Chlorobiphenyl, p-	2051-62-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.07E+05	3.14E+04	2.64E+01	-		-		-		No	-	-
Chlorobutane, 1-	109-69-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.04E+08	7.96E+08	2.64E+01	1.90E+00	CRC	-		-		No	-	-
Chlorobutane, 2-	78-86-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.80E+08	1.04E+09	2.64E+01	1.90E+00	YAWS	-		-		No	-	-
Chlorocyclopentadiene	41851-50-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.10E+08	8.89E+08	2.64E+01	-		-		-		No	-	-
Chlorodibromoethane	73506-94-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chlorodifluoromethane	75-45-6	Yes	Yes	Yes	Yes	5.21E+03	NC	1.74E+05	3.06E+03	--	3.37E+10	4.72E+09	2.64E+01	-		-		5.00E+01	I	No	-	5.21E+03
Chloroethanol, 2-	107-07-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.11E+07	3.40E+07	2.64E+01	4.90E+00	CRC	-		-		No	-	-

Chloroethylvinyl ether, 2-	110-75-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.53E+08	1.54E+08	2.64E+01	-		-		-		No	-	-
Chloroform	67-66-3	Yes	Yes	Yes	Yes	1.22E-01	CA	4.07E+00	7.71E-01	Yes (80)	1.26E+09	1.26E+09	2.64E+01	-		2.30E-05	I	9.77E-02	A	No	1.22E-01	1.02E+01
Chloromethane	74-87-3	Yes	Yes	Yes	Yes	9.39E+00	NC	3.13E+02	2.52E+01	--	1.17E+10	1.98E+09	2.64E+01	8.10E+00	CRC	-		9.00E-02	I	No	-	9.39E+00
Chloromethyl Methyl Ether	107-30-2	Yes	Yes	Yes	Yes	4.07E-03	CA	1.36E-01	3.11E-01	--	1.30E+08	9.09E+08	2.64E+01	-		6.90E-04	C	-		No	4.07E-03	-
Chloronaphthalene, Beta-	91-58-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.07E+05	1.71E+05	2.64E+01	-		-		-		No	-	-
Chloronaphthalene, alpha-	90-13-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.54E+05	2.85E+05	2.64E+01	1.00E+00	YAWS	-		-		No	-	-
Chloronitrobenzene, o-	88-73-3	No	Yes	No (not volatile)	No (not volatile)	1.04E-03		-	-		1.54E+05	1.89E+05	2.64E+01	-		-		1.00E-05	X	No	-	1.04E-03
Chloronitrobenzene, p-	100-00-5	No	Yes	No (not volatile)	No (not volatile)	2.09E-01		-	-		1.86E+05	5.07E+04	2.64E+01	-		-		2.00E-03	P	No	-	2.09E-01
Chlorooctadecane, 1-	3386-33-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.65E+02	0.00E+00	2.64E+01	-		-		-		No	-	-
Chlorophenol, 2-	95-57-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.75E+07	5.64E+06	2.64E+01	1.70E+00	YAWS	-		-		No	-	-
Chlorophenol, 3-	108-43-0	No	No	No (not volatile)	No (not volatile)	-		-	-		8.66E+05	4.07E+05	2.64E+01	1.70E+00	YAWS	-		-		No	-	-
Chlorophenol, 4-	106-48-9	No	No	No (not volatile)	No (not volatile)	-		-	-		6.15E+05	6.84E+05	2.64E+01	1.70E+00	YAWS	-		-		No	-	-
Chlorophenyl Methyl Sulfide, p-	123-09-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.13E+06	5.64E+05	2.64E+01	-		-		-		No	-	-
Chlorophenyl Methyl Sulfoxide	934-73-6	No	No	No (not volatile)	No (not volatile)	-		-	-		2.51E+04	2.12E+03	2.64E+01	-		-		-		No	-	-
Chlorophenyl phenyl ether, 4-	7005-72-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.97E+04	1.21E+04	2.64E+01	-		-		-		No	-	-
Chloropicrin	76-06-2	Yes	Yes	Yes	Yes	4.17E-02	NC	1.39E+00	4.65E-01	--	2.12E+08	1.45E+08	2.64E+01	-		-		4.00E-04	C	No	-	4.17E-02
Chloropropane, 2-	75-29-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.18E+09	2.32E+09	2.64E+01	2.80E+00	CRC	-		-		No	-	-
Chlorothalonil	1897-45-6	No	No	No (not volatile)	No (not volatile)	-		-	-		8.15E+00	7.57E+01	2.64E+01	-		-		-		No	-	-
Chlorotoluene, o-	95-49-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.34E+07	5.91E+07	2.64E+01	1.30E+00	YAWS	-		-		No	-	-
Chlorotoluene, p-	106-43-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.83E+07	2.07E+07	2.64E+01	1.30E+00	YAWS	-		-		No	-	-
Chlorozotocin	54749-90-5	No	Yes	No (not volatile)	No (not volatile)	4.07E-05		-	-		5.69E-07	2.75E-11	2.64E+01	-		6.90E-02	C	-		No	4.07E-05	-
Chlorpropham	101-21-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.07E+03	2.07E+03	2.64E+01	-		-		-		No	-	-
Chlorpyrifos	2921-88-2	No	No	No (not volatile)	No (not volatile)	-		-	-		3.82E+02	1.34E+02	2.64E+01	-		-		-		No	-	-
Chlorpyrifos Methyl	5598-13-0	No	No	No (not volatile)	No (not volatile)	-		-	-		7.29E+02	7.30E+02	2.64E+01	-		-		-		No	-	-
Chlorsulfuron	64902-72-3	No	No	No (not volatile)	No (not volatile)	-		-	-		4.33E-04	4.33E-04	2.64E+01	-		-		-		No	-	-
Chlorthal-dimethyl	1861-32-1	No	No	No (not volatile)	No (not volatile)	-		-	-		4.46E+01	4.98E+01	2.64E+01	-		-		-		No	-	-
Chlorthiophos	60238-56-4	No	No	No (not volatile)	No (not volatile)	-		-	-		7.71E+06	1.47E+01	2.64E+01	-		-		-		No	-	-
Chromium(III) (Soluble Compounds)	16065-83-1	Indeterminate	Yes	No (not volatile)	No (not volatile)	6.26E-03		-	-		-	-	2.64E+01	-		-		6.00E-05	C	No	-	6.26E-03
Chromium(III), Insoluble Salts	16065-83-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chromium(VI)	18540-29-9	Indeterminate	Yes	No (not volatile)	No (not volatile)	1.21E-05		-	-		-	-	2.64E+01	-		8.40E-02	G	1.00E-04	I	Mut	1.21E-05	1.04E-02
Chromium, Total	7440-47-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Chrysene	218-01-9	No	Yes	No (not volatile)	No (not volatile)	1.69E+00		-	-		7.65E-02	5.17E-01	2.64E+01	5.00E-01	YAWS	6.00E-07	E	-		Mut	1.69E+00	-
Clofentezine	74115-24-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.59E-02	1.59E-02	2.64E+01	-		-		-		No	-	-
Cobalt	7440-48-4	No	Yes	No (not volatile)	No (not volatile)	3.12E-04		-	-		0.00E+00	-	2.64E+01	-		9.00E-03	P	6.00E-06	P	No	3.12E-04	6.26E-04
Coke Oven Emissions	NA		Yes	Yes		1.64E-03		-	-		-	-	2.64E+01	-		6.20E-04	I	-		Mut	1.64E-03	-
Complex Mixtures of Aliphatic and Aromatic Hydrocarbons	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Copper	7440-50-8	No	No	No (not volatile)	No (not volatile)	-		-	-		0.00E+00	-	2.64E+01	-		-		-		No	-	-
Copper Cyanide	544-92-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Coronene	191-07-1	No	No	No (not volatile)	No (not volatile)	-		-	-		3.51E-05	1.21E-04	2.64E+01	-		-		-		No	-	-
Creosote	8001-58-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Cresol, m-	108-39-4	No	Yes	No (not volatile)	No (not volatile)	6.26E+01		-	-		6.40E+05	8.84E+05	2.64E+01	1.10E+00	CRC	-		6.00E-01	C	No	-	6.26E+01
Cresol, o-	95-48-7	No	Yes	No (not volatile)	No (not volatile)	6.26E+01		-	-		1.74E+06	1.40E+06	2.64E+01	1.40E+00	CRC	-		6.00E-01	C	No	-	6.26E+01
Cresol, p-	106-44-5	No	Yes	No (not volatile)	No (not volatile)	6.26E+01		-	-		6.40E+05	9.78E+05	2.64E+01	1.10E+00	CRC	-		6.00E-01	C	No	-	6.26E+01
Cresol, p-chloro-m-	59-50-7	No	No	No (not volatile)	No (not volatile)	-		-	-		3.83E+05	4.25E+05	2.64E+01	-		-		-		No	-	-
Cresols	1319-77-3	No	Yes	No (not volatile)	No (not volatile)	6.26E+01		-	-		2.97E+06	2.55E+05	2.64E+01	-		-		6.00E-01	C	No	-	6.26E+01
Crotonaldehyde	4170-30-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.13E+08	7.75E+07	2.64E+01	-		-		-		No	-	-
Crotonaldehyde, trans-	123-73-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.13E+08	1.18E+08	2.64E+01	2.10E+00	CRC	-		-		No	-	-
Cumene	98-82-8	Yes	Yes	Yes	Yes	4.17E+01	NC	1.39E+03	8.08E+01	--	2.91E+07	3.17E+07	2.64E+01	9.00E-01	CRC	-		4.00E-01	I	No	-	4.17E+01

Cupferron	135-20-6	No	Yes	No (not volatile)	No (not volatile)	4.46E-02		-	-		5.25E+02	9.00E+04	2.64E+01	-		6.30E-05	C	-		No	4.46E-02	-
Cyanazine	21725-46-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.79E+00	1.79E-02	2.64E+01	-		-		-		No	-	-
Cyanide (CN-)	57-12-5	Yes	Yes	Yes	Yes	8.34E-02	NC	2.78E+00	2.01E+01	Yes (200)	4.31E+08	3.96E+08	2.64E+01	-		-		8.00E-04	G	No	-	8.34E-02
Cyanogen	460-19-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.20E+10	1.83E+09	2.64E+01	6.60E+00	CRC	-		-		No	-	-
Cyanogen Bromide	506-68-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.93E+08	-	2.64E+01	-		-		-		No	-	-
Cyanogen Chloride	506-77-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.05E+09	4.98E+09	2.64E+01	6.60E+00	YAWS	-		-		No	-	-
Cyclohexane	110-82-7	Yes	Yes	Yes	Yes	6.26E+02	NC	2.09E+04	9.64E+01	--	4.38E+08	3.57E+08	2.64E+01	1.30E+00	CRC	-		6.00E+00	I	No	-	6.26E+02
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	No	No	No (not volatile)	No (not volatile)	-		-	-		9.55E+01	2.15E+00	2.64E+01	-		-		-		No	-	-
Cyclohexanone	108-94-1	Yes	Yes	Yes	Yes	7.30E+01	NC	2.43E+03	1.80E+05	--	2.29E+07	1.01E+07	2.64E+01	1.10E+00	CRC	-		7.00E-01	P	No	-	7.30E+01
Cyclohexene	110-83-8	Yes	Yes	Yes	Yes	1.04E+02	NC	3.48E+03	5.29E+01	--	3.93E+08	4.20E+08	2.64E+01	1.20E+00	CRC	-		1.00E+00	X	No	-	1.04E+02
Cyclohexylamine	108-91-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.39E+07	1.83E+08	2.64E+01	1.90E+00	CRC	-		-		No	-	-
Cyclopentadiene	542-92-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.55E+09	1.62E+09	2.64E+01	1.70E+00	YAWS	-		-		No	-	-
Cyfluthrin	68359-37-5	No	No	No (not volatile)	No (not volatile)	-		-	-		3.50E-03	3.56E-03	2.64E+01	-		-		-		No	-	-
Cyhalothrin	68085-85-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.63E-02	3.03E-01	2.64E+01	-		-		-		No	-	-
Cypermethrin	52315-07-8	No	No	No (not volatile)	No (not volatile)	-		-	-		6.87E-02	6.87E-02	2.64E+01	-		-		-		No	-	-
Cyromazine	66215-27-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.00E-02	3.00E-02	2.64E+01	-		-		-		No	-	-
DDD, o,p'-	53-19-0	No	No	No (not volatile)	No (not volatile)	-		-	-		3.34E+01	3.34E+01	2.64E+01	-		-		-		No	-	-
DDT, o,p'-	789-02-6	No	No	No (not volatile)	No (not volatile)	-		-	-		2.57E+01	2.58E+01	2.64E+01	-		-		-		No	-	-
DDT/DDE/DDD (total)	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Dalapon	75-99-0	No	No	No (not volatile)	No (not volatile)	-		-	-		1.16E+06	1.27E+06	2.64E+01	-		-		-		No	-	-
Daminozide	1596-84-5	No	Yes	No (not volatile)	No (not volatile)	5.51E-01		-	-		1.72E+03	1.73E+03	2.64E+01	-		5.10E-06	C	-		No	5.51E-01	-
Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	No	No	No (not volatile)	No (not volatile)	-		-	-		2.41E-04	5.85E-05	2.64E+01	-		-		-		No	-	-
Decane	124-18-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.09E+07	1.20E+07	2.64E+01	8.00E-01	CRC	-		-		No	-	-
Decanol, n-	112-30-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.24E+04	5.43E+04	2.64E+01	-		-		-		No	-	-
Deltamethrin	52918-63-5	No	No	No (not volatile)	No (not volatile)	-		-	-		4.08E-01	4.08E-01	2.64E+01	-		-		-		No	-	-
Demeton	8065-48-3	No	No	No (not volatile)	No (not volatile)	-		-	-		9.45E+03	1.04E+05	2.64E+01	-		-		-		No	-	-
Di(2-ethylhexyl)adipate	103-23-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.69E+01	1.65E+01	2.64E+01	4.00E-01	CRC	-		-		No	-	-
Di-n-butyltin bis(2-ethylhexanoate)	2781-10-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.60E+01	4.36E+03	2.64E+01	-		-		-		No	-	-
Di-n-butyltin bis(methyl maleate)	15546-11-9	No	No	No (not volatile)	No (not volatile)	-		-	-		2.06E+00	8.61E-02	2.64E+01	-		-		-		No	-	-
Di-n-butyltin bis(n-butyl maleate)	15546-16-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.62E-02	4.11E-04	2.64E+01	-		-		-		No	-	-
Di-n-butyltin dilaurate	77-58-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.02E-02	1.97E+07	2.64E+01	-		-		-		No	-	-
Di-n-butyltin distearate	5847-55-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.78E-08	1.14E-05	2.64E+01	-		-		-		No	-	-
Di-n-hexylphthalate	84-75-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.52E+02	6.21E+01	2.64E+01	-		-		-		No	-	-
Diallate	2303-16-4	No	No	No (not volatile)	No (not volatile)	-		-	-		2.18E+03	2.17E+03	2.64E+01	-		-		-		No	-	-
Diammonium phosphate	7783-28-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Diazinon	333-41-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.47E+03	1.85E+02	2.64E+01	-		-		-		No	-	-
Dibenz[a,h]anthracene	53-70-3	No	Yes	No (not volatile)	No (not volatile)	1.69E-03		-	-		1.43E-02	1.80E-02	2.64E+01	-		6.00E-04	E	-		Mut	1.69E-03	-
Dibenzo(a,e)pyrene	192-65-4	No	Yes	No (not volatile)	No (not volatile)	2.55E-03		-	-		1.14E-03	4.62E-05	2.64E+01	-		1.10E-03	C	-		No	2.55E-03	-
Dibenzofuran	132-64-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.24E+04	5.35E+04	2.64E+01	8.00E-01	YAWS	-		-		No	-	-
Dibenzothiophene	132-65-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.03E+03	2.55E+03	2.64E+01	-		-		-		No	-	-
Dibromo-3-chloropropane, 1,2-	96-12-8	Yes	Yes	Yes	Yes	1.69E-04	CA	5.63E-03	2.56E-02	Yes (0)	7.37E+06	8.11E+06	2.64E+01	-		6.00E-03	P	2.00E-04	I	Mut	1.69E-04	2.09E-02
Dibromoacetic acid	631-64-1	No	No	No (not volatile)	No (not volatile)	-		-	-		2.69E+05	3.81E+05	2.64E+01	-		-		-		No	-	-
Dibromobenzene, 1,3-	108-36-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.41E+06	3.77E+06	2.64E+01	1.90E+00	YAWS	-		-		No	-	-
Dibromobenzene, 1,4-	106-37-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.30E+05	8.05E+05	2.64E+01	-		-		-		No	-	-
Dibromochloromethane	124-48-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.21E+07	9.05E+07	2.64E+01	-		-		-		No	-	-
Dibromodichloromethane	594-18-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.62E+07	2.37E+06	2.64E+01	-		-		-		No	-	-
Dibromodiphenyl Ether, p,p'-	2050-47-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.98E+03	1.38E+02	2.64E+01	-		-		-		No	-	-
Dibromoethane, 1,2-	106-93-4	Yes	Yes	Yes	Yes	4.68E-03	CA	1.56E-01	1.64E-01	No (0)	1.13E+08	1.11E+08	2.64E+01	-		6.00E-04	I	9.00E-03	I	No	4.68E-03	9.39E-01

Dibromomethane (Methylene Bromide)	74-95-3	Yes	Yes	Yes	Yes	4.17E-01	NC	1.39E+01	1.17E+01	--	4.15E+08	4.26E+08	2.64E+01	-		-		4.00E-03	X	No	-	4.17E-01
Dibutoxy di-n-butyltin	3349-36-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.03E+03	1.34E+07	2.64E+01	-		-		-		No	-	-
Dibutyl Phthalate	84-74-2	No	No	No (not volatile)	No (not volatile)	-		-	-		3.01E+02	1.03E+03	2.64E+01	5.00E-01	CRC	-		-		No	-	-
Dibutylbis((1-oxoisooctyl)oxy)stannane	85702-74-5	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Dibutylbis(octadeca-9(Z),12(Z),15(Z)-trienoyloxy)stannane	95873-60-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		9.41E-09	7.21E+01	2.64E+01	-		-		-		No	-	-
Dibutylbis(octadeca-9(Z),12(Z)-dienoyloxy)stannane	85391-79-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Dibutylbis(palmitoyloxy)stannane	13323-63-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.40E-06	4.74E+01	2.64E+01	-		-		-		No	-	-
Dibutyltin Compounds	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Dibutyltin diacetate	1067-33-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.68E+04	1.37E+05	2.64E+01	-		-		-		No	-	-
Dibutyltin dichloride	683-18-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.29E+06	1.15E+07	2.64E+01	-		-		-		No	-	-
Dibutyltin oxide	818-08-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.25E+07	-	2.64E+01	-		-		-		No	-	-
Dicalcium phosphate	7757-93-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Dicamba	1918-00-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.49E+02	7.41E+02	2.64E+01	-		-		-		No	-	-
Dichloramine	3400-09-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Dichloro-2-butene, 1,4-	764-41-0	Yes	Yes	Yes	Yes	6.68E-04	CA	2.23E-02	1.75E-03	--	2.02E+07	2.21E+08	2.64E+01	-		4.20E-03	P	-		No	6.68E-04	-
Dichloro-2-butene, cis-1,4-	1476-11-5	Yes	Yes	Yes	Yes	6.68E-04	CA	2.23E-02	2.27E-02	--	2.75E+07	1.71E+07	2.64E+01	2.50E+00	YAWS	4.20E-03	P	-		No	6.68E-04	-
Dichloro-2-butene, trans-1,4-	110-57-6	Yes	Yes	Yes	Yes	6.68E-04	CA	2.23E-02	2.27E-02	--	2.31E+07	2.50E+07	2.64E+01	1.50E+00	YAWS	4.20E-03	P	-		No	6.68E-04	-
Dichloroacetic Acid	79-43-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.24E+06	3.83E+05	2.64E+01	-		-		-		No	-	-
Dichloroaniline, 2,4-	554-00-7	No	No	No (not volatile)	No (not volatile)	-		-	-		1.31E+05	4.00E+04	2.64E+01	-		-		-		No	-	-
Dichloroaniline, 3,4-	95-76-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.51E+04	6.24E+04	2.64E+01	2.80E+00	YAWS	-		-		No	-	-
Dichlorobenzene	25321-22-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.49E+07	6.28E+06	2.64E+01	-		-		-		No	-	-
Dichlorobenzene, 1,2-	95-50-1	Yes	Yes	Yes	Yes	2.09E+01	NC	6.95E+02	2.44E+02	Yes (600)	1.08E+07	1.33E+07	2.64E+01	2.20E+00	CRC	-		2.00E-01	H	No	-	2.09E+01
Dichlorobenzene, 1,3-	541-73-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.70E+07	1.46E+07	2.64E+01	1.80E+00	YAWS	-		-		No	-	-
Dichlorobenzene, 1,4-	106-46-7	Yes	Yes	Yes	Yes	2.55E-01	CA	8.51E+00	2.38E+00	Yes (75)	1.38E+07	8.72E+06	2.64E+01	1.80E+00	YAWS	1.10E-05	C	8.00E-01	I	No	2.55E-01	8.34E+01
Dichlorobenzidine, 3,3'-	91-94-1	No	Yes	No (not volatile)	No (not volatile)	8.26E-03		-	-		3.49E+00	3.60E-03	2.64E+01	-		3.40E-04	C	-		No	8.26E-03	-
Dichlorobenzophenone, 4,4'-	90-98-2	No	No	No (not volatile)	No (not volatile)	-		-	-		8.63E+01	4.15E+01	2.64E+01	-		-		-		No	-	-
Dichlorobenzotrifluoride, 3,4-	328-84-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.73E+07	1.98E+07	2.64E+01	-		-		-		No	-	-
Dichlorodifluoromethane	75-71-8	Yes	Yes	Yes	Yes	1.04E+01	NC	3.48E+02	7.24E-01	--	3.15E+10	4.03E+09	2.64E+01	-		-		1.00E-01	X	No	-	1.04E+01
Dichlorodiisopropyl ether, 2,2'-	39638-32-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.16E+08	8.45E+06	2.64E+01	-		-		-		No	-	-
Dichlorodiphenyldichloroethane, p,p'- (DDD)	72-54-8	No	Yes	No (not volatile)	No (not volatile)	4.07E-02		-	-		2.32E+01	2.43E+01	2.64E+01	-		6.90E-05	C	-		No	4.07E-02	-
Dichlorodiphenyldichloroethylene, p,p'- (DDE)	72-55-9	Yes	Yes	Yes	Yes	2.89E-02	CA	9.65E-01	1.46E+01	--	1.03E+02	7.91E+01	2.64E+01	-		9.70E-05	C	-		No	2.89E-02	-
Dichlorodiphenyltrichloroethane, p,p'- (DDT)	50-29-3	No	Yes	No (not volatile)	No (not volatile)	2.89E-02		-	-		3.05E+00	2.09E+00	2.64E+01	-		9.70E-05	I	-		No	2.89E-02	-
Dichloroethane, 1,1-	75-34-3	Yes	Yes	Yes	Yes	1.75E+00	CA	5.85E+01	7.24E+00	--	1.21E+09	1.22E+09	2.64E+01	5.40E+00	CRC	1.60E-06	C	-		No	1.75E+00	-
Dichloroethane, 1,2-	107-06-2	Yes	Yes	Yes	Yes	1.08E-01	CA	3.60E+00	2.11E+00	Yes (5)	4.20E+08	4.41E+08	2.64E+01	6.20E+00	CRC	2.60E-05	I	7.00E-03	P	No	1.08E-01	7.30E-01
Dichloroethylene, 1,1-	75-35-4	Yes	Yes	Yes	Yes	2.09E+01	NC	6.95E+02	1.87E+01	No (7)	3.13E+09	2.70E+09	2.64E+01	6.50E+00	CRC	-		2.00E-01	I	No	-	2.09E+01
Dichloroethylene, cis-1,2-	156-59-2	Yes	Yes	Yes	Yes	4.17E+00	NC	1.39E+02	2.37E+01	Yes (70)	1.04E+09	1.13E+09	2.64E+01	3.00E+00	CRC	-		4.00E-02	X	No	-	4.17E+00
Dichloroethylene, trans-1,2-	156-60-5	Yes	Yes	Yes	Yes	4.17E+00	NC	1.39E+02	1.03E+01	Yes (100)	1.73E+09	1.83E+09	2.64E+01	6.00E+00	CRC	-		4.00E-02	X	No	-	4.17E+00
Dichlorophenol, 2,3-	576-24-9	No	No	No (not volatile)	No (not volatile)	-		-	-		5.08E+05	4.53E+04	2.64E+01	-		-		-		No	-	-
Dichlorophenol, 2,4-	120-83-2	No	No	No (not volatile)	No (not volatile)	-		-	-		7.89E+05	1.07E+06	2.64E+01	-		-		-		No	-	-
Dichlorophenol, 2,5-	583-78-8	No	No	No (not volatile)	No (not volatile)	-		-	-		4.93E+05	2.52E+04	2.64E+01	-		-		-		No	-	-
Dichlorophenol, 2,6-	87-65-0	No	No	No (not volatile)	No (not volatile)	-		-	-		2.89E+05	2.07E+05	2.64E+01	-		-		-		No	-	-
Dichlorophenol, 3,4-	95-77-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.52E+05	1.17E+05	2.64E+01	-		-		-		No	-	-
Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	No	No	No (not volatile)	No (not volatile)	-		-	-		9.81E+02	9.80E+02	2.64E+01	-		-		-		No	-	-
Dichloropropane, 1,2-	78-87-5	Yes	Yes	Yes	Yes	4.17E-01	NC	1.39E+01	3.40E+00	Yes (5)	3.24E+08	3.44E+08	2.64E+01	3.40E+00	YAWS	3.70E-06	P	4.00E-03	I	No	7.59E-01	4.17E-01
Dichloropropane, 1,3-	142-28-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.10E+08	1.18E+08	2.64E+01	3.40E+00	YAWS	-		-		No	-	-
Dichloropropane, 2,2-	594-20-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		8.20E+08	2.72E+08	2.64E+01	-		-		-		No	-	-
Dichloropropanol, 2,3-	616-23-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.28E+06	1.04E+04	2.64E+01	-		-		-		No	-	-
Dichloropropene, 1,1-	563-58-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.42E+08	1.61E+09	2.64E+01	-		-		-		No	-	-
Dichloropropene, 1,3-	542-75-6	Yes	Yes	Yes	Yes	7.02E-01	CA	2.34E+01	4.52E+00	--	2.03E+08	4.35E+08	2.64E+01	5.30E+00	N	4.00E-06	I	2.00E-02	I	No	7.02E-01	2.09E+00
Dichloropropene, 2,3-	78-88-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.65E+08	3.88E+08	2.64E+01	2.60E+00	CRC	-		-		No	-	-
Dichloropropene, cis-1,3-	10061-01-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.57E+08	2.59E+08	2.64E+01	-		-		-		No	-	-
Dichloropropene, trans-1,3-	10061-02-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.03E+08	1.08E+08	2.64E+01	-		-		-		No	-	-

Dichlorvos	62-73-7	No	Yes	No (not volatile)	No (not volatile)	3.38E-02		-	-		1.87E+05	1.88E+05	2.64E+01	-		8.30E-05	C	5.00E-04	I	No	3.38E-02	5.21E-02
Dicrotophos	141-66-2	No	No	No (not volatile)	No (not volatile)	-		-	-		2.04E+03	2.06E+03	2.64E+01	-		-		-		No	-	-
Dicyclohexylamine	101-83-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.30E+05	2.70E+05	2.64E+01	-		-		-		No	-	-
Dicyclopentadiene	77-73-6	Yes	Yes	Yes	Yes	3.13E-02	NC	1.04E+00	1.20E-02	--	1.63E+07	6.87E+07	2.64E+01	1.00E+00	YAWS	-		3.00E-04	X	No	-	3.13E-02
Dieldrin	60-57-1	No	Yes	No (not volatile)	No (not volatile)	6.10E-04		-	-		1.21E+02	9.46E+01	2.64E+01	-		4.60E-03	I	-		No	6.10E-04	-
Diepoxybutane	1464-53-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.81E+08	1.45E+06	2.64E+01	-		-		-		No	-	-
Diesel Engine Exhaust	NA	Indeterminate	Yes	No (not volatile)	No (not volatile)	9.36E-03		-	-		-	-	2.64E+01	-		3.00E-04	C	5.00E-03	I	No	9.36E-03	5.21E-01
Diethanolamine	111-42-2	No	Yes	No (not volatile)	No (not volatile)	2.09E-02		-	-		1.58E+03	1.87E+03	2.64E+01	2.00E+00	CRC	-		2.00E-04	P	No	-	2.09E-02
Diethyl Phthalate	84-66-2	No	No	No (not volatile)	No (not volatile)	-		-	-		2.51E+04	3.12E+04	2.64E+01	7.00E-01	CRC	-		-		No	-	-
Diethyl sulfate	64-67-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.76E+06	1.93E+06	2.64E+01	-		-		-		No	-	-
Diethyl-meta-Toluamide, N,N (DEET)	134-62-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.06E+04	0.00E+00	2.64E+01	-		-		-		No	-	-
Diethyl-p-nitrophenylphosphate	311-45-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.63E+01	1.62E+01	2.64E+01	-		-		-		No	-	-
Diethylene Glycol Dinitrate (DEGDN)	693-21-0	No	No	No (not volatile)	No (not volatile)	-		-	-		6.22E+04	6.22E+04	2.64E+01	-		-		-		No	-	-
Diethylene Glycol Monobutyl Ether	112-34-5	No	Yes	No (not volatile)	No (not volatile)	1.04E-02		-	-		1.91E+05	3.37E+05	2.64E+01	9.00E-01	YAWS	-		1.00E-04	P	No	-	1.04E-02
Diethylene Glycol Monoethyl Ether	111-90-0	No	Yes	No (not volatile)	No (not volatile)	3.13E-02		-	-		9.09E+05	1.02E+06	2.64E+01	1.20E+00	YAWS	-		3.00E-04	P	No	-	3.13E-02
Diethylene-glycol	111-46-6	No	No	No (not volatile)	No (not volatile)	-		-	-		3.25E+04	1.39E+04	2.64E+01	2.00E+00	CRC	-		-		No	-	-
Diethylformamide	617-84-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.58E+06	5.91E+06	2.64E+01	-		-		-		No	-	-
Diethylphosphorodithioate	298-06-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.84E+05	9.71E+02	2.64E+01	-		-		-		No	-	-
Diethylstilbestrol	56-53-1	No	Yes	No (not volatile)	No (not volatile)	2.81E-05		-	-		2.04E-01	2.85E-03	2.64E+01	-		1.00E-01	C	-		No	2.81E-05	-
Difenzoquat	43222-48-6	No	No	No (not volatile)	No (not volatile)	-		-	-		7.93E-05	-	2.64E+01	-		-		-		No	-	-
Diflubenzuron	35367-38-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.50E-02	1.50E-02	2.64E+01	-		-		-		No	-	-
Difluoroethane, 1,1-	75-37-6	Yes	Yes	Yes	Yes	4.17E+03	NC	1.39E+05	4.88E+03	--	1.62E+10	2.74E+09	2.64E+01	3.70E+00	YAWS	-		4.00E+01	I	No	-	4.17E+03
Difluoropropane, 2,2-	420-45-1	Yes	Yes	Yes	Yes	3.13E+03	NC	1.04E+05	1.44E+02	--	7.75E+09	3.47E+09	2.64E+01	-		-		3.00E+01	X	No	-	3.13E+03
Dihydrosafrole	94-58-6	Yes	Yes	Yes	Yes	2.16E-01	CA	7.20E+00	3.92E+02	--	4.95E+05	3.13E+04	2.64E+01	-		1.30E-05	C	-		No	2.16E-01	-
Diisopropyl Ether	108-20-3	Yes	Yes	Yes	Yes	7.30E+01	NC	2.43E+03	6.60E+02	--	8.19E+08	9.74E+08	2.64E+01	1.40E+00	CRC	-		7.00E-01	P	No	-	7.30E+01
Diisopropyl Methylphosphonate	1445-75-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.21E+06	2.92E+06	2.64E+01	-		-		-		No	-	-
Dimagnesium phosphate	7782-75-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Dimethipin	55290-64-7	No	No	No (not volatile)	No (not volatile)	-		-	-		4.33E+00	4.33E+00	2.64E+01	-		-		-		No	-	-
Dimethoate	60-51-5	No	No	No (not volatile)	No (not volatile)	-		-	-		2.31E+02	2.31E+02	2.64E+01	-		-		-		No	-	-
Dimethoxybenzidine, 3,3'-	119-90-4	No	Yes	No (not volatile)	No (not volatile)	2.01E-05		-	-		1.64E+00	1.15E-01	2.64E+01	-		1.40E-01	C	-		No	2.01E-05	-
Dimethyl Sulfate	77-78-1	No	No	No (not volatile)	No (not volatile)	-		-	-		4.59E+06	5.08E+06	2.64E+01	2.90E+00	YAWS	-		-		No	-	-
Dimethyl Sulfide	75-18-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.68E+09	1.52E+09	2.64E+01	2.20E+00	CRC	-		-		No	-	-
Dimethyl methylphosphonate	756-79-6	No	No	No (not volatile)	No (not volatile)	-		-	-		5.56E+06	6.06E+06	2.64E+01	-		-		-		No	-	-
Dimethylamino azobenzene [p-]	60-11-7	No	Yes	No (not volatile)	No (not volatile)	2.16E-03		-	-		8.48E-01	3.76E-03	2.64E+01	-		1.30E-03	C	-		No	2.16E-03	-
Dimethylaniline HCl, 2,4-	21436-96-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.16E+06	3.46E+05	2.64E+01	-		-		-		No	-	-
Dimethylaniline, 2,4-	95-68-1	No	No	No (not volatile)	No (not volatile)	-		-	-		8.67E+05	6.86E+05	2.64E+01	-		-		-		No	-	-
Dimethylaniline, N,N-	121-69-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.56E+06	3.78E+06	2.64E+01	1.20E+00	YAWS	-		-		No	-	-
Dimethylbenz(a)anthracene, 7,12-	57-97-6	No	Yes	No (not volatile)	No (not volatile)	1.43E-05		-	-		9.38E+00	9.38E+00	2.64E+01	-		7.10E-02	C	-		Mut	1.43E-05	-
Dimethylbenzidine, 3,3'-	119-93-7	No	No	No (not volatile)	No (not volatile)	-		-	-		7.90E+00	3.69E+00	2.64E+01	-		-		-		No	-	-
Dimethylcyclohexylamine, n,n-	98-94-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.72E+07	1.09E+07	2.64E+01	-		-		-		No	-	-
Dimethylethyl Lead	107584-40-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Dimethylformamide	68-12-2	Yes	Yes	Yes	Yes	3.13E+00	NC	1.04E+02	9.35E+05	--	1.52E+07	3.34E+06	2.64E+01	2.20E+00	CRC	-		3.00E-02	I	No	-	3.13E+00
Dimethylhydrazine, 1,1-	57-14-7	Yes	Yes	Yes	Yes	2.09E-04	NC	6.95E-03	3.72E-01	--	5.27E+08	5.61E+08	2.64E+01	2.00E+00	CRC	-		2.00E-06	X	No	-	2.09E-04
Dimethylhydrazine, 1,2-	540-73-8	Yes	Yes	Yes	Yes	1.75E-05	CA	5.85E-04	5.83E+00	--	2.26E+08	3.01E+06	2.64E+01	-		1.60E-01	C	-		No	1.75E-05	-
Dimethylmercury	593-74-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.73E+08	7.71E+08	2.64E+01	-		-		-		No	-	-
Dimethylphenethylamine	122-09-8	No	No	No (not volatile)	No (not volatile)	-		-	-		7.71E+05	1.09E+06	2.64E+01	-		-		-		No	-	-
Dimethylphenol, 2,4-	105-67-9	No	No	No (not volatile)	No (not volatile)	-		-	-		6.70E+05	3.42E+05	2.64E+01	1.10E+00	YAWS	-		-		No	-	-
Dimethylphenol, 2,6-	576-26-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.12E+06	1.82E+06	2.64E+01	1.40E+00	YAWS	-		-		No	-	-
Dimethylphenol, 3,4-	95-65-8	No	No	No (not volatile)	No (not volatile)	-		-	-		2.34E+05	9.13E+04	2.64E+01	1.10E+00	YAWS	-		-		No	-	-

Dimethylphthalate	131-11-3	No	No	No (not volatile)	No (not volatile)	-		-	-		3.22E+04	3.70E+04	2.64E+01	9.00E-01	CRC	-		-		No	-	-
Dimethylterephthalate	120-61-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.04E+05	1.19E+05	2.64E+01	1.00E+00	YAWS	-		-		No	-	-
Dimethylvinylchloride	513-37-1	Yes	Yes	Yes	Yes	2.16E-01	CA	7.20E+00	4.23E+00	--	1.03E+09	5.11E+07	2.64E+01	-		1.30E-05	C	-		No	2.16E-01	-
Dinitro-o-cresol, 4,6-	534-52-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.28E+03	1.13E+04	2.64E+01	-		-		-		No	-	-
Dinitro-o-cyclohexyl Phenol, 4,6-	131-89-5	No	No	No (not volatile)	No (not volatile)	-		-	-		6.00E-01	3.40E+01	2.64E+01	-		-		-		No	-	-
Dinitroaniline, 3,5-	618-87-1	No	Yes	No (not volatile)	No (not volatile)	2.09E-01		-	-		2.64E+02	1.56E+00	2.64E+01	-		-		2.00E-03	X	No	-	2.09E-01
Dinitrobenzene, 1,2-	528-29-0	No	No	No (not volatile)	No (not volatile)	-		-	-		4.11E+02	3.41E+02	2.64E+01	1.80E+00	YAWS	-		-		No	-	-
Dinitrobenzene, 1,3-	99-65-0	No	No	No (not volatile)	No (not volatile)	-		-	-		8.14E+03	1.24E+03	2.64E+01	-		-		-		No	-	-
Dinitrobenzene, 1,4-	100-25-4	No	No	No (not volatile)	No (not volatile)	-		-	-		2.36E+02	2.76E+02	2.64E+01	1.80E+00	YAWS	-		-		No	-	-
Dinitrophenol, 2,4-	51-28-5	No	No	No (not volatile)	No (not volatile)	-		-	-		3.86E+03	9.81E+03	2.64E+01	-		-		-		No	-	-
Dinitrophenols	25550-58-7	No	No	No (not volatile)	No (not volatile)	-		-	-		2.18E+03	6.32E+00	2.64E+01	-		-		-		No	-	-
Dinitrosopentamethylenetetramine, N,N-	101-25-7	No	No	No (not volatile)	No (not volatile)	-		-	-		5.03E+01	1.15E+00	2.64E+01	-		-		-		No	-	-
Dinitrotoluene Mixture, 2,4/2,6-	NA	No	No	No (not volatile)	No (not volatile)	-		-	-		2.11E+04	4.38E+03	2.64E+01	-		-		-		No	-	-
Dinitrotoluene, 2,3-	602-01-7	No	No	No (not volatile)	No (not volatile)	-		-	-		3.89E+03	1.02E+03	2.64E+01	-		-		-		No	-	-
Dinitrotoluene, 2,4-	121-14-2	No	Yes	No (not volatile)	No (not volatile)	3.15E-02		-	-		1.44E+03	5.23E+02	2.64E+01	1.50E+00	YAWS	8.90E-05	C	-		No	3.15E-02	-
Dinitrotoluene, 2,5-	619-15-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.89E+03	9.72E+02	2.64E+01	1.50E+00	YAWS	-		-		No	-	-
Dinitrotoluene, 2,6-	606-20-2	No	No	No (not volatile)	No (not volatile)	-		-	-		5.55E+03	6.52E+03	2.64E+01	1.50E+00	YAWS	-		-		No	-	-
Dinitrotoluene, 2-Amino-4,6-	35572-78-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.13E+02	1.63E+00	2.64E+01	-		-		-		No	-	-
Dinitrotoluene, 3,4-	610-39-9	No	No	No (not volatile)	No (not volatile)	-		-	-		3.89E+03	7.91E+02	2.64E+01	1.50E+00	YAWS	-		-		No	-	-
Dinitrotoluene, 3,5-	618-85-9	No	No	No (not volatile)	No (not volatile)	-		-	-		3.97E+03	6.41E+02	2.64E+01	1.50E+00	YAWS	-		-		No	-	-
Dinitrotoluene, 4-Amino-2,6-	19406-51-0	No	No	No (not volatile)	No (not volatile)	-		-	-		1.13E+02	1.63E+00	2.64E+01	-		-		-		No	-	-
Dinitrotoluene, Technical grade	25321-14-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.17E+04	1.02E+03	2.64E+01	-		-		-		No	-	-
Dinoseb	88-85-7	No	No	No (not volatile)	No (not volatile)	-		-	-		9.69E+02	9.69E+02	2.64E+01	-		-		-		No	-	-
Dioxane, 1,4-	123-91-1	Yes	Yes	Yes	Yes	5.62E-01	CA	1.87E+01	2.68E+03	--	1.80E+08	2.10E+08	2.64E+01	2.00E+00	CRC	5.00E-06	I	3.00E-02	I	No	5.62E-01	3.13E+00
Diphenamid	957-51-7	No	No	No (not volatile)	No (not volatile)	-		-	-		3.86E-01	3.86E-01	2.64E+01	-		-		-		No	-	-
Diphenyl Ether	101-84-8	Yes	Yes	Yes	Yes	4.17E-02	NC	1.39E+00	3.26E+00	--	2.06E+05	2.30E+05	2.64E+01	8.00E-01	CRC	-		4.00E-04	X	No	-	4.17E-02
Diphenyl Sulfone	127-63-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.80E+02	3.66E+03	2.64E+01	-		-		-		No	-	-
Diphenylamine	122-39-4	No	No	No (not volatile)	No (not volatile)	-		-	-		6.10E+03	6.69E+03	2.64E+01	7.00E-01	YAWS	-		-		No	-	-
Diphenylhydrazine, 1,2-	122-66-7	No	Yes	No (not volatile)	No (not volatile)	1.28E-02		-	-		4.32E+03	4.93E+03	2.64E+01	7.00E-01	YAWS	2.20E-04	I	-		No	1.28E-02	-
Dipotassium phosphate	7758-11-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Diquat	2764-72-9	No	No	No (not volatile)	No (not volatile)	-		-	-		9.91E-02	4.07E+02	2.64E+01	-		-		-		No	-	-
Direct Black 38	1937-37-7	No	Yes	No (not volatile)	No (not volatile)	1.34E-03		-	-		6.42E-29	1.01E-28	2.64E+01	-		2.10E-03	C	-		No	1.34E-03	-
Direct Blue 6	2602-46-2	No	Yes	No (not volatile)	No (not volatile)	1.34E-03		-	-		4.79E-31	5.09E-40	2.64E+01	-		2.10E-03	C	-		No	1.34E-03	-
Direct Brown 95	16071-86-6	No	Yes	No (not volatile)	No (not volatile)	1.48E-03		-	-		5.85E-34	-	2.64E+01	-		1.90E-03	C	-		No	1.48E-03	-
Direct Sky Blue	2610-05-1	No	No	No (not volatile)	No (not volatile)	-		-	-		3.00E-34	1.40E-31	2.64E+01	-		-		-		No	-	-
Disodium phosphate	7558-79-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Disulfoton	298-04-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.44E+03	1.44E+03	2.64E+01	-		-		-		No	-	-
Dithiane, 1,4-	505-29-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.14E+05	5.68E+06	2.64E+01	-		-		-		No	-	-
Diundecyl Phthalate	3648-20-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.11E-02	2.54E+03	2.64E+01	-		-		-		No	-	-
Diuron	330-54-1	No	No	No (not volatile)	No (not volatile)	-		-	-		8.65E-01	8.65E-01	2.64E+01	-		-		-		No	-	-
Dodine	2439-10-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.32E+00	2.32E+00	2.64E+01	-		-		-		No	-	-
EPTC	759-94-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.44E+05	2.44E+05	2.64E+01	-		-		-		No	-	-
Endosulfan	115-29-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.79E+00	8.64E+02	2.64E+01	-		-		-		No	-	-
Endosulfan I	959-98-8	No	No	No (not volatile)	No (not volatile)	-		-	-		6.57E+01	1.48E+02	2.64E+01	-		-		-		No	-	-
Endosulfan II	33213-65-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.31E+01	7.19E+00	2.64E+01	-		-		-		No	-	-
Endosulfan Sulfate	1031-07-8	No	No	No (not volatile)	No (not volatile)	-		-	-		6.37E+00	6.38E+00	2.64E+01	-		-		-		No	-	-

Endothall	145-73-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.57E-03	1.57E-03	2.64E+01	-		-		-		No	-	-
Endrin	72-20-8	No	No	No (not volatile)	No (not volatile)	-		-	-		6.15E+01	6.50E+01	2.64E+01	-		-		-		No	-	-
Endrin aldehyde	7421-93-4	No	No	No (not volatile)	No (not volatile)	-		-	-		4.10E+00	4.10E+00	2.64E+01	-		-		-		No	-	-
Endrin ketone	53494-70-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.13E+02	1.83E-01	2.64E+01	-		-		-		No	-	-
Epichlorohydrin	106-89-8	Yes	Yes	Yes	Yes	1.04E-01	NC	3.48E+00	8.43E+01	--	8.18E+07	8.15E+07	2.64E+01	3.80E+00	YAWS	1.20E-06	I	1.00E-03	I	No	2.34E+00	1.04E-01
Epoxybutane, 1,2-	106-88-7	Yes	Yes	Yes	Yes	2.09E+00	NC	6.95E+01	2.68E+02	--	6.98E+08	7.40E+08	2.64E+01	1.70E+00	CRC	-		2.00E-02	I	No	-	2.09E+00
Ethanol	64-17-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.47E+08	2.21E+08	2.64E+01	3.30E+00	CRC	-		-		No	-	-
Ethanol, 2-(2-methoxyethoxy)-	111-77-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.62E+06	7.51E+02	2.64E+01	1.38E+00	CRC	-		-		No	-	-
Ethephon	16672-87-0	No	No	No (not volatile)	No (not volatile)	-		-	-		7.62E-01	2.33E+02	2.64E+01	-		-		-		No	-	-
Ethion	563-12-2	No	No	No (not volatile)	No (not volatile)	-		-	-		3.10E+01	3.10E+01	2.64E+01	-		-		-		No	-	-
Ethoxy Propanol	52125-53-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.36E+07	1.20E+06	2.64E+01	-		-		-		No	-	-
Ethoxyethanol Acetate, 2-	111-15-9	Yes	Yes	Yes	Yes	6.26E+00	NC	2.09E+02	4.36E+04	--	1.42E+07	2.68E+07	2.64E+01	2.00E+00	CRC	-		6.00E-02	P	No	-	6.26E+00
Ethoxyethanol, 2-	110-80-5	Yes	Yes	Yes	Yes	4.17E+00	NC	1.39E+02	1.99E+05	--	2.57E+07	2.10E+07	2.64E+01	3.00E+00	CRC	-		4.00E-02	P	No	-	4.17E+00
Ethyl Acetate	141-78-6	Yes	Yes	Yes	Yes	7.30E+00	NC	2.43E+02	1.25E+03	--	4.42E+08	4.66E+08	2.64E+01	2.00E+00	CRC	-		7.00E-02	P	No	-	7.30E+00
Ethyl Acrylate	140-88-5	Yes	Yes	Yes	Yes	8.34E-01	NC	2.78E+01	5.61E+01	--	2.08E+08	2.23E+08	2.64E+01	1.40E+00	CRC	-		8.00E-03	P	No	-	8.34E-01
Ethyl Chloride	75-00-3	Yes	Yes	Yes	Yes	4.17E+02	NC	1.39E+04	8.83E+02	--	3.50E+09	3.17E+09	2.64E+01	3.80E+00	CRC	-		4.00E+00	P	No	-	4.17E+02
Ethyl Ether	60-29-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.14E+09	3.18E+09	2.64E+01	1.90E+00	CRC	-		-		No	-	-
Ethyl Methacrylate	97-63-2	Yes	Yes	Yes	Yes	3.13E+01	NC	1.04E+03	1.21E+03	--	1.26E+08	1.39E+08	2.64E+01	1.80E+00	YAWS	-		3.00E-01	P	No	-	3.13E+01
Ethyl Tertiary Butyl Ether (ETBE)	637-92-3	Yes	Yes	Yes	Yes	3.51E+01	CA	1.17E+03	4.95E+02	--	6.81E+08	8.51E+08	2.64E+01	1.20E+00	YAWS	8.00E-08	I	4.00E+01	I	No	3.51E+01	4.17E+03
Ethyl methane sulfonate	62-50-0	No	No	No (not volatile)	No (not volatile)	-		-	-		1.38E+06	1.42E+06	2.64E+01	-		-		-		No	-	-
Ethyl-p-nitrophenyl Phosphonate	2104-64-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.65E+01	5.65E+01	2.64E+01	-		-		-		No	-	-
Ethylbenzene	100-41-4	Yes	Yes	Yes	Yes	1.12E+00	CA	3.74E+01	3.24E+00	Yes (700)	5.48E+07	5.86E+07	2.64E+01	8.00E-01	CRC	2.50E-06	C	1.00E+00	I	No	1.12E+00	1.04E+02
Ethylene Cyanohydrin	109-78-4	No	No	No (not volatile)	No (not volatile)	-		-	-		3.07E+05	3.50E+05	2.64E+01	2.30E+00	YAWS	-		-		No	-	-
Ethylene Diamine	107-15-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.88E+07	7.64E+04	2.64E+01	2.50E+00	CRC	-		-		No	-	-
Ethylene Glycol	107-21-1	No	Yes	No (not volatile)	No (not volatile)	4.17E+01		-	-		3.07E+05	2.74E+06	2.64E+01	3.20E+00	CRC	-		4.00E-01	C	No	-	4.17E+01
Ethylene Glycol Monobutyl Ether	111-76-2	No	Yes	No (not volatile)	No (not volatile)	1.67E+02		-	-		5.59E+06	7.26E+07	2.64E+01	4.00E+00	CRC	-		1.60E+00	I	No	-	1.67E+02
Ethylene Oxide	75-21-8	Yes	Yes	Yes	Yes	3.38E-04	CA	1.13E-02	5.35E-02	--	3.11E+09	6.31E+09	2.64E+01	3.00E+00	CRC	3.00E-03	I	3.00E-02	C	Mut	3.38E-04	3.13E+00
Ethylene Thiourea	96-45-7	No	Yes	No (not volatile)	No (not volatile)	2.16E-01		-	-		1.11E+01	1.11E+01	2.64E+01	-		1.30E-05	C	-		No	2.16E-01	-
Ethyleneimine	151-56-4	Yes	Yes	Yes	Yes	1.48E-04	CA	4.93E-03	2.82E-01	--	4.93E+08	5.24E+08	2.64E+01	3.30E+00	CRC	1.90E-02	C	-		No	1.48E-04	-
Ethylhexyl acrylate, 2-	103-11-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.76E+06	1.98E+06	2.64E+01	-		-		-		No	-	-
Ethylphenol, 4-	123-07-9	No	No	No (not volatile)	No (not volatile)	-		-	-		2.44E+05	1.74E+05	2.64E+01	-		-		-		No	-	-
Ethylphthalyl Ethyl Glycolate	84-72-0	No	No	No (not volatile)	No (not volatile)	-		-	-		3.26E+03	5.89E+01	2.64E+01	-		-		-		No	-	-
Famphur	52-85-7	No	No	No (not volatile)	No (not volatile)	-		-	-		2.38E+01	7.14E+01	2.64E+01	-		-		-		No	-	-
Fenamiphos	22224-92-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.63E+01	1.63E+01	2.64E+01	-		-		-		No	-	-
Fenpropathrin	39515-41-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.03E+02	1.03E+02	2.64E+01	-		-		-		No	-	-
Fenvalerate	51630-58-1	No	No	No (not volatile)	No (not volatile)	-		-	-		3.39E-02	3.39E-02	2.64E+01	-		-		-		No	-	-
Fluometuron	2164-17-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.17E+01	1.17E+01	2.64E+01	-		-		-		No	-	-
Fluoranthene	206-44-0	No	No	No (not volatile)	No (not volatile)	-		-	-		1.00E+02	1.10E+02	2.64E+01	6.00E-01	YAWS	-		-		No	-	-
Fluorene	86-73-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.36E+03	7.56E+03	2.64E+01	7.00E-01	YAWS	-		-		No	-	-
Fluoride	16984-48-8	Indeterminate	Yes	No (not volatile)	No (not volatile)	1.36E+00		-	-		-	-	2.64E+01	-		-		1.30E-02	C	No	-	1.36E+00
Fluorine (Soluble Fluoride)	7782-41-4	Indeterminate	Yes	No (not volatile)	No (not volatile)	1.36E+00		-	-		-	-	2.64E+01	-		-		1.30E-02	C	No	-	1.36E+00
Fluorobenzene	462-06-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.99E+08	4.18E+08	2.64E+01	-		-		-		No	-	-
Fluorobiphenyl, 2-	321-60-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		9.54E+04	2.74E+05	2.64E+01	-		-		-		No	-	-
Fluorophenol, 2-	367-12-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.17E+06	1.86E+06	2.64E+01	-		-		-		No	-	-
Fluridone	59756-60-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.73E+00	3.97E+00	2.64E+01	-		-		-		No	-	-
Flurprimidol	56425-91-3	No	No	No (not volatile)	No (not volatile)	-		-	-		6.11E+00	6.81E+00	2.64E+01	-		-		-		No	-	-
Flusilazole	85509-19-9	No	No	No (not volatile)	No (not volatile)	-		-	-		4.97E+00	4.97E+00	2.64E+01	-		-		-		No	-	-
Flutolanil	66332-96-5	No	No	No (not volatile)	No (not volatile)	-		-	-		8.49E-01	8.49E-01	2.64E+01	-		-		-		No	-	-
Fluvalinate	69409-94-5	No	No	No (not volatile)	No (not volatile)	-		-	-		2.70E+00	2.96E-03	2.64E+01	-		-		-		No	-	-
Folpet	133-07-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.50E+00	2.51E+00	2.64E+01	-		-		-		No	-	-
Fomesafen	72178-02-0	No	No	No (not volatile)	No (not volatile)	-		-	-		1.77E+01	1.54E-03	2.64E+01	-		-		-		No	-	-

Fonofos	944-22-9	No	No	No (not volatile)	No (not volatile)	-		-	-		4.48E+03	4.48E+03	2.64E+01	-		-		-		No	-	-
Formaldehyde	50-00-0	Yes	Yes	Yes	Yes	2.16E-01	CA	7.20E+00	1.51E+04	--	6.28E+09	5.72E+06	2.64E+01	7.00E+00	CRC	1.30E-05	I	9.83E-03	A	No	2.16E-01	1.02E+00
Formic Acid	64-18-6	Yes	Yes	Yes	Yes	3.13E-02	NC	1.04E+00	4.39E+03	--	1.05E+08	7.13E+06	2.64E+01	1.80E+01	CRC	-		3.00E-04	X	No	-	3.13E-02
Fosetyl-AL	39148-24-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.43E-03	1.43E-01	2.64E+01	-		-		-		No	-	-
Fuel Oil Number 2	68476-30-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Furan	110-00-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.20E+09	2.31E+09	2.64E+01	2.30E+00	CRC	-		-		No	-	-
Furazolidone	67-45-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.15E+01	5.33E-02	2.64E+01	-		-		-		No	-	-
Furfural	98-01-1	Yes	Yes	Yes	Yes	5.21E+00	NC	1.74E+02	3.09E+04	--	1.14E+07	1.25E+07	2.64E+01	2.10E+00	CRC	-		5.00E-02	H	No	-	5.21E+00
Furium	531-82-8	No	Yes	No (not volatile)	No (not volatile)	6.53E-03		-	-		1.20E-01	2.29E-04	2.64E+01	-		4.30E-04	C	-		No	6.53E-03	-
Furmecyclox	60568-05-0	No	Yes	No (not volatile)	No (not volatile)	3.26E-01		-	-		1.13E+03	8.45E-02	2.64E+01	-		8.60E-06	C	-		No	3.26E-01	-
Gadolinium	7440-54-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Gallium	7440-55-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Germanium	7440-56-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Glufosinate, Ammonium	77182-82-2	No	No	No (not volatile)	No (not volatile)	-		-	-		9.72E-05	2.48E+00	2.64E+01	-		-		-		No	-	-
Glutaraldehyde	111-30-8	No	Yes	No (not volatile)	No (not volatile)	8.34E-03		-	-		3.23E+06	3.31E+05	2.64E+01	-		-		8.00E-05	C	No	-	8.34E-03
Glycerol	56-81-5	No	No	No (not volatile)	No (not volatile)	-		-	-		8.32E+02	8.16E+05	2.64E+01	3.00E+00	CRC	-		-		No	-	-
Glycidaldehyde	765-34-4	Yes	Yes	Yes	Yes	1.04E-01	NC	3.48E+00	4.67E+03	--	1.76E+08	2.23E+07	2.64E+01	-		-		1.00E-03	X	No	-	1.04E-01
Glyphosate	1071-83-6	No	No	No (not volatile)	No (not volatile)	-		-	-		8.91E-01	9.01E-01	2.64E+01	-		-		-		No	-	-
Guanidine	113-00-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.02E+06	1.76E+00	2.64E+01	-		-		-		No	-	-
Guanidine Chloride	50-01-1	No	No	No (not volatile)	No (not volatile)	-		-	-		9.04E+00	8.87E-05	2.64E+01	-		-		-		No	-	-
Guanidine Nitrate	506-93-4	No	No	No (not volatile)	No (not volatile)	-		-	-		8.21E-01	3.66E-05	2.64E+01	-		-		-		No	-	-
Haloacetic acids	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Haloxyfop, Methyl	69806-40-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.21E+02	1.21E+02	2.64E+01	-		-		-		No	-	-
Heptachlor	76-44-8	Yes	Yes	Yes	Yes	2.16E-03	CA	7.20E-02	1.58E-01	Yes (0)	8.03E+03	2.46E+03	2.64E+01	-		1.30E-03	I	-		No	2.16E-03	-
Heptachlor Epoxide	1024-57-3	Yes	Yes	Yes	Yes	1.08E-03	CA	3.60E-02	1.07E+00	No (0)	4.08E+02	2.02E+02	2.64E+01	-		2.60E-03	I	-		No	1.08E-03	-
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	Yes	Yes	Yes	Yes	2.46E-03	CA	8.21E-02	1.19E+00	--	2.76E+00	1.56E+00	2.64E+01	-		1.14E-03	W	1.33E-03	W	No	2.46E-03	1.39E-01
Heptachlorodibenzofuran, 1,2,3,4,6,7,8-	67562-39-4	Yes	Yes	Yes	Yes	7.39E-06	CA	2.46E-04	1.28E-02	--	7.77E-04	7.78E-04	2.64E+01	-		3.80E-01	W	4.00E-06	W	No	7.39E-06	4.17E-04
Heptanal, n-	111-71-7	Yes	Yes	Yes	Yes	3.13E-01	NC	1.04E+01	2.60E+01	--	2.16E+07	1.50E+07	2.64E+01	-		-		3.00E-03	X	No	-	3.13E-01
Heptane, N-	142-82-5	Yes	Yes	Yes	Yes	4.17E+01	NC	1.39E+03	4.78E-01	--	2.48E+08	2.97E+08	2.64E+01	1.05E+00	CRC	-		4.00E-01	P	No	-	4.17E+01
Heptanol, n-	111-70-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.35E+06	1.43E+06	2.64E+01	-		-		-		No	-	-
Hexabromobenzene	87-82-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.83E-01	1.84E-01	2.64E+01	-		-		-		No	-	-
Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2	No	No	No (not volatile)	No (not volatile)	-		-	-		2.01E+02	-	2.64E+01	-		-		-		No	-	-
Hexachlorobenzene	118-74-1	Yes	Yes	Yes	Yes	6.10E-03	CA	2.03E-01	7.74E-02	Yes (1)	2.76E+02	4.89E+02	2.64E+01	3.50E+00	YAWS	4.60E-04	I	-		No	6.10E-03	-
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	Yes	Yes	Yes	Yes	2.46E-03	CA	8.21E-02	8.79E-01	--	1.13E+01	6.23E+00	2.64E+01	-		1.14E-03	W	1.33E-03	W	No	2.46E-03	1.39E-01
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	Yes	Yes	Yes	Yes	2.46E-03	CA	8.21E-02	3.72E-01	--	1.13E+01	1.09E+01	2.64E+01	-		1.14E-03	W	1.33E-03	W	No	2.46E-03	1.39E-01
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	Yes	Yes	Yes	Yes	2.46E-03	CA	8.21E-02	3.65E-01	--	3.12E+01	3.59E+01	2.64E+01	-		1.14E-03	W	1.33E-03	W	No	2.46E-03	1.39E-01
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	Yes	Yes	Yes	Yes	2.46E-06	CA	8.21E-05	7.63E-04	--	1.13E+01	1.65E+00	2.64E+01	-		1.14E+00	W	1.33E-06	W	No	2.46E-06	1.39E-04
Hexachlorobutadiene	87-68-3	Yes	Yes	Yes	Yes	1.28E-01	CA	4.25E+00	2.76E-01	--	3.09E+06	1.48E+06	2.64E+01	2.90E+00	YAWS	2.20E-05	I	-		No	1.28E-01	-
Hexachlorocyclohexane, Alpha-	319-84-6	No	Yes	No (not volatile)	No (not volatile)	1.56E-03		-	-		5.51E+02	5.48E+02	2.64E+01	-		1.80E-03	I	-		No	1.56E-03	-
Hexachlorocyclohexane, Beta-	319-85-7	No	Yes	No (not volatile)	No (not volatile)	5.30E-03		-	-		5.63E+00	4.32E+00	2.64E+01	-		5.30E-04	I	-		No	5.30E-03	-
Hexachlorocyclohexane, Delta-	319-86-8	No	No	No (not volatile)	No (not volatile)	-		-	-		5.51E+02	6.60E+03	2.64E+01	-		-		-		No	-	-
Hexachlorocyclohexane, Epsilon	6108-10-7	No	No	No (not volatile)	No (not volatile)	-		-	-		5.51E+02	1.68E+03	2.64E+01	-		-		-		No	-	-
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	No	Yes	No (not volatile)	No (not volatile)	9.06E-03		-	-		6.57E+02	1.53E+03	2.64E+01	-		3.10E-04	C	-		No	9.06E-03	-
Hexachlorocyclohexane, Technical	608-73-1	No	Yes	No (not volatile)	No (not volatile)	5.51E-03		-	-		5.51E+02	1.68E+03	2.64E+01	-		5.10E-04	I	-		No	5.51E-03	-
Hexachlorocyclopentadiene	77-47-4	Yes	Yes	Yes	Yes	2.09E-02	NC	6.95E-01	1.22E-02	Yes (50)	8.80E+05	3.07E+06	2.64E+01	-		-		2.00E-04	I	No	-	2.09E-02
Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-	39227-28-6	No	Yes	No (not volatile)	No (not volatile)	7.39E-07		-	-		8.05E-04	7.11E-04	2.64E+01	-		3.80E+00	W	4.00E-07	W	No	7.39E-07	4.17E-05
Hexachlorodibenzo-p-dioxin, Mixture	34465-46-8	No	Yes	No (not volatile)	No (not volatile)	2.16E-06		-	-		9.25E-04	9.32E-04	2.64E+01	-		1.30E+00	I	-		No	2.16E-06	-
Hexachlorodibenzofuran, 1,2,3,4,7,8-	70648-26-9	Yes	Yes	Yes	Yes	7.39E-07	CA	2.46E-05	4.66E-04	--	2.26E+00	4.73E-03	2.64E+01	-		3.80E+00	W	4.00E-07	W	No	7.39E-07	4.17E-05
Hexachloroethane	67-72-1	Yes	Yes	Yes	Yes	2.55E-01	CA	8.51E+00	1.60E+00	--	2.67E+06	7.95E+06	2.64E+01	-		1.10E-05	C	3.00E-02	I	No	2.55E-01	3.13E+00
Hexachlorophene	70-30-4	No	No	No (not volatile)	No (not volatile)	-		-	-		2.25E-03	3.14E-03	2.64E+01	-		-		-		No	-	-
Hexachloropropene	1888-71-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.26E+06	3.27E+06	2.64E+01	-		-		-		No	-	-
Hexadecanoic Acid	57-10-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.24E+00	3.96E+01	2.64E+01	5.00E-01	YAWS	-		-		No	-	-
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.07E+07	7.73E+09	2.64E+01	-		-		-		No	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	No	No	No (not volatile)	No (not volatile)	-		-	-		4.90E-02	4.91E-02	2.64E+01	-		-		-		No	-	-
Hexamethylene Diisocyanate, 1,6-	822-06-0	Yes	Yes	Yes	Yes	1.04E-03	NC	3.48E-02	4.85E-01	--	2.71E+05	2.51E+05	2.64E+01	-		-		1.00E-05	I	No	-	1.04E-03

Hexamethylene diisocyanate biuret	4035-89-6	No	Yes	No (not volatile)	No (not volatile)	4.17E-02		-	-		6.49E-08	8.41E-15	2.64E+01	-		-		4.00E-04	C	No	-	4.17E-02
Hexamethylene diisocyanate isocyanurate	3779-63-3	No	Yes	No (not volatile)	No (not volatile)	4.17E-02		-	-		2.65E-09	2.65E-16	2.64E+01	-		-		4.00E-04	C	No	-	4.17E-02
Hexamethylphosphoramide	680-31-9	No	No	No (not volatile)	No (not volatile)	-		-	-		4.43E+05	8.18E+05	2.64E+01	-		-		-		No	-	-
Hexane, Commercial	NA	Yes	Yes	Yes	Yes	1.40E+01	CA	4.68E+02	1.81E-01	--	7.01E+08	7.39E+08	2.64E+01	1.10E+00	CRC	2.00E-07	X	6.00E-01	P	No	1.40E+01	6.26E+01
Hexane, N-	110-54-3	Yes	Yes	Yes	Yes	7.30E+01	NC	2.43E+03	9.39E-01	--	7.01E+08	7.39E+08	2.64E+01	1.10E+00	CRC	-		7.00E-01	I	No	-	7.30E+01
Hexanedioic Acid	124-04-9	No	No	No (not volatile)	No (not volatile)	-		-	-		2.50E+00	7.18E+00	2.64E+01	1.60E+00	YAWS	-		-		No	-	-
Hexanol, 1-,2-ethyl- (2-Ethyl-1-hexanol)	104-76-7	Yes	Yes	Yes	Yes	4.17E-02	NC	1.39E+00	3.39E+01	--	9.53E+05	1.08E+06	2.64E+01	8.80E-01	CRC	-		4.00E-04	P	No	-	4.17E-02
Hexanol, n-	111-27-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.10E+06	4.56E+06	2.64E+01	-		-		-		No	-	-
Hexanone, 2-	591-78-6	Yes	Yes	Yes	Yes	3.13E+00	NC	1.04E+02	7.60E+02	--	6.25E+07	7.08E+07	2.64E+01	1.00E+00	CRC	-		3.00E-02	I	No	-	3.13E+00
Hexazinone	51235-04-2	No	No	No (not volatile)	No (not volatile)	-		-	-		3.05E+00	3.05E+00	2.64E+01	-		-		-		No	-	-
Hexythiazox	78587-05-0	No	No	No (not volatile)	No (not volatile)	-		-	-		4.84E-01	4.84E-01	2.64E+01	-		-		-		No	-	-
HpCDD, 1,2,3,4,6,7,8,-	35822-46-9	Yes	Yes	Yes	Yes	7.39E-06	CA	2.46E-04	1.03E-03	--	1.72E-02	1.72E-02	2.64E+01	-		3.80E-01	W	4.00E-06	W	No	7.39E-06	4.17E-04
HpCDF, 1,2,3,4,7,8,9-	55673-89-7	Yes	Yes	Yes	Yes	7.39E-06	CA	2.46E-04	1.28E-02	--	7.77E-04	7.78E-04	2.64E+01	-		3.80E-01	W	4.00E-06	W	No	7.39E-06	4.17E-04
HxCDD, 1,2,3,6,7,8-	57653-85-7	No	Yes	No (not volatile)	No (not volatile)	7.39E-07		-	-		7.57E-04	2.10E-03	2.64E+01	-		3.80E+00	W	4.00E-07	W	No	7.39E-07	4.17E-05
HxCDD, 1,2,3,7,8,9-	19408-74-3	No	Yes	No (not volatile)	No (not volatile)	7.39E-07		-	-		7.57E-04	2.10E-03	2.64E+01	-		3.80E+00	W	4.00E-07	W	No	7.39E-07	4.17E-05
HxCDF, 1,2,3,6,7,8-	57117-44-9	Yes	Yes	Yes	Yes	7.39E-07	CA	2.46E-05	4.66E-04	--	2.26E+00	5.54E-01	2.64E+01	-		3.80E+00	W	4.00E-07	W	No	7.39E-07	4.17E-05
HxCDF, 1,2,3,7,8,9-	72918-21-9	No	Yes	No (not volatile)	No (not volatile)	7.39E-07		-	-		1.55E+00	5.39E-01	2.64E+01	-		3.80E+00	W	4.00E-07	W	No	7.39E-07	4.17E-05
HxCDF, 2,3,4,6,7,8-	60851-34-5	No	Yes	No (not volatile)	No (not volatile)	7.39E-07		-	-		2.26E+00	1.64E-02	2.64E+01	-		3.80E+00	W	4.00E-07	W	No	7.39E-07	4.17E-05
Hydramethylnon	67485-29-4	No	No	No (not volatile)	No (not volatile)	-		-	-		5.40E-01	5.40E-01	2.64E+01	-		-		-		No	-	-
Hydrazine	302-01-2	Yes	Yes	Yes	Yes	5.73E-04	CA	1.91E-02	2.13E+01	--	2.48E+07	2.70E+07	2.64E+01	5.00E+00	CRC	4.90E-03	I	3.00E-05	P	No	5.73E-04	3.13E-03
Hydrazine Sulfate	10034-93-2	Indeterminate	Yes	No (not volatile)	No (not volatile)	5.73E-04		-	-		-	-	2.64E+01	-		4.90E-03	I	-		No	5.73E-04	-
Hydrogen Chloride	7647-01-0	Yes	Yes	Yes	Yes	2.09E+00	NC	6.95E+01	1.03E+08	--	6.75E+10	1.37E+04	2.64E+01	-		-		2.00E-02	I	No	-	2.09E+00
Hydrogen Cyanide	74-90-8	Yes	Yes	Yes	Yes	8.34E-02	NC	2.78E+00	1.46E+01	--	1.08E+09	5.71E+09	2.64E+01	6.00E+00	CRC	-		8.00E-04	I	No	-	8.34E-02
Hydrogen Fluoride	7664-39-3	Yes	Yes	Yes	Yes	1.46E+00	NC	4.87E+01	3.40E+02	--	9.87E+08	4.29E+09	2.64E+01	-		-		1.40E-02	C	No	-	1.46E+00
Hydrogen Selenide	7783-07-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.97E+10	-	2.64E+01	-		-		-		No	-	-
Hydrogen Sulfate	12143-45-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Hydrogen Sulfide	7783-06-4	Yes	Yes	Yes	Yes	2.09E-01	NC	6.95E+00	5.82E-01	--	2.87E+10	1.34E+09	2.64E+01	4.00E+00	CRC	-		2.00E-03	I	No	-	2.09E-01
Hydroquinone	123-31-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.42E+02	1.62E+02	2.64E+01	1.60E+00	YAWS	-		-		No	-	-
Imazalil	35554-44-0	No	No	No (not volatile)	No (not volatile)	-		-	-		1.90E+01	1.91E+01	2.64E+01	-		-		-		No	-	-
Imazaquin	81335-37-7	No	No	No (not volatile)	No (not volatile)	-		-	-		1.72E-06	2.54E-08	2.64E+01	-		-		-		No	-	-
Imazethapyr	81335-77-5	No	No	No (not volatile)	No (not volatile)	-		-	-		3.35E-04	5.95E-06	2.64E+01	-		-		-		No	-	-
Indeno[1,2,3-cd]pyrene	193-39-5	No	Yes	No (not volatile)	No (not volatile)	1.69E-02		-	-		1.86E-03	3.35E-03	2.64E+01	-		6.00E-05	E	-		Mut	1.69E-02	-
Indium	7440-74-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Iodide	20461-54-5	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Iodine	7553-56-2	No	No	No (not volatile)	No (not volatile)	-		-	-		3.18E+06	-	2.64E+01	-		-		-		No	-	-
Iodomethane	74-88-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.09E+09	3.11E+09	2.64E+01	-		-		-		No	-	-
Iodopropynyl Butylcarbamate (IPBC)	55406-53-6	No	No	No (not volatile)	No (not volatile)	-		-	-		7.94E+02	7.65E+02	2.64E+01	-		-		-		No	-	-
Iprodione	36734-19-7	No	No	No (not volatile)	No (not volatile)	-		-	-		6.66E-02	1.77E+00	2.64E+01	-		-		-		No	-	-
Iron	7439-89-6	No	No	No (not volatile)	No (not volatile)	-		-	-		0.00E+00	-	2.64E+01	-		-		-		No	-	-
Iron Sulfide	11126-12-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Isobutyl Alcohol	78-83-1	Yes	Yes	Yes	Yes	4.17E+01	NC	1.39E+03	9.55E+04	--	4.17E+07	3.71E+07	2.64E+01	1.70E+00	CRC	-		4.00E-01	X	No	-	4.17E+01
Isodrin	465-73-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.36E+03	3.06E+01	2.64E+01	-		-		-		No	-	-
Isophorone	78-59-1	No	Yes	No (not volatile)	No (not volatile)	2.09E+02		-	-		3.26E+06	3.59E+06	2.64E+01	8.00E-01	CRC	-		2.00E+00	C	No	-	2.09E+02
Isopropalin	33820-53-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.99E+02	4.99E+02	2.64E+01	-		-		-		No	-	-
Isopropanol	67-63-0	Yes	Yes	Yes	Yes	2.09E+01	NC	6.95E+02	5.81E+04	--	1.47E+08	3.59E+08	2.64E+01	2.00E+00	CRC	-		2.00E-01	P	No	-	2.09E+01
Isopropyl Methyl Phosphonic Acid	1832-54-8	No	No	No (not volatile)	No (not volatile)	-		-	-		8.84E+04	1.42E+04	2.64E+01	-		-		-		No	-	-
Isopropyltoluene, p-	99-87-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.05E+07	1.15E+07	2.64E+01	7.00E-01	CRC	-		-		No	-	-
Isosafrole	120-58-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.14E+05	2.12E+08	2.64E+01	-		-		-		No	-	-
Isoxaben	82558-50-7	No	No	No (not volatile)	No (not volatile)	-		-	-		7.38E-02	7.37E-02	2.64E+01	-		-		-		No	-	-
Jet propulsion fuel 4 (JP-4)	50815-00-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		-	2.33E+10	2.64E+01	-		-		-		No	-	-
Jet propulsion fuel 5 (JP-5)	NA	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		-	1.21E+04	2.64E+01	-		-		-		No	-	-
Jet propulsion fuel 7 (JP-7)	NA	Yes	Yes		Yes	3.13E+01	NC	-	7.65E+01	--	-	4.25E+06	2.64E+01	-		-		3.00E-01	A	No	-	3.13E+01

Jet propulsion fuel 8 (JP-8)	NA	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		-	3.00E+04	2.64E+01	-		-		-		No	-	-
Kerosene	8008-20-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		-	4.25E+06	2.64E+01	-		-		-		No	-	-
Lactofen	77501-63-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.74E+00	1.93E+00	2.64E+01	-		-		-		No	-	-
Lactonitrile	78-97-7	No	No	No (not volatile)	No (not volatile)	-		-	-		4.55E+05	2.12E+08	2.64E+01	2.70E+00	YAWS	-		-		No	-	-
Lanthanum	7439-91-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Lanthanum Acetate Hydrate	100587-90-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Lanthanum Chloride Heptahydrate	10025-84-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Lanthanum Chloride, Anhydrous	10099-58-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Lanthanum Nitrate Hexahydrate	10277-43-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Lead Alkyls	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Lead Phosphate	7446-27-7	Indeterminate	Yes	No (not volatile)	No (not volatile)	2.34E-01		-	-		-	-	2.64E+01	-		1.20E-05	C	-		No	2.34E-01	-
Lead acetate	301-04-2	No	Yes	No (not volatile)	No (not volatile)	3.51E-02		-	-		1.27E+04	-	2.64E+01	-		8.00E-05	C	-		No	3.51E-02	-
Lead and Compounds	7439-92-1	No	No	No (not volatile)	No (not volatile)	-		-	-		0.00E+00	-	2.64E+01	-		-		-		No	-	-
Lead subacetate	1335-32-6	No	Yes	No (not volatile)	No (not volatile)	2.55E-01		-	-		1.29E-02	-	2.64E+01	-		1.10E-05	C	-		No	2.55E-01	-
Lewisite	541-25-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.47E+06	4.87E+06	2.64E+01	-		-		-		No	-	-
Linuron	330-55-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.92E+01	1.92E+01	2.64E+01	-		-		-		No	-	-
Lithium	7439-93-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Lithium Perchlorate	7791-03-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Lithium bis[(trifluoromethyl)sulfonyl]azanide	90076-65-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.63E-01	7.07E+08	2.64E+01	-		-		-		No	-	-
Lutetium	7439-94-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
MCPA	94-74-6	No	No	No (not volatile)	No (not volatile)	-		-	-		6.37E+01	3.43E+01	2.64E+01	-		-		-		No	-	-
MCPB	94-81-5	No	No	No (not volatile)	No (not volatile)	-		-	-		5.33E+00	5.32E+00	2.64E+01	-		-		-		No	-	-
MCPP	93-65-2	No	No	No (not volatile)	No (not volatile)	-		-	-		8.66E+00	4.61E+02	2.64E+01	-		-		-		No	-	-
Magnesium	7439-95-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Malathion	121-75-5	No	No	No (not volatile)	No (not volatile)	-		-	-		6.01E+01	2.86E+01	2.64E+01	-		-		-		No	-	-
Maleic Anhydride	108-31-6	No	Yes	No (not volatile)	No (not volatile)	7.30E-02		-	-		1.32E+06	2.91E+07	2.64E+01	1.40E+00	CRC	-		7.00E-04	C	No	-	7.30E-02
Maleic Hydrazide	123-33-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.67E+01	4.88E+00	2.64E+01	-		-		-		No	-	-
Malononitrile	109-77-3	No	No	No (not volatile)	No (not volatile)	-		-	-		7.11E+05	7.93E+05	2.64E+01	2.90E+00	YAWS	-		-		No	-	-
Mancozeb	8018-01-7	No	No	No (not volatile)	No (not volatile)	-		-	-		3.84E-03	3.85E-03	2.64E+01	-		-		-		No	-	-
Maneb	12427-38-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.19E+00	1.19E+00	2.64E+01	-		-		-		No	-	-
Manganese (Diet)	7439-96-5	No	Yes	No (not volatile)	No (not volatile)	5.21E-03		-	-		0.00E+00	-	2.64E+01	-		-		5.00E-05	I	No	-	5.21E-03
Manganese (Non-diet)	7439-96-5	No	Yes	No (not volatile)	No (not volatile)	5.21E-03		-	-		0.00E+00	-	2.64E+01	-		-		5.00E-05	I	No	-	5.21E-03
Mechlorethamine	51-75-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.43E+06	1.43E+06	2.64E+01	-		-		-		No	-	-
Mephosfolan	950-10-7	No	No	No (not volatile)	No (not volatile)	-		-	-		4.61E+02	2.77E-01	2.64E+01	-		-		-		No	-	-
Mepiquat Chloride	24307-26-4	No	No	No (not volatile)	No (not volatile)	-		-	-		2.99E+00	8.81E+01	2.64E+01	-		-		-		No	-	-
Mercaptobenzothiazole, 2-	149-30-4	No	No	No (not volatile)	No (not volatile)	-		-	-		4.17E+03	1.78E+02	2.64E+01	1.00E+00	YAWS	-		-		No	-	-
Mercuric Chloride	7487-94-7	Indeterminate	Yes	No (not volatile)	No (not volatile)	3.13E-02		-	-		-	-	2.64E+01	-		-		3.00E-04	G	No	-	3.13E-02
Mercury (elemental)	7439-97-6	Yes	Yes	Yes	Yes	3.13E-02	NC	1.04E+00	7.90E-02	Yes (2)	2.11E+04	2.38E+04	2.64E+01	-		-		3.00E-04	I	No	-	3.13E-02
Merphos	150-50-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.21E+02	3.25E+00	2.64E+01	-		-		-		No	-	-
Metalaxyl	57837-19-1	No	No	No (not volatile)	No (not volatile)	-		-	-		8.44E+01	1.01E+03	2.64E+01	-		-		-		No	-	-
Methacrylonitrile	126-98-7	Yes	Yes	Yes	Yes	3.13E+00	NC	1.04E+02	2.91E+02	--	2.57E+08	2.73E+08	2.64E+01	2.00E+00	CRC	-		3.00E-02	P	No	-	3.13E+00
Methamidophos	10265-92-6	No	No	No (not volatile)	No (not volatile)	-		-	-		2.68E+02	3.55E+04	2.64E+01	-		-		-		No	-	-
Methanol	67-56-1	Yes	Yes	Yes	Yes	2.09E+03	NC	6.95E+04	1.05E+07	--	2.19E+08	1.99E+08	2.64E+01	6.00E+00	CRC	-		2.00E+01	I	No	-	2.09E+03
Methapyrilene	91-80-5	No	No	No (not volatile)	No (not volatile)	-		-	-		7.49E+01	7.96E-02	2.64E+01	-		-		-		No	-	-
Methidathion	950-37-8	No	No	No (not volatile)	No (not volatile)	-		-	-		5.48E+01	5.48E+01	2.64E+01	-		-		-		No	-	-
Methomyl	16752-77-5	No	No	No (not volatile)	No (not volatile)	-		-	-		4.71E+01	4.67E+01	2.64E+01	-		-		-		No	-	-

Methoxy-5-nitroaniline, 2-	99-59-2	No	No	No (not volatile)	No (not volatile)	-		-	-		2.88E+03	5.88E+01	2.64E+01	-		-		-		No	-	-
Methoxychlor	72-43-5	No	No	No (not volatile)	No (not volatile)	-		-	-		4.80E+01	8.30E-01	2.64E+01	-		-		-		No	-	-
Methoxyethanol Acetate, 2-	110-49-6	Yes	Yes	Yes	Yes	1.04E-01	NC	3.48E+00	7.45E+03	--	4.45E+07	1.40E+07	2.64E+01	1.50E+00	CRC	-		1.00E-03	P	No	-	1.04E-01
Methoxyethanol, 2-	109-86-4	Yes	Yes	Yes	Yes	7.30E-01	NC	2.43E+01	5.01E+04	--	3.89E+07	1.46E+07	2.64E+01	1.80E+00	CRC	-		7.00E-03	P	No	-	7.30E-01
Methyl Acetate	79-20-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		8.61E+08	1.21E+09	2.64E+01	3.10E+00	CRC	-		-		No	-	-
Methyl Acrylate	96-33-3	Yes	Yes	Yes	Yes	2.09E+00	NC	6.95E+01	2.40E+02	--	4.01E+08	4.29E+08	2.64E+01	2.80E+00	CRC	-		2.00E-02	P	No	-	2.09E+00
Methyl Ethyl Ketone (2-Butanone)	78-93-3	Yes	Yes	Yes	Yes	5.21E+02	NC	1.74E+04	2.11E+05	--	3.51E+08	5.51E+08	2.64E+01	1.40E+00	CRC	-		5.00E+00	I	No	-	5.21E+02
Methyl Hydrazine	60-34-4	Yes	Yes	Yes	Yes	2.09E-03	NC	6.95E-02	1.57E+01	--	1.24E+08	1.33E+08	2.64E+01	2.50E+00	CRC	1.00E-03	X	2.00E-05	X	No	2.81E-03	2.09E-03
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	Yes	Yes	Yes	Yes	3.13E+02	NC	1.04E+04	5.16E+04	--	1.07E+08	1.15E+08	2.64E+01	1.20E+00	CRC	-		3.00E+00	I	No	-	3.13E+02
Methyl Isocyanate	624-83-9	Yes	Yes	Yes	Yes	1.04E-01	NC	3.48E+00	2.63E+00	--	1.07E+09	1.16E+09	2.64E+01	5.30E+00	CRC	-		1.00E-03	C	No	-	1.04E-01
Methyl Mercaptan	74-93-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.90E+09	2.04E+09	2.64E+01	3.90E+00	CRC	-		-		No	-	-
Methyl Mercury	22967-92-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Methyl Methacrylate	80-62-6	Yes	Yes	Yes	Yes	7.30E+01	NC	2.43E+03	5.20E+03	--	2.07E+08	2.11E+08	2.64E+01	1.70E+00	CRC	-		7.00E-01	I	No	-	7.30E+01
Methyl Parathion	298-00-0	No	No	No (not volatile)	No (not volatile)	-		-	-		4.95E+01	1.54E+02	2.64E+01	-		-		-		No	-	-
Methyl Phosphonic Acid	993-13-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.69E+03	9.98E+00	2.64E+01	-		-		-		No	-	-
Methyl Styrene (Mixed Isomers)	25013-15-4	Yes	Yes	Yes	Yes	4.17E+00	NC	1.39E+02	3.49E+01	--	2.86E+07	1.06E+07	2.64E+01	-		-		4.00E-02	H	No	-	4.17E+00
Methyl dicyclohexylamine, n-	7560-83-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.84E+05	1.58E+06	2.64E+01	-		-		-		No	-	-
Methyl methanesulfonate	66-27-3	No	Yes	No (not volatile)	No (not volatile)	1.00E-01		-	-		1.84E+06	3.30E+07	2.64E+01	-		2.80E-05	C	-		No	1.00E-01	-
Methyl tert-Butyl Ether (MTBE)	1634-04-4	Yes	Yes	Yes	Yes	1.08E+01	CA	3.60E+02	4.27E+02	--	1.19E+09	1.29E+09	2.64E+01	2.00E+00	YAWS	2.60E-07	C	3.00E+00	I	No	1.08E+01	3.13E+02
Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2	No	No	No (not volatile)	No (not volatile)	-		-	-		4.32E-05	2.61E-04	2.64E+01	-		-		-		No	-	-
Methyl-2-Pentanol, 4-	108-11-2	Yes	Yes	Yes	Yes	3.13E+02	NC	1.04E+04	1.56E+05	--	2.91E+07	3.29E+07	2.64E+01	1.00E+00	CRC	-		3.00E+00	X	No	-	3.13E+02
Methyl-5-Nitroaniline, 2-	99-55-8	No	No	No (not volatile)	No (not volatile)	-		-	-		7.98E+03	3.39E+03	2.64E+01	-		-		-		No	-	-
Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	No	Yes	No (not volatile)	No (not volatile)	1.17E-03		-	-		9.49E+02	1.33E+01	2.64E+01	-		2.40E-03	C	-		No	1.17E-03	-
Methylaniline Hydrochloride, 2-	636-21-5	No	Yes	No (not volatile)	No (not volatile)	7.59E-02		-	-		2.26E+06	7.12E+05	2.64E+01	-		3.70E-05	C	-		No	7.59E-02	-
Methylarsonic acid	124-58-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.22E+04	-	2.64E+01	-		-		-		No	-	-
Methylaziridine, 2-	75-55-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.30E+08	4.33E+08	2.64E+01	-		-		-		No	-	-
Methylbenzene,1-4-diamine monohydrochloride, 2-	74612-12-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Methylbenzene-1,4-diamine sulfate, 2-	615-50-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Methylcholanthrene, 3-	56-49-5	No	Yes	No (not volatile)	No (not volatile)	1.61E-04		-	-		6.21E-01	6.21E-01	2.64E+01	-		6.30E-03	C	-		Mut	1.61E-04	-
Methylcyclohexane	108-87-2	Yes	Yes	Yes	Yes	9.91E+00	NC	3.30E+02	5.30E-01	--	2.43E+08	2.62E+08	2.64E+01	1.20E+00	CRC	-		9.50E-02	X	No	-	9.91E+00
Methylcyclohexylamine, n-	100-60-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.81E+07	2.35E+07	2.64E+01	-		-		-		No	-	-
Methylcyclopentane	96-37-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.22E+08	6.58E+08	2.64E+01	1.00E+00	CRC	-		-		No	-	-
Methylene Chloride	75-09-2	Yes	Yes	Yes	Yes	6.26E+01	NC	2.09E+03	4.48E+02	No (5)	1.99E+09	1.82E+09	2.64E+01	1.30E+01	CRC	1.00E-08	I	6.00E-01	I	Mut	1.01E+02	6.26E+01
Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	No	Yes	No (not volatile)	No (not volatile)	2.36E-03		-	-		4.11E+00	2.31E-02	2.64E+01	-		4.30E-04	C	-		Mut	2.36E-03	-
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-61-1	No	Yes	No (not volatile)	No (not volatile)	2.16E-01		-	-		2.39E+02	1.81E-01	2.64E+01	-		1.30E-05	C	-		No	2.16E-01	-
Methylenebisbenzenamine, 4,4'-	101-77-9	No	Yes	No (not volatile)	No (not volatile)	6.10E-03		-	-		2.16E+00	2.17E+00	2.64E+01	-		4.60E-04	C	2.00E-02	C	No	6.10E-03	2.09E+00
Methylenediphenyl Diisocyanate	101-68-8	No	Yes	No (not volatile)	No (not volatile)	6.26E-02		-	-		6.73E+01	3.56E+01	2.64E+01	6.00E-01	YAWS	-		6.00E-04	I	No	-	6.26E-02
Methylisothiocyanate	556-61-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.39E+07	1.39E+07	2.64E+01	-		-		-		No	-	-
Methylnaphthalene	1321-94-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.12E+05	5.84E+05	2.64E+01	-		-		-		No	-	-
Methylnaphthalene, 1-	90-12-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.12E+05	6.02E+05	2.64E+01	8.00E-01	YAWS	-		-		No	-	-
Methylnaphthalene, 2-	91-57-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.21E+05	5.89E+05	2.64E+01	8.00E-01	YAWS	-		-		No	-	-
Methylstyrene, Alpha-	98-83-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.21E+07	1.34E+07	2.64E+01	1.90E+00	CRC	-		-		No	-	-
Methyltriethyl Lead	1762-28-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.18E+07	4.88E+07	2.64E+01	-		-		-		No	-	-
Metolachlor	51218-45-2	No	No	No (not volatile)	No (not volatile)	-		-	-		4.79E+02	1.95E+02	2.64E+01	-		-		-		No	-	-
Metribuzin	21087-64-9	No	No	No (not volatile)	No (not volatile)	-		-	-		5.01E+00	5.02E+00	2.64E+01	-		-		-		No	-	-
Metsulfuron-methyl	74223-64-6	No	No	No (not volatile)	No (not volatile)	-		-	-		5.13E-05	5.13E-05	2.64E+01	-		-		-		No	-	-
Midrange Aliphatic Hydrocarbon Streams	NA	Yes	Yes	Yes	Yes	6.24E-01	CA	2.08E+01	4.04E-03	--	3.07E+07	3.40E+07	2.64E+01	8.00E-01	CRC	4.50E-06	X	1.00E-01	P	No	6.24E-01	1.04E+01
Mineral oils	8012-95-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.24E+06	1.24E+06	2.64E+01	-		-		-		No	-	-
Mirex	2385-85-5	Yes	Yes	Yes	Yes	5.51E-04	CA	1.84E-02	1.66E-02	--	2.35E+01	2.82E+03	2.64E+01	-		5.10E-03	C	-		No	5.51E-04	-
Molinate	2212-67-1	No	No	No (not volatile)	No (not volatile)	-		-	-		5.64E+04	1.63E+05	2.64E+01	-		-		-		No	-	-
Molybdenum	7439-98-7	No	Yes	No (not volatile)	No (not volatile)	2.09E-01		-	-		0.00E+00	-	2.64E+01	-		-		2.00E-03	A	No	-	2.09E-01
Monoaluminum phosphate	13530-50-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-

Monoammonium phosphate	7722-76-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Monobutyltin Compounds	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Monocalcium phosphate	7758-23-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Monochloramine	10599-90-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Monochlorobutanes	25154-42-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Monocyclic aromatic hydrocarbons (total)	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Monomagnesium phosphate	7757-86-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Monomethylaniline	100-61-8	No	No	No (not volatile)	No (not volatile)	-		-	-		2.61E+06	2.26E+06	2.64E+01	1.20E+00	YAWS	-		-		No	-	-
Monopotassium phosphate	7778-77-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Monosodium phosphate	7558-80-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Myclobutanil	88671-89-0	No	No	No (not volatile)	No (not volatile)	-		-	-		2.36E+01	2.48E+01	2.64E+01	-		-		-		No	-	-
N,N'-Diphenyl-1,4-benzenediamine	74-31-7	No	No	No (not volatile)	No (not volatile)	-		-	-		8.89E-02	7.16E-02	2.64E+01	5.00E-01	YAWS	-		-		No	-	-
N-Methyl dithiocarbamate	137-42-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.15E-02	-	2.64E+01	-		-		-		No	-	-
Naled	300-76-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.10E+03	3.99E+03	2.64E+01	-		-		-		No	-	-
Naphtha, High Flash Aromatic (HFAN)	64742-95-6	Yes	Yes		Yes	1.04E+01	NC	-	5.80E+02	--	-	5.58E+05	2.64E+01	-		-		1.00E-01	P	No	-	1.04E+01
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	8.26E-02	CA	2.75E+00	4.17E+00	--	5.86E+05	6.14E+05	2.64E+01	9.00E-01	CRC	3.40E-05	C	3.00E-03	I	No	8.26E-02	3.13E-01
Naphthol, 2-	135-19-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.48E+03	8.46E+02	2.64E+01	-		-		-		No	-	-
Naphthoquinone, 1,4-	130-15-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.53E+03	5.38E+01	2.64E+01	-		-		-		No	-	-
Naphthylamine, 1-	134-32-7	No	No	No (not volatile)	No (not volatile)	-		-	-		3.22E+04	7.71E+03	2.64E+01	-		-		-		No	-	-
Naphthylamine, 2-	91-59-8	No	Yes	No (not volatile)	No (not volatile)	-		-	-		1.97E+03	6.26E+02	2.64E+01	-		0.00E+00	C	-		No	-	-
Napropamide	15299-99-7	No	No	No (not volatile)	No (not volatile)	-		-	-		2.51E+00	2.51E+00	2.64E+01	-		-		-		No	-	-
Neodymium Chloride (Stable, Nonradioactive)	10024-93-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Niagara Blue 4B	2429-74-5	No	No	No (not volatile)	No (not volatile)	-		-	-		3.00E-34	2.06E-38	2.64E+01	-		-		-		No	-	-
Nickel Acetate	373-02-4	No	Yes	No (not volatile)	No (not volatile)	1.46E-03		-	-		1.70E+02	-	2.64E+01	-		2.60E-04	C	1.40E-05	C	No	1.08E-02	1.46E-03
Nickel Carbonate	3333-67-3	No	Yes	No (not volatile)	No (not volatile)	1.46E-03		-	-		2.27E+01	-	2.64E+01	-		2.60E-04	C	1.40E-05	C	No	1.08E-02	1.46E-03
Nickel Carbonyl	13463-39-3	Yes	Yes	Yes	Yes	1.46E-03	NC	4.87E-02	6.79E-05	--	2.89E+09	3.87E+09	2.64E+01	2.00E+00	N	2.60E-04	C	1.40E-05	C	No	1.08E-02	1.46E-03
Nickel Hydroxide	12054-48-7	Indeterminate	Yes	No (not volatile)	No (not volatile)	1.46E-03		-	-		-	-	2.64E+01	-		2.60E-04	C	1.40E-05	C	No	1.08E-02	1.46E-03
Nickel Oxide	1313-99-1	Indeterminate	Yes	No (not volatile)	No (not volatile)	2.09E-03		-	-		-	-	2.64E+01	-		2.60E-04	C	2.00E-05	C	No	1.08E-02	2.09E-03
Nickel Refinery Dust	NA	Indeterminate	Yes	No (not volatile)	No (not volatile)	1.46E-03		-	-		-	-	2.64E+01	-		2.40E-04	I	1.40E-05	C	No	1.17E-02	1.46E-03
Nickel Soluble Salts	7440-02-0	No	Yes	No (not volatile)	No (not volatile)	1.46E-03		-	-		0.00E+00	-	2.64E+01	-		2.60E-04	C	1.40E-05	C	No	1.08E-02	1.46E-03
Nickel Subsulfide	12035-72-2	Indeterminate	Yes	No (not volatile)	No (not volatile)	1.46E-03		-	-		-	-	2.64E+01	-		4.80E-04	I	1.40E-05	C	No	5.85E-03	1.46E-03
Nickelocene	1271-28-9	Indeterminate	Yes	No (not volatile)	No (not volatile)	1.46E-03		-	-		-	-	2.64E+01	-		2.60E-04	C	1.40E-05	C	No	1.08E-02	1.46E-03
Nicotinonitrile	100-54-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.66E+06	1.66E+06	2.64E+01	-		-		-		No	-	-
Niobium	7440-03-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Nitrate (measured as nitrogen)	14797-55-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Nitrate + Nitrite (measured as nitrogen)	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Nitric Acid	7697-37-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.14E+08	-	2.64E+01	-		-		-		No	-	-
Nitric Oxide	10102-43-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.34E+10	-	2.64E+01	-		-		-		No	-	-
Nitrite (measured as nitrogen)	14797-65-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Nitroaniline, 2-	88-74-4	No	Yes	No (not volatile)	No (not volatile)	5.21E-03		-	-		2.06E+04	4.13E+03	2.64E+01	1.50E+00	YAWS	-		5.00E-05	X	No	-	5.21E-03
Nitroaniline, 3-	99-09-2	No	No	No (not volatile)	No (not volatile)	-		-	-		7.10E+02	4.55E+02	2.64E+01	1.70E+00	YAWS	-		-		No	-	-
Nitroaniline, 4-	100-01-6	No	Yes	No (not volatile)	No (not volatile)	6.26E-01		-	-		2.38E+01	4.46E+01	2.64E+01	1.50E+00	YAWS	-		6.00E-03	P	No	-	6.26E-01
Nitrobenzene	98-95-3	Yes	Yes	Yes	Yes	7.02E-02	CA	2.34E+00	6.47E+01	--	1.62E+06	2.27E+06	2.64E+01	1.80E+00	CRC	4.00E-05	I	9.00E-03	I	No	7.02E-02	9.39E-01
Nitrobiphenyl, 4-	92-93-3	No	No	No (not volatile)	No (not volatile)	-		-	-		3.48E+02	1.78E+02	2.64E+01	-		-		-		No	-	-
Nitrocellulose	9004-70-0	No	No	No (not volatile)	No (not volatile)	-		-	-		2.94E-10	1.35E-09	2.64E+01	-		-		-		No	-	-
Nitrodiphenylamine, 2-	119-75-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.15E+02	1.19E+02	2.64E+01	-		-		-		No	-	-
Nitrofurantoin	67-20-9	No	No	No (not volatile)	No (not volatile)	-		-	-		3.56E-03	4.32E-03	2.64E+01	-		-		-		No	-	-

Nitrofurazone	59-87-0	No	Yes	No (not volatile)	No (not volatile)	7.59E-03		-	-		4.59E+01	2.66E-03	2.64E+01	-		3.70E-04	C	-		No	7.59E-03	-
Nitrogen Dioxide	10102-44-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.23E+09	-	2.64E+01	-		-		-		No	-	-
Nitroglycerin	55-63-0	No	No	No (not volatile)	No (not volatile)	-		-	-		4.89E+03	5.82E+03	2.64E+01	-		-		-		No	-	-
Nitroguanidine	556-88-7	No	No	No (not volatile)	No (not volatile)	-		-	-		8.00E-05	8.00E-05	2.64E+01	-		-		-		No	-	-
Nitromethane	75-52-5	Yes	Yes	Yes	Yes	3.19E-01	CA	1.06E+01	2.55E+02	--	1.18E+08	1.39E+08	2.64E+01	7.30E+00	CRC	8.80E-06	P	5.00E-03	P	No	3.19E-01	5.21E-01
Nitrophenol, 2-	88-75-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		8.45E+05	1.31E+06	2.64E+01	-		-		-		No	-	-
Nitrophenol, 2-amino-4-	99-57-0	No	No	No (not volatile)	No (not volatile)	-		-	-		2.92E+02	8.43E-02	2.64E+01	-		-		-		No	-	-
Nitrophenol, 3-	554-84-7	No	No	No (not volatile)	No (not volatile)	-		-	-		8.83E+03	1.10E+03	2.64E+01	-		-		-		No	-	-
Nitrophenol, 4-	100-02-7	No	No	No (not volatile)	No (not volatile)	-		-	-		7.32E+02	1.97E+02	2.64E+01	-		-		-		No	-	-
Nitrophenol, 4-amino-2-	119-34-6	No	No	No (not volatile)	No (not volatile)	-		-	-		2.92E+02	1.00E+00	2.64E+01	-		-		-		No	-	-
Nitropropane, 2-	79-46-9	Yes	Yes	Yes	Yes	4.84E-03	CA	1.61E-01	9.22E-01	--	8.25E+07	8.92E+07	2.64E+01	2.60E+00	CRC	5.80E-04	X	2.00E-02	I	No	4.84E-03	2.09E+00
Nitropyrene, 4-	57835-92-4	No	Yes	No (not volatile)	No (not volatile)	2.55E-02		-	-		7.40E-01	6.80E-02	2.64E+01	-		1.10E-04	C	-		No	2.55E-02	-
Nitroquinoline-1-oxide. 4-	56-57-5	No	No	No (not volatile)	No (not volatile)	-		-	-		2.66E+01	2.61E-03	2.64E+01	-		-		-		No	-	-
Nitroso-N-ethylurea, N-	759-73-9	No	Yes	No (not volatile)	No (not volatile)	1.32E-04		-	-		1.15E+05	7.02E+01	2.64E+01	-		7.70E-03	C	-		Mut	1.32E-04	-
Nitroso-N-methylurea, N-	684-93-5	No	Yes	No (not volatile)	No (not volatile)	2.98E-05		-	-		1.62E+05	5.83E+01	2.64E+01	-		3.40E-02	C	-		Mut	2.98E-05	-
Nitroso-di-N-butylamine, N-	924-16-3	Yes	Yes	Yes	Yes	1.75E-03	CA	5.85E-02	3.04E+00	--	3.99E+05	7.33E+05	2.64E+01	-		1.60E-03	I	-		No	1.75E-03	-
Nitroso-di-N-propylamine, N-	621-64-7	No	Yes	No (not volatile)	No (not volatile)	1.40E-03		-	-		6.02E+05	2.86E+06	2.64E+01	-		2.00E-03	C	-		No	1.40E-03	-
Nitrosodiethanolamine, N-	1116-54-7	No	Yes	No (not volatile)	No (not volatile)	3.51E-03		-	-		3.61E+03	1.98E+02	2.64E+01	-		8.00E-04	C	-		No	3.51E-03	-
Nitrosodiethylamine, N-	55-18-5	No	Yes	No (not volatile)	No (not volatile)	2.36E-05		-	-		4.72E+06	1.57E+07	2.64E+01	-		4.30E-02	I	-		Mut	2.36E-05	-
Nitrosodimethylamine, N-	62-75-9	Yes	Yes	Yes	Yes	7.24E-05	CA	2.41E-03	9.00E-01	--	1.08E+07	8.05E+07	2.64E+01	-		1.40E-02	I	4.00E-05	X	Mut	7.24E-05	4.17E-03
Nitrosodiphenylamine, N-	86-30-6	No	Yes	No (not volatile)	No (not volatile)	1.08E+00		-	-		1.07E+06	1.73E+03	2.64E+01	-		2.60E-06	C	-		No	1.08E+00	-
Nitrosomethylethylamine, N-	10595-95-6	Yes	Yes	Yes	Yes	4.46E-04	CA	1.49E-02	7.57E+00	--	5.21E+06	1.77E+07	2.64E+01	-		6.30E-03	C	-		No	4.46E-04	-
Nitrosomethylvinylamine, N-	4549-40-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.15E+07	4.42E+06	2.64E+01	-		-		-		No	-	-
Nitrosomorpholine [N-]	59-89-2	No	Yes	No (not volatile)	No (not volatile)	1.48E-03		-	-		2.25E+05	1.00E+06	2.64E+01	-		1.90E-03	C	-		No	1.48E-03	-
Nitrosopiperidine [N-]	100-75-4	No	Yes	No (not volatile)	No (not volatile)	1.04E-03		-	-		5.65E+05	2.64E+06	2.64E+01	-		2.70E-03	C	-		No	1.04E-03	-
Nitrosopyrrolidine, N-	930-55-2	No	Yes	No (not volatile)	No (not volatile)	4.60E-03		-	-		3.23E+05	2.00E+06	2.64E+01	-		6.10E-04	I	-		No	4.60E-03	-
Nitrotoluene, 4-Amino-2-	119-32-4	No	No	No (not volatile)	No (not volatile)	-		-	-		7.95E+03	4.75E+02	2.64E+01	-		-		-		No	-	-
Nitrotoluene, m-	99-08-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.51E+06	2.11E+05	2.64E+01	1.30E+00	YAWS	-		-		No	-	-
Nitrotoluene, o-	88-72-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.39E+06	3.74E+05	2.64E+01	2.20E+00	YAWS	-		-		No	-	-
Nitrotoluene, p-	99-99-0	No	No	No (not volatile)	No (not volatile)	-		-	-		1.16E+05	1.14E+05	2.64E+01	1.60E+00	YAWS	-		-		No	-	-
Nonachlor, trans-	39765-80-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.39E+01	1.06E+01	2.64E+01	-		-		-		No	-	-
Nonane, n-	111-84-2	Yes	Yes	Yes	Yes	2.09E+00	NC	6.95E+01	1.38E-02	--	3.07E+07	3.32E+07	2.64E+01	8.00E-01	CRC	-		2.00E-02	P	No	-	2.09E+00
Nonanol, n-	143-08-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.76E+05	1.97E+05	2.64E+01	-		-		-		No	-	-
Nonylphenol	25154-52-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.80E+02	1.47E+03	2.64E+01	1.00E+00	YAWS	-		-		No	-	-
Norflurazon	27314-13-2	No	No	No (not volatile)	No (not volatile)	-		-	-		4.72E-01	4.73E-01	2.64E+01	-		-		-		No	-	-
OCDD	3268-87-9	No	Yes	No (not volatile)	No (not volatile)	2.46E-04		-	-		2.04E-05	6.31E-05	2.64E+01	-		1.14E-02	W	1.33E-04	W	No	2.46E-04	1.39E-02
OCDF	39001-02-0	No	Yes	No (not volatile)	No (not volatile)	2.46E-04		-	-		8.95E-05	3.16E-05	2.64E+01	-		1.14E-02	W	1.33E-04	W	No	2.46E-04	1.39E-02
Octabromodiphenyl Ether	32536-52-0	No	No	No (not volatile)	No (not volatile)	-		-	-		5.47E+05	3.39E-08	2.64E+01	-		-		-		No	-	-
Octachlorostyrene	29082-74-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.70E+02	1.64E+01	2.64E+01	-		-		-		No	-	-
Octadecanoic Acid	57-11-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.10E+01	1.42E+01	2.64E+01	4.00E-01	YAWS	-		-		No	-	-
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	No	No	No (not volatile)	No (not volatile)	-		-	-		5.26E-07	1.77E-01	2.64E+01	-		-		-		No	-	-
Octahydrotrimethylmethylethylphenanthrenol	511-15-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.60E+01	2.76E+00	2.64E+01	-		-		-		No	-	-
Octamethylpyrophosphoramide	152-16-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.54E+04	1.54E+04	2.64E+01	-		-		-		No	-	-
Octanol, n-	111-87-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.56E+05	6.00E+05	2.64E+01	-		-		-		No	-	-
Octanone, 2-	111-13-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		9.31E+06	7.78E+06	2.64E+01	1.00E+00	YAWS	-		-		No	-	-
Octanone, 3-	106-68-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.38E+07	1.51E+07	2.64E+01	-		-		-		No	-	-
Octyl Phthalate, di-N-	117-84-0	No	No	No (not volatile)	No (not volatile)	-		-	-		2.10E+00	2.87E+00	2.64E+01	-		-		-		No	-	-
Oleic acid	112-80-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.13E+01	2.58E+01	2.64E+01	4.00E-01	YAWS	-		-		No	-	-

Oleum	8014-95-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Oryzalin	19044-88-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.82E-01	1.95E-01	2.64E+01	-		-		-		No	-	-
Oxadiazon	19666-30-9	No	No	No (not volatile)	No (not volatile)	-		-	-		2.08E+00	2.08E+00	2.64E+01	-		-		-		No	-	-
Oxamyl	23135-22-0	No	No	No (not volatile)	No (not volatile)	-		-	-		2.71E+03	2.71E+03	2.64E+01	-		-		-		No	-	-
Oxychlordane	27304-13-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.57E+02	8.09E-02	2.64E+01	-		-		-		No	-	-
Oxyfluorfen	42874-03-3	No	No	No (not volatile)	No (not volatile)	-		-	-		3.89E+00	3.89E+00	2.64E+01	-		-		-		No	-	-
Ozone	10028-15-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Paclobutrazol	76738-62-0	No	No	No (not volatile)	No (not volatile)	-		-	-		1.19E-01	8.80E-02	2.64E+01	-		-		-		No	-	-
Paraquat Dichloride	1910-42-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.04E+00	8.16E+00	2.64E+01	-		-		-		No	-	-
Parathion	56-38-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.05E+02	1.34E+02	2.64E+01	-		-		-		No	-	-
PeCDF, 1,2,3,7,8-	57117-41-6	No	Yes	No (not volatile)	No (not volatile)	2.46E-06		-	-		3.17E-02	4.81E-02	2.64E+01	-		1.14E+00	W	1.33E-06	W	No	2.46E-06	1.39E-04
PeCDF, 2,3,4,7,8-	57117-31-4	No	Yes	No (not volatile)	No (not volatile)	2.46E-07		-	-		3.17E-02	4.81E-02	2.64E+01	-		1.14E+01	W	1.33E-07	W	No	2.46E-07	1.39E-05
Pebulate	1114-71-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		9.68E+05	9.69E+05	2.64E+01	-		-		-		No	-	-
Pendimethalin	40487-42-1	No	No	No (not volatile)	No (not volatile)	-		-	-		2.21E+02	1.15E+01	2.64E+01	-		-		-		No	-	-
Pentabromodiphenyl Ether	32534-81-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		9.41E-01	1.06E+01	2.64E+01	-		-		-		No	-	-
Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	60348-60-9	No	No	No (not volatile)	No (not volatile)	-		-	-		9.41E-01	3.79E-03	2.64E+01	-		-		-		No	-	-
Pentachloroaniline	527-20-8	No	No	No (not volatile)	No (not volatile)	-		-	-		4.99E+01	5.18E-01	2.64E+01	-		-		-		No	-	-
Pentachlorobenzene	608-93-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.36E+04	2.70E+04	2.64E+01	-		-		-		No	-	-
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	Yes	Yes	Yes	Yes	2.46E-03	CA	8.21E-02	3.17E-01	--	9.60E+01	1.24E+02	2.64E+01	-		1.14E-03	W	1.33E-03	W	No	2.46E-03	1.39E-01
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	Yes	Yes	Yes	Yes	2.46E-03	CA	8.21E-02	1.82E-01	--	1.58E+02	1.82E+02	2.64E+01	-		1.14E-03	W	1.33E-03	W	No	2.46E-03	1.39E-01
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	Yes	Yes	Yes	Yes	2.46E-03	CA	8.21E-02	1.85E-01	--	1.15E+02	4.53E+01	2.64E+01	-		1.14E-03	W	1.33E-03	W	No	2.46E-03	1.39E-01
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	Yes	Yes	Yes	Yes	2.46E-03	CA	8.21E-02	6.52E-01	--	9.60E+01	6.04E+01	2.64E+01	-		1.14E-03	W	1.33E-03	W	No	2.46E-03	1.39E-01
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	Yes	Yes	Yes	Yes	7.39E-07	CA	2.46E-05	8.26E-05	--	3.90E+01	6.56E+01	2.64E+01	-		3.80E+00	W	4.00E-07	W	No	7.39E-07	4.17E-05
Pentachlorocyclopentadiene	25329-35-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.74E+05	2.48E+06	2.64E+01	-		-		-		No	-	-
Pentachlorodibenzo-p-dioxin, 1,2,3,7,8-	40321-76-4	No	Yes	No (not volatile)	No (not volatile)	7.39E-08		-	-		8.34E-03	1.63E-02	2.64E+01	-		3.80E+01	W	4.00E-08	W	No	7.39E-08	4.17E-06
Pentachloroethane	76-01-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.81E+07	4.20E+07	2.64E+01	-		-		-		No	-	-
Pentachloronitrobenzene	82-68-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.94E+02	7.95E+02	2.64E+01	-		-		-		No	-	-
Pentachlorophenol	87-86-5	No	Yes	No (not volatile)	No (not volatile)	5.51E-01		-	-		1.58E+03	1.40E+01	2.64E+01	-		5.10E-06	C	-		No	5.51E-01	-
Pentaerythritol tetranitrate (PETN)	78-11-5	No	No	No (not volatile)	No (not volatile)	-		-	-		9.27E-02	3.23E+00	2.64E+01	-		-		-		No	-	-
Pentamethyl dipropylenetriamine	3855-32-1	No	No	No (not volatile)	No (not volatile)	-		-	-		3.76E+05	2.00E+03	2.64E+01	-		-		-		No	-	-
Pentamethylphosphoramide (PMPA)	10159-46-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.29E+06	5.30E+01	2.64E+01	-		-		-		No	-	-
Pentane, n-	109-66-0	Yes	Yes	Yes	Yes	1.04E+02	NC	3.48E+03	1.95E+00	--	1.99E+09	2.03E+09	2.64E+01	1.40E+00	CRC	-		1.00E+00	P	No	-	1.04E+02
Pentyl Alcohol, N-	71-41-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.04E+07	1.29E+07	2.64E+01	1.20E+00	CRC	-		-		No	-	-
Perchlorate and Perchlorate Salts	14797-73-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Perfluorobutanesulfonate	45187-15-3	No	No	No (not volatile)	No (not volatile)	-		-	-		8.04E+05	-	2.64E+01	-		-		-		No	-	-
Perfluorobutanesulfonic acid (PFBS)	375-73-5	No	No	No (not volatile)	No (not volatile)	-		-	-		8.07E+05	-	2.64E+01	-		-		-		No	-	-
Perfluorobutanoate	45048-62-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.72E+08	9.46E+06	2.64E+01	-		-		-		No	-	-
Perfluorobutanoic acid (PFBA)	375-22-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.73E+08	2.24E+07	2.64E+01	-		-		-		No	-	-
Perfluorododecanoic acid (PFDoDA)	307-55-1	No	No	No (not volatile)	No (not volatile)	-		-	-		6.94E+02	1.15E+00	2.64E+01	-		-		-		No	-	-
Perfluorohexanesulfonate	108427-53-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Perfluorohexanoate	92612-52-7	No	No	No (not volatile)	No (not volatile)	-		-	-		5.56E+06	2.40E+03	2.64E+01	-		-		-		No	-	-
Perfluorohexanoic acid (PFHxA)	307-24-4	No	No	No (not volatile)	No (not volatile)	-		-	-		5.57E+06	2.40E+03	2.64E+01	-		-		-		No	-	-
Perfluorononanoate	72007-68-2	No	No	No (not volatile)	No (not volatile)	-		-	-		2.37E+05	-	2.64E+01	-		-		-		No	-	-
Perfluorononanoic acid (PFNA)	375-95-1	No	No	No (not volatile)	No (not volatile)	-		-	-		2.38E+05	-	2.64E+01	-		-		-		No	-	-
Perfluorooctadecanoic acid (PFODA)	16517-11-6	No	No	No (not volatile)	No (not volatile)	-		-	-		6.19E+02	2.65E-05	2.64E+01	-		-		-		No	-	-
Perfluorooctanesulfonate	45298-90-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.75E+04	1.21E+04	2.64E+01	-		-		-		No	-	-
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.76E+04	1.21E+04	2.64E+01	-		-		-		No	-	-

Perfluorooctanoate	45285-51-6	No	No	No (not volatile)	No (not volatile)	-		-	-		6.66E+05	1.39E+06	2.64E+01	-		-		-		No	-	-
Perfluorooctanoic acid (PFOA)	335-67-1	No	No	No (not volatile)	No (not volatile)	-		-	-		6.69E+05	1.39E+06	2.64E+01	-		-		-		No	-	-
Perfluoropropanoic acid (PFPrA)	422-64-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.53E+08	9.27E+07	2.64E+01	-		-		-		No	-	-
Perfluorotetradecanoic acid (PFTetA)	376-06-7	No	No	No (not volatile)	No (not volatile)	-		-	-		1.63E+04	4.29E-03	2.64E+01	-		-		-		No	-	-
Perfluoroundecanoic acid (PFUDA)	2058-94-8	No	No	No (not volatile)	No (not volatile)	-		-	-		2.25E+04	1.24E+00	2.64E+01	-		-		-		No	-	-
Permethrin	52645-53-1	No	No	No (not volatile)	No (not volatile)	-		-	-		4.59E-01	4.59E-01	2.64E+01	-		-		-		No	-	-
Perylene	198-55-0	No	Yes	No (not volatile)	No (not volatile)	2.09E-04		-	-		7.12E-02	5.97E-02	2.64E+01	-		-		2.00E-06	X	No	-	2.09E-04
Pesticides (total)	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Phenacetin	62-44-2	No	Yes	No (not volatile)	No (not volatile)	4.46E+00		-	-		6.67E+00	6.67E+00	2.64E+01	-		6.30E-07	C	-		No	4.46E+00	-
Phenanthrene	85-01-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.16E+03	2.28E+03	2.64E+01	7.00E-01	YAWS	-		-		No	-	-
Phenmedipham	13684-63-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.62E-04	1.62E-04	2.64E+01	-		-		-		No	-	-
Phenol	108-95-2	No	Yes	No (not volatile)	No (not volatile)	2.09E+01		-	-		1.77E+06	1.25E+06	2.64E+01	1.80E+00	CRC	-		2.00E-01	C	No	-	2.09E+01
Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	No	No	No (not volatile)	No (not volatile)	-		-	-		2.36E+02	1.09E+02	2.64E+01	-		-		-		No	-	-
Phenothiazine	92-84-2	No	No	No (not volatile)	No (not volatile)	-		-	-		9.54E+00	1.82E+00	2.64E+01	-		-		-		No	-	-
Phenyl Isothiocyanate	103-72-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.09E+07	1.09E+07	2.64E+01	-		-		-		No	-	-
Phenyl-1-(2,4-dimethylphenyl)-ethane, 1- (PXE)	6165-52-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.22E+03	5.42E+03	2.64E+01	-		-		-		No	-	-
Phenylenediamine, m-	108-45-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.22E+04	1.39E+04	2.64E+01	1.30E+00	YAWS	-		-		No	-	-
Phenylenediamine, o-	95-54-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.20E+04	1.35E+04	2.64E+01	1.50E+00	CRC	-		-		No	-	-
Phenylenediamine, p-	106-50-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.91E+04	1.16E+03	2.64E+01	1.30E+00	YAWS	-		-		No	-	-
Phenylmercuric Acetate	62-38-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.09E+02	1.01E+02	2.64E+01	-		-		-		No	-	-
Phenylphenol, 2-	90-43-7	No	No	No (not volatile)	No (not volatile)	-		-	-		1.83E+04	3.00E+04	2.64E+01	-		-		-		No	-	-
Phorate	298-02-2	No	No	No (not volatile)	No (not volatile)	-		-	-		8.93E+03	8.93E+03	2.64E+01	-		-		-		No	-	-
Phosgene	75-44-5	Yes	Yes	Yes	Yes	3.13E-02	NC	1.04E+00	4.35E-02	--	7.54E+09	4.91E+09	2.64E+01	-		-		3.00E-04	I	No	-	3.13E-02
Phosmet	732-11-6	No	No	No (not volatile)	No (not volatile)	-		-	-		8.36E+00	8.36E+00	2.64E+01	-		-		-		No	-	-
Phosphine	7803-51-2	Yes	Yes	Yes	Yes	3.13E-02	NC	1.04E+00	3.10E-02	--	5.36E+10	2.62E+11	2.64E+01	1.80E+00	CRC	-		3.00E-04	I	No	-	3.13E-02
Phosphoric Acid	7664-38-2	No	Yes	No (not volatile)	No (not volatile)	1.04E+00		-	-		1.58E+05	-	2.64E+01	-		-		1.00E-02	I	No	-	1.04E+00
Phosphoric acid, aluminum salt (1:1) [aluminum phosphate]	7784-30-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Phosphoric acid, aluminum sodium salt (1:X:X) [sodium aluminum phosphate acidic (acidic SALP)]	7785-88-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Phosphorus pentoxide	1314-56-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Phosphorus, White	7723-14-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.16E+04	2.65E+05	2.64E+01	-		-		-		No	-	-
Phthalates (total)	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Phthalic Acid, m-	121-91-5	No	No	No (not volatile)	No (not volatile)	-		-	-		2.32E-01	2.51E-03	2.64E+01	1.30E+00	YAWS	-		-		No	-	-
Phthalic Acid, o-	88-99-3	No	No	No (not volatile)	No (not volatile)	-		-	-		5.68E+00	7.04E+00	2.64E+01	1.30E+00	YAWS	-		-		No	-	-
Phthalic Acid, p-	100-21-0	No	No	No (not volatile)	No (not volatile)	-		-	-		8.22E+01	2.89E-04	2.64E+01	1.30E+00	YAWS	-		-		No	-	-
Phthalic Anhydride	85-44-9	No	Yes	No (not volatile)	No (not volatile)	2.09E+00		-	-		4.12E+03	4.73E+03	2.64E+01	1.70E+00	CRC	-		2.00E-02	C	No	-	2.09E+00
Picloram	1918-02-1	No	No	No (not volatile)	No (not volatile)	-		-	-		9.36E-04	9.37E-04	2.64E+01	-		-		-		No	-	-
Picoline, 2-	109-06-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.61E+07	4.39E+08	2.64E+01	1.40E+00	YAWS	-		-		No	-	-
Picramic Acid (2-Amino-4,6-dinitrophenol)	96-91-3	No	No	No (not volatile)	No (not volatile)	-		-	-		4.45E+00	5.58E-01	2.64E+01	-		-		-		No	-	-
Picric Acid (2,4,6-Trinitrophenol)	88-89-1	No	No	No (not volatile)	No (not volatile)	-		-	-		9.24E+00	8.83E+00	2.64E+01	-		-		-		No	-	-
Piperidine	110-89-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.47E+08	1.94E+08	2.64E+01	1.40E+00	YAWS	-		-		No	-	-
Pirimiphos, Methyl	29232-93-7	No	No	No (not volatile)	No (not volatile)	-		-	-		2.46E+02	2.46E+02	2.64E+01	-		-		-		No	-	-
Polybrominated Biphenyls	36355-01-8	Indeterminate	Yes	No (not volatile)	No (not volatile)	3.26E-04		-	-		-	-	2.64E+01	-		8.60E-03	C	-		No	3.26E-04	-
Polychlorinated Biphenyls (high risk)	1336-36-3	Yes	Yes	Yes	Yes	4.91E-03	CA	1.64E-01	2.90E-01	Yes (1)	7.76E+03	1.19E+04	2.64E+01	-		5.71E-04	I	-		No	4.91E-03	-
Polychlorinated Biphenyls (low risk)	1336-36-3	Yes	Yes	Yes	Yes	2.81E-02	CA	9.36E-01	1.65E+00	No (1)	7.76E+03	1.19E+04	2.64E+01	-		1.00E-04	I	-		No	2.81E-02	-
Polychlorinated Biphenyls (lowest risk)	1336-36-3	Yes	Yes	Yes	Yes	1.40E-01	CA	4.68E+00	8.27E+00	No (1)	7.76E+03	1.19E+04	2.64E+01	-		2.00E-05	I	-		No	1.40E-01	-
Polycyclic aromatic hydrocarbons (PAH), Total (high molecular weight)	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Polycyclic aromatic hydrocarbons (PAH), Total (low molecular weight)	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-

Polycyclic chlorinated hydrocarbons (total)	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	No	Yes	No (not volatile)	No (not volatile)	6.26E-02		-	-		1.49E-05	9.51E-10	2.64E+01	-		-		6.00E-04	I	No	-	6.26E-02
Polyphosphoric acid	8017-16-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Potassium	7440-09-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Potassium Cyanide	151-50-8	No	Yes	No (not volatile)	No (not volatile)	9.39E-01		-	-		0.00E+00	-	2.64E+01	-		-		9.00E-03	C	No	-	9.39E-01
Potassium Perchlorate	7778-74-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Potassium Silver Cyanide	506-61-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Potassium heptafluorobutanoate	2966-54-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.94E+08	3.54E+08	2.64E+01	-		-		-		No	-	-
Potassium perfluorobutanesulfonate	29420-49-3	No	No	No (not volatile)	No (not volatile)	-		-	-		1.66E+00	1.66E+00	2.64E+01	-		-		-		No	-	-
Potassium perfluorooctanesulfonate	2795-39-3	No	No	No (not volatile)	No (not volatile)	-		-	-		7.18E+01	5.56E+04	2.64E+01	-		-		-		No	-	-
Potassium salts of inorganic phosphates	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Potassium tripolyphosphate	13845-36-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Praseodymium	7440-10-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Praseodymium Chloride (Stable, Nonradioactive)	10361-79-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Prochloraz	67747-09-5	No	No	No (not volatile)	No (not volatile)	-		-	-		2.29E+01	2.28E+01	2.64E+01	-		-		-		No	-	-
Profluralin	26399-36-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.18E+03	1.19E+03	2.64E+01	-		-		-		No	-	-
Promethium	7440-12-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Prometon	1610-18-0	No	No	No (not volatile)	No (not volatile)	-		-	-		2.79E+01	2.79E+01	2.64E+01	-		-		-		No	-	-
Prometryn	7287-19-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.61E+01	1.61E+01	2.64E+01	-		-		-		No	-	-
Pronamide	23950-58-5	No	No	No (not volatile)	No (not volatile)	-		-	-		5.99E+00	5.99E+00	2.64E+01	-		-		-		No	-	-
Propachlor	1918-16-7	No	No	No (not volatile)	No (not volatile)	-		-	-		2.62E+03	8.54E+03	2.64E+01	-		-		-		No	-	-
Propanil	709-98-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.06E+01	1.06E+01	2.64E+01	-		-		-		No	-	-
Propargite	2312-35-8	No	No	No (not volatile)	No (not volatile)	-		-	-		5.65E+00	5.63E+00	2.64E+01	-		-		-		No	-	-
Propargyl Alcohol	107-19-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.70E+07	1.67E+08	2.64E+01	2.40E+00	YAWS	-		-		No	-	-
Propazine	139-40-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.62E+00	1.62E+00	2.64E+01	-		-		-		No	-	-
Propham	122-42-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.35E+03	1.35E+03	2.64E+01	-		-		-		No	-	-
Propiconazole	60207-90-1	No	No	No (not volatile)	No (not volatile)	-		-	-		7.73E+00	7.74E+00	2.64E+01	-		-		-		No	-	-
Propionaldehyde	123-38-6	Yes	Yes	Yes	Yes	8.34E-01	NC	2.78E+01	2.64E+02	--	9.90E+08	9.66E+08	2.64E+01	2.60E+00	CRC	-		8.00E-03	I	No	-	8.34E-01
Propionitrile	107-12-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.40E+08	1.66E+08	2.64E+01	3.10E+00	CRC	-		-		No	-	-
Propionitrile, 3-(NN-dimethylamino)	1738-25-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.13E+06	8.22E+05	2.64E+01	-		-		-		No	-	-
Propyl Alcohol, n-	71-23-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.78E+07	3.30E+08	2.64E+01	2.20E+00	CRC	-		-		No	-	-
Propyl benzene	103-65-1	Yes	Yes	Yes	Yes	1.04E+02	NC	3.48E+03	2.24E+02	--	2.21E+07	2.43E+07	2.64E+01	8.00E-01	CRC	-		1.00E+00	X	No	-	1.04E+02
Propylene	115-07-1	Yes	Yes	Yes	Yes	3.13E+02	NC	1.04E+04	3.82E+01	--	1.97E+10	1.64E+09	2.64E+01	2.00E+00	CRC	-		3.00E+00	C	No	-	3.13E+02
Propylene Glycol	57-55-6	No	No	No (not volatile)	No (not volatile)	-		-	-		5.28E+05	5.94E+05	2.64E+01	2.60E+00	CRC	-		-		No	-	-
Propylene Glycol Dinitrate	6423-43-4	No	Yes	No (not volatile)	No (not volatile)	2.83E-02		-	-		3.38E+06	1.26E+05	2.64E+01	-		-		2.72E-04	A	No	-	2.83E-02
Propylene Glycol Monoethyl Ether	1569-02-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.16E+07	1.21E+06	2.64E+01	-		-		-		No	-	-
Propylene Glycol Monomethyl Ether	107-98-2	Yes	Yes	Yes	Yes	2.09E+02	NC	6.95E+03	5.18E+06	--	6.06E+07	4.02E+07	2.64E+01	1.60E+00	N	-		2.00E+00	I	No	-	2.09E+02
Propylene Oxide	75-56-9	Yes	Yes	Yes	Yes	7.59E-01	CA	2.53E+01	2.54E+02	--	1.68E+09	1.76E+09	2.64E+01	1.90E+00	YAWS	3.70E-06	I	3.00E-02	I	No	7.59E-01	3.13E+00
Prussian Blue (Ferric Ferrocyanide)	14038-43-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Pyrazinyl phosphorothioate, O,O-diethyl O-2-	297-97-2	No	No	No (not volatile)	No (not volatile)	-		-	-		4.01E+04	4.01E+04	2.64E+01	-		-		-		No	-	-
Pyrene	129-00-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.90E+01	7.71E+01	2.64E+01	6.00E-01	YAWS	-		-		No	-	-
Pyridine	110-86-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		8.85E+07	4.82E+08	2.64E+01	1.80E+00	CRC	-		-		No	-	-
Quinalphos	13593-03-8	No	No	No (not volatile)	No (not volatile)	-		-	-		4.17E+01	4.17E+01	2.64E+01	-		-		-		No	-	-
Quinoline	91-22-5	No	No	No (not volatile)	No (not volatile)	-		-	-		4.17E+05	4.66E+05	2.64E+01	1.00E+00	YAWS	-		-		No	-	-
Quizalofop-ethyl	76578-14-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.30E-01	1.30E-01	2.64E+01	-		-		-		No	-	-
Refractory Ceramic Fibers (units in fibers)	NA	Indeterminate	Yes	No (not volatile)	No (not volatile)	3.13E+03		-	-		-	-	2.64E+01	-		-		3.00E+04	A	No	-	3.13E+03
Resmethrin	10453-86-8	No	No	No (not volatile)	No (not volatile)	-		-	-		2.06E-01	2.06E-01	2.64E+01	-		-		-		No	-	-

Resorcinol	108-46-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.90E+03	3.37E+03	2.64E+01	1.40E+00	CRC	-		-		No	-	-
Ronnel	299-84-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.30E+03	1.31E+03	2.64E+01	-		-		-		No	-	-
Rotenone	83-79-4	No	No	No (not volatile)	No (not volatile)	-		-	-		1.47E-02	9.16E-07	2.64E+01	-		-		-		No	-	-
Rubidium	7440-17-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Rubidium Chloride	7791-11-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Rubidium Hydroxide	1310-82-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Rubidium Iodide	7790-29-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Safrole	94-59-7	No	Yes	No (not volatile)	No (not volatile)	1.61E-02		-	-		6.54E+05	4.97E+04	2.64E+01	-		6.30E-05	C	-		Mut	1.61E-02	-
Samarium Chloride (Stable, Nonradioactive)	10361-82-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Samarium Nitrate (Stable, Nonradioactive)	10361-83-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Scandium	7440-20-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Selenious Acid	7783-00-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Selenite	14124-67-5	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Selenium	7782-49-2	No	Yes	No (not volatile)	No (not volatile)	2.09E+00		-	-		6.03E-04	-	2.64E+01	-		-		2.00E-02	C	No	-	2.09E+00
Selenium Sulfide	7446-34-6	Indeterminate	Yes	No (not volatile)	No (not volatile)	2.09E+00		-	-		-	-	2.64E+01	-		-		2.00E-02	C	No	-	2.09E+00
Selenourea	630-10-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.24E+07	-	2.64E+01	-		-		-		No	-	-
Sethoxydim	74051-80-2	No	No	No (not volatile)	No (not volatile)	-		-	-		2.82E+00	2.21E-02	2.64E+01	-		-		-		No	-	-
Silica (crystalline, respirable)	7631-86-9	Indeterminate	Yes	No (not volatile)	No (not volatile)	3.13E-01		-	-		-	-	2.64E+01	-		-		3.00E-03	C	No	-	3.13E-01
Silicon	7440-21-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Silver	7440-22-4	No	No	No (not volatile)	No (not volatile)	-		-	-		0.00E+00	-	2.64E+01	-		-		-		No	-	-
Silver Cyanide	506-64-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Simazine	122-34-9	No	No	No (not volatile)	No (not volatile)	-		-	-		2.40E-01	2.39E-01	2.64E+01	-		-		-		No	-	-
Sodium	7440-23-5	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium Acifluorfen	62476-59-9	No	No	No (not volatile)	No (not volatile)	-		-	-		2.01E-01	6.18E+02	2.64E+01	-		-		-		No	-	-
Sodium Azide	26628-22-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium Cyanide	143-33-9	No	Yes	No (not volatile)	No (not volatile)	9.39E-01		-	-		0.00E+00	-	2.64E+01	-		-		9.00E-03	C	No	-	9.39E-01
Sodium Diethyldithiocarbamate	148-18-5	No	No	No (not volatile)	No (not volatile)	-		-	-		7.55E-03	-	2.64E+01	-		-		-		No	-	-
Sodium Fluoride	7681-49-4	No	Yes	No (not volatile)	No (not volatile)	1.46E+00		-	-		0.00E+00	-	2.64E+01	-		-		1.40E-02	C	No	-	1.46E+00
Sodium Fluoroacetate	62-74-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.52E+00	4.95E+07	2.64E+01	-		-		-		No	-	-
Sodium Hydroxide	1310-73-2	No	No	No (not volatile)	No (not volatile)	-		-	-		3.92E-15	-	2.64E+01	-		-		-		No	-	-
Sodium Metavanadate	13718-26-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium Perchlorate	7601-89-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium Tungstate	13472-45-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium aluminum phosphate (anhydrous)	10279-59-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium aluminum phosphate (tetrahydrate)	10305-76-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium hexametaphosphate	10124-56-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium perfluorobutanoate	2218-54-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.75E+08	3.32E+08	2.64E+01	-		-		-		No	-	-
Sodium perfluorohexanoate	2923-26-4	No	No	No (not volatile)	No (not volatile)	-		-	-		-	2.84E-01	2.64E+01	-		-		-		No	-	-
Sodium polyphosphate	68915-31-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium pyrophosphate	7758-16-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium salts of inorganic phosphates	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium trimetaphosphate	7785-84-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sodium tripolyphosphate	7758-29-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Stearyl Acetate	822-23-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.02E+03	6.49E+02	2.64E+01	-		-		-		No	-	-

Stirofos (Tetrachlorovinphos)	961-11-5	No	No	No (not volatile)	No (not volatile)	-		-	-		8.27E-01	8.27E-01	2.64E+01	-		-		-		No	-	-
Strontium, Stable	7440-24-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Strychnine	57-24-9	No	No	No (not volatile)	No (not volatile)	-		-	-		5.27E-02	4.95E-04	2.64E+01	-		-		-		No	-	-
Styrene	100-42-5	Yes	Yes	Yes	Yes	1.04E+02	NC	3.48E+03	8.55E+02	No (100)	3.58E+07	3.78E+07	2.64E+01	9.00E-01	CRC	-		1.00E+00	I	No	-	1.04E+02
Styrene-Acrylonitrile (SAN) Trimer (THNA isomer)	57964-39-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Styrene-Acrylonitrile (SAN) Trimer (THNP isomer)	57964-40-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.29E+00	-	2.64E+01	-		-		-		No	-	-
Sulfate	14808-79-8	No	No	No (not volatile)	No (not volatile)	-		-	-		3.13E+02	-	2.64E+01	-		-		-		No	-	-
Sulfite	14265-45-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Sulfolane	126-33-0	No	Yes	No (not volatile)	No (not volatile)	2.09E-01		-	-		2.64E+04	2.25E+08	2.64E+01	-		-		2.00E-03	X	No	-	2.09E-01
Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9	No	No	No (not volatile)	No (not volatile)	-		-	-		1.25E+01	1.34E+01	2.64E+01	-		-		-		No	-	-
Sulfur	7704-34-9	No	No	No (not volatile)	No (not volatile)	-		-	-		6.81E+00	-	2.64E+01	-		-		-		No	-	-
Sulfur Dioxide	7446-09-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.03E+10	3.69E+09	2.64E+01	-		-		-		No	-	-
Sulfur Mustard	505-60-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		9.41E+05	6.85E+05	2.64E+01	-		-		-		No	-	-
Sulfur Trioxide	7446-11-9	Yes	Yes	Yes		1.04E-01		3.48E+00	-		1.13E+09	-	2.64E+01	-		-		1.00E-03	C	No	-	1.04E-01
Sulfuric Acid	7664-93-9	No	Yes	No (not volatile)	No (not volatile)	1.04E-01		-	-		3.13E+02	-	2.64E+01	-		-		1.00E-03	C	No	-	1.04E-01
Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	No	Yes	No (not volatile)	No (not volatile)	3.95E-01		-	-		3.93E+00	4.58E+00	2.64E+01	-		7.10E-06	I	-		No	3.95E-01	-
TCDD, 2,3,7,8-	1746-01-6	Yes	Yes	Yes	Yes	7.39E-08	CA	2.46E-06	3.61E-05	No (0)	2.60E-02	4.09E-01	2.64E+01	-		3.80E+01	C	4.00E-08	C	No	7.39E-08	4.17E-06
TCDF, 2,3,7,8-	51207-31-9	Yes	Yes	Yes	Yes	7.39E-07	CA	2.46E-05	1.08E-03	--	2.47E-01	4.72E-01	2.64E+01	-		3.80E+00	W	4.00E-07	W	No	7.39E-07	4.17E-05
Tebuthiuron	34014-18-1	No	No	No (not volatile)	No (not volatile)	-		-	-		3.68E+00	1.23E+01	2.64E+01	-		-		-		No	-	-
Technetium	7440-26-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Tellurium	13494-80-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Temephos	3383-96-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.98E+00	2.16E-02	2.64E+01	-		-		-		No	-	-
Terbacil	5902-51-2	No	No	No (not volatile)	No (not volatile)	-		-	-		5.48E+00	3.48E+00	2.64E+01	-		-		-		No	-	-
Terbufos	13071-79-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.96E+03	4.97E+03	2.64E+01	-		-		-		No	-	-
Terbutryn	886-50-0	No	No	No (not volatile)	No (not volatile)	-		-	-		2.19E+01	2.20E+01	2.64E+01	-		-		-		No	-	-
Tert-Butyl Acetate	540-88-5	Yes	Yes	Yes	Yes	2.16E+00	CA	7.20E+01	6.13E+01	--	2.94E+08	2.94E+08	2.64E+01	-		1.30E-06	C	-		No	2.16E+00	-
Test Chemical	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	5436-43-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.83E+00	1.77E-01	2.64E+01	-		-		-		No	-	-
Tetrabutyl Lead	1920-90-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.33E+03	4.69E+06	2.64E+01	-		-		-		No	-	-
Tetrachloroaniline, 2,3,5,6-	3481-20-7	No	No	No (not volatile)	No (not volatile)	-		-	-		6.92E+03	2.23E+02	2.64E+01	-		-		-		No	-	-
Tetrachlorobenzene, 1,2,3,4-	634-66-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.53E+05	2.06E+05	2.64E+01	-		-		-		No	-	-
Tetrachlorobenzene, 1,2,4,5-	95-94-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.27E+04	2.72E+04	2.64E+01	-		-		-		No	-	-
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	No	Yes	No (not volatile)	No (not volatile)	7.39E-04		-	-		2.58E+02	2.44E-01	2.64E+01	-		3.80E-03	W	4.00E-04	W	No	7.39E-04	4.17E-02
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	Yes	Yes	Yes	Yes	2.46E-04	CA	8.21E-03	2.70E-02	--	1.33E+02	2.94E+02	2.64E+01	-		1.14E-02	W	1.33E-04	W	No	2.46E-04	1.39E-02
Tetrachloroethane, 1,1,1,2-	630-20-6	Yes	Yes	Yes	Yes	3.79E-01	CA	1.26E+01	3.41E+00	--	1.08E+08	1.19E+08	2.64E+01	4.90E+00	YAWS	7.40E-06	I	-		No	3.79E-01	-
Tetrachloroethane, 1,1,2,2-	79-34-5	Yes	Yes	Yes	Yes	4.84E-02	CA	1.61E+00	2.98E+00	--	4.17E+07	4.59E+07	2.64E+01	-		5.80E-05	C	-		No	4.84E-02	-
Tetrachloroethylene	127-18-4	Yes	Yes	Yes	Yes	4.17E+00	NC	1.39E+02	5.38E+00	No (5)	1.65E+08	1.60E+08	2.64E+01	-		2.60E-07	I	4.00E-02	I	No	1.08E+01	4.17E+00
Tetrachlorophenol, 2,3,4,5-	4901-51-3	No	No	No (not volatile)	No (not volatile)	-		-	-		4.23E+03	1.98E+02	2.64E+01	-		-		-		No	-	-
Tetrachlorophenol, 2,3,4,6-	58-90-2	No	No	No (not volatile)	No (not volatile)	-		-	-		8.31E+03	8.31E+03	2.64E+01	-		-		-		No	-	-
Tetrachlorophenols (total)	25167-83-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.49E+04	8.31E+03	2.64E+01	-		-		-		No	-	-
Tetrachloroterephthalate, 2,3,5,6-	2136-79-0	No	No	No (not volatile)	No (not volatile)	-		-	-		7.99E-01	4.71E-03	2.64E+01	-		-		-		No	-	-
Tetrachlorotoluene, p- alpha, alpha, alpha-	5216-25-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.74E+05	3.54E+04	2.64E+01	-		-		-		No	-	-
Tetraethyl Dithiopyrophosphate	3689-24-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.82E+03	5.46E+03	2.64E+01	-		-		-		No	-	-
Tetraethyl Lead	78-00-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.52E+06	7.43E+06	2.64E+01	-		-		-		No	-	-
Tetrafluoroethane, 1,1,1,2-	811-97-2	Yes	Yes	Yes	Yes	8.34E+03	NC	2.78E+05	3.95E+03	--	2.74E+10	4.31E+09	2.64E+01	-		-		8.00E+01	I	No	-	8.34E+03
Tetrahydrofuran	109-99-9	Yes	Yes	Yes	Yes	2.09E+02	NC	6.95E+03	6.85E+04	--	6.29E+08	3.05E+09	2.64E+01	2.00E+00	CRC	-		2.00E+00	I	No	-	2.09E+02
Tetrahydrothiophene	110-01-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		8.73E+07	9.98E+07	2.64E+01	1.50E+00	YAWS	-		-		No	-	-
Tetramethyl Lead	75-74-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.74E+08	3.74E+08	2.64E+01	-		-		-		No	-	-
Tetramethylcyclohexane	30501-43-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.56E+07	-	2.64E+01	-		-		-		No	-	-
Tetramethylphosphoramide, -N,N,N',N'' (TMPA)	16853-36-4	No	No	No (not volatile)	No (not volatile)	-		-	-		2.95E+06	2.33E+01	2.64E+01	-		-		-		No	-	-

Tetrapotassium phosphate	7320-34-5	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Tetrapropyl Lead	3440-75-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.45E+05	6.09E+05	2.64E+01	-		-		-		No	-	-
Tetrasodium pyrophosphate	7722-88-5	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Tetryl (Trinitrophenylmethylnitramine)	479-45-8	No	No	No (not volatile)	No (not volatile)	-		-	-		8.74E-01	8.20E+00	2.64E+01	-		-		-		No	-	-
Thallic Oxide	1314-32-5	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Thallium (I) Nitrate	10102-45-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Thallium (Soluble Salts)	7440-28-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Thallium Acetate	563-68-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.08E+08	-	2.64E+01	-		-		-		No	-	-
Thallium Carbonate	6533-73-9	No	No	No (not volatile)	No (not volatile)	-		-	-		2.52E+01	-	2.64E+01	-		-		-		No	-	-
Thallium Chloride	7791-12-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Thallium Selenite	12039-52-0	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Thallium Sulfate	7446-18-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Thifensulfuron-methyl	79277-27-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.67E-03	3.74E-03	2.64E+01	-		-		-		No	-	-
Thiobencarb	28249-77-6	No	No	No (not volatile)	No (not volatile)	-		-	-		3.05E+02	3.06E+02	2.64E+01	-		-		-		No	-	-
Thiocyanates	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Thiocyanic Acid	463-56-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.50E+07	-	2.64E+01	-		-		-		No	-	-
Thiocyanic acid, (2-benzothiazolylthio)methyl ester (TCMTB)	21564-17-0	No	No	No (not volatile)	No (not volatile)	-		-	-		4.00E+00	3.32E-02	2.64E+01	-		-		-		No	-	-
Thiodiglycol	111-48-8	No	No	No (not volatile)	No (not volatile)	-		-	-		2.12E+04	8.61E+04	2.64E+01	-		-		-		No	-	-
Thiofanox	39196-18-4	No	No	No (not volatile)	No (not volatile)	-		-	-		2.00E+03	2.00E+03	2.64E+01	-		-		-		No	-	-
Thiophanate, Methyl	23564-05-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.31E+00	1.32E+00	2.64E+01	-		-		-		No	-	-
Thiophene	110-02-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.61E+08	2.97E+08	2.64E+01	1.60E+00	YAWS	-		-		No	-	-
Thiram	137-26-8	No	No	No (not volatile)	No (not volatile)	-		-	-		2.23E+02	2.23E+02	2.64E+01	-		-		-		No	-	-
Thorium	7440-29-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Thymol	89-83-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.78E+04	1.99E+04	2.64E+01	-		-		-		No	-	-
Tin	7440-31-5	No	No	No (not volatile)	No (not volatile)	-		-	-		0.00E+00	-	2.64E+01	-		-		-		No	-	-
Titanium	7440-32-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Titanium Tetrachloride	7550-45-0	Yes	Yes	Yes		1.04E-02		3.48E-01	-		1.02E+08	-	2.64E+01	-		-		1.00E-04	A	No	-	1.04E-02
Toluene	108-88-3	Yes	Yes	Yes	Yes	5.21E+02	NC	1.74E+04	1.80E+03	No (1000)	1.41E+08	1.53E+08	2.64E+01	1.10E+00	CRC	-		5.00E+00	I	No	-	5.21E+02
Toluene-2,4-diisocyanate	584-84-9	Yes	Yes	Yes	Yes	8.34E-04	NC	2.78E-02	1.62E+00	--	7.49E+04	1.93E+04	2.64E+01	9.00E-01	CRC	1.10E-05	C	8.00E-06	C	No	2.55E-01	8.34E-04
Toluene-2,6-diisocyanate	91-08-7	Yes	Yes	Yes	Yes	8.34E-04	NC	2.78E-02	1.66E+00	--	1.96E+05	1.89E+04	2.64E+01	1.10E+00	YAWS	1.10E-05	C	8.00E-06	C	No	2.55E-01	8.34E-04
Toluenediamine, 2,3-	2687-25-4	No	No	No (not volatile)	No (not volatile)	-		-	-		3.63E+03	7.46E+03	2.64E+01	-		-		-		No	-	-
Toluenediamine, 2,5-	95-70-5	No	No	No (not volatile)	No (not volatile)	-		-	-		2.23E+04	2.62E+04	2.64E+01	-		-		-		No	-	-
Toluenediamine, 3,4-	496-72-0	No	No	No (not volatile)	No (not volatile)	-		-	-		4.13E+03	8.24E+03	2.64E+01	-		-		-		No	-	-
Toluic Acid, p-	99-94-5	No	No	No (not volatile)	No (not volatile)	-		-	-		3.72E+02	4.52E+03	2.64E+01	1.20E+00	YAWS	-		-		No	-	-
Toluidine, o- (Methylaniline, 2-)	95-53-4	No	Yes	No (not volatile)	No (not volatile)	5.51E-02		-	-		1.50E+06	1.48E+06	2.64E+01	1.20E+00	YAWS	5.10E-05	C	-		No	5.51E-02	-
Toluidine, p-	106-49-0	No	No	No (not volatile)	No (not volatile)	-		-	-		1.65E+06	5.96E+05	2.64E+01	1.20E+00	YAWS	-		-		No	-	-
Total Petroleum Hydrocarbons (Aliphatic High)	NA	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.24E+06	1.24E+06	2.64E+01	-		-		-		No	-	-
Total Petroleum Hydrocarbons (Aliphatic Low)	NA	Yes	Yes	Yes	Yes	4.17E+01	NC	1.39E+03	2.11E+01	--	4.59E+08	1.49E+08	2.64E+01	1.12E+00	CRC	-		4.00E-01	P	No	-	4.17E+01
Total Petroleum Hydrocarbons (Aliphatic Medium)	NA	Yes	Yes	Yes	Yes	1.04E+01	NC	3.48E+02	7.50E-02	--	3.07E+07	3.06E+07	2.64E+01	8.00E-01	CRC	-		1.00E-01	P	No	-	1.04E+01
Total Petroleum Hydrocarbons (Aromatic High)	NA	No	Yes	No (not volatile)	No (not volatile)	2.09E-04		-	-		7.45E-02	3.63E-02	2.64E+01	-		-		2.00E-06	P	Mut	-	2.09E-04
Total Petroleum Hydrocarbons (Aromatic Low)	NA	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.98E+08	4.31E+08	2.64E+01	1.20E+00	CRC	-		-		No	-	-
Total Petroleum Hydrocarbons (Aromatic Medium)	NA	Yes	Yes	Yes	Yes	6.26E+00	NC	2.09E+02	2.17E+01	--	1.35E+07	1.74E+07	2.64E+01	9.00E-01	CRC	-		6.00E-02	P	No	-	6.26E+00
Toxaphene	8001-35-2	No	Yes	No (not volatile)	No (not volatile)	8.77E-03		-	-		1.61E+02	1.35E+02	2.64E+01	-		3.20E-04	I	-		No	8.77E-03	-
Toxaphene, Weathered	NA	No	No	No (not volatile)	No (not volatile)	-		-	-		1.61E+02	1.35E+02	2.64E+01	-		-		-		No	-	-
Tralomethrin	66841-25-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.29E-03	1.29E-03	2.64E+01	-		-		-		No	-	-
Tri-n-butyltin	688-73-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		6.25E+05	4.81E+05	2.64E+01	-		-		-		No	-	-
Triacetin	102-76-1	No	No	No (not volatile)	No (not volatile)	-		-	-		2.91E+04	3.38E+04	2.64E+01	1.00E+00	CRC	-		-		No	-	-
Triadimefon	43121-43-3	No	No	No (not volatile)	No (not volatile)	-		-	-		2.37E-01	2.37E-01	2.64E+01	-		-		-		No	-	-

Triallate	2303-17-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.97E+03	1.96E+03	2.64E+01	-		-		-		No	-	-
Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate)	15136-87-5	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Triasulfuron	82097-50-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.20E-04	4.23E-04	2.64E+01	-		-		-		No	-	-
Triaziquone	68-76-8	No	No	No (not volatile)	No (not volatile)	-		-	-		4.23E+01	4.05E-03	2.64E+01	-		-		-		No	-	-
Tribenuron-methyl	101200-48-0	No	No	No (not volatile)	No (not volatile)	-		-	-		8.29E-03	2.09E-04	2.64E+01	-		-		-		No	-	-
Tribromobenzene, 1,2,4-	615-54-3	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		9.28E+04	7.64E+04	2.64E+01	-		-		-		No	-	-
Tribromochloromethane	594-15-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.01E+07	3.82E+05	2.64E+01	-		-		-		No	-	-
Tribromodiphenyl Ether	49690-94-0	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.12E+01	2.22E+02	2.64E+01	-		-		-		No	-	-
Tribromophenol, 2,4,6-	118-79-6	No	No	No (not volatile)	No (not volatile)	-		-	-		5.39E+03	1.02E+02	2.64E+01	-		-		-		No	-	-
Tribufos	78-48-8	No	No	No (not volatile)	No (not volatile)	-		-	-		8.96E+01	2.76E+01	2.64E+01	-		-		-		No	-	-
Tributyl Phosphate	126-73-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.62E+04	1.81E+04	2.64E+01	-		-		-		No	-	-
Tributyltin Compounds	NA	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Tributyltin Oxide	56-35-9	No	No	No (not volatile)	No (not volatile)	-		-	-		2.40E+02	2.41E+02	2.64E+01	-		-		-		No	-	-
Tributyltin chloride	1461-22-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.62E+05	5.30E+07	2.64E+01	-		-		-		No	-	-
Tributyltin fluoride	1983-10-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.85E+01	2.04E+08	2.64E+01	-		-		-		No	-	-
Tributyltin linoleate	24124-25-2	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.82E-03	3.38E+01	2.64E+01	-		-		-		No	-	-
Tributyltin methacrylate	2155-70-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.60E+03	2.49E+06	2.64E+01	-		-		-		No	-	-
Tributyltin naphthenate	85409-17-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Tricaine Methanesulfonate	886-86-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.29E+03	6.66E+04	2.64E+01	-		-		-		No	-	-
Tricalcium phosphate	7758-87-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Trichloramine	10025-85-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	Yes	Yes	Yes	Yes	5.21E+02	NC	1.74E+04	2.31E+01	--	3.65E+09	3.84E+09	2.64E+01	-		-		5.00E+00	P	No	-	5.21E+02
Trichloro-2'-hydroxydiphenylether	3380-34-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.00E+01	2.04E+00	2.64E+01	-		-		-		No	-	-
Trichloroacetic Acid	76-03-9	No	No	No (not volatile)	No (not volatile)	-		-	-		5.27E+05	3.31E+04	2.64E+01	-		-		-		No	-	-
Trichloroaniline HCl, 2,4,6-	33663-50-2	No	No	No (not volatile)	No (not volatile)	-		-	-		7.68E-01	6.15E-05	2.64E+01	-		-		-		No	-	-
Trichloroaniline, 2,4,5-	636-30-6	No	No	No (not volatile)	No (not volatile)	-		-	-		3.13E+04	1.64E+03	2.64E+01	-		-		-		No	-	-
Trichloroaniline, 2,4,6-	634-93-5	No	No	No (not volatile)	No (not volatile)	-		-	-		4.69E+04	2.44E+03	2.64E+01	-		-		-		No	-	-
Trichlorobenzene	12002-48-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		8.94E+06	2.56E+06	2.64E+01	-		-		-		No	-	-
Trichlorobenzene, 1,2,3-	87-61-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.05E+06	1.04E+06	2.64E+01	-		-		-		No	-	-
Trichlorobenzene, 1,2,4-	120-82-1	Yes	Yes	Yes	Yes	2.09E-01	NC	6.95E+00	3.25E+00	Yes (70)	4.49E+06	3.14E+06	2.64E+01	2.50E+00	CRC	-		2.00E-03	P	No	-	2.09E-01
Trichloroethane, 1,1,1-	71-55-6	Yes	Yes	Yes	Yes	5.21E+02	NC	1.74E+04	7.01E+02	No (200)	8.90E+08	9.60E+08	2.64E+01	8.00E+00	CRC	-		5.00E+00	I	No	-	5.21E+02
Trichloroethane, 1,1,2-	79-00-5	Yes	Yes	Yes	Yes	2.09E-02	NC	6.95E-01	5.77E-01	Yes (5)	1.65E+08	1.66E+08	2.64E+01	6.00E+00	CRC	1.60E-05	I	2.00E-04	X	No	1.75E-01	2.09E-02
Trichloroethylene	79-01-6	Yes	Yes	Yes	Yes	2.09E-01	NC	6.95E+00	4.88E-01	Yes (5)	4.88E+08	5.48E+08	2.64E+01	8.00E+00	CRC	4.10E-06	I	2.00E-03	I	Mut	4.78E-01	2.09E-01
Trichlorofluoromethane	75-69-4	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		5.93E+09	4.55E+09	2.64E+01	-		-		-		No	-	-
Trichlorophenol, 2,4,5-	95-95-4	No	No	No (not volatile)	No (not volatile)	-		-	-		7.96E+04	8.83E+04	2.64E+01	-		-		-		No	-	-
Trichlorophenol, 2,4,6-	88-06-2	No	Yes	No (not volatile)	No (not volatile)	9.06E-01		-	-		8.50E+04	9.44E+04	2.64E+01	-		3.10E-06	I	-		No	9.06E-01	-
Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	No	No	No (not volatile)	No (not volatile)	-		-	-		5.15E+02	9.87E+01	2.64E+01	-		-		-		No	-	-
Trichlorophenoxypropionic acid, -2,4,5	93-72-1	No	No	No (not volatile)	No (not volatile)	-		-	-		1.45E+02	2.63E+01	2.64E+01	-		-		-		No	-	-
Trichloropropane, 1,1,2-	598-77-6	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.46E+07	2.65E+07	2.64E+01	-		-		-		No	-	-
Trichloropropane, 1,2,3-	96-18-4	Yes	Yes	Yes	Yes	3.13E-02	NC	1.04E+00	2.06E+00	--	2.93E+07	2.66E+07	2.64E+01	3.20E+00	CRC	-		3.00E-04	I	Mut	-	3.13E-02
Trichloropropene, 1,2,3-	96-19-5	Yes	Yes	Yes	Yes	3.13E-02	NC	1.04E+00	4.03E-02	--	3.44E+07	2.59E+08	2.64E+01	-		-		3.00E-04	P	No	-	3.13E-02
Trichlorotoluene, 2,3,6-	2077-46-5	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		7.70E+05	4.69E+05	2.64E+01	-		-		-		No	-	-
Trichlorotoluene, alpha 2,6-	2014-83-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		2.90E+05	1.59E+05	2.64E+01	-		-		-		No	-	-
Tricresyl Phosphate (TCP)	1330-78-5	No	No	No (not volatile)	No (not volatile)	-		-	-		1.19E+01	1.35E+01	2.64E+01	-		-		-		No	-	-
Tridiphane	58138-08-2	No	No	No (not volatile)	No (not volatile)	-		-	-		6.72E+03	1.91E+01	2.64E+01	-		-		-		No	-	-
Tridymite	15468-32-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Triethyl Lead	5224-23-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.99E+07	1.95E+10	2.64E+01	-		-		-		No	-	-
Triethyl phosphorothioate [O,O,O-]	126-68-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		9.36E+05	2.76E+06	2.64E+01	-		-		-		No	-	-
Triethylamine	121-44-8	Yes	Yes	Yes	Yes	7.30E-01	NC	2.43E+01	1.13E+02	--	3.11E+08	4.44E+08	2.64E+01	1.20E+00	CRC	-		7.00E-03	I	No	-	7.30E-01

Triethylene Glycol	112-27-6	No	No	No (not volatile)	No (not volatile)	-		-	-		1.07E+04	1.55E+03	2.64E+01	9.00E-01	CRC	-		-		No	-	-
Trifluoroethane, 1,1,1-	420-46-2	Yes	Yes	Yes	Yes	2.09E+03	NC	6.95E+04	6.49E+01	--	4.31E+10	2.45E+10	2.64E+01	-		-		2.00E+01	P	No	-	2.09E+03
Trifluralin	1582-09-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		8.26E+02	7.75E+02	2.64E+01	-		-		-		No	-	-
Trimagnesium phosphate	7757-87-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Trimethyl Lead	7442-13-9	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		8.13E+08	1.30E+09	2.64E+01	-		-		-		No	-	-
Trimethyl Phosphate	512-56-1	No	No	No (not volatile)	No (not volatile)	-		-	-		6.40E+06	1.62E+05	2.64E+01	2.20E+00	YAWS	-		-		No	-	-
Trimethyl-4-Propenylnaphthalene, 1,2,3-	26137-53-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.06E+03	9.01E+02	2.64E+01	-		-		-		No	-	-
Trimethylbenzene, 1,2,3-	526-73-8	Yes	Yes	Yes	Yes	6.26E+00	NC	2.09E+02	3.15E+01	--	1.09E+07	1.50E+07	2.64E+01	8.00E-01	CRC	-		6.00E-02	I	No	-	6.26E+00
Trimethylbenzene, 1,2,4-	95-63-6	Yes	Yes	Yes	Yes	6.26E+00	NC	2.09E+02	2.28E+01	--	1.36E+07	1.57E+07	2.64E+01	9.00E-01	CRC	-		6.00E-02	I	No	-	6.26E+00
Trimethylbenzene, 1,3,5-	108-67-8	Yes	Yes	Yes	Yes	6.26E+00	NC	2.09E+02	1.60E+01	--	1.60E+07	1.88E+07	2.64E+01	1.00E+00	CRC	-		6.00E-02	I	No	-	6.26E+00
Trimethylethyl Lead	1762-26-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.10E+08	1.10E+08	2.64E+01	-		-		-		No	-	-
Trimethylpentane, 2,2,4-	540-84-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.03E+08	3.23E+08	2.64E+01	9.00E-01	YAWS	-		-		No	-	-
Trimethylpentene, 2,4,4-	25167-70-8	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		4.29E+08	1.31E+08	2.64E+01	-		-		-		No	-	-
Trinitrobenzene, 1,3,5-	99-35-4	No	No	No (not volatile)	No (not volatile)	-		-	-		7.38E+01	8.60E+01	2.64E+01	-		-		-		No	-	-
Trinitrotoluene, 2,4,6-	118-96-7	No	No	No (not volatile)	No (not volatile)	-		-	-		9.80E+01	1.13E+02	2.64E+01	-		-		-		No	-	-
Triphenylphosphine Oxide	791-28-6	No	No	No (not volatile)	No (not volatile)	-		-	-		3.89E-02	1.35E+00	2.64E+01	-		-		-		No	-	-
Triphosphoric acid, aluminum salt (1:1) [aluminum triphosphate]	13939-25-8	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Tripotassium phosphate	7778-53-2	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Tripropyl Lead	6618-03-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		3.29E+06	7.04E+06	2.64E+01	-		-		-		No	-	-
Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.71E+00	7.47E-01	2.64E+01	-		-		-		No	-	-
Tris(1-chloro-2-propyl)phosphate	13674-84-5	No	No	No (not volatile)	No (not volatile)	-		-	-		3.56E+02	3.27E+03	2.64E+01	-		-		-		No	-	-
Tris(2,3-dibromopropyl)phosphate	126-72-7	Yes	Yes	Yes	Yes	4.25E-03	CA	1.42E-01	4.77E+00	--	7.13E+03	7.13E+03	2.64E+01	-		6.60E-04	C	-		No	4.25E-03	-
Tris(2-chloroethyl)phosphate	115-96-8	No	No	No (not volatile)	No (not volatile)	-		-	-		9.41E+05	1.07E+06	2.64E+01	-		-		-		No	-	-
Tris(2-ethylhexyl)phosphate	78-42-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.93E+00	2.12E+00	2.64E+01	-		-		-		No	-	-
Trisbutoxyethyl Phosphate	78-51-3	No	No	No (not volatile)	No (not volatile)	-		-	-		5.36E-01	5.40E-01	2.64E+01	-		-		-		No	-	-
Trisodium phosphate	7601-54-9	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Trithion	786-19-6	No	No	No (not volatile)	No (not volatile)	-		-	-		5.53E+00	5.54E+00	2.64E+01	-		-		-		No	-	-
Tungsten	7440-33-7	No	No	No (not volatile)	No (not volatile)	-		-	-		0.00E+00	-	2.64E+01	-		-		-		No	-	-
Uranium	7440-61-1	No	Yes	No (not volatile)	No (not volatile)	4.17E-03		-	-		0.00E+00	-	2.64E+01	-		-		4.00E-05	A	No	-	4.17E-03
Urea	57-13-6	No	No	No (not volatile)	No (not volatile)	-		-	-		3.88E+01	4.41E+01	2.64E+01	5.60E+00	YAWS	-		-		No	-	-
Urethane	51-79-6	No	Yes	No (not volatile)	No (not volatile)	3.50E-03		-	-		1.26E+06	1.38E+06	2.64E+01	-		2.90E-04	C	-		Mut	3.50E-03	-
Vanadium Pentoxide	1314-62-1	No	Yes	No (not volatile)	No (not volatile)	3.38E-04		-	-		0.00E+00	-	2.64E+01	-		8.30E-03	P	7.00E-06	P	No	3.38E-04	7.30E-04
Vanadium Sulfate	36907-42-3	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Vanadium and Compounds	7440-62-2	Indeterminate	Yes	No (not volatile)	No (not volatile)	1.04E-02		-	-		-	-	2.64E+01	-		-		1.00E-04	A	No	-	1.04E-02
Vanadyl Sulfate	27774-13-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Vernolate	1929-77-7	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-		1.14E+05	1.14E+05	2.64E+01	-		-		-		No	-	-
Vinclozolin	50471-44-8	No	No	No (not volatile)	No (not volatile)	-		-	-		1.85E+00	1.85E+00	2.64E+01	-		-		-		No	-	-
Vinyl Acetate	108-05-4	Yes	Yes	Yes	Yes	2.09E+01	NC	6.95E+02	9.34E+02	--	4.17E+08	4.47E+08	2.64E+01	2.60E+00	CRC	-		2.00E-01	I	No	-	2.09E+01
Vinyl Bromide	593-60-2	Yes	Yes	Yes	Yes	1.87E-01	CA	6.24E+00	3.58E-01	--	5.94E+09	3.97E+09	2.64E+01	9.00E+00	CRC	1.50E-05	P	3.00E-03	I	No	1.87E-01	3.13E-01
Vinyl Chloride	75-01-4	Yes	Yes	Yes	Yes	1.68E-01	CA	5.59E+00	1.43E-01	Yes (2)	1.00E+10	1.03E+10	2.64E+01	3.60E+00	CRC	4.40E-06	I	1.00E-01	I	Mut	1.68E-01	1.04E+01
Warfarin	81-81-2	No	No	No (not volatile)	No (not volatile)	-		-	-		1.92E+00	1.93E+00	2.64E+01	-		-		-		No	-	-
Xylene, m-	108-38-3	Yes	Yes	Yes	Yes	1.04E+01	NC	3.48E+02	3.30E+01	--	4.73E+07	5.09E+07	2.64E+01	1.10E+00	CRC	-		1.00E-01	G	No	-	1.04E+01
Xylene, o-	95-47-6	Yes	Yes	Yes	Yes	1.04E+01	NC	3.48E+02	4.56E+01	--	3.77E+07	4.07E+07	2.64E+01	9.00E-01	CRC	-		1.00E-01	G	No	-	1.04E+01
Xylene, p-	106-42-3	Yes	Yes	Yes	Yes	1.04E+01	NC	3.48E+02	3.43E+01	--	5.05E+07	4.93E+07	2.64E+01	1.10E+00	CRC	-		1.00E-01	G	No	-	1.04E+01
Xylenes	1330-20-7	Yes	Yes	Yes	Yes	1.04E+01	NC	3.48E+02	3.57E+01	Yes (10000)	4.56E+07	3.10E+07	2.64E+01	-		-		1.00E-01	I	No	-	1.04E+01
Ytterbium	7440-64-4	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Yttrium	7440-65-5	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Zinc Cyanide	557-21-1	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Zinc Phosphide	1314-84-7	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Zinc and Compounds	7440-66-6	Indeterminate	No	No (not volatile)	No (not volatile)	-		-	-		-	-	2.64E+01	-		-		-		No	-	-
Zineb	12122-67-7	No	No	No (not volatile)	No (not volatile)	-		-	-		1.11E+00	1.11E+00	2.64E+01	-		-		-		No	-	-

Zirconium	7440-67-7	No	No	No (not volatile)	No (not volatile)	-		-	-		0.00E+00	-	2.64E+01	-		-		-		No	-	-

Output generated 08NOV2023:15:09:41

Default

Resident Risk-Based Regional Screening Levels (RSL) for Air

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; R = ORD; N = WI; W = TEF applied; E = RPF applied; G = see user guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	IUR ($ug/m^3)^{-1}$	IUR Ref	RfC (mg/m^3)	RfC Ref	CarcinogenicSL TR=1E-06 (ug/m^3)	NoncarcinogenicSL THI=0.1 (ug or $fibers/m^3$)	Screening Level (ug $orfibers/m^3$)
Acenaphthene	83-32-9	No	Yes	Organics	-		-		-	-	
Acephate	30560-19-1	No	No	Organics	-		-		-	-	
Acetaldehyde	75-07-0	No	Yes	Organics	2.20E-06	I	9.00E-03	I	1.28E+00	9.39E-01	9.39E-01 nc
Acetochlor	34256-82-1	No	No	Organics	-		-		-	-	
Acetone	67-64-1	No	Yes	Organics	-		-		-	-	
Acetone Cyanohydrin	75-86-5	No	No	Organics	-		2.00E-03	X	-	2.09E-01	2.09E-01 nc
Acetonitrile	75-05-8	No	Yes	Organics	-		6.00E-02	I	-	6.26E+00	6.26E+00 nc
Acetophenone	98-86-2	No	Yes	Organics	-		-		-	-	
Acetylaminofluorene, 2-	53-96-3	No	No	Organics	1.30E-03	C	-		2.16E-03	-	2.16E-03 ca
Acrolein	107-02-8	No	Yes	Organics	-		2.00E-05	I	-	2.09E-03	2.09E-03 nc
Acrylamide	79-06-1	Yes	No	Organics	1.00E-04	I	6.00E-03	I	1.01E-02	6.26E-01	1.01E-02 ca*
Acrylic Acid	79-10-7	No	Yes	Organics	-		2.00E-04	P	-	2.09E-02	2.09E-02 nc
Acrylonitrile	107-13-1	No	Yes	Organics	6.80E-05	I	2.00E-03	I	4.13E-02	2.09E-01	4.13E-02 ca**
Adiponitrile	111-69-3	No	No	Organics	-		6.00E-03	P	-	6.26E-01	6.26E-01 nc
Alachlor	15972-60-8	No	No	Organics	-		-		-	-	
Aldicarb	116-06-3	No	No	Organics	-		-		-	-	
Aldicarb Sulfone	1646-88-4	No	No	Organics	-		-		-	-	
Aldrin	309-00-2	No	Yes	Organics	4.90E-03	I	-		5.73E-04	-	5.73E-04 ca
Allyl Alcohol	107-18-6	No	Yes	Organics	-		1.00E-04	X	-	1.04E-02	1.04E-02 nc
Allyl Chloride	107-05-1	No	Yes	Organics	6.00E-06	C	1.00E-03	I	4.68E-01	1.04E-01	1.04E-01 nc
Aluminum	7429-90-5	No	No	Inorganics	-		5.00E-03	P	-	5.21E-01	5.21E-01 nc
Aluminum Phosphide	20859-73-8	No	No	Inorganics	-		-		-	-	
Aluminum metaphosphate	13776-88-0	No	No	Inorganics	-		-		-	-	
Aluminum salts of inorganic phosphates	NA	No	No	Inorganics	-		-		-	-	
Ametryn	834-12-8	No	No	Organics	-		-		-	-	
Aminobiphenyl, 4-	92-67-1	No	No	Organics	6.00E-03	C	-		4.68E-04	-	4.68E-04 ca
Aminophenol, m-	591-27-5	No	No	Organics	-		-		-	-	
Aminophenol, o-	95-55-6	No	No	Organics	-		-		-	-	
Aminophenol, p-	123-30-8	No	No	Organics	-		-		-	-	
Amitraz	33089-61-1	No	No	Organics	-		-		-	-	
Ammonia	7664-41-7	No	Yes	Inorganics	-		5.00E-01	I	-	5.21E+01	5.21E+01 nc
Ammonium Perchlorate	7790-98-9	No	No	Inorganics	-		-		-	-	
Ammonium Picrate	131-74-8	No	No	Organics	-		-		-	-	

Ammonium Sulfamate	7773-06-0	No	No	Inorganics	-		-		-	-	
Ammonium perfluoro-2-methyl-3-oxahexanoate	62037-80-3	No	No	Organics	-		-		-	-	
Ammonium perfluorobutanoate	10495-86-0	No	Yes	Organics	-		-		-	-	
Ammonium perfluorohexanoate	21615-47-4	No	No	Organics	-		-		-	-	
Amyl Alcohol, tert-	75-85-4	No	Yes	Organics	-		3.00E-03	X	-	3.13E-01	3.13E-01 nc
Aniline	62-53-3	No	No	Organics	1.60E-06	C	1.00E-03	I	1.75E+00	1.04E-01	1.04E-01 nc
Anthracene	120-12-7	No	Yes	Organics	-		-		-	-	
Anthraquinone, 9,10-	84-65-1	No	No	Organics	-		-		-	-	
Antimony (metallic)	7440-36-0	No	No	Inorganics	-		3.00E-04	A	-	3.13E-02	3.13E-02 nc
Antimony Pentoxide	1314-60-9	No	No	Inorganics	-		-		-	-	
Antimony Tetroxide	1332-81-6	No	No	Inorganics	-		-		-	-	
Antimony Trioxide	1309-64-4	No	No	Inorganics	-		2.00E-04	I	-	2.09E-02	2.09E-02 nc
Aroclor 1016	12674-11-2	No	Yes	Organics	2.00E-05	G	-		1.40E-01	-	1.40E-01 ca
Aroclor 1221	11104-28-2	No	Yes	Organics	5.71E-04	G	-		4.91E-03	-	4.91E-03 ca
Aroclor 1232	11141-16-5	No	Yes	Organics	5.71E-04	G	-		4.91E-03	-	4.91E-03 ca
Aroclor 1242	53469-21-9	No	Yes	Organics	5.71E-04	G	-		4.91E-03	-	4.91E-03 ca
Aroclor 1248	12672-29-6	No	Yes	Organics	5.71E-04	G	-		4.91E-03	-	4.91E-03 ca
Aroclor 1254	11097-69-1	No	Yes	Organics	5.71E-04	G	-		4.91E-03	-	4.91E-03 ca
Aroclor 1260	11096-82-5	No	Yes	Organics	5.71E-04	G	-		4.91E-03	-	4.91E-03 ca
Aroclor 5460	11126-42-4	No	Yes	Organics	-		-		-	-	
Arsenic, Inorganic	7440-38-2	No	No	Inorganics	4.30E-03	I	1.50E-05	C	6.53E-04	1.56E-03	6.53E-04 ca**
Arsine	7784-42-1	No	No	Inorganics	-		5.00E-05	I	-	5.21E-03	5.21E-03 nc
Asulam	3337-71-1	No	No	Organics	-		-		-	-	
Atrazine	1912-24-9	No	No	Organics	-		-		-	-	
Auramine	492-80-8	No	No	Organics	2.50E-04	C	-		1.12E-02	-	1.12E-02 ca
Avermectin B1	65195-55-3	No	No	Organics	-		-		-	-	
Azinphos-methyl	86-50-0	No	No	Organics	-		1.00E-02	A	-	1.04E+00	1.04E+00 nc
Azobenzene	103-33-3	No	Yes	Organics	3.10E-05	I	-		9.06E-02	-	9.06E-02 ca
Azodicarbonamide	123-77-3	No	No	Organics	-		7.00E-06	P	-	7.30E-04	7.30E-04 nc
Barium	7440-39-3	No	No	Inorganics	-		5.00E-04	H	-	5.21E-02	5.21E-02 nc
Benfluralin	1861-40-1	No	Yes	Organics	-		-		-	-	
Benomyl	17804-35-2	No	No	Organics	-		-		-	-	
Bensulfuron-methyl	83055-99-6	No	No	Organics	-		-		-	-	
Bentazon	25057-89-0	No	No	Organics	-		-		-	-	
Benz[a]anthracene	56-55-3	Yes	Yes	Organics	6.00E-05	E	-		1.69E-02	-	1.69E-02 ca
Benzaldehyde	100-52-7	No	Yes	Organics	-		-		-	-	
Benzene	71-43-2	No	Yes	Organics	7.80E-06	I	3.00E-02	I	3.60E-01	3.13E+00	3.60E-01 ca**
Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1	No	No	Organics	-		-		-	-	
Benzenethiol	108-98-5	No	Yes	Organics	-		-		-	-	
Benzidine	92-87-5	Yes	No	Organics	6.70E-02	I	-		1.51E-05	-	1.51E-05 ca
Benzo(e)pyrene	192-97-2	No	No	Organics	-		2.00E-06	X	-	2.09E-04	2.09E-04 nc
Benzo(j)fluoranthene	205-82-3	No	No	Organics	1.10E-04	C	-		2.55E-02	-	2.55E-02 ca
Benzo[a]pyrene	50-32-8	Yes	No	Organics	6.00E-04	I	2.00E-06	I	1.69E-03	2.09E-04	2.09E-04 nc
Benzo[b]fluoranthene	205-99-2	Yes	No	Organics	6.00E-05	E	-		1.69E-02	-	1.69E-02 ca
Benzo[k]fluoranthene	207-08-9	Yes	No	Organics	6.00E-06	E	-		1.69E-01	-	1.69E-01 ca
Benzoic Acid	65-85-0	No	No	Organics	-		-		-	-	

Benzotrichloride	98-07-7	No	Yes	Organics	-		-		-	-	
Benzyl Alcohol	100-51-6	No	No	Organics	-		-		-	-	
Benzyl Chloride	100-44-7	No	Yes	Organics	4.90E-05	C	1.00E-03	P	5.73E-02	1.04E-01	5.73E-02 ca**
Beryllium and compounds	7440-41-7	No	No	Inorganics	2.40E-03	I	2.00E-05	I	1.17E-03	2.09E-03	1.17E-03 ca**
Bifenox	42576-02-3	No	No	Organics	-		-		-	-	
Biphenthrin	82657-04-3	No	No	Organics	-		-		-	-	
Biphenyl, 1,1'-	92-52-4	No	Yes	Organics	-		4.00E-04	X	-	4.17E-02	4.17E-02 nc
Bis(2-chloro-1-methylethyl) ether	108-60-1	No	Yes	Organics	-		-		-	-	
Bis(2-chloroethoxy)methane	111-91-1	No	No	Organics	-		-		-	-	
Bis(2-chloroethyl)ether	111-44-4	No	Yes	Organics	3.30E-04	I	-		8.51E-03	-	8.51E-03 ca
Bis(2-ethylhexyl)phthalate	117-81-7	No	No	Organics	2.40E-06	C	-		1.17E+00	-	1.17E+00 ca
Bis(chloromethyl)ether	542-88-1	No	Yes	Organics	6.20E-02	I	-		4.53E-05	-	4.53E-05 ca
Bis(trifluoromethylsulfonyl)amine (TFSI)	82113-65-3	No	Yes	Organics	-		-		-	-	
Bisphenol A	80-05-7	No	No	Organics	-		-		-	-	
Boron And Borates Only	7440-42-8	No	No	Inorganics	-		2.00E-02	H	-	2.09E+00	2.09E+00 nc
Boron Trichloride	10294-34-5	No	Yes	Inorganics	-		2.00E-02	P	-	2.09E+00	2.09E+00 nc
Boron Trifluoride	7637-07-2	No	Yes	Inorganics	-		1.30E-02	C	-	1.36E+00	1.36E+00 nc
Bromate	15541-45-4	No	No	Inorganics	1.40E-04	C	-		2.01E-02	-	2.01E-02 ca
Bromo-2-chloroethane, 1-	107-04-0	No	Yes	Organics	-		6.00E-05	X	-	6.26E-03	6.26E-03 nc
Bromo-3-fluorobenzene, 1-	1073-06-9	No	Yes	Organics	-		-		-	-	
Bromo-4-fluorobenzene, 1-	460-00-4	No	Yes	Organics	-		-		-	-	
Bromoacetic acid	79-08-3	No	No	Organics	-		-		-	-	
Bromobenzene	108-86-1	No	Yes	Organics	-		6.00E-02	I	-	6.26E+00	6.26E+00 nc
Bromochloromethane	74-97-5	No	Yes	Organics	-		4.00E-02	X	-	4.17E+00	4.17E+00 nc
Bromodichloromethane	75-27-4	No	Yes	Organics	3.70E-05	C	-		7.59E-02	-	7.59E-02 ca
Bromoform	75-25-2	No	Yes	Organics	1.10E-06	I	-		2.55E+00	-	2.55E+00 ca
Bromomethane	74-83-9	No	Yes	Organics	-		5.00E-03	I	-	5.21E-01	5.21E-01 nc
Bromophos	2104-96-3	No	Yes	Organics	-		-		-	-	
Bromopropane, 1-	106-94-5	No	Yes	Organics	3.70E-06	C	1.00E-01	A	7.59E-01	1.04E+01	7.59E-01 ca*
Bromoxynil	1689-84-5	No	No	Organics	-		-		-	-	
Bromoxynil Octanoate	1689-99-2	No	Yes	Organics	-		-		-	-	
Butadiene, 1,3-	106-99-0	No	Yes	Organics	3.00E-05	I	2.00E-03	I	9.36E-02	2.09E-01	9.36E-02 ca**
Butanol, N-	71-36-3	No	Yes	Organics	-		-		-	-	
Butyl Alcohol, t-	75-65-0	No	Yes	Organics	-		5.00E+00	I	-	5.21E+02	5.21E+02 nc
Butyl Benzyl Phthalate	85-68-7	No	No	Organics	-		-		-	-	

Butyl alcohol, sec-	78-92-2	No	Yes	Organics	-		3.00E+01	P	-	3.13E+03	3.13E+03 nc
Butylate	2008-41-5	No	Yes	Organics	-		-		-	-	
Butylated hydroxyanisole	25013-16-5	No	No	Organics	5.70E-08	C	-		4.93E+01	-	4.93E+01 ca
Butylated hydroxytoluene	128-37-0	No	No	Organics	-		-		-	-	
Butylbenzene, n-	104-51-8	No	Yes	Organics	-		-		-	-	
Butylbenzene, sec-	135-98-8	No	Yes	Organics	-		-		-	-	
Butylbenzene, tert-	98-06-6	No	Yes	Organics	-		-		-	-	
Butylphthalyl Butylglycolate	85-70-1	No	No	Organics	-		-		-	-	
Cacodylic Acid	75-60-5	No	No	Organics	-		-		-	-	
Cadmium (Diet)	7440-43-9	No	No	Inorganics	1.80E-03	I	1.00E-05	A	1.56E-03	1.04E-03	1.04E-03 nc
Cadmium (Water)	7440-43-9	No	No	Inorganics	1.80E-03	I	1.00E-05	A	1.56E-03	1.04E-03	1.04E-03 nc
Calcium Cyanide	592-01-8	No	No	Inorganics	-		9.00E-03	C	-	9.39E-01	9.39E-01 nc
Caprolactam	105-60-2	No	No	Organics	-		2.20E-03	C	-	2.29E-01	2.29E-01 nc
Captafol	2425-06-1	No	No	Organics	4.30E-05	C	-		6.53E-02	-	6.53E-02 ca
Captan	133-06-2	No	No	Organics	6.60E-07	C	-		4.25E+00	-	4.25E+00 ca
Carbaryl	63-25-2	No	No	Organics	-		-		-	-	
Carbofuran	1563-66-2	No	No	Organics	-		-		-	-	
Carbon Disulfide	75-15-0	No	Yes	Organics	-		7.00E-01	I	-	7.30E+01	7.30E+01 nc
Carbon Tetrachloride	56-23-5	No	Yes	Organics	6.00E-06	I	1.00E-01	I	4.68E-01	1.04E+01	4.68E-01 ca*
Carbonyl Sulfide	463-58-1	No	Yes	Organics	-		1.00E-01	P	-	1.04E+01	1.04E+01 nc
Carbosulfan	55285-14-8	No	No	Organics	-		-		-	-	
Carboxin	5234-68-4	No	No	Organics	-		-		-	-	
Ceric oxide	1306-38-3	No	No	Inorganics	-		9.00E-04	I	-	9.39E-02	9.39E-02 nc
Chloral Hydrate	302-17-0	No	Yes	Organics	-		-		-	-	
Chloramben	133-90-4	No	No	Organics	-		-		-	-	
Chloranil	118-75-2	No	No	Organics	-		-		-	-	
Chlordane (alpha)	5103-71-9	No	Yes	Organics	-		-		-	-	
Chlordane (gamma)	5103-74-2	No	Yes	Organics	-		-		-	-	
Chlordane (technical mixture)	12789-03-6	No	Yes	Organics	1.00E-04	I	7.00E-04	I	2.81E-02	7.30E-02	2.81E-02 ca**
Chlordecone (Kepone)	143-50-0	No	No	Organics	4.60E-03	C	-		6.10E-04	-	6.10E-04 ca
Chlorfenvinphos	470-90-6	No	No	Organics	-		-		-	-	
Chlorimuron, Ethyl-	90982-32-4	No	No	Organics	-		-		-	-	
Chlorine	7782-50-5	No	Yes	Inorganics	-		1.45E-04	A	-	1.51E-02	1.51E-02 nc
Chlorine Dioxide	10049-04-4	No	Yes	Inorganics	-		2.00E-04	I	-	2.09E-02	2.09E-02 nc
Chlorite (Sodium Salt)	7758-19-2	No	No	Inorganics	-		-		-	-	
Chloro-1,1-difluoroethane, 1-	75-68-3	No	Yes	Organics	-		5.00E+01	I	-	5.21E+03	5.21E+03 nc
Chloro-1,3-butadiene, 2- (Chloroprene)	126-99-8	No	Yes	Organics	3.00E-04	I	2.00E-02	I	9.36E-03	2.09E+00	9.36E-03 ca
Chloro-2-methylaniline HCl, 4-	3165-93-3	No	No	Organics	-		-		-	-	
Chloro-2-methylaniline, 4-	95-69-2	No	No	Organics	7.70E-05	C	-		3.65E-02	-	3.65E-02 ca
Chloroacetaldehyde, 2-	107-20-0	No	Yes	Organics	-		-		-	-	
Chloroacetic Acid	79-11-8	No	No	Organics	-		-		-	-	

Chloroacetophenone, 2-	532-27-4	No	No	Organics	-		3.00E-05	I	-	3.13E-03	3.13E-03 nc
Chloroaniline, p-	106-47-8	No	No	Organics	-		-		-	-	
Chlorobenzene	108-90-7	No	Yes	Organics	-		5.00E-02	P	-	5.21E+00	5.21E+00 nc
Chlorobenzene sulfonic acid, p-	98-66-8	No	No	Organics	-		-		-	-	
Chlorobenzilate	510-15-6	No	No	Organics	3.10E-05	C	-		9.06E-02	-	9.06E-02 ca
Chlorobenzoic Acid, p-	74-11-3	No	No	Organics	-		-		-	-	
Chlorobenzotrifluoride, 4-	98-56-6	No	Yes	Organics	8.60E-06	C	3.00E-01	P	3.26E-01	3.13E+01	3.26E-01 ca*
Chlorobutane, 1-	109-69-3	No	Yes	Organics	-		-		-	-	
Chlorodifluoromethane	75-45-6	No	Yes	Organics	-		5.00E+01	I	-	5.21E+03	5.21E+03 nc
Chloroethanol, 2-	107-07-3	No	Yes	Organics	-		-		-	-	
Chloroform	67-66-3	No	Yes	Organics	2.30E-05	I	9.77E-02	A	1.22E-01	1.02E+01	1.22E-01 ca*
Chloromethane	74-87-3	No	Yes	Organics	-		9.00E-02	I	-	9.39E+00	9.39E+00 nc
Chloromethyl Methyl Ether	107-30-2	No	Yes	Organics	6.90E-04	C	-		4.07E-03	-	4.07E-03 ca
Chloronaphthalene, Beta-	91-58-7	No	Yes	Organics	-		-		-	-	
Chloronitrobenzene, o-	88-73-3	No	No	Organics	-		1.00E-05	X	-	1.04E-03	1.04E-03 nc
Chloronitrobenzene, p-	100-00-5	No	No	Organics	-		2.00E-03	P	-	2.09E-01	2.09E-01 nc
Chlorophenol, 2-	95-57-8	No	Yes	Organics	-		-		-	-	
Chloropicrin	76-06-2	No	Yes	Organics	-		4.00E-04	C	-	4.17E-02	4.17E-02 nc
Chlorothalonil	1897-45-6	No	No	Organics	-		-		-	-	
Chlorotoluene, o-	95-49-8	No	Yes	Organics	-		-		-	-	
Chlorotoluene, p-	106-43-4	No	Yes	Organics	-		-		-	-	
Chlorozotocin	54749-90-5	No	No	Organics	6.90E-02	C	-		4.07E-05	-	4.07E-05 ca
Chlorpropham	101-21-3	No	No	Organics	-		-		-	-	
Chlorpyrifos	2921-88-2	No	No	Organics	-		-		-	-	
Chlorpyrifos Methyl	5598-13-0	No	No	Organics	-		-		-	-	
Chlorsulfuron	64902-72-3	No	No	Organics	-		-		-	-	
Chlorthal-dimethyl	1861-32-1	No	No	Organics	-		-		-	-	
Chlorthiophos	60238-56-4	No	No	Organics	-		-		-	-	
Chromium(III) (Soluble Compounds)	16065-83-1	No	No	Inorganics	-		6.00E-05	C	-	6.26E-03	6.26E-03 nc
Chromium(III), Insoluble Salts	16065-83-1	No	No	Inorganics	-		-		-	-	
Chromium(VI)	18540-29-9	Yes	No	Inorganics	8.40E-02	G	1.00E-04	I	1.21E-05	1.04E-02	1.21E-05 ca
Chrysene	218-01-9	Yes	No	Organics	6.00E-07	E	-		1.69E+00	-	1.69E+00 ca
Clofentezine	74115-24-5	No	No	Organics	-		-		-	-	
Cobalt	7440-48-4	No	No	Inorganics	9.00E-03	P	6.00E-06	P	3.12E-04	6.26E-04	3.12E-04 ca**
Coke Oven Emissions	NA	Yes	Yes	Organics	6.20E-04	I	-		1.64E-03	-	1.64E-03 ca
Copper	7440-50-8	No	No	Inorganics	-		-		-	-	
Copper Cyanide	544-92-3	No	No	Inorganics	-		-		-	-	
Cresol, m-	108-39-4	No	No	Organics	-		6.00E-01	C	-	6.26E+01	6.26E+01 nc
Cresol, o-	95-48-7	No	No	Organics	-		6.00E-01	C	-	6.26E+01	6.26E+01 nc

Cresol, p-	106-44-5	No	No	Organics	-		6.00E-01	C	-	6.26E+01	6.26E+01 nc
Cresol, p-chloro-m-	59-50-7	No	No	Organics	-		-		-	-	
Cresols	1319-77-3	No	No	Organics	-		6.00E-01	C	-	6.26E+01	6.26E+01 nc
Crotonaldehyde, trans-	123-73-9	No	Yes	Organics	-		-		-	-	
Cumene	98-82-8	No	Yes	Organics	-		4.00E-01	I	-	4.17E+01	4.17E+01 nc
Cupferron	135-20-6	No	No	Organics	6.30E-05	C	-		4.46E-02	-	4.46E-02 ca
Cyanazine	21725-46-2	No	No	Organics	-		-		-	-	
Cyanide (CN-)	57-12-5	No	Yes	Inorganics	-		8.00E-04	G	-	8.34E-02	8.34E-02 nc
Cyanogen	460-19-5	No	Yes	Inorganics	-		-		-	-	
Cyanogen Bromide	506-68-3	No	Yes	Inorganics	-		-		-	-	
Cyanogen Chloride	506-77-4	No	Yes	Inorganics	-		-		-	-	
Cyclohexane	110-82-7	No	Yes	Organics	-		6.00E+00	I	-	6.26E+02	6.26E+02 nc
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	No	No	Organics	-		-		-	-	
Cyclohexanone	108-94-1	No	Yes	Organics	-		7.00E-01	P	-	7.30E+01	7.30E+01 nc
Cyclohexene	110-83-8	No	Yes	Organics	-		1.00E+00	X	-	1.04E+02	1.04E+02 nc
Cyclohexylamine	108-91-8	No	Yes	Organics	-		-		-	-	
Cyfluthrin	68359-37-5	No	No	Organics	-		-		-	-	
Cyromazine	66215-27-8	No	No	Organics	-		-		-	-	
Dalapon	75-99-0	No	No	Organics	-		-		-	-	
Daminozide	1596-84-5	No	No	Organics	5.10E-06	C	-		5.51E-01	-	5.51E-01 ca
Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	No	No	Organics	-		-		-	-	
Demeton	8065-48-3	No	No	Organics	-		-		-	-	
Di(2-ethylhexyl)adipate	103-23-1	No	No	Organics	-		-		-	-	
Diallate	2303-16-4	No	No	Organics	-		-		-	-	
Diazinon	333-41-5	No	No	Organics	-		-		-	-	
Dibenz[a,h]anthracene	53-70-3	Yes	No	Organics	6.00E-04	E	-		1.69E-03	-	1.69E-03 ca
Dibenzo(a,e)pyrene	192-65-4	No	No	Organics	1.10E-03	C	-		2.55E-03	-	2.55E-03 ca
Dibenzofuran	132-64-9	No	Yes	Organics	-		-		-	-	
Dibromo-3-chloropropane, 1,2-	96-12-8	Yes	Yes	Organics	6.00E-03	P	2.00E-04	I	1.69E-04	2.09E-02	1.69E-04 ca
Dibromoacetic acid	631-64-1	No	No	Organics	-		-		-	-	
Dibromobenzene, 1,3-	108-36-1	No	Yes	Organics	-		-		-	-	
Dibromobenzene, 1,4-	106-37-6	No	Yes	Organics	-		-		-	-	
Dibromochloromethane	124-48-1	No	Yes	Organics	-		-		-	-	
Dibromoethane, 1,2-	106-93-4	No	Yes	Organics	6.00E-04	I	9.00E-03	I	4.68E-03	9.39E-01	4.68E-03 ca
Dibromomethane (Methylene Bromide)	74-95-3	No	Yes	Organics	-		4.00E-03	X	-	4.17E-01	4.17E-01 nc
Dibutyl Phthalate	84-74-2	No	No	Organics	-		-		-	-	
Dibutyltin Compounds	NA	No	No	Organics	-		-		-	-	
Dicamba	1918-00-9	No	No	Organics	-		-		-	-	
Dichloro-2-butene, 1,4-	764-41-0	No	Yes	Organics	4.20E-03	P	-		6.68E-04	-	6.68E-04 ca
Dichloro-2-butene, cis-1,4-	1476-11-5	No	Yes	Organics	4.20E-03	P	-		6.68E-04	-	6.68E-04 ca
Dichloro-2-butene, trans-1,4-	110-57-6	No	Yes	Organics	4.20E-03	P	-		6.68E-04	-	6.68E-04 ca
Dichloroacetic Acid	79-43-6	No	No	Organics	-		-		-	-	

Dichlorobenzene, 1,2-	95-50-1	No	Yes	Organics	-		2.00E-01	H	-	2.09E+01	2.09E+01 nc
Dichlorobenzene, 1,4-	106-46-7	No	Yes	Organics	1.10E-05	C	8.00E-01	I	2.55E-01	8.34E+01	2.55E-01 ca
Dichlorobenzidine, 3,3'-	91-94-1	No	No	Organics	3.40E-04	C	-		8.26E-03	-	8.26E-03 ca
Dichlorobenzophenone, 4,4'-	90-98-2	No	No	Organics	-		-		-	-	
Dichlorodifluoromethane	75-71-8	No	Yes	Organics	-		1.00E-01	X	-	1.04E+01	1.04E+01 nc
Dichlorodiphenyldichloroethane, p,p'- (DDD)	72-54-8	No	No	Organics	6.90E-05	C	-		4.07E-02	-	4.07E-02 ca
Dichlorodiphenyldichloroethylene, p,p'- (DDE)	72-55-9	No	Yes	Organics	9.70E-05	C	-		2.89E-02	-	2.89E-02 ca
Dichlorodiphenyltrichloroethane, p,p'- (DDT)	50-29-3	No	No	Organics	9.70E-05	I	-		2.89E-02	-	2.89E-02 ca
Dichloroethane, 1,1-	75-34-3	No	Yes	Organics	1.60E-06	C	-		1.75E+00	-	1.75E+00 ca
Dichloroethane, 1,2-	107-06-2	No	Yes	Organics	2.60E-05	I	7.00E-03	P	1.08E-01	7.30E-01	1.08E-01 ca**
Dichloroethylene, 1,1-	75-35-4	No	Yes	Organics	-		2.00E-01	I	-	2.09E+01	2.09E+01 nc
Dichloroethylene, cis-1,2-	156-59-2	No	Yes	Organics	-		4.00E-02	X	-	4.17E+00	4.17E+00 nc
Dichloroethylene, trans-1,2-	156-60-5	No	Yes	Organics	-		4.00E-02	X	-	4.17E+00	4.17E+00 nc
Dichlorophenol, 2,4-	120-83-2	No	No	Organics	-		-		-	-	
Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	No	No	Organics	-		-		-	-	
Dichloropropane, 1,2-	78-87-5	No	Yes	Organics	3.70E-06	P	4.00E-03	I	7.59E-01	4.17E-01	4.17E-01 nc
Dichloropropane, 1,3-	142-28-9	No	Yes	Organics	-		-		-	-	
Dichloropropanol, 2,3-	616-23-9	No	No	Organics	-		-		-	-	
Dichloropropene, 1,3-	542-75-6	No	Yes	Organics	4.00E-06	I	2.00E-02	I	7.02E-01	2.09E+00	7.02E-01 ca**
Dichlorvos	62-73-7	No	No	Organics	8.30E-05	C	5.00E-04	I	3.38E-02	5.21E-02	3.38E-02 ca**
Dicrotophos	141-66-2	No	No	Organics	-		-		-	-	
Dicyclopentadiene	77-73-6	No	Yes	Organics	-		3.00E-04	X	-	3.13E-02	3.13E-02 nc
Dieldrin	60-57-1	No	No	Organics	4.60E-03	I	-		6.10E-04	-	6.10E-04 ca
Diesel Engine Exhaust	NA	No	No	Organics	3.00E-04	C	5.00E-03	I	9.36E-03	5.21E-01	9.36E-03 ca*
Diethanolamine	111-42-2	No	No	Organics	-		2.00E-04	P	-	2.09E-02	2.09E-02 nc
Diethyl Phthalate	84-66-2	No	No	Organics	-		-		-	-	
Diethylene Glycol Monobutyl Ether	112-34-5	No	No	Organics	-		1.00E-04	P	-	1.04E-02	1.04E-02 nc
Diethylene Glycol Monoethyl Ether	111-90-0	No	No	Organics	-		3.00E-04	P	-	3.13E-02	3.13E-02 nc
Diethylformamide	617-84-5	No	Yes	Organics	-		-		-	-	
Diethylstilbestrol	56-53-1	No	No	Organics	1.00E-01	C	-		2.81E-05	-	2.81E-05 ca
Difenzoquat	43222-48-6	No	No	Organics	-		-		-	-	
Diflubenzuron	35367-38-5	No	No	Organics	-		-		-	-	
Difluoroethane, 1,1-	75-37-6	No	Yes	Organics	-		4.00E+01	I	-	4.17E+03	4.17E+03 nc
Difluoropropane, 2,2-	420-45-1	No	Yes	Organics	-		3.00E+01	X	-	3.13E+03	3.13E+03 nc
Dihydrosafrole	94-58-6	No	Yes	Organics	1.30E-05	C	-		2.16E-01	-	2.16E-01 ca

Diisopropyl Ether	108-20-3	No	Yes	Organics	-		7.00E-01	P	-	7.30E+01	7.30E+01 nc
Diisopropyl Methylphosphonate	1445-75-6	No	Yes	Organics	-		-		-	-	
Dimethipin	55290-64-7	No	No	Organics	-		-		-	-	
Dimethoate	60-51-5	No	No	Organics	-		-		-	-	
Dimethoxybenzidine, 3,3'-	119-90-4	No	No	Organics	1.40E-01	C	-		2.01E-05	-	2.01E-05 ca
Dimethyl methylphosphonate	756-79-6	No	No	Organics	-		-		-	-	
Dimethylamino azobenzene [p-]	60-11-7	No	No	Organics	1.30E-03	C	-		2.16E-03	-	2.16E-03 ca
Dimethylaniline HCl, 2,4-	21436-96-4	No	No	Organics	-		-		-	-	
Dimethylaniline, 2,4-	95-68-1	No	No	Organics	-		-		-	-	
Dimethylaniline, N,N-	121-69-7	No	Yes	Organics	-		-		-	-	
Dimethylbenz(a)anthracene, 7,12-	57-97-6	Yes	No	Organics	7.10E-02	C	-		1.43E-05	-	1.43E-05 ca
Dimethylbenzidine, 3,3'-	119-93-7	No	No	Organics	-		-		-	-	
Dimethylformamide	68-12-2	No	Yes	Organics	-		3.00E-02	I	-	3.13E+00	3.13E+00 nc
Dimethylhydrazine, 1,1-	57-14-7	No	Yes	Organics	-		2.00E-06	X	-	2.09E-04	2.09E-04 nc
Dimethylhydrazine, 1,2-	540-73-8	No	Yes	Organics	1.60E-01	C	-		1.75E-05	-	1.75E-05 ca
Dimethylphenol, 2,4-	105-67-9	No	No	Organics	-		-		-	-	
Dimethylphenol, 2,6-	576-26-1	No	No	Organics	-		-		-	-	
Dimethylphenol, 3,4-	95-65-8	No	No	Organics	-		-		-	-	
Dimethylterephthalate	120-61-6	No	Yes	Organics	-		-		-	-	
Dimethylvinylchloride	513-37-1	No	Yes	Organics	1.30E-05	C	-		2.16E-01	-	2.16E-01 ca
Dinitro-o-cresol, 4,6-	534-52-1	No	No	Organics	-		-		-	-	
Dinitro-o-cyclohexyl Phenol, 4,6-	131-89-5	No	No	Organics	-		-		-	-	
Dinitroaniline, 3,5-	618-87-1	No	No	Organics	-		2.00E-03	X	-	2.09E-01	2.09E-01 nc
Dinitrobenzene, 1,2-	528-29-0	No	No	Organics	-		-		-	-	
Dinitrobenzene, 1,3-	99-65-0	No	No	Organics	-		-		-	-	
Dinitrobenzene, 1,4-	100-25-4	No	No	Organics	-		-		-	-	
Dinitrophenol, 2,4-	51-28-5	No	No	Organics	-		-		-	-	
Dinitrotoluene Mixture, 2,4/2,6-	NA	No	No	Organics	-		-		-	-	
Dinitrotoluene, 2,4-	121-14-2	No	No	Organics	8.90E-05	C	-		3.15E-02	-	3.15E-02 ca
Dinitrotoluene, 2,6-	606-20-2	No	No	Organics	-		-		-	-	
Dinitrotoluene, 2-Amino-4,6-	35572-78-2	No	No	Organics	-		-		-	-	
Dinitrotoluene, 4-Amino-2,6-	19406-51-0	No	No	Organics	-		-		-	-	
Dinitrotoluene, Technical grade	25321-14-6	No	No	Organics	-		-		-	-	
Dinoseb	88-85-7	No	No	Organics	-		-		-	-	
Dioxane, 1,4-	123-91-1	No	Yes	Organics	5.00E-06	I	3.00E-02	I	5.62E-01	3.13E+00	5.62E-01 ca**
Diphenamid	957-51-7	No	No	Organics	-		-		-	-	
Diphenyl Ether	101-84-8	No	Yes	Organics	-		4.00E-04	X	-	4.17E-02	4.17E-02 nc
Diphenyl Sulfone	127-63-9	No	No	Organics	-		-		-	-	
Diphenylamine	122-39-4	No	No	Organics	-		-		-	-	
Diphenylhydrazine, 1,2-	122-66-7	No	No	Organics	2.20E-04	I	-		1.28E-02	-	1.28E-02 ca
Dipotassium phosphate	7758-11-4	No	No	Inorganics	-		-		-	-	
Diquat	2764-72-9	No	No	Organics	-		-		-	-	
Direct Black 38	1937-37-7	No	No	Organics	2.10E-03	C	-		1.34E-03	-	1.34E-03 ca
Direct Blue 6	2602-46-2	No	No	Organics	2.10E-03	C	-		1.34E-03	-	1.34E-03 ca
Direct Brown 95	16071-86-6	No	No	Organics	1.90E-03	C	-		1.48E-03	-	1.48E-03 ca
Disodium phosphate	7558-79-4	No	No	Inorganics	-		-		-	-	

Disulfoton	298-04-4	No	No	Organics	-		-		-	-	
Dithiane, 1,4-	505-29-3	No	Yes	Organics	-		-		-	-	
Diuron	330-54-1	No	No	Organics	-		-		-	-	
Dodine	2439-10-3	No	No	Organics	-		-		-	-	
EPTC	759-94-4	No	Yes	Organics	-		-		-	-	
Endosulfan	115-29-7	No	Yes	Organics	-		-		-	-	
Endosulfan Sulfate	1031-07-8	No	No	Organics	-		-		-	-	
Endothall	145-73-3	No	No	Organics	-		-		-	-	
Endrin	72-20-8	No	No	Organics	-		-		-	-	
Epichlorohydrin	106-89-8	No	Yes	Organics	1.20E-06	I	1.00E-03	I	2.34E+00	1.04E-01	1.04E-01 nc
Epoxybutane, 1,2-	106-88-7	No	Yes	Organics	-		2.00E-02	I	-	2.09E+00	2.09E+00 nc
Ethanol, 2-(2-methoxyethoxy)-	111-77-3	No	No	Organics	-		-		-	-	
Ethephon	16672-87-0	No	No	Organics	-		-		-	-	
Ethion	563-12-2	No	No	Organics	-		-		-	-	
Ethoxyethanol Acetate, 2-	111-15-9	No	Yes	Organics	-		6.00E-02	P	-	6.26E+00	6.26E+00 nc
Ethoxyethanol, 2-	110-80-5	No	Yes	Organics	-		4.00E-02	P	-	4.17E+00	4.17E+00 nc
Ethyl Acetate	141-78-6	No	Yes	Organics	-		7.00E-02	P	-	7.30E+00	7.30E+00 nc
Ethyl Acrylate	140-88-5	No	Yes	Organics	-		8.00E-03	P	-	8.34E-01	8.34E-01 nc
Ethyl Chloride	75-00-3	No	Yes	Organics	-		4.00E+00	P	-	4.17E+02	4.17E+02 nc
Ethyl Ether	60-29-7	No	Yes	Organics	-		-		-	-	
Ethyl Methacrylate	97-63-2	No	Yes	Organics	-		3.00E-01	P	-	3.13E+01	3.13E+01 nc
Ethyl Tertiary Butyl Ether (ETBE)	637-92-3	No	Yes	Organics	8.00E-08	I	4.00E+01	I	3.51E+01	4.17E+03	3.51E+01 ca
Ethyl-p-nitrophenyl Phosphonate	2104-64-5	No	No	Organics	-		-		-	-	
Ethylbenzene	100-41-4	No	Yes	Organics	2.50E-06	C	1.00E+00	I	1.12E+00	1.04E+02	1.12E+00 ca*
Ethylene Cyanohydrin	109-78-4	No	No	Organics	-		-		-	-	
Ethylene Diamine	107-15-3	No	Yes	Organics	-		-		-	-	
Ethylene Glycol	107-21-1	No	No	Organics	-		4.00E-01	C	-	4.17E+01	4.17E+01 nc
Ethylene Glycol Monobutyl Ether	111-76-2	No	No	Organics	-		1.60E+00	I	-	1.67E+02	1.67E+02 nc
Ethylene Oxide	75-21-8	Yes	Yes	Organics	3.00E-03	I	3.00E-02	C	3.38E-04	3.13E+00	3.38E-04 ca
Ethylene Thiourea	96-45-7	No	No	Organics	1.30E-05	C	-		2.16E-01	-	2.16E-01 ca
Ethyleneimine	151-56-4	No	Yes	Organics	1.90E-02	C	-		1.48E-04	-	1.48E-04 ca
Ethylphthalyl Ethyl Glycolate	84-72-0	No	No	Organics	-		-		-	-	
Fenamiphos	22224-92-6	No	No	Organics	-		-		-	-	
Fenpropathrin	39515-41-8	No	No	Organics	-		-		-	-	
Fenvalerate	51630-58-1	No	No	Organics	-		-		-	-	
Fluometuron	2164-17-2	No	No	Organics	-		-		-	-	
Fluoranthene	206-44-0	No	No	Organics	-		-		-	-	
Fluorene	86-73-7	No	Yes	Organics	-		-		-	-	

Fluoride	16984-48-8	No	No	Inorganics	-		1.30E-02	C	-	1.36E+00	1.36E+00 nc
Fluorine (Soluble Fluoride)	7782-41-4	No	No	Inorganics	-		1.30E-02	C	-	1.36E+00	1.36E+00 nc
Fluridone	59756-60-4	No	No	Organics	-		-		-	-	
Flurprimidol	56425-91-3	No	No	Organics	-		-		-	-	
Flusilazole	85509-19-9	No	No	Organics	-		-		-	-	
Flutolanil	66332-96-5	No	No	Organics	-		-		-	-	
Fluvalinate	69409-94-5	No	No	Organics	-		-		-	-	
Folpet	133-07-3	No	No	Organics	-		-		-	-	
Fomesafen	72178-02-0	No	No	Organics	-		-		-	-	
Fonofos	944-22-9	No	No	Organics	-		-		-	-	
Formaldehyde	50-00-0	No	Yes	Organics	1.30E-05	I	9.83E-03	A	2.16E-01	1.02E+00	2.16E-01 ca**
Formic Acid	64-18-6	No	Yes	Organics	-		3.00E-04	X	-	3.13E-02	3.13E-02 nc
Fosetyl-AL	39148-24-8	No	No	Organics	-		-		-	-	
Furan	110-00-9	No	Yes	Organics	-		-		-	-	
Furazolidone	67-45-8	No	No	Organics	-		-		-	-	
Furfural	98-01-1	No	Yes	Organics	-		5.00E-02	H	-	5.21E+00	5.21E+00 nc
Furium	531-82-8	No	No	Organics	4.30E-04	C	-		6.53E-03	-	6.53E-03 ca
Furmecyclox	60568-05-0	No	No	Organics	8.60E-06	C	-		3.26E-01	-	3.26E-01 ca
Glufosinate, Ammonium	77182-82-2	No	No	Organics	-		-		-	-	
Glutaraldehyde	111-30-8	No	No	Organics	-		8.00E-05	C	-	8.34E-03	8.34E-03 nc
Glycidaldehyde	765-34-4	No	Yes	Organics	-		1.00E-03	X	-	1.04E-01	1.04E-01 nc
Glyphosate	1071-83-6	No	No	Organics	-		-		-	-	
Guanidine	113-00-8	No	Yes	Organics	-		-		-	-	
Guanidine Chloride	50-01-1	No	No	Organics	-		-		-	-	
Guanidine Nitrate	506-93-4	No	No	Organics	-		-		-	-	
Haloxyfop, Methyl	69806-40-2	No	No	Organics	-		-		-	-	
Heptachlor	76-44-8	No	Yes	Organics	1.30E-03	I	-		2.16E-03	-	2.16E-03 ca
Heptachlor Epoxide	1024-57-3	No	Yes	Organics	2.60E-03	I	-		1.08E-03	-	1.08E-03 ca
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	No	Yes	Organics	1.14E-03	W	1.33E-03	W	2.46E-03	1.39E-01	2.46E-03 ca*
Heptachlorodibenzofuran, 1,2,3,4,6,7,8-	67562-39-4	No	Yes	Organics	3.80E-01	W	4.00E-06	W	7.39E-06	4.17E-04	7.39E-06 ca*
Heptanal, n-	111-71-7	No	Yes	Organics	-		3.00E-03	X	-	3.13E-01	3.13E-01 nc
Heptane, N-	142-82-5	No	Yes	Organics	-		4.00E-01	P	-	4.17E+01	4.17E+01 nc
Hexabromobenzene	87-82-1	No	Yes	Organics	-		-		-	-	
Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2	No	No	Organics	-		-		-	-	
Hexachlorobenzene	118-74-1	No	Yes	Organics	4.60E-04	I	-		6.10E-03	-	6.10E-03 ca
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	No	Yes	Organics	1.14E-03	W	1.33E-03	W	2.46E-03	1.39E-01	2.46E-03 ca*
Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	69782-90-7	No	Yes	Organics	1.14E-03	W	1.33E-03	W	2.46E-03	1.39E-01	2.46E-03 ca*
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	No	Yes	Organics	1.14E-03	W	1.33E-03	W	2.46E-03	1.39E-01	2.46E-03 ca*

Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	No	Yes	Organics	1.14E+00	W	1.33E-06	W	2.46E-06	1.39E-04	2.46E-06 ca*
Hexachlorobutadiene	87-68-3	No	Yes	Organics	2.20E-05	I	-		1.28E-01	-	1.28E-01 ca
Hexachlorocyclohexane, Alpha-	319-84-6	No	No	Organics	1.80E-03	I	-		1.56E-03	-	1.56E-03 ca
Hexachlorocyclohexane, Beta-	319-85-7	No	No	Organics	5.30E-04	I	-		5.30E-03	-	5.30E-03 ca
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	No	No	Organics	3.10E-04	C	-		9.06E-03	-	9.06E-03 ca
Hexachlorocyclohexane, Technical	608-73-1	No	No	Organics	5.10E-04	I	-		5.51E-03	-	5.51E-03 ca
Hexachlorocyclopentadiene	77-47-4	No	Yes	Organics	-		2.00E-04	I	-	2.09E-02	2.09E-02 nc
Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-	39227-28-6	No	No	Organics	3.80E+00	W	4.00E-07	W	7.39E-07	4.17E-05	7.39E-07 ca*
Hexachlorodibenzo-p-dioxin, Mixture	34465-46-8	No	No	Organics	1.30E+00	I	-		2.16E-06	-	2.16E-06 ca
Hexachlorodibenzofuran, 1,2,3,4,7,8-	70648-26-9	No	Yes	Organics	3.80E+00	W	4.00E-07	W	7.39E-07	4.17E-05	7.39E-07 ca*
Hexachloroethane	67-72-1	No	Yes	Organics	1.10E-05	C	3.00E-02	I	2.55E-01	3.13E+00	2.55E-01 ca*
Hexachlorophene	70-30-4	No	No	Organics	-		-		-	-	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	No	Yes	Organics	-		-		-	-	
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	No	No	Organics	-		-		-	-	
Hexamethylene Diisocyanate, 1,6-	822-06-0	No	Yes	Organics	-		1.00E-05	I	-	1.04E-03	1.04E-03 nc
Hexamethylene diisocyanate biuret	4035-89-6	No	No	Organics	-		4.00E-04	C	-	4.17E-02	4.17E-02 nc
Hexamethylene diisocyanate isocyanurate	3779-63-3	No	No	Organics	-		4.00E-04	C	-	4.17E-02	4.17E-02 nc
Hexamethylphosphoramide	680-31-9	No	No	Organics	-		-		-	-	
Hexane, Commercial	NA	No	Yes	Organics	2.00E-07	X	6.00E-01	P	1.40E+01	6.26E+01	1.40E+01 ca**
Hexane, N-	110-54-3	No	Yes	Organics	-		7.00E-01	I	-	7.30E+01	7.30E+01 nc
Hexanedioic Acid	124-04-9	No	No	Organics	-		-		-	-	
Hexanol, 1-,2-ethyl- (2-Ethyl-1-hexanol)	104-76-7	No	Yes	Organics	-		4.00E-04	P	-	4.17E-02	4.17E-02 nc
Hexanone, 2-	591-78-6	No	Yes	Organics	-		3.00E-02	I	-	3.13E+00	3.13E+00 nc
Hexazinone	51235-04-2	No	No	Organics	-		-		-	-	
Hexythiazox	78587-05-0	No	No	Organics	-		-		-	-	
HpCDD, 1,2,3,4,6,7,8,-	35822-46-9	No	Yes	Organics	3.80E-01	W	4.00E-06	W	7.39E-06	4.17E-04	7.39E-06 ca*
HpCDF, 1,2,3,4,7,8,9-	55673-89-7	No	Yes	Organics	3.80E-01	W	4.00E-06	W	7.39E-06	4.17E-04	7.39E-06 ca*
HxCDD, 1,2,3,6,7,8-	57653-85-7	No	No	Organics	3.80E+00	W	4.00E-07	W	7.39E-07	4.17E-05	7.39E-07 ca*
HxCDD, 1,2,3,7,8,9-	19408-74-3	No	No	Organics	3.80E+00	W	4.00E-07	W	7.39E-07	4.17E-05	7.39E-07 ca*
HxCDF, 1,2,3,6,7,8-	57117-44-9	No	Yes	Organics	3.80E+00	W	4.00E-07	W	7.39E-07	4.17E-05	7.39E-07 ca*
HxCDF, 1,2,3,7,8,9-	72918-21-9	No	No	Organics	3.80E+00	W	4.00E-07	W	7.39E-07	4.17E-05	7.39E-07 ca*
HxCDF, 2,3,4,6,7,8-	60851-34-5	No	No	Organics	3.80E+00	W	4.00E-07	W	7.39E-07	4.17E-05	7.39E-07 ca*
Hydramethylnon	67485-29-4	No	No	Organics	-		-		-	-	

Hydrazine	302-01-2	No	Yes	Inorganics	4.90E-03	I	3.00E-05	P	5.73E-04	3.13E-03	5.73E-04 ca**
Hydrazine Sulfate	10034-93-2	No	No	Inorganics	4.90E-03	I	-		5.73E-04	-	5.73E-04 ca
Hydrogen Chloride	7647-01-0	No	Yes	Inorganics	-		2.00E-02	I	-	2.09E+00	2.09E+00 nc
Hydrogen Cyanide	74-90-8	No	Yes	Inorganics	-		8.00E-04	I	-	8.34E-02	8.34E-02 nc
Hydrogen Fluoride	7664-39-3	No	Yes	Inorganics	-		1.40E-02	C	-	1.46E+00	1.46E+00 nc
Hydrogen Sulfide	7783-06-4	No	Yes	Inorganics	-		2.00E-03	I	-	2.09E-01	2.09E-01 nc
Hydroquinone	123-31-9	No	No	Organics	-		-		-	-	
Imazalil	35554-44-0	No	No	Organics	-		-		-	-	
Imazaquin	81335-37-7	No	No	Organics	-		-		-	-	
Imazethapyr	81335-77-5	No	No	Organics	-		-		-	-	
Indeno[1,2,3-cd]pyrene	193-39-5	Yes	No	Organics	6.00E-05	E	-		1.69E-02	-	1.69E-02 ca
Iodine	7553-56-2	No	No	Inorganics	-		-		-	-	
Iprodione	36734-19-7	No	No	Organics	-		-		-	-	
Iron	7439-89-6	No	No	Inorganics	-		-		-	-	
Isobutyl Alcohol	78-83-1	No	Yes	Organics	-		4.00E-01	X	-	4.17E+01	4.17E+01 nc
Isophorone	78-59-1	No	No	Organics	-		2.00E+00	C	-	2.09E+02	2.09E+02 nc
Isopropalin	33820-53-0	No	Yes	Organics	-		-		-	-	
Isopropanol	67-63-0	No	Yes	Organics	-		2.00E-01	P	-	2.09E+01	2.09E+01 nc
Isopropyl Methyl Phosphonic Acid	1832-54-8	No	No	Organics	-		-		-	-	
Isoxaben	82558-50-7	No	No	Organics	-		-		-	-	
Jet propulsion fuel 7 (JP-7)	NA	No	Yes	Organics	-		3.00E-01	A	-	3.13E+01	3.13E+01 nc
Lactofen	77501-63-4	No	No	Organics	-		-		-	-	
Lactonitrile	78-97-7	No	No	Organics	-		-		-	-	
Lanthanum	7439-91-0	No	No	Inorganics	-		-		-	-	
Lanthanum Acetate Hydrate	100587-90-4	No	No	Organics	-		-		-	-	
Lanthanum Chloride Heptahydrate	10025-84-0	No	No	Inorganics	-		-		-	-	
Lanthanum Chloride, Anhydrous	10099-58-8	No	No	Inorganics	-		-		-	-	
Lanthanum Nitrate Hexahydrate	10277-43-7	No	No	Inorganics	-		-		-	-	
Lead Phosphate	7446-27-7	No	No	Inorganics	1.20E-05	C	-		2.34E-01	-	2.34E-01 ca
Lead acetate	301-04-2	No	No	Organics	8.00E-05	C	-		3.51E-02	-	3.51E-02 ca
Lead subacetate	1335-32-6	No	No	Organics	1.10E-05	C	-		2.55E-01	-	2.55E-01 ca
Lewisite	541-25-3	No	Yes	Organics	-		-		-	-	
Linuron	330-55-2	No	No	Organics	-		-		-	-	
Lithium	7439-93-2	No	No	Inorganics	-		-		-	-	
Lithium Perchlorate	7791-03-9	No	No	Inorganics	-		-		-	-	
Lithium bis[(trifluoromethyl)sulfonyl]azanide	90076-65-6	No	Yes	Organics	-		-		-	-	
MCPA	94-74-6	No	No	Organics	-		-		-	-	
MCPB	94-81-5	No	No	Organics	-		-		-	-	
MCPP	93-65-2	No	No	Organics	-		-		-	-	
Malathion	121-75-5	No	No	Organics	-		-		-	-	
Maleic Anhydride	108-31-6	No	No	Organics	-		7.00E-04	C	-	7.30E-02	7.30E-02 nc
Maleic Hydrazide	123-33-1	No	No	Organics	-		-		-	-	

Malononitrile	109-77-3	No	No	Organics	-		-		-	-	
Mancozeb	8018-01-7	No	No	Organics	-		-		-	-	
Maneb	12427-38-2	No	No	Organics	-		-		-	-	
Manganese (Diet)	7439-96-5	No	No	Inorganics	-		5.00E-05	I	-	5.21E-03	5.21E-03 nc
Manganese (Non-diet)	7439-96-5	No	No	Inorganics	-		5.00E-05	I	-	5.21E-03	5.21E-03 nc
Mephosfolan	950-10-7	No	No	Organics	-		-		-	-	
Mepiquat Chloride	24307-26-4	No	No	Organics	-		-		-	-	
Mercaptobenzothiazole, 2-	149-30-4	No	No	Organics	-		-		-	-	
Mercuric Chloride	7487-94-7	No	No	Inorganics	-		3.00E-04	G	-	3.13E-02	3.13E-02 nc
Mercury (elemental)	7439-97-6	No	Yes	Inorganics	-		3.00E-04	I	-	3.13E-02	3.13E-02 nc
Merphos	150-50-5	No	Yes	Organics	-		-		-	-	
Metalaxyl	57837-19-1	No	No	Organics	-		-		-	-	
Methacrylonitrile	126-98-7	No	Yes	Organics	-		3.00E-02	P	-	3.13E+00	3.13E+00 nc
Methamidophos	10265-92-6	No	No	Organics	-		-		-	-	
Methanol	67-56-1	No	Yes	Organics	-		2.00E+01	I	-	2.09E+03	2.09E+03 nc
Methidathion	950-37-8	No	No	Organics	-		-		-	-	
Methomyl	16752-77-5	No	No	Organics	-		-		-	-	
Methoxy-5-nitroaniline, 2-	99-59-2	No	No	Organics	-		-		-	-	
Methoxychlor	72-43-5	No	No	Organics	-		-		-	-	
Methoxyethanol Acetate, 2-	110-49-6	No	Yes	Organics	-		1.00E-03	P	-	1.04E-01	1.04E-01 nc
Methoxyethanol, 2-	109-86-4	No	Yes	Organics	-		7.00E-03	P	-	7.30E-01	7.30E-01 nc
Methyl Acetate	79-20-9	No	Yes	Organics	-		-		-	-	
Methyl Acrylate	96-33-3	No	Yes	Organics	-		2.00E-02	P	-	2.09E+00	2.09E+00 nc
Methyl Ethyl Ketone (2-Butanone)	78-93-3	No	Yes	Organics	-		5.00E+00	I	-	5.21E+02	5.21E+02 nc
Methyl Hydrazine	60-34-4	No	Yes	Organics	1.00E-03	X	2.00E-05	X	2.81E-03	2.09E-03	2.09E-03 nc
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	No	Yes	Organics	-		3.00E+00	I	-	3.13E+02	3.13E+02 nc
Methyl Isocyanate	624-83-9	No	Yes	Organics	-		1.00E-03	C	-	1.04E-01	1.04E-01 nc
Methyl Mercury	22967-92-6	No	No	Inorganics	-		-		-	-	
Methyl Methacrylate	80-62-6	No	Yes	Organics	-		7.00E-01	I	-	7.30E+01	7.30E+01 nc
Methyl Parathion	298-00-0	No	No	Organics	-		-		-	-	
Methyl Phosphonic Acid	993-13-5	No	No	Organics	-		-		-	-	
Methyl Styrene (Mixed Isomers)	25013-15-4	No	Yes	Organics	-		4.00E-02	H	-	4.17E+00	4.17E+00 nc
Methyl methanesulfonate	66-27-3	No	No	Organics	2.80E-05	C	-		1.00E-01	-	1.00E-01 ca
Methyl tert-Butyl Ether (MTBE)	1634-04-4	No	Yes	Organics	2.60E-07	C	3.00E+00	I	1.08E+01	3.13E+02	1.08E+01 ca*
Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2	No	No	Organics	-		-		-	-	
Methyl-2-Pentanol, 4-	108-11-2	No	Yes	Organics	-		3.00E+00	X	-	3.13E+02	3.13E+02 nc
Methyl-5-Nitroaniline, 2-	99-55-8	No	No	Organics	-		-		-	-	
Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	No	No	Organics	2.40E-03	C	-		1.17E-03	-	1.17E-03 ca
Methylaniline Hydrochloride, 2-	636-21-5	No	No	Organics	3.70E-05	C	-		7.59E-02	-	7.59E-02 ca
Methylarsonic acid	124-58-3	No	No	Organics	-		-		-	-	

Methylbenzene,1-4-diamine monohydrochloride, 2-	74612-12-7	No	No	Organics	-		-		-	-	
Methylbenzene-1,4-diamine sulfate, 2-	615-50-9	No	No	Organics	-		-		-	-	
Methylcholanthrene, 3-	56-49-5	Yes	No	Organics	6.30E-03	C	-		1.61E-04	-	1.61E-04 ca
Methylcyclohexane	108-87-2	No	Yes	Organics	-		9.50E-02	X	-	9.91E+00	9.91E+00 nc
Methylene Chloride	75-09-2	Yes	Yes	Organics	1.00E-08	I	6.00E-01	I	1.01E+02	6.26E+01	6.26E+01 nc
Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	Yes	No	Organics	4.30E-04	C	-		2.36E-03	-	2.36E-03 ca
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-61-1	No	No	Organics	1.30E-05	C	-		2.16E-01	-	2.16E-01 ca
Methylenebisbenzenamine, 4,4'-	101-77-9	No	No	Organics	4.60E-04	C	2.00E-02	C	6.10E-03	2.09E+00	6.10E-03 ca
Methylenediphenyl Diisocyanate	101-68-8	No	No	Organics	-		6.00E-04	I	-	6.26E-02	6.26E-02 nc
Methylnaphthalene, 1-	90-12-0	No	Yes	Organics	-		-		-	-	
Methylnaphthalene, 2-	91-57-6	No	Yes	Organics	-		-		-	-	
Methylstyrene, Alpha-	98-83-9	No	Yes	Organics	-		-		-	-	
Metolachlor	51218-45-2	No	No	Organics	-		-		-	-	
Metribuzin	21087-64-9	No	No	Organics	-		-		-	-	
Metsulfuron-methyl	74223-64-6	No	No	Organics	-		-		-	-	
Midrange Aliphatic Hydrocarbon Streams	NA	No	Yes	Organics	4.50E-06	X	1.00E-01	P	6.24E-01	1.04E+01	6.24E-01 ca*
Mineral oils	8012-95-1	No	Yes	Organics	-		-		-	-	
Mirex	2385-85-5	No	Yes	Organics	5.10E-03	C	-		5.51E-04	-	5.51E-04 ca
Molinate	2212-67-1	No	No	Organics	-		-		-	-	
Molybdenum	7439-98-7	No	No	Inorganics	-		2.00E-03	A	-	2.09E-01	2.09E-01 nc
Monoaluminum phosphate	13530-50-2	No	No	Inorganics	-		-		-	-	
Monochloramine	10599-90-3	No	No	Inorganics	-		-		-	-	
Monomethylaniline	100-61-8	No	No	Organics	-		-		-	-	
Monopotassium phosphate	7778-77-0	No	No	Inorganics	-		-		-	-	
Monosodium phosphate	7558-80-7	No	No	Inorganics	-		-		-	-	
Myclobutanil	88671-89-0	No	No	Organics	-		-		-	-	
N,N'-Diphenyl-1,4-benzenediamine	74-31-7	No	No	Organics	-		-		-	-	
Naled	300-76-5	No	Yes	Organics	-		-		-	-	
Naphtha, High Flash Aromatic (HFAN)	64742-95-6	No	Yes	Organics	-		1.00E-01	P	-	1.04E+01	1.04E+01 nc
Naphthalene	91-20-3	No	Yes	Organics	3.40E-05	C	3.00E-03	I	8.26E-02	3.13E-01	8.26E-02 ca**
Naphthylamine, 2-	91-59-8	No	No	Organics	0.00E+00	C	-		-	-	
Napropamide	15299-99-7	No	No	Organics	-		-		-	-	
Nickel Acetate	373-02-4	No	No	Organics	2.60E-04	C	1.40E-05	C	1.08E-02	1.46E-03	1.46E-03 nc
Nickel Carbonate	3333-67-3	No	No	Organics	2.60E-04	C	1.40E-05	C	1.08E-02	1.46E-03	1.46E-03 nc
Nickel Carbonyl	13463-39-3	No	Yes	Organics	2.60E-04	C	1.40E-05	C	1.08E-02	1.46E-03	1.46E-03 nc
Nickel Hydroxide	12054-48-7	No	No	Inorganics	2.60E-04	C	1.40E-05	C	1.08E-02	1.46E-03	1.46E-03 nc
Nickel Oxide	1313-99-1	No	No	Inorganics	2.60E-04	C	2.00E-05	C	1.08E-02	2.09E-03	2.09E-03 nc
Nickel Refinery Dust	NA	No	No	Inorganics	2.40E-04	I	1.40E-05	C	1.17E-02	1.46E-03	1.46E-03 nc
Nickel Soluble Salts	7440-02-0	No	No	Inorganics	2.60E-04	C	1.40E-05	C	1.08E-02	1.46E-03	1.46E-03 nc
Nickel Subsulfide	12035-72-2	No	No	Inorganics	4.80E-04	I	1.40E-05	C	5.85E-03	1.46E-03	1.46E-03 nc
Nickelocene	1271-28-9	No	No	Organics	2.60E-04	C	1.40E-05	C	1.08E-02	1.46E-03	1.46E-03 nc
Nitrate (measured as nitrogen)	14797-55-8	No	No	Inorganics	-		-		-	-	
Nitrite (measured as nitrogen)	14797-65-0	No	No	Inorganics	-		-		-	-	
Nitroaniline, 2-	88-74-4	No	No	Organics	-		5.00E-05	X	-	5.21E-03	5.21E-03 nc

Nitroaniline, 4-	100-01-6	No	No	Organics	-		6.00E-03	P	-	6.26E-01	6.26E-01 nc
Nitrobenzene	98-95-3	No	Yes	Organics	4.00E-05	I	9.00E-03	I	7.02E-02	9.39E-01	7.02E-02 ca*
Nitrocellulose	9004-70-0	No	No	Organics	-		-		-	-	
Nitrofurantoin	67-20-9	No	No	Organics	-		-		-	-	
Nitrofurazone	59-87-0	No	No	Organics	3.70E-04	C	-		7.59E-03	-	7.59E-03 ca
Nitroglycerin	55-63-0	No	No	Organics	-		-		-	-	
Nitroguanidine	556-88-7	No	No	Organics	-		-		-	-	
Nitromethane	75-52-5	No	Yes	Organics	8.80E-06	P	5.00E-03	P	3.19E-01	5.21E-01	3.19E-01 ca**
Nitropropane, 2-	79-46-9	No	Yes	Organics	5.80E-04	X	2.00E-02	I	4.84E-03	2.09E+00	4.84E-03 ca
Nitropyrene, 4-	57835-92-4	No	No	Organics	1.10E-04	C	-		2.55E-02	-	2.55E-02 ca
Nitroso-N-ethylurea, N-	759-73-9	Yes	No	Organics	7.70E-03	C	-		1.32E-04	-	1.32E-04 ca
Nitroso-N-methylurea, N-	684-93-5	Yes	No	Organics	3.40E-02	C	-		2.98E-05	-	2.98E-05 ca
Nitroso-di-N-butylamine, N-	924-16-3	No	Yes	Organics	1.60E-03	I	-		1.75E-03	-	1.75E-03 ca
Nitroso-di-N-propylamine, N-	621-64-7	No	No	Organics	2.00E-03	C	-		1.40E-03	-	1.40E-03 ca
Nitrosodiethanolamine, N-	1116-54-7	No	No	Organics	8.00E-04	C	-		3.51E-03	-	3.51E-03 ca
Nitrosodiethylamine, N-	55-18-5	Yes	No	Organics	4.30E-02	I	-		2.36E-05	-	2.36E-05 ca
Nitrosodimethylamine, N-	62-75-9	Yes	Yes	Organics	1.40E-02	I	4.00E-05	X	7.24E-05	4.17E-03	7.24E-05 ca*
Nitrosodiphenylamine, N-	86-30-6	No	No	Organics	2.60E-06	C	-		1.08E+00	-	1.08E+00 ca
Nitrosomethylethylamine, N-	10595-95-6	No	Yes	Organics	6.30E-03	C	-		4.46E-04	-	4.46E-04 ca
Nitrosomorpholine [N-]	59-89-2	No	No	Organics	1.90E-03	C	-		1.48E-03	-	1.48E-03 ca
Nitrosopiperidine [N-]	100-75-4	No	No	Organics	2.70E-03	C	-		1.04E-03	-	1.04E-03 ca
Nitrosopyrrolidine, N-	930-55-2	No	No	Organics	6.10E-04	I	-		4.60E-03	-	4.60E-03 ca
Nitrotoluene, m-	99-08-1	No	No	Organics	-		-		-	-	
Nitrotoluene, o-	88-72-2	No	Yes	Organics	-		-		-	-	
Nitrotoluene, p-	99-99-0	No	No	Organics	-		-		-	-	
Nonane, n-	111-84-2	No	Yes	Organics	-		2.00E-02	P	-	2.09E+00	2.09E+00 nc
Norflurazon	27314-13-2	No	No	Organics	-		-		-	-	
OCDD	3268-87-9	No	No	Organics	1.14E-02	W	1.33E-04	W	2.46E-04	1.39E-02	2.46E-04 ca*
OCDF	39001-02-0	No	No	Organics	1.14E-02	W	1.33E-04	W	2.46E-04	1.39E-02	2.46E-04 ca*
Octabromodiphenyl Ether	32536-52-0	No	No	Organics	-		-		-	-	
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	No	No	Organics	-		-		-	-	
Octamethylpyrophosphoramide	152-16-9	No	No	Organics	-		-		-	-	
Octyl Phthalate, di-N-	117-84-0	No	No	Organics	-		-		-	-	
Oryzalin	19044-88-3	No	No	Organics	-		-		-	-	
Oxadiazon	19666-30-9	No	No	Organics	-		-		-	-	
Oxamyl	23135-22-0	No	No	Organics	-		-		-	-	
Oxyfluorfen	42874-03-3	No	No	Organics	-		-		-	-	
Paclobutrazol	76738-62-0	No	No	Organics	-		-		-	-	
Paraquat Dichloride	1910-42-5	No	No	Organics	-		-		-	-	
Parathion	56-38-2	No	No	Organics	-		-		-	-	
PeCDF, 1,2,3,7,8-	57117-41-6	No	No	Organics	1.14E+00	W	1.33E-06	W	2.46E-06	1.39E-04	2.46E-06 ca*

PeCDF, 2,3,4,7,8-	57117-31-4	No	No	Organics	1.14E+01	W	1.33E-07	W	2.46E-07	1.39E-05	2.46E-07 ca*
Pebulate	1114-71-2	No	Yes	Organics	-		-		-	-	
Pendimethalin	40487-42-1	No	No	Organics	-		-		-	-	
Pentabromodiphenyl Ether	32534-81-9	No	Yes	Organics	-		-		-	-	
Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	60348-60-9	No	No	Organics	-		-		-	-	
Pentachlorobenzene	608-93-5	No	Yes	Organics	-		-		-	-	
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	No	Yes	Organics	1.14E-03	W	1.33E-03	W	2.46E-03	1.39E-01	2.46E-03 ca*
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	No	Yes	Organics	1.14E-03	W	1.33E-03	W	2.46E-03	1.39E-01	2.46E-03 ca*
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	No	Yes	Organics	1.14E-03	W	1.33E-03	W	2.46E-03	1.39E-01	2.46E-03 ca*
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	No	Yes	Organics	1.14E-03	W	1.33E-03	W	2.46E-03	1.39E-01	2.46E-03 ca*
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	No	Yes	Organics	3.80E+00	W	4.00E-07	W	7.39E-07	4.17E-05	7.39E-07 ca*
Pentachlorodibenzo-p-dioxin, 1,2,3,7,8-	40321-76-4	No	No	Organics	3.80E+01	W	4.00E-08	W	7.39E-08	4.17E-06	7.39E-08 ca*
Pentachloroethane	76-01-7	No	Yes	Organics	-		-		-	-	
Pentachloronitrobenzene	82-68-8	No	Yes	Organics	-		-		-	-	
Pentachlorophenol	87-86-5	No	No	Organics	5.10E-06	C	-		5.51E-01	-	5.51E-01 ca
Pentaerythritol tetranitrate (PETN)	78-11-5	No	No	Organics	-		-		-	-	
Pentamethylphosphoramide (PMPA)	10159-46-3	No	No	Organics	-		-		-	-	
Pentane, n-	109-66-0	No	Yes	Organics	-		1.00E+00	P	-	1.04E+02	1.04E+02 nc
Perchlorate and Perchlorate Salts	14797-73-0	No	No	Inorganics	-		-		-	-	
Perfluorobutanesulfonate	45187-15-3	No	No	Organics	-		-		-	-	
Perfluorobutanesulfonic acid (PFBS)	375-73-5	No	No	Organics	-		-		-	-	
Perfluorobutanoate	45048-62-2	No	Yes	Organics	-		-		-	-	
Perfluorobutanoic acid (PFBA)	375-22-4	No	Yes	Organics	-		-		-	-	
Perfluorododecanoic acid (PFDoDA)	307-55-1	No	No	Organics	-		-		-	-	
Perfluorohexanesulfonate	108427-53-8	No	No	Organics	-		-		-	-	
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	No	No	Organics	-		-		-	-	
Perfluorohexanoate	92612-52-7	No	No	Organics	-		-		-	-	
Perfluorohexanoic acid (PFHxA)	307-24-4	No	No	Organics	-		-		-	-	
Perfluorononanoate	72007-68-2	No	No	Organics	-		-		-	-	
Perfluorononanoic acid (PFNA)	375-95-1	No	No	Organics	-		-		-	-	
Perfluorooctadecanoic acid (PFODA)	16517-11-6	No	No	Organics	-		-		-	-	
Perfluorooctanesulfonate	45298-90-6	No	No	Organics	-		-		-	-	
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	No	No	Organics	-		-		-	-	
Perfluorooctanoate	45285-51-6	No	No	Organics	-		-		-	-	
Perfluorooctanoic acid (PFOA)	335-67-1	No	No	Organics	-		-		-	-	
Perfluoropropanoic acid (PFPrA)	422-64-0	No	Yes	Organics	-		-		-	-	
Perfluorotetradecanoic acid (PFTetA)	376-06-7	No	No	Organics	-		-		-	-	
Perfluoroundecanoic acid (PFUDA)	2058-94-8	No	No	Organics	-		-		-	-	
Permethrin	52645-53-1	No	No	Organics	-		-		-	-	
Perylene	198-55-0	No	No	Organics	-		2.00E-06	X	-	2.09E-04	2.09E-04 nc

Phenacetin	62-44-2	No	No	Organics	6.30E-07	C	-		4.46E+00	-	4.46E+00 ca
Phenmedipham	13684-63-4	No	No	Organics	-		-		-	-	
Phenol	108-95-2	No	No	Organics	-		2.00E-01	C	-	2.09E+01	2.09E+01 nc
Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	No	No	Organics	-		-		-	-	
Phenothiazine	92-84-2	No	No	Organics	-		-		-	-	
Phenyl Isothiocyanate	103-72-0	No	Yes	Organics	-		-		-	-	
Phenylenediamine, m-	108-45-2	No	No	Organics	-		-		-	-	
Phenylenediamine, o-	95-54-5	No	No	Organics	-		-		-	-	
Phenylenediamine, p-	106-50-3	No	No	Organics	-		-		-	-	
Phenylmercuric Acetate	62-38-4	No	No	Organics	-		-		-	-	
Phenylphenol, 2-	90-43-7	No	No	Organics	-		-		-	-	
Phorate	298-02-2	No	No	Organics	-		-		-	-	
Phosgene	75-44-5	No	Yes	Organics	-		3.00E-04	I	-	3.13E-02	3.13E-02 nc
Phosmet	732-11-6	No	No	Organics	-		-		-	-	
Phosphine	7803-51-2	No	Yes	Inorganics	-		3.00E-04	I	-	3.13E-02	3.13E-02 nc
Phosphoric Acid	7664-38-2	No	No	Inorganics	-		1.00E-02	I	-	1.04E+00	1.04E+00 nc
Phosphoric acid, aluminum salt (1:1) [aluminum phosphate]	7784-30-7	No	No	Inorganics	-		-		-	-	
Phosphoric acid, aluminum sodium salt (1:X:X) [sodium aluminum phosphate acidic (acidic SALP)]	7785-88-8	No	No	Inorganics	-		-		-	-	
Phosphorus, White	7723-14-0	No	Yes	Inorganics	-		-		-	-	
Phthalic Acid, p-	100-21-0	No	No	Organics	-		-		-	-	
Phthalic Anhydride	85-44-9	No	No	Organics	-		2.00E-02	C	-	2.09E+00	2.09E+00 nc
Picloram	1918-02-1	No	No	Organics	-		-		-	-	
Picramic Acid (2-Amino-4,6-dinitrophenol)	96-91-3	No	No	Organics	-		-		-	-	
Picric Acid (2,4,6-Trinitrophenol)	88-89-1	No	No	Organics	-		-		-	-	
Pirimiphos, Methyl	29232-93-7	No	No	Organics	-		-		-	-	
Polybrominated Biphenyls	36355-01-8	No	No	Organics	8.60E-03	C	-		3.26E-04	-	3.26E-04 ca
Polychlorinated Biphenyls (high risk)	1336-36-3	No	Yes	Organics	5.71E-04	I	-		4.91E-03	-	4.91E-03 ca
Polychlorinated Biphenyls (low risk)	1336-36-3	No	Yes	Organics	1.00E-04	I	-		2.81E-02	-	2.81E-02 ca
Polychlorinated Biphenyls (lowest risk)	1336-36-3	No	Yes	Organics	2.00E-05	I	-		1.40E-01	-	1.40E-01 ca
Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	No	No	Organics	-		6.00E-04	I	-	6.26E-02	6.26E-02 nc
Polyphosphoric acid	8017-16-1	No	No	Inorganics	-		-		-	-	
Potassium Cyanide	151-50-8	No	No	Inorganics	-		9.00E-03	C	-	9.39E-01	9.39E-01 nc
Potassium Perchlorate	7778-74-7	No	No	Inorganics	-		-		-	-	
Potassium Silver Cyanide	506-61-6	No	No	Inorganics	-		-		-	-	
Potassium heptafluorobutanoate	2966-54-3	No	Yes	Organics	-		-		-	-	
Potassium perfluorobutanesulfonate	29420-49-3	No	No	Organics	-		-		-	-	
Potassium perfluorooctanesulfonate	2795-39-3	No	No	Organics	-		-		-	-	
Potassium salts of inorganic phosphates	NA	No	No	Inorganics	-		-		-	-	
Potassium tripolyphosphate	13845-36-8	No	No	Inorganics	-		-		-	-	
Prochloraz	67747-09-5	No	No	Organics	-		-		-	-	
Profluralin	26399-36-0	No	Yes	Organics	-		-		-	-	
Prometon	1610-18-0	No	No	Organics	-		-		-	-	
Prometryn	7287-19-6	No	No	Organics	-		-		-	-	
Pronamide	23950-58-5	No	No	Organics	-		-		-	-	

Propachlor	1918-16-7	No	No	Organics	-		-		-	-	
Propanil	709-98-8	No	No	Organics	-		-		-	-	
Propargite	2312-35-8	No	No	Organics	-		-		-	-	
Propargyl Alcohol	107-19-7	No	Yes	Organics	-		-		-	-	
Propazine	139-40-2	No	No	Organics	-		-		-	-	
Propham	122-42-9	No	No	Organics	-		-		-	-	
Propiconazole	60207-90-1	No	No	Organics	-		-		-	-	
Propionaldehyde	123-38-6	No	Yes	Organics	-		8.00E-03	I	-	8.34E-01	8.34E-01 nc
Propyl benzene	103-65-1	No	Yes	Organics	-		1.00E+00	X	-	1.04E+02	1.04E+02 nc
Propylene	115-07-1	No	Yes	Organics	-		3.00E+00	C	-	3.13E+02	3.13E+02 nc
Propylene Glycol	57-55-6	No	No	Organics	-		-		-	-	
Propylene Glycol Dinitrate	6423-43-4	No	No	Organics	-		2.72E-04	A	-	2.83E-02	2.83E-02 nc
Propylene Glycol Monomethyl Ether	107-98-2	No	Yes	Organics	-		2.00E+00	I	-	2.09E+02	2.09E+02 nc
Propylene Oxide	75-56-9	No	Yes	Organics	3.70E-06	I	3.00E-02	I	7.59E-01	3.13E+00	7.59E-01 ca**
Pyrene	129-00-0	No	Yes	Organics	-		-		-	-	
Pyridine	110-86-1	No	Yes	Organics	-		-		-	-	
Quinalphos	13593-03-8	No	No	Organics	-		-		-	-	
Quinoline	91-22-5	No	No	Organics	-		-		-	-	
Quizalofop-ethyl	76578-14-8	No	No	Organics	-		-		-	-	
Refractory Ceramic Fibers (units in fibers)	NA	No	No	Inorganics	-		3.00E+04	A	-	3.13E+03	3.13E+03 nc
Resmethrin	10453-86-8	No	No	Organics	-		-		-	-	
Ronnel	299-84-3	No	Yes	Organics	-		-		-	-	
Rotenone	83-79-4	No	No	Organics	-		-		-	-	
Safrole	94-59-7	Yes	No	Organics	6.30E-05	C	-		1.61E-02	-	1.61E-02 ca
Selenious Acid	7783-00-8	No	No	Inorganics	-		-		-	-	
Selenium	7782-49-2	No	No	Inorganics	-		2.00E-02	C	-	2.09E+00	2.09E+00 nc
Selenium Sulfide	7446-34-6	No	No	Inorganics	-		2.00E-02	C	-	2.09E+00	2.09E+00 nc
Sethoxydim	74051-80-2	No	No	Organics	-		-		-	-	
Silica (crystalline, respirable)	7631-86-9	No	No	Inorganics	-		3.00E-03	C	-	3.13E-01	3.13E-01 nc
Silver	7440-22-4	No	No	Inorganics	-		-		-	-	
Silver Cyanide	506-64-9	No	No	Inorganics	-		-		-	-	
Simazine	122-34-9	No	No	Organics	-		-		-	-	
Sodium Acifluorfen	62476-59-9	No	No	Organics	-		-		-	-	
Sodium Azide	26628-22-8	No	No	Inorganics	-		-		-	-	
Sodium Cyanide	143-33-9	No	No	Inorganics	-		9.00E-03	C	-	9.39E-01	9.39E-01 nc
Sodium Diethyldithiocarbamate	148-18-5	No	No	Organics	-		-		-	-	
Sodium Fluoride	7681-49-4	No	No	Inorganics	-		1.40E-02	C	-	1.46E+00	1.46E+00 nc
Sodium Fluoroacetate	62-74-8	No	No	Organics	-		-		-	-	
Sodium Metavanadate	13718-26-8	No	No	Inorganics	-		-		-	-	
Sodium Perchlorate	7601-89-0	No	No	Inorganics	-		-		-	-	
Sodium Tungstate	13472-45-2	No	No	Inorganics	-		-		-	-	

Sodium aluminum phosphate (anhydrous)	10279-59-1	No	No	Inorganics	-		-		-	-	
Sodium aluminum phosphate (tetrahydrate)	10305-76-7	No	No	Inorganics	-		-		-	-	
Sodium hexametaphosphate	10124-56-8	No	No	Inorganics	-		-		-	-	
Sodium perfluorobutanoate	2218-54-4	No	Yes	Organics	-		-		-	-	
Sodium perfluorohexanoate	2923-26-4	No	No	Organics	-		-		-	-	
Sodium polyphosphate	68915-31-1	No	No	Inorganics	-		-		-	-	
Sodium pyrophosphate	7758-16-9	No	No	Inorganics	-		-		-	-	
Sodium salts of inorganic phosphates	NA	No	No	Inorganics	-		-		-	-	
Sodium trimetaphosphate	7785-84-4	No	No	Inorganics	-		-		-	-	
Sodium tripolyphosphate	7758-29-4	No	No	Inorganics	-		-		-	-	
Stirofos (Tetrachlorovinphos)	961-11-5	No	No	Organics	-		-		-	-	
Strontium, Stable	7440-24-6	No	No	Inorganics	-		-		-	-	
Strychnine	57-24-9	No	No	Organics	-		-		-	-	
Styrene	100-42-5	No	Yes	Organics	-		1.00E+00	I	-	1.04E+02	1.04E+02 nc
Styrene-Acrylonitrile (SAN) Trimer (THNA isomer)	57964-39-3	No	No	Organics	-		-		-	-	
Styrene-Acrylonitrile (SAN) Trimer (THNP isomer)	57964-40-6	No	No	Organics	-		-		-	-	
Sulfolane	126-33-0	No	No	Organics	-		2.00E-03	X	-	2.09E-01	2.09E-01 nc
Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9	No	No	Organics	-		-		-	-	
Sulfur Trioxide	7446-11-9	No	Yes	Inorganics	-		1.00E-03	C	-	1.04E-01	1.04E-01 nc
Sulfuric Acid	7664-93-9	No	No	Inorganics	-		1.00E-03	C	-	1.04E-01	1.04E-01 nc
Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	No	No	Organics	7.10E-06	I	-		3.95E-01	-	3.95E-01 ca
TCDD, 2,3,7,8-	1746-01-6	No	Yes	Organics	3.80E+01	C	4.00E-08	C	7.39E-08	4.17E-06	7.39E-08 ca*
TCDF, 2,3,7,8-	51207-31-9	No	Yes	Organics	3.80E+00	W	4.00E-07	W	7.39E-07	4.17E-05	7.39E-07 ca*
Tebuthiuron	34014-18-1	No	No	Organics	-		-		-	-	
Temephos	3383-96-8	No	No	Organics	-		-		-	-	
Terbacil	5902-51-2	No	No	Organics	-		-		-	-	
Terbufos	13071-79-9	No	Yes	Organics	-		-		-	-	
Terbutryn	886-50-0	No	No	Organics	-		-		-	-	
Tert-Butyl Acetate	540-88-5	No	Yes	Organics	1.30E-06	C	-		2.16E+00	-	2.16E+00 ca
Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	5436-43-1	No	No	Organics	-		-		-	-	
Tetrachlorobenzene, 1,2,4,5-	95-94-3	No	Yes	Organics	-		-		-	-	
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	No	No	Organics	3.80E-03	W	4.00E-04	W	7.39E-04	4.17E-02	7.39E-04 ca*
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	No	Yes	Organics	1.14E-02	W	1.33E-04	W	2.46E-04	1.39E-02	2.46E-04 ca*
Tetrachloroethane, 1,1,1,2-	630-20-6	No	Yes	Organics	7.40E-06	I	-		3.79E-01	-	3.79E-01 ca
Tetrachloroethane, 1,1,2,2-	79-34-5	No	Yes	Organics	5.80E-05	C	-		4.84E-02	-	4.84E-02 ca
Tetrachloroethylene	127-18-4	No	Yes	Organics	2.60E-07	I	4.00E-02	I	1.08E+01	4.17E+00	4.17E+00 nc
Tetrachlorophenol, 2,3,4,6-	58-90-2	No	No	Organics	-		-		-	-	
Tetrachlorotoluene, p- alpha, alpha, alpha-	5216-25-1	No	Yes	Organics	-		-		-	-	
Tetraethyl Dithiopyrophosphate	3689-24-5	No	No	Organics	-		-		-	-	
Tetraethyl Lead	78-00-2	No	Yes	Organics	-		-		-	-	

Tetrafluoroethane, 1,1,1,2-	811-97-2	No	Yes	Organics	-		8.00E+01	I	-	8.34E+03	8.34E+03 nc
Tetrahydrofuran	109-99-9	No	Yes	Organics	-		2.00E+00	I	-	2.09E+02	2.09E+02 nc
Tetramethylphosphoramide, -N,N,N',N" (TMPA)	16853-36-4	No	No	Organics	-		-		-	-	
Tetrapotassium phosphate	7320-34-5	No	No	Inorganics	-		-		-	-	
Tetrasodium pyrophosphate	7722-88-5	No	No	Inorganics	-		-		-	-	
Tetryl (Trinitrophenylmethylnitramine)	479-45-8	No	No	Organics	-		-		-	-	
Thallic Oxide	1314-32-5	No	No	Inorganics	-		-		-	-	
Thallium (I) Nitrate	10102-45-1	No	No	Inorganics	-		-		-	-	
Thallium (Soluble Salts)	7440-28-0	No	No	Inorganics	-		-		-	-	
Thallium Acetate	563-68-8	No	Yes	Organics	-		-		-	-	
Thallium Carbonate	6533-73-9	No	No	Inorganics	-		-		-	-	
Thallium Chloride	7791-12-0	No	No	Inorganics	-		-		-	-	
Thallium Selenite	12039-52-0	No	No	Inorganics	-		-		-	-	
Thallium Sulfate	7446-18-6	No	No	Inorganics	-		-		-	-	
Thifensulfuron-methyl	79277-27-3	No	No	Organics	-		-		-	-	
Thiobencarb	28249-77-6	No	No	Organics	-		-		-	-	
Thiocyanates	NA	No	No	Inorganics	-		-		-	-	
Thiocyanic Acid	463-56-9	No	Yes	Inorganics	-		-		-	-	
Thiocyanic acid, (2-benzothiazolylthio)methyl ester (TCMTB)	21564-17-0	No	No	Organics	-		-		-	-	
Thiodiglycol	111-48-8	No	No	Organics	-		-		-	-	
Thiofanox	39196-18-4	No	No	Organics	-		-		-	-	
Thiophanate, Methyl	23564-05-8	No	No	Organics	-		-		-	-	
Thiram	137-26-8	No	No	Organics	-		-		-	-	
Tin	7440-31-5	No	No	Inorganics	-		-		-	-	
Titanium Tetrachloride	7550-45-0	No	Yes	Inorganics	-		1.00E-04	A	-	1.04E-02	1.04E-02 nc
Toluene	108-88-3	No	Yes	Organics	-		5.00E+00	I	-	5.21E+02	5.21E+02 nc
Toluene-2,4-diisocyanate	584-84-9	No	Yes	Organics	1.10E-05	C	8.00E-06	C	2.55E-01	8.34E-04	8.34E-04 nc
Toluene-2,6-diisocyanate	91-08-7	No	Yes	Organics	1.10E-05	C	8.00E-06	C	2.55E-01	8.34E-04	8.34E-04 nc
Toluenediamine, 2,3-	2687-25-4	No	No	Organics	-		-		-	-	
Toluenediamine, 2,5-	95-70-5	No	No	Organics	-		-		-	-	
Toluenediamine, 3,4-	496-72-0	No	No	Organics	-		-		-	-	
Toluic Acid, p-	99-94-5	No	No	Organics	-		-		-	-	
Toluidine, o- (Methylaniline, 2-)	95-53-4	No	No	Organics	5.10E-05	C	-		5.51E-02	-	5.51E-02 ca
Toluidine, p-	106-49-0	No	No	Organics	-		-		-	-	
Total Petroleum Hydrocarbons (Aliphatic High)	NA	No	Yes	Organics	-		-		-	-	
Total Petroleum Hydrocarbons (Aliphatic Low)	NA	No	Yes	Organics	-		4.00E-01	P	-	4.17E+01	4.17E+01 nc
Total Petroleum Hydrocarbons (Aliphatic Medium)	NA	No	Yes	Organics	-		1.00E-01	P	-	1.04E+01	1.04E+01 nc
Total Petroleum Hydrocarbons (Aromatic High)	NA	Yes	No	Organics	-		2.00E-06	P	-	2.09E-04	2.09E-04 nc
Total Petroleum Hydrocarbons (Aromatic Medium)	NA	No	Yes	Organics	-		6.00E-02	P	-	6.26E+00	6.26E+00 nc
Toxaphene	8001-35-2	No	No	Organics	3.20E-04	I	-		8.77E-03	-	8.77E-03 ca
Toxaphene, Weathered	NA	No	No	Organics	-		-		-	-	
Tralomethrin	66841-25-6	No	No	Organics	-		-		-	-	
Tri-n-butyltin	688-73-3	No	Yes	Organics	-		-		-	-	

Triacetin	102-76-1	No	No	Organics	-		-		-	-	
Triadimefon	43121-43-3	No	No	Organics	-		-		-	-	
Triallate	2303-17-5	No	Yes	Organics	-		-		-	-	
Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate)	15136-87-5	No	No	Inorganics	-		-		-	-	
Triasulfuron	82097-50-5	No	No	Organics	-		-		-	-	
Tribenuron-methyl	101200-48-0	No	No	Organics	-		-		-	-	
Tribromobenzene, 1,2,4-	615-54-3	No	Yes	Organics	-		-		-	-	
Tribromophenol, 2,4,6-	118-79-6	No	No	Organics	-		-		-	-	
Tribufos	78-48-8	No	No	Organics	-		-		-	-	
Tributyl Phosphate	126-73-8	No	No	Organics	-		-		-	-	
Tributyltin Compounds	NA	No	No	Organics	-		-		-	-	
Tributyltin Oxide	56-35-9	No	No	Organics	-		-		-	-	
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	No	Yes	Organics	-		5.00E+00	P	-	5.21E+02	5.21E+02 nc
Trichloroacetic Acid	76-03-9	No	No	Organics	-		-		-	-	
Trichloroaniline HCl, 2,4,6-	33663-50-2	No	No	Organics	-		-		-	-	
Trichloroaniline, 2,4,6-	634-93-5	No	No	Organics	-		-		-	-	
Trichlorobenzene, 1,2,3-	87-61-6	No	Yes	Organics	-		-		-	-	
Trichlorobenzene, 1,2,4-	120-82-1	No	Yes	Organics	-		2.00E-03	P	-	2.09E-01	2.09E-01 nc
Trichloroethane, 1,1,1-	71-55-6	No	Yes	Organics	-		5.00E+00	I	-	5.21E+02	5.21E+02 nc
Trichloroethane, 1,1,2-	79-00-5	No	Yes	Organics	1.60E-05	I	2.00E-04	X	1.75E-01	2.09E-02	2.09E-02 nc
Trichloroethylene	79-01-6	Yes	Yes	Organics	4.10E-06	I	2.00E-03	I	4.78E-01	2.09E-01	2.09E-01 nc
Trichlorofluoromethane	75-69-4	No	Yes	Organics	-		-		-	-	
Trichlorophenol, 2,4,5-	95-95-4	No	No	Organics	-		-		-	-	
Trichlorophenol, 2,4,6-	88-06-2	No	No	Organics	3.10E-06	I	-		9.06E-01	-	9.06E-01 ca
Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	No	No	Organics	-		-		-	-	
Trichlorophenoxypropionic acid, -2,4,5	93-72-1	No	No	Organics	-		-		-	-	
Trichloropropane, 1,1,2-	598-77-6	No	Yes	Organics	-		-		-	-	
Trichloropropane, 1,2,3-	96-18-4	Yes	Yes	Organics	-		3.00E-04	I	-	3.13E-02	3.13E-02 nc
Trichloropropene, 1,2,3-	96-19-5	No	Yes	Organics	-		3.00E-04	P	-	3.13E-02	3.13E-02 nc
Tricresyl Phosphate (TCP)	1330-78-5	No	No	Organics	-		-		-	-	
Tridiphane	58138-08-2	No	No	Organics	-		-		-	-	
Triethylamine	121-44-8	No	Yes	Organics	-		7.00E-03	I	-	7.30E-01	7.30E-01 nc
Triethylene Glycol	112-27-6	No	No	Organics	-		-		-	-	
Trifluoroethane, 1,1,1-	420-46-2	No	Yes	Organics	-		2.00E+01	P	-	2.09E+03	2.09E+03 nc
Trifluralin	1582-09-8	No	Yes	Organics	-		-		-	-	
Trimethyl Phosphate	512-56-1	No	No	Organics	-		-		-	-	
Trimethylbenzene, 1,2,3-	526-73-8	No	Yes	Organics	-		6.00E-02	I	-	6.26E+00	6.26E+00 nc
Trimethylbenzene, 1,2,4-	95-63-6	No	Yes	Organics	-		6.00E-02	I	-	6.26E+00	6.26E+00 nc
Trimethylbenzene, 1,3,5-	108-67-8	No	Yes	Organics	-		6.00E-02	I	-	6.26E+00	6.26E+00 nc
Trimethylpentene, 2,4,4-	25167-70-8	No	Yes	Organics	-		-		-	-	
Trinitrobenzene, 1,3,5-	99-35-4	No	No	Organics	-		-		-	-	
Trinitrotoluene, 2,4,6-	118-96-7	No	No	Organics	-		-		-	-	

Triphenylphosphine Oxide	791-28-6	No	No	Organics	-		-		-	-	
Triphosphoric acid, aluminum salt (1:1) [aluminum triphosphate]	13939-25-8	No	No	Inorganics	-		-		-	-	
Tripotassium phosphate	7778-53-2	No	No	Inorganics	-		-		-	-	
Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8	No	No	Organics	-		-		-	-	
Tris(1-chloro-2-propyl)phosphate	13674-84-5	No	No	Organics	-		-		-	-	
Tris(2,3-dibromopropyl)phosphate	126-72-7	No	Yes	Organics	6.60E-04	C	-		4.25E-03	-	4.25E-03 ca
Tris(2-chloroethyl)phosphate	115-96-8	No	No	Organics	-		-		-	-	
Tris(2-ethylhexyl)phosphate	78-42-2	No	No	Organics	-		-		-	-	
Trisodium phosphate	7601-54-9	No	No	Inorganics	-		-		-	-	
Tungsten	7440-33-7	No	No	Inorganics	-		-		-	-	
Uranium	7440-61-1	No	No	Inorganics	-		4.00E-05	A	-	4.17E-03	4.17E-03 nc
Urethane	51-79-6	Yes	No	Organics	2.90E-04	C	-		3.50E-03	-	3.50E-03 ca
Vanadium Pentoxide	1314-62-1	No	No	Inorganics	8.30E-03	P	7.00E-06	P	3.38E-04	7.30E-04	3.38E-04 ca**
Vanadium and Compounds	7440-62-2	No	No	Inorganics	-		1.00E-04	A	-	1.04E-02	1.04E-02 nc
Vernolate	1929-77-7	No	Yes	Organics	-		-		-	-	
Vinclozolin	50471-44-8	No	No	Organics	-		-		-	-	
Vinyl Acetate	108-05-4	No	Yes	Organics	-		2.00E-01	I	-	2.09E+01	2.09E+01 nc
Vinyl Bromide	593-60-2	No	Yes	Organics	1.50E-05	P	3.00E-03	I	1.87E-01	3.13E-01	1.87E-01 ca**
Vinyl Chloride	75-01-4	Yes	Yes	Organics	4.40E-06	I	1.00E-01	I	1.68E-01	1.04E+01	1.68E-01 ca*
Warfarin	81-81-2	No	No	Organics	-		-		-	-	
Xylene, m-	108-38-3	No	Yes	Organics	-		1.00E-01	G	-	1.04E+01	1.04E+01 nc
Xylene, o-	95-47-6	No	Yes	Organics	-		1.00E-01	G	-	1.04E+01	1.04E+01 nc
Xylene, p-	106-42-3	No	Yes	Organics	-		1.00E-01	G	-	1.04E+01	1.04E+01 nc
Xylenes	1330-20-7	No	Yes	Organics	-		1.00E-01	I	-	1.04E+01	1.04E+01 nc
Zinc Cyanide	557-21-1	No	No	Inorganics	-		-		-	-	
Zinc Phosphide	1314-84-7	No	No	Inorganics	-		-		-	-	
Zinc and Compounds	7440-66-6	No	No	Inorganics	-		-		-	-	
Zineb	12122-67-7	No	No	Organics	-		-		-	-	
Zirconium	7440-67-7	No	No	Inorganics	-		-		-	-	

Attachment 7

Laboratory Analytical Reports

ANALYTICAL REPORT

March 26, 2024

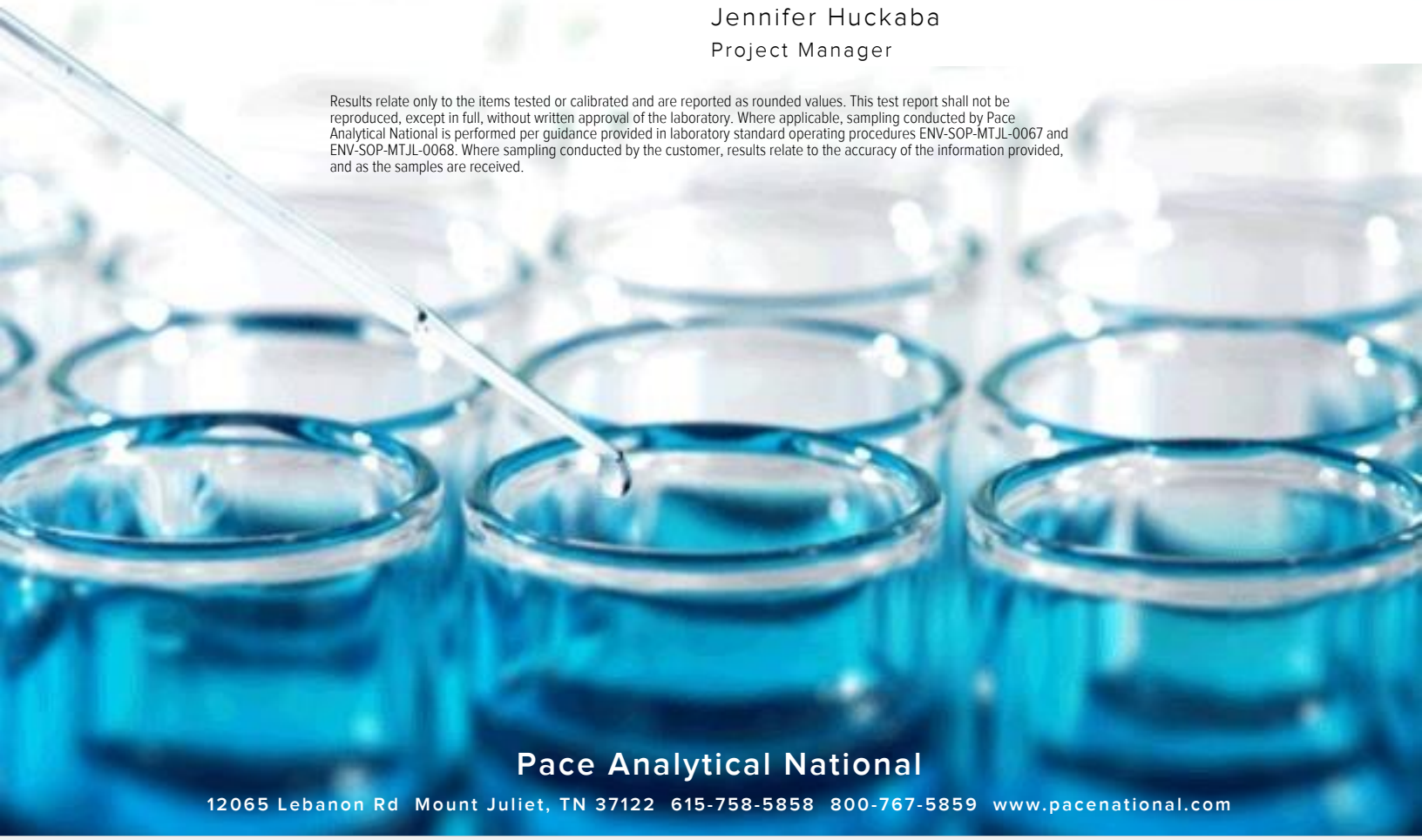
Dominion Due Diligence Group

Sample Delivery Group:	L1716187
Samples Received:	03/16/2024
Project Number:	2024-000564
Description:	Arrington Manor
Site:	COLUMBIA, SC
Report To:	Mr. Ian Court 201 Wylderose Dr Midlothian, VA 23113

Entire Report Reviewed By:

Jennifer Huckaba

Project Manager



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

SB-1 L1716187-01 Solid

Collected by: Ian Court | Collected date/time: 03/15/24 12:24 | Received date/time: 03/16/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2249731	1	03/20/24 10:09	03/20/24 10:15	CMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2252699	1	03/15/24 12:24	03/24/24 02:29	JHH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2250876	1	03/21/24 07:44	03/21/24 23:31	JRM	Mt. Juliet, TN

SB-2 L1716187-02 Solid

Collected by: Ian Court | Collected date/time: 03/15/24 12:47 | Received date/time: 03/16/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2249731	1	03/20/24 10:09	03/20/24 10:15	CMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2252699	1	03/15/24 12:47	03/23/24 20:36	JHH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2250876	1	03/21/24 07:44	03/21/24 23:48	JRM	Mt. Juliet, TN

SB-3 L1716187-03 Solid

Collected by: Ian Court | Collected date/time: 03/15/24 11:59 | Received date/time: 03/16/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2249731	1	03/20/24 10:09	03/20/24 10:15	CMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2252702	1	03/15/24 11:59	03/24/24 07:42	JHH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2250876	1	03/21/24 07:44	03/22/24 00:05	JRM	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jennifer Huckaba
Project Manager

Project Narrative

The project number was revised per client request to 2024-000564. Also, per the client LTO, a custom 8260 list is being reported rather than the full list (BTEX, NAP, MTBE, 1,2-DCA, EDB).

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.6		1	03/20/2024 10:15	WG2249731

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000674	0.00144	1	03/24/2024 02:29	WG2252699
Toluene	U	C3	0.00188	0.00722	1	03/24/2024 02:29	WG2252699
Ethylbenzene	U		0.00106	0.00361	1	03/24/2024 02:29	WG2252699
Xylenes, Total	U		0.00127	0.00938	1	03/24/2024 02:29	WG2252699
Naphthalene	U		0.00705	0.0180	1	03/24/2024 02:29	WG2252699
Methyl tert-butyl ether	U		0.000505	0.00144	1	03/24/2024 02:29	WG2252699
1,2-Dichloroethane	U		0.000937	0.00361	1	03/24/2024 02:29	WG2252699
1,2-Dibromoethane	U		0.000936	0.00361	1	03/24/2024 02:29	WG2252699
(S) Toluene-d8	*107*			*75.0-131*		*03/24/2024 02:29*	WG2252699
(S) 4-Bromofluorobenzene	*99.2*			*67.0-138*		*03/24/2024 02:29*	WG2252699
(S) 1,2-Dichloroethane-d4	*87.9*			*70.0-130*		*03/24/2024 02:29*	WG2252699

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	U		0.00272	0.00709	1	03/21/2024 23:31	WG2250876
Acenaphthene	U		0.00247	0.00709	1	03/21/2024 23:31	WG2250876
Acenaphthylene	U		0.00255	0.00709	1	03/21/2024 23:31	WG2250876
Benzo(a)anthracene	U		0.00205	0.00709	1	03/21/2024 23:31	WG2250876
Benzo(a)pyrene	U		0.00212	0.00709	1	03/21/2024 23:31	WG2250876
Benzo(b)fluoranthene	U		0.00181	0.00709	1	03/21/2024 23:31	WG2250876
Benzo(g,h,i)perylene	U		0.00209	0.00709	1	03/21/2024 23:31	WG2250876
Benzo(k)fluoranthene	U		0.00254	0.00709	1	03/21/2024 23:31	WG2250876
Chrysene	U		0.00274	0.00709	1	03/21/2024 23:31	WG2250876
Dibenz(a,h)anthracene	U		0.00203	0.00709	1	03/21/2024 23:31	WG2250876
Fluoranthene	U		0.00268	0.00709	1	03/21/2024 23:31	WG2250876
Fluorene	U		0.00242	0.00709	1	03/21/2024 23:31	WG2250876
Indeno(1,2,3-cd)pyrene	U		0.00214	0.00709	1	03/21/2024 23:31	WG2250876
Naphthalene	U		0.00482	0.0236	1	03/21/2024 23:31	WG2250876
Phenanthrene	U		0.00273	0.00709	1	03/21/2024 23:31	WG2250876
Pyrene	U		0.00236	0.00709	1	03/21/2024 23:31	WG2250876
1-Methylnaphthalene	U		0.00531	0.0236	1	03/21/2024 23:31	WG2250876
2-Methylnaphthalene	U		0.00505	0.0236	1	03/21/2024 23:31	WG2250876
2-Chloronaphthalene	U		0.00551	0.0236	1	03/21/2024 23:31	WG2250876
(S) Nitrobenzene-d5	*79.0*			*14.0-149*		*03/21/2024 23:31*	WG2250876
(S) 2-Fluorobiphenyl	*72.6*			*34.0-125*		*03/21/2024 23:31*	WG2250876
(S) p-Terphenyl-d14	*63.2*			*23.0-120*		*03/21/2024 23:31*	WG2250876

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.8		1	03/20/2024 10:15	WG2249731

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000717	0.00154	1	03/23/2024 20:36	WG2252699
Toluene	U	C3	0.00200	0.00768	1	03/23/2024 20:36	WG2252699
Ethylbenzene	U		0.00113	0.00384	1	03/23/2024 20:36	WG2252699
Xylenes, Total	U		0.00135	0.00998	1	03/23/2024 20:36	WG2252699
Naphthalene	U		0.00749	0.0192	1	03/23/2024 20:36	WG2252699
Methyl tert-butyl ether	U		0.000537	0.00154	1	03/23/2024 20:36	WG2252699
1,2-Dichloroethane	U		0.000997	0.00384	1	03/23/2024 20:36	WG2252699
1,2-Dibromoethane	U		0.000995	0.00384	1	03/23/2024 20:36	WG2252699
(S) Toluene-d8	*112*			*75.0-131*		*03/23/2024 20:36*	WG2252699
(S) 4-Bromofluorobenzene	*97.7*			*67.0-138*		*03/23/2024 20:36*	WG2252699
(S) 1,2-Dichloroethane-d4	*93.3*			*70.0-130*		*03/23/2024 20:36*	WG2252699

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	U		0.00288	0.00752	1	03/21/2024 23:48	WG2250876
Acenaphthene	U		0.00262	0.00752	1	03/21/2024 23:48	WG2250876
Acenaphthylene	U		0.00271	0.00752	1	03/21/2024 23:48	WG2250876
Benzo(a)anthracene	U		0.00217	0.00752	1	03/21/2024 23:48	WG2250876
Benzo(a)pyrene	U		0.00224	0.00752	1	03/21/2024 23:48	WG2250876
Benzo(b)fluoranthene	U		0.00192	0.00752	1	03/21/2024 23:48	WG2250876
Benzo(g,h,i)perylene	U		0.00222	0.00752	1	03/21/2024 23:48	WG2250876
Benzo(k)fluoranthene	U		0.00269	0.00752	1	03/21/2024 23:48	WG2250876
Chrysene	U		0.00291	0.00752	1	03/21/2024 23:48	WG2250876
Dibenz(a,h)anthracene	U		0.00215	0.00752	1	03/21/2024 23:48	WG2250876
Fluoranthene	U		0.00284	0.00752	1	03/21/2024 23:48	WG2250876
Fluorene	U		0.00257	0.00752	1	03/21/2024 23:48	WG2250876
Indeno(1,2,3-cd)pyrene	U		0.00227	0.00752	1	03/21/2024 23:48	WG2250876
Naphthalene	U		0.00511	0.0251	1	03/21/2024 23:48	WG2250876
Phenanthrene	U		0.00289	0.00752	1	03/21/2024 23:48	WG2250876
Pyrene	U		0.00251	0.00752	1	03/21/2024 23:48	WG2250876
1-Methylnaphthalene	U		0.00562	0.0251	1	03/21/2024 23:48	WG2250876
2-Methylnaphthalene	U		0.00535	0.0251	1	03/21/2024 23:48	WG2250876
2-Chloronaphthalene	U		0.00584	0.0251	1	03/21/2024 23:48	WG2250876
(S) Nitrobenzene-d5	*79.8*			*14.0-149*		*03/21/2024 23:48*	WG2250876
(S) 2-Fluorobiphenyl	*78.3*			*34.0-125*		*03/21/2024 23:48*	WG2250876
(S) p-Terphenyl-d14	*70.9*			*23.0-120*		*03/21/2024 23:48*	WG2250876

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.5		1	03/20/2024 10:15	WG2249731

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000718	0.00154	1	03/24/2024 07:42	WG2252702
Toluene	U		0.00200	0.00769	1	03/24/2024 07:42	WG2252702
Ethylbenzene	U		0.00113	0.00384	1	03/24/2024 07:42	WG2252702
Xylenes, Total	U		0.00135	0.00999	1	03/24/2024 07:42	WG2252702
Naphthalene	U		0.00750	0.0192	1	03/24/2024 07:42	WG2252702
Methyl tert-butyl ether	U		0.000538	0.00154	1	03/24/2024 07:42	WG2252702
1,2-Dichloroethane	U		0.000998	0.00384	1	03/24/2024 07:42	WG2252702
1,2-Dibromoethane	U		0.000996	0.00384	1	03/24/2024 07:42	WG2252702
(S) Toluene-d8	*103*			*75.0-131*		*03/24/2024 07:42*	WG2252702
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*03/24/2024 07:42*	WG2252702
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*03/24/2024 07:42*	WG2252702

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	U		0.00286	0.00745	1	03/22/2024 00:05	WG2250876
Acenaphthene	U		0.00260	0.00745	1	03/22/2024 00:05	WG2250876
Acenaphthylene	U		0.00268	0.00745	1	03/22/2024 00:05	WG2250876
Benzo(a)anthracene	U		0.00215	0.00745	1	03/22/2024 00:05	WG2250876
Benzo(a)pyrene	U		0.00222	0.00745	1	03/22/2024 00:05	WG2250876
Benzo(b)fluoranthene	U		0.00190	0.00745	1	03/22/2024 00:05	WG2250876
Benzo(g,h,i)perylene	U		0.00220	0.00745	1	03/22/2024 00:05	WG2250876
Benzo(k)fluoranthene	U		0.00267	0.00745	1	03/22/2024 00:05	WG2250876
Chrysene	U		0.00288	0.00745	1	03/22/2024 00:05	WG2250876
Dibenz(a,h)anthracene	U		0.00214	0.00745	1	03/22/2024 00:05	WG2250876
Fluoranthene	U		0.00282	0.00745	1	03/22/2024 00:05	WG2250876
Fluorene	U		0.00255	0.00745	1	03/22/2024 00:05	WG2250876
Indeno(1,2,3-cd)pyrene	U		0.00225	0.00745	1	03/22/2024 00:05	WG2250876
Naphthalene	U		0.00507	0.0248	1	03/22/2024 00:05	WG2250876
Phenanthrene	U		0.00287	0.00745	1	03/22/2024 00:05	WG2250876
Pyrene	U		0.00248	0.00745	1	03/22/2024 00:05	WG2250876
1-Methylnaphthalene	U		0.00558	0.0248	1	03/22/2024 00:05	WG2250876
2-Methylnaphthalene	U		0.00530	0.0248	1	03/22/2024 00:05	WG2250876
2-Chloronaphthalene	U		0.00579	0.0248	1	03/22/2024 00:05	WG2250876
(S) Nitrobenzene-d5	*87.1*			*14.0-149*		*03/22/2024 00:05*	WG2250876
(S) 2-Fluorobiphenyl	*89.5*			*34.0-125*		*03/22/2024 00:05*	WG2250876
(S) p-Terphenyl-d14	*86.7*			*23.0-120*		*03/22/2024 00:05*	WG2250876

Method Blank (MB)

(MB) R4048143-1 03/20/24 10:15

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1716187-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1716187-01 03/20/24 10:15 • (DUP) R4048143-3 03/20/24 10:15

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.6	84.7	1	0.180		10

Laboratory Control Sample (LCS)

(LCS) R4048143-2 03/20/24 10:15

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	90.0-110	

Method Blank (MB)

(MB) R4049523-2 03/23/24 20:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Xylenes, Total	U		0.000880	0.00650
Naphthalene	U		0.00488	0.0125
Methyl tert-butyl ether	U		0.000350	0.00100
1,2-Dichloroethane	U		0.000649	0.00250
1,2-Dibromoethane	U		0.000648	0.00250
(S) Toluene-d8	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*91.9*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4049523-1 03/23/24 18:55 • (LCSD) R4049523-3 03/24/24 03:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.124	0.142	99.2	114	70.0-130			13.5	20
Toluene	0.125	0.104	0.116	83.2	92.8	70.0-130			10.9	20
Ethylbenzene	0.125	0.124	0.131	99.2	105	70.0-130			5.49	20
Xylenes, Total	0.375	0.348	0.381	92.8	102	70.0-130			9.05	20
Naphthalene	0.125	0.121	0.128	96.8	102	70.0-130			5.62	20
Methyl tert-butyl ether	0.125	0.151	0.134	121	107	70.0-130			11.9	20
1,2-Dichloroethane	0.125	0.117	0.109	93.6	87.2	70.0-130			7.08	20
1,2-Dibromoethane	0.125	0.113	0.117	90.4	93.6	70.0-130			3.48	20
(S) Toluene-d8				*92.3*	*95.7*	*75.0-131*				
(S) 4-Bromofluorobenzene				*104*	*106*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*102*	*108*	*70.0-130*				

Method Blank (MB)

(MB) R4049537-2 03/24/24 04:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Xylenes, Total	0.00247	J	0.000880	0.00650
Naphthalene	U		0.00488	0.0125
Methyl tert-butyl ether	U		0.000350	0.00100
1,2-Dichloroethane	U		0.000649	0.00250
1,2-Dibromoethane	U		0.000648	0.00250
(S) Toluene-d8	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*94.4*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R4049537-1 03/24/24 03:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.137	110	70.0-130	
Toluene	0.125	0.117	93.6	70.0-130	
Ethylbenzene	0.125	0.132	106	70.0-130	
Xylenes, Total	0.375	0.380	101	70.0-130	
Naphthalene	0.125	0.125	100	70.0-130	
Methyl tert-butyl ether	0.125	0.140	112	70.0-130	
1,2-Dichloroethane	0.125	0.116	92.8	70.0-130	
1,2-Dibromoethane	0.125	0.116	92.8	70.0-130	
(S) Toluene-d8			*98.2*	*75.0-131*	
(S) 4-Bromofluorobenzene			*104*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*107*	*70.0-130*	

Method Blank (MB)

(MB) R4049029-2 03/21/24 18:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	*77.8*			*14.0-149*
(S) 2-Fluorobiphenyl	*89.4*			*34.0-125*
(S) p-Terphenyl-d14	*91.5*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R4049029-1 03/21/24 18:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0772	96.5	70.0-130	
Acenaphthene	0.0800	0.0735	91.9	70.0-130	
Acenaphthylene	0.0800	0.0816	102	70.0-130	
Benzo(a)anthracene	0.0800	0.0777	97.1	70.0-130	
Benzo(a)pyrene	0.0800	0.0595	74.4	70.0-130	
Benzo(b)fluoranthene	0.0800	0.0741	92.6	70.0-130	
Benzo(g,h,i)perylene	0.0800	0.0723	90.4	70.0-130	
Benzo(k)fluoranthene	0.0800	0.0690	86.3	70.0-130	
Chrysene	0.0800	0.0775	96.9	70.0-130	
Dibenz(a,h)anthracene	0.0800	0.0727	90.9	70.0-130	
Fluoranthene	0.0800	0.0807	101	70.0-130	

Laboratory Control Sample (LCS)

(LCS) R4049029-1 03/21/24 18:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0818	102	70.0-130	
Indeno(1,2,3-cd)pyrene	0.0800	0.0748	93.5	70.0-130	
Naphthalene	0.0800	0.0742	92.8	70.0-130	
Phenanthrene	0.0800	0.0772	96.5	70.0-130	
Pyrene	0.0800	0.0758	94.8	70.0-130	
1-Methylnaphthalene	0.0800	0.0807	101	70.0-130	
2-Methylnaphthalene	0.0800	0.0782	97.8	70.0-130	
2-Chloronaphthalene	0.0800	0.0778	97.3	70.0-130	
(S) Nitrobenzene-d5			*80.9*	*14.0-149*	
(S) 2-Fluorobiphenyl			*89.3*	*34.0-125*	
(S) p-Terphenyl-d14			*91.5*	*23.0-120*	

L1716059-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1716059-21 03/21/24 21:13 • (MS) R4049029-3 03/21/24 21:31 • (MSD) R4049029-4 03/21/24 21:48

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0788	U	0.0754	0.0704	95.7	89.3	1	26.5-141			6.86	25
Acenaphthene	0.0788	U	0.0708	0.0670	89.8	85.0	1	31.9-130			5.52	25
Acenaphthylene	0.0788	U	0.0761	0.0732	96.6	92.9	1	33.7-129			3.88	25
Benzo(a)anthracene	0.0788	U	0.0742	0.0709	94.2	90.0	1	18.3-136			4.55	25
Benzo(a)pyrene	0.0788	U	0.0694	0.0671	88.1	85.2	1	16.9-135			3.37	25
Benzo(b)fluoranthene	0.0788	U	0.0697	0.0670	88.5	85.0	1	10.0-134			3.95	25
Benzo(g,h,i)perylene	0.0788	U	0.0680	0.0647	86.3	82.1	1	14.1-140			4.97	25
Benzo(k)fluoranthene	0.0788	U	0.0671	0.0646	85.2	82.0	1	18.2-138			3.80	25
Chrysene	0.0788	U	0.0740	0.0711	93.9	90.2	1	17.1-145			4.00	25
Dibenz(a,h)anthracene	0.0788	U	0.0670	0.0643	85.0	81.6	1	18.5-138			4.11	25
Fluoranthene	0.0788	U	0.0781	0.0733	99.1	93.0	1	15.4-144			6.34	25
Fluorene	0.0788	0.00639	0.0824	0.0786	96.5	91.6	1	23.5-136			4.72	25
Indeno(1,2,3-cd)pyrene	0.0788	U	0.0688	0.0662	87.3	84.0	1	14.5-142			3.85	25
Naphthalene	0.0788	U	0.0737	0.0697	93.5	88.5	1	29.2-128			5.58	25
Phenanthrene	0.0788	0.0390	0.115	0.105	96.4	83.8	1	20.1-134			9.09	25
Pyrene	0.0788	0.00220	0.0744	0.0709	91.6	87.2	1	11.0-148			4.82	25
1-Methylnaphthalene	0.0788	0.0352	0.110	0.102	94.9	84.8	1	28.4-137			7.55	25
2-Methylnaphthalene	0.0788	0.0220	0.0948	0.0886	92.4	84.5	1	26.6-137			6.76	25
2-Chloronaphthalene	0.0788	U	0.0729	0.0696	92.5	88.3	1	38.6-126			4.63	25
(S) Nitrobenzene-d5					*82.1*	*80.6*		*14.0-149*				
(S) 2-Fluorobiphenyl					*87.0*	*83.7*		*34.0-125*				
(S) p-Terphenyl-d14					*90.3*	*85.0*		*23.0-120*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Dominion Due Diligence Group

201 Wylderose Dr
Midlothian, VA 23113

Billing Information:
Accounts Payable
201 Wylderose Dr
Midlothian, VA 23113

Report to:
Mr. Ian Court

Email To:
r.james@d3g.com;b.diehl@d3g.com;m.antal@d

Project Description:
Arrington Manor - Columbia, South Carolina

City/State Collected: Columbia, SC

Please Circle: PT MT CT (ET)

Phone: **703-340-5773**

Client Project #
2024-000563

Lab Project #
D3GVA-2024-000563

Collected by (print): Ian Court

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N___ Y___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day 7 day TAT

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8270PAHSIMDSC 100ml Amb NoPres	SV8270PAHSIMDSC, TS 4ozAmb-NoPres	V8260SC 40mlAmb HCl	V8260SC 40mlAmb/MeOH10ml/Syr							Remarks	Sample # (lab only)
SB-1	6	SS	5-7	5-15-24	12:24	3		X		X								-01
SB-2	6	SS	4-6	5-15-24	12:47	3		X		X								-02
SB-3	6	SS	4-6	5-15-24	11:54	3		X		X								-03
		SS				3		X		X								
SB-1 (GW)		GW				5	X		X									
SB-2 (GW)		GW				5	X		X									
SB-3 (GW)		GW				5	X		X									
TRIP BLANK		GW				1			X									
		GW				5	X		X									

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1716187
A216

Acctnum: **D3GVA**
Template:**T248505**
Prelogin: **P1062510**
PM: **3513 - Jennifer Huckaba**
PB: BF 3/12/24
Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: 7 day TAT

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier _____

Tracking # 7155 0321 3283

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: ✓Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR
	3-15-24	14:00		2
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				4.2A9 4.8+0=4.8
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			Zak Wells	3-16-24 9:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Jennifer Huckaba

From: Ian Court <i.court@d3g.com>
Sent: Thursday, March 21, 2024 9:17 AM
To: Jennifer Huckaba
Subject: Columbia SC Projects

Jennifer,

Can you please change the project name on SGDs L1716187 and L1716008 to Arrington Manor, and the project numbers to 2024-000564.

Thank you!

Ian Court
Phase II Staff Environmental Scientist
E: i.court@d3g.com
A: 201 Wylderose Drive
Midlothian, Va. 23113

People, Innovation, Passion, Excellence

ANALYTICAL REPORT

March 21, 2024

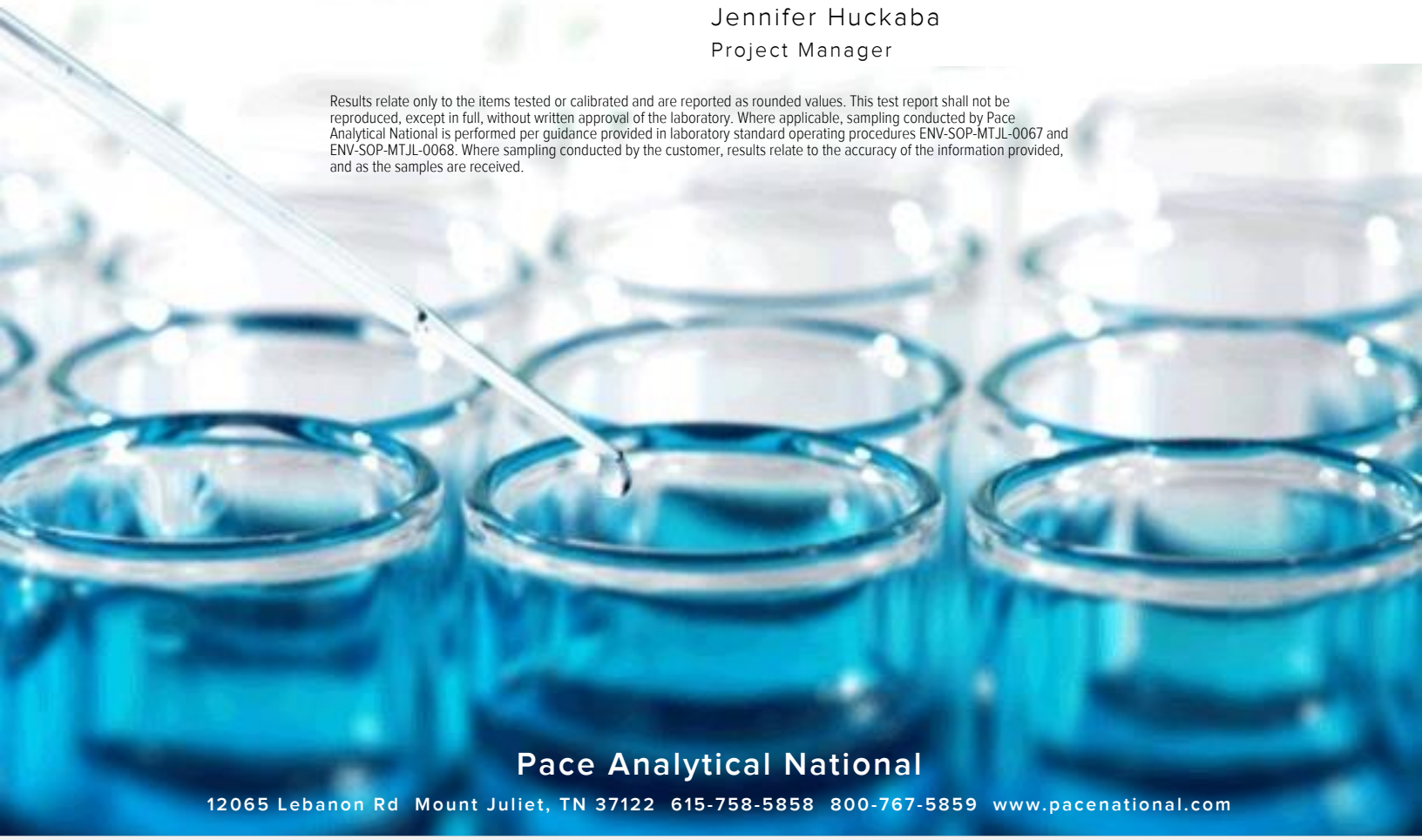
Dominion Due Diligence Group

Sample Delivery Group:	L1716008
Samples Received:	03/16/2024
Project Number:	2024-000564
Description:	Arrington Manor
Site:	COLUMBIA, SC
Report To:	Mr. Ian Court 201 Wylderose Dr Midlothian, VA 23113

Entire Report Reviewed By:

Jennifer Huckaba

Project Manager



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SG-1 L1716008-01 Air

Collected by: Ian Court | Collected date/time: 03/15/24 12:29 | Received date/time: 03/16/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2248344	1	03/17/24 17:33	03/17/24 17:33	MNP	Mt. Juliet, TN

SG-2 L1716008-02 Air

Collected by: Ian Court | Collected date/time: 03/15/24 12:51 | Received date/time: 03/16/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2248344	1	03/17/24 18:01	03/17/24 18:01	MNP	Mt. Juliet, TN

SG-3 L1716008-03 Air

Collected by: Ian Court | Collected date/time: 03/15/24 12:03 | Received date/time: 03/16/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2248344	1	03/17/24 18:30	03/17/24 18:30	MNP	Mt. Juliet, TN

OA-1 L1716008-04 Air

Collected by: Ian Court | Collected date/time: 03/15/24 11:33 | Received date/time: 03/16/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2248344	1	03/17/24 18:58	03/17/24 18:58	MNP	Mt. Juliet, TN

TRIP BLANK L1716008-05 Air

Collected by: Ian Court | Collected date/time: 03/15/24 00:00 | Received date/time: 03/16/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2248344	1	03/17/24 16:09	03/17/24 16:09	MNP	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jennifer Huckaba
Project Manager

Project Narrative

The project number for this SDG was changed by client request to 2024-000564. Also, reporting a custom short list according to the LTO for this project, rather than the full TO-15 list.

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.200	0.639	7.17	22.9		1	WG2248344
Toluene	108-88-3	92.10	0.500	1.88	22.5	84.8		1	WG2248344
Ethylbenzene	100-41-4	106	0.200	0.867	2.37	10.3		1	WG2248344
m&p-Xylene	179601-23-1	106	0.400	1.73	7.60	32.9		1	WG2248344
o-Xylene	95-47-6	106	0.200	0.867	3.32	14.4		1	WG2248344
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2248344
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2248344
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2248344
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2248344
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG2248344

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.200	0.639	16.2	51.7		1	WG2248344
Toluene	108-88-3	92.10	0.500	1.88	95.6	360		1	WG2248344
Ethylbenzene	100-41-4	106	0.200	0.867	5.48	23.8		1	WG2248344
m&p-Xylene	179601-23-1	106	0.400	1.73	14.6	63.3		1	WG2248344
o-Xylene	95-47-6	106	0.200	0.867	7.30	31.6		1	WG2248344
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2248344
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2248344
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2248344
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2248344
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG2248344

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.200	0.639	6.01	19.2		1	WG2248344
Toluene	108-88-3	92.10	0.500	1.88	64.3	242		1	WG2248344
Ethylbenzene	100-41-4	106	0.200	0.867	2.87	12.4		1	WG2248344
m&p-Xylene	179601-23-1	106	0.400	1.73	8.52	36.9		1	WG2248344
o-Xylene	95-47-6	106	0.200	0.867	3.55	15.4		1	WG2248344
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2248344
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2248344
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2248344
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2248344
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG2248344

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.200	0.639	0.271	0.866		1	WG2248344
Toluene	108-88-3	92.10	0.500	1.88	6.26	23.6		1	WG2248344
Ethylbenzene	100-41-4	106	0.200	0.867	0.204	0.884		1	WG2248344
m&p-Xylene	179601-23-1	106	0.400	1.73	0.575	2.49		1	WG2248344
o-Xylene	95-47-6	106	0.200	0.867	0.206	0.893		1	WG2248344
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2248344
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2248344
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2248344
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2248344
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.4*				WG2248344

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2248344
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2248344
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2248344
m&p-Xylene	179601-23-1	106	0.400	1.73	ND	ND		1	WG2248344
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2248344
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2248344
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2248344
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2248344
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2248344
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*91.7*				WG2248344

Method Blank (MB)

(MB) R4047419-3 03/17/24 09:54

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Benzene	U		0.0715	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichloroethane	U		0.0700	0.200
Ethylbenzene	U		0.0835	0.200
MTBE	U		0.0647	0.200
Naphthalene	0.554	J	0.350	0.630
Toluene	U		0.0870	0.500
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	*93.1*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4047419-1 03/17/24 08:58 • (LCSD) R4047419-2 03/17/24 09:27

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	3.75	4.04	3.74	108	99.7	70.0-130			7.71	25
1,2-Dibromoethane	3.75	4.19	3.89	112	104	70.0-130			7.43	25
1,2-Dichloroethane	3.75	3.90	3.67	104	97.9	70.0-130			6.08	25
Ethylbenzene	3.75	4.24	3.96	113	106	70.0-130			6.83	25
MTBE	3.75	4.31	4.04	115	108	70.0-130			6.47	25
Naphthalene	3.75	4.18	3.83	111	102	70.0-159			8.74	25
Toluene	3.75	4.18	3.88	111	103	70.0-130			7.44	25
m&p-Xylene	7.50	8.75	8.12	117	108	70.0-130			7.47	25
o-Xylene	3.75	4.43	4.14	118	110	70.0-130			6.77	25
(S) 1,4-Bromofluorobenzene				*98.6*	*97.4*	*60.0-140*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Pace® Location Requested (City/State):

Air CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR code for instructions

I165

Company Name: Dominion Due Diligence Group	Contact/Report To: Mr. Ron James
Street Address: 201 Wylderose Dr Midlothian, VA 23113	Phone #: 804-358-2020
City, State Zip:	E-Mail: r.james@d3g.com;b.diehl@d3g.com;m.antal@d3g.com;i.court@d3g.com
Customer Project #: 2024-000563	Cc E-Mail:
Project Name: Arrington Manor - Columbia, South Carolina	Invoice to: Ian Court
Site Collection Info/Facility ID (as applicable): D3GVA-2024-000563	Invoice E-Mail: I.court@d3g.com
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET	Purchase Order # (if applicable):
	Quote #:
	State origin of sample(s): SC

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (CAA, RCRA, etc.) as applicable:

Rush (Pre-approval required): 2 Day 3 day 5 day Other 7 day

Date Results Requested:

Permit # as applicable:

Units for Reporting: (ug/m³) PPBV mg/m³ PPMV

* Matrix Codes (Insert in Matrix box below): Ambient (A), Indoor (I), Soil Vapor (SV), Other (O)

Customer Sample ID	Matrix *	Summa Canister ID	Flow Controller ID	Begin Collection Date	Begin Collection Time	End Collection Date	End Collection Time	Canister Pressure / Vacuum: Start Pressure / Vacuum (in Hg)	Canister Pressure / Vacuum: End Pressure / Vacuum (in Hg)	PUF / FILTER: Duration (minutes)	PUF / FILTER: Flow Rate m³/min or L/min	PUF / FILTER: Total Volume Sampled m³ or L	Analyses Requested: TO-15 Summa	Lab Use Only	Sample Comment
SG-1	SV	9239	20553	3-15	12:23	3-15	12:29	-30	-3	6			✓		-01
SG-2	SV	20328	12571	3-15	12:41	3-15	12:51	-29	-5	10			✓		-02
SG-3	SV	28676	12827	3-15	11:26	3-15	12:00	-30	-3	7			✓		-03
QA-1	A	20243	11935	3-15	11:27	3-15	11:33	-24	0	6			✓		-04
Trip blank													✓		-05

Sample Receipt Checklist

COC Seal Present/Intact: [X] Y [ ] N
COC Signed/Accurate: [X] Y [ ] N
Bottles arrive intact: [X] Y [ ] N
Correct bottles used: [X] Y [ ] N

Airs Size: 5 1L ___ 6L ___ 1.4L
Tage Color: G__ [X] P__ B__
Tubing ___ Shunt ___

T/P#: ___

Customer Remarks / Special Conditions / Possible Hazards:

Collected By: d3G
Printed Name: Ian Court
Signature:

Additional Instructions from Pace®:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C):

Relinquished by/Company: (Signature) d3G	Date/Time: 3-15-24 14:00	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 3/16 09:30
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number:

Delivered by: In- Person Courier FedEX UPS Other

Page: ___ of: ___

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

VTC 3/12/24

Proj. Manager: 3513 - Jennifer Huckaba

AcctNum / Client ID: D3GVA

Table #:

Profile / Template: T248508

Prelog / Bottle Ord. ID: P1061088

L1716008

Jennifer Huckaba

From: Ian Court <i.court@d3g.com>
Sent: Thursday, March 21, 2024 9:17 AM
To: Jennifer Huckaba
Subject: Columbia SC Projects

Jennifer,

Can you please change the project name on SGDs L1716187 and L1716008 to Arrington Manor, and the project numbers to 2024-000564.

Thank you!

Ian Court
Phase II Staff Environmental Scientist
E: i.court@d3g.com
A: 201 Wylderose Drive
Midlothian, Va. 23113

People, Innovation, Passion, Excellence

ATTACHMENT 8

Soil Vapor Sampling Logs

Soil Vapor Sampling Field Log	
Project Name:	Arrington Manor
D3G Project Number:	2024-000564
Sample Installation Date:	3/15/2024
Sample Collection Date:	3/15/2024

Dominion Due Diligence Group (D3G)
201 Wylderose Drive
Midlothian, VA 23113
804.358.2020 (phone)
804.358.3003 (fax)

Soil Gas Sampling Point	Location of Installation			Total Depth (ft. bgs)	Exterior Observations (Fº)	Summa Canister Pressure (in/Hg)	ID Numbers	Sampling Time (24 hours)	Field Observations (Moisture Content, Weather Conditions, PID Reading, laboratory analysis)
SG-1	Location: Advanced approximately 35 feet north of the 2225 College Street residential structure	Longitude:	Latitude:	5'	Humidity*:	Barometric*:	Canister ID:	Date Started:	
					57%	29.74	9239	3/15/2024	
					Outside Temp:	Lab:		Time:	
					73	-29		1223	
					Setup Temp.	Field Setup:	Flow Meter ID:	Date Collected:	
					73	-30	20555	3/15/2024	
					Collection Temp.	Field Collection:		Time:	
					73	0		1229	PID Reading: 0.0; Winds SW @ 10mph; Mostly Cloudy
SG-2	Location: Advanced approximately 25 feet north of the 2225 College Street residential structure	Longitude:	Latitude:	5'	Humidity*:	Barometric*:	Canister ID:	Date Started:	
					73%	29.77	20328	3/15/2024	
					Outside Temp:	Lab:		Time:	
					69	-29		1241	
					Setup Temp.	Field Setup:	Flow Meter ID:	Date Collected:	
					69	-29	12571	3/15/2024	
					Collection Temp.	Field Collection:		Time:	
					69	-5		1251	PID Reading: 0.0; Winds W @ 12mph; Heavy T-Storm
SG-3	Location: Advanced approximately 26 feet west of the 2225 College Street residential structure	Longitude:	Latitude:	5'	Humidity*:	Barometric*:	Canister ID:	Date Started:	
					57%	29.74	28696	3/15/2024	
					Outside Temp:	Lab:		Time:	
					73	-29		1156	
					Setup Temp.	Field Setup:	Flow Meter ID:	Date Collected:	
					73	-30	12829	3/15/2024	
					Collection Temp.	Field Collection:		Time:	
					73	-3		1203	PID Reading: 0.6; Winds SW @ 10mph; Mostly Cloudy
OA-1	Location: OA-1 was placed approximately 33 feet east of the 2225 College Street residential structure.	Longitude:	Latitude:	N/A	Humidity*:	Barometric*:	Canister ID:	Date Started:	
					61%	29.76	20243	3/15/2024	
					Outside Temp:	Lab:		Time:	
					70	-28		1127	
					Setup Temp.	Field Setup:	Flow Meter ID:	Date Collected:	
					70	-29	11935	3/15/2024	
					Collection Temp.	Field Collection:		Time:	
					70	0		1133	PID Reading: 0.0; Winds WSW @ 13mph; Smoke

Drilled By/With: D3G/The Probing Company	Additional Observations:
Sampled By: Ian Court	

Attachment 9

USEPA VISL Calculator Results (SG-1 through SG-3)

Resident Air Inputs

Variable	Resident Air Default Value	Site-Specific Value
AF_{gw} (Attenuation Factor Groundwater) unitless	0.001	0.001
AF_{ss} (Attenuation Factor Sub-Slab) unitless	0.03	0.03
ED_{res} (exposure duration) years	26	26
ED_{0-2} (mutagenic exposure duration first phase) years	2	2
ED_{2-6} (mutagenic exposure duration second phase) years	4	4
ED_{6-16} (mutagenic exposure duration third phase) years	10	10
ED_{16-26} (mutagenic exposure duration fourth phase) years	10	10
EF_{res} (exposure frequency) days/year	350	350
EF_{0-2} (mutagenic exposure frequency first phase) days/year	350	350
EF_{2-6} (mutagenic exposure frequency second phase) days/year	350	350
EF_{6-16} (mutagenic exposure frequency third phase) days/year	350	350
EF_{16-26} (mutagenic exposure frequency fourth phase) days/year	350	350
ET_{res} (exposure time) hours/day	24	24
ET_{0-2} (mutagenic exposure time first phase) hours/day	24	24
ET_{2-6} (mutagenic exposure time second phase) hours/day	24	24
ET_{6-16} (mutagenic exposure time third phase) hours/day	24	24
ET_{16-26} (mutagenic exposure time fourth phase) hours/day	24	24
THQ (target hazard quotient) unitless	0.1	1
LT (lifetime) years	70	70
TR (target risk) unitless	1.0E-06	1.0E-06

Output generated 27MAR2024:17:27:51

Resident Vapor Intrusion Screening Levels (VISL)

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; U = user provided; G = see RSL User's Guide Section 5; CA = cancer; NC = noncancer.

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	Does the chemical have inhalation toxicity data? (IUR and/or RfC)	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Soil Source? ($C_{vp} > C_{i,a}$,Target?)	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source? ($C_{hc} > C_{i,a}$,Target?)	Target Indoor Air Concentration (TCR=1E-06 or THQ=1) MIN($C_{ia,c}$,$C_{ia,nc}$) ($\mu g/m^3$)	Toxicity Basis	Target Sub-Slab and Near-source Soil Gas Concentration (TCR=1E-06 or THQ=1) C_{sg},Target ($\mu g/m^3$)	Target Groundwater Concentration (TCR=1E-06 or THQ=1) C_{gw},Target ($\mu g/L$)	Is Target Groundwater Concentration < MCL? (C_{gw} < MCL?)
Benzene	71-43-2	Yes	Yes	Yes	Yes	3.60E-01	CA	1.20E+01	1.59E+00	Yes (5)

Pure Phase Vapor Concentration C_{vp}\ (25 °C)\ ($\mu g/m^3$)	Maximum Groundwater Vapor Concentration C_{hc}\ ($\mu g/m^3$)	Temperature for Maximum Groundwater Vapor Concentration (°C)	Lower Explosive Limit LEL (% by volume)	LEL Ref	IUR $(ug/m^3)^{-1}$	IUR Ref	RfC (mg/m^3)	RfC Ref	Mutagenic Indicator	Carcinogenic VISL TCR=1E-06 $C_{ia,c}$ ($\mu g/m^3$)	Noncarcinogenic VISL THQ=1 $C_{ia,nc}$ ($\mu g/m^3$)
3.98E+08	4.06E+08	25	1.20	CRC	7.80E-06	I	3.00E-02	I	No	3.60E-01	3.13E+01

Resident Vapor Intrusion Risk

Chemical	CAS Number	Site Sub-Slab and Exterior Soil Gas Concentration C_{sg} \ ($\mu g/m^3$)	Site Indoor Air Concentration $C_{i,a}$ \ ($\mu g/m^3$)	VI Carcinogenic Risk CDI ($\mu g/m^3$)	VI Carcinogenic Risk CR	VI Hazard CDI (mg/m^3)	VI Hazard HQ	IUR $(ug/m^3)^{-1}$	IUR Ref	Chronic RfC (mg/m^3)	RfC Ref	Temperature (°C)\ for Groundwater Vapor Concentration	Mutagen?
Benzene	71-43-2	22.9	6.87E-01	2.45E-01	1.91E-06	6.59E-04	2.20E-02	7.80E-06	I	3.00E-02	I	25	No
*Sum		-	-	-	1.91E-06	-	2.20E-02	-		-		-	

Chemical Properties

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	Does the chemical have inhalation toxicity data? (IUR and/or RfC)	MW	MW Ref	Vapor Pressure VP (mm Hg)	VP Ref	S (mg/L)	S Ref	MCL (ug/L)	HLC (atm-m ^{3}/mole)	Henry's Law Constant (unitless)
Benzene	71-43-2	Yes	Yes	78.12	PHYSPROP	9.48E+01	PHYSPROP	1.79E+03	PHYSPROP	5	5.55E-03	2.27E-01

H` and HLC Ref	Henry's Law Constant Used in Calcs (unitless)	Normal Boiling Point BP (K)	BP Ref	Critical Temperature T_c\ (K)	T_c\ Ref	Enthalpy of vaporization at the normal boiling point $\Delta H_{v,b}$\ (cal/mol)	$\Delta H_{v,b}$\ Ref	Lower Explosive Limit LEL (% by volume)	LEL Ref
PHYSPROP	2.27E-01	353.15	PHYSPROP	5.62E+02	CRC	7342.26	CRC	1.20	CRC

Resident Air Inputs

Variable	Resident Air Default Value	Site-Specific Value
AF_{gw} (Attenuation Factor Groundwater) unitless	0.001	0.001
AF_{ss} (Attenuation Factor Sub-Slab) unitless	0.03	0.03
ED_{res} (exposure duration) years	26	26
ED_{0-2} (mutagenic exposure duration first phase) years	2	2
ED_{2-6} (mutagenic exposure duration second phase) years	4	4
ED_{6-16} (mutagenic exposure duration third phase) years	10	10
ED_{16-26} (mutagenic exposure duration fourth phase) years	10	10
EF_{res} (exposure frequency) days/year	350	350
EF_{0-2} (mutagenic exposure frequency first phase) days/year	350	350
EF_{2-6} (mutagenic exposure frequency second phase) days/year	350	350
EF_{6-16} (mutagenic exposure frequency third phase) days/year	350	350
EF_{16-26} (mutagenic exposure frequency fourth phase) days/year	350	350
ET_{res} (exposure time) hours/day	24	24
ET_{0-2} (mutagenic exposure time first phase) hours/day	24	24
ET_{2-6} (mutagenic exposure time second phase) hours/day	24	24
ET_{6-16} (mutagenic exposure time third phase) hours/day	24	24
ET_{16-26} (mutagenic exposure time fourth phase) hours/day	24	24
THQ (target hazard quotient) unitless	0.1	1
LT (lifetime) years	70	70
TR (target risk) unitless	1.0E-06	1.0E-06

Output generated 27MAR2024:17:29:39

Resident Vapor Intrusion Screening Levels (VISL)

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; U = user provided; G = see RSL User's Guide Section 5; CA = cancer; NC = noncancer.

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	Does the chemical have inhalation toxicity data? (IUR and/or RfC)	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Soil Source? ($C_{vp} > C_{i,a}$,Target?)	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source? ($C_{hc} > C_{i,a}$,Target?)	Target Indoor Air Concentration (TCR=1E-06 or THQ=1) MIN($C_{ia,c}$,$C_{ia,nc}$) ($\mu g/m^3$)	Toxicity Basis	Target Sub-Slab and Near-source Soil Gas Concentration (TCR=1E-06 or THQ=1) C_{sg},Target ($\mu g/m^3$)	Target Groundwater Concentration (TCR=1E-06 or THQ=1) C_{gw},Target ($\mu g/L$)	Is Target Groundwater Concentration < MCL? (C_{gw} < MCL?)
Benzene	71-43-2	Yes	Yes	Yes	Yes	3.60E-01	CA	1.20E+01	1.59E+00	Yes (5)

Pure Phase Vapor Concentration C_{vp}\ (25 °C)\ ($\mu g/m^3$)	Maximum Groundwater Vapor Concentration C_{hc}\ ($\mu g/m^3$)	Temperature for Maximum Groundwater Vapor Concentration (°C)	Lower Explosive Limit LEL (% by volume)	LEL Ref	IUR $(ug/m^3)^{-1}$	IUR Ref	RfC (mg/m^3)	RfC Ref	Mutagenic Indicator	Carcinogenic VISL TCR=1E-06 $C_{ia,c}$ ($\mu g/m^3$)	Noncarcinogenic VISL THQ=1 $C_{ia,nc}$ ($\mu g/m^3$)
3.98E+08	4.06E+08	25	1.20	CRC	7.80E-06	I	3.00E-02	I	No	3.60E-01	3.13E+01

Resident Vapor Intrusion Risk

Chemical	CAS Number	Site Sub-Slab and Exterior Soil Gas Concentration C_{sg} \ ($\mu g/m^3$)	Site Indoor Air Concentration $C_{i,a}$ \ ($\mu g/m^3$)	VI Carcinogenic Risk CDI ($\mu g/m^3$)	VI Carcinogenic Risk CR	VI Hazard CDI (mg/m^3)	VI Hazard HQ	IUR $(ug/m^3)^{-1}$	IUR Ref	Chronic RfC (mg/m^3)	RfC Ref	Temperature (°C)\ for Groundwater Vapor Concentration	Mutagen?
Benzene	71-43-2	51.7	1.55E+00	5.52E-01	4.31E-06	1.49E-03	4.96E-02	7.80E-06	I	3.00E-02	I	25	No
*Sum		-	-	-	4.31E-06	-	4.96E-02	-		-		-	

Output generated 27MAR2024:17:29:39

Chemical Properties

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	Does the chemical have inhalation toxicity data? (IUR and/or RfC)	MW	MW Ref	Vapor Pressure VP (mm Hg)	VP Ref	S (mg/L)	S Ref	MCL (ug/L)	HLC (atm-m^3/mole)	Henry's Law Constant (unitless)
Benzene	71-43-2	Yes	Yes	78.12	PHYSPROP	9.48E+01	PHYSPROP	1.79E+03	PHYSPROP	5	5.55E-03	2.27E-01

H` and HLC Ref	Henry's Law Constant Used in Calcs (unitless)	Normal Boiling Point BP (K)	BP Ref	Critical Temperature T_c\ (K)	T_c\ Ref	Enthalpy of vaporization at the normal boiling point $\Delta H_{v,b}$\ (cal/mol)	$\Delta H_{v,b}$\ Ref	Lower Explosive Limit LEL (% by volume)	LEL Ref
PHYSPROP	2.27E-01	353.15	PHYSPROP	5.62E+02	CRC	7342.26	CRC	1.20	CRC

Resident Air Inputs

Variable	Resident Air Default Value	Site-Specific Value
AF_{gw} (Attenuation Factor Groundwater) unitless	0.001	0.001
AF_{ss} (Attenuation Factor Sub-Slab) unitless	0.03	0.03
ED_{res} (exposure duration) years	26	26
ED_{0-2} (mutagenic exposure duration first phase) years	2	2
ED_{2-6} (mutagenic exposure duration second phase) years	4	4
ED_{6-16} (mutagenic exposure duration third phase) years	10	10
ED_{16-26} (mutagenic exposure duration fourth phase) years	10	10
EF_{res} (exposure frequency) days/year	350	350
EF_{0-2} (mutagenic exposure frequency first phase) days/year	350	350
EF_{2-6} (mutagenic exposure frequency second phase) days/year	350	350
EF_{6-16} (mutagenic exposure frequency third phase) days/year	350	350
EF_{16-26} (mutagenic exposure frequency fourth phase) days/year	350	350
ET_{res} (exposure time) hours/day	24	24
ET_{0-2} (mutagenic exposure time first phase) hours/day	24	24
ET_{2-6} (mutagenic exposure time second phase) hours/day	24	24
ET_{6-16} (mutagenic exposure time third phase) hours/day	24	24
ET_{16-26} (mutagenic exposure time fourth phase) hours/day	24	24
THQ (target hazard quotient) unitless	0.1	1
LT (lifetime) years	70	70
TR (target risk) unitless	1.0E-06	1.0E-06

Output generated 27MAR2024:17:30:37

Resident Vapor Intrusion Screening Levels (VISL)

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; U = user provided; G = see RSL User's Guide Section 5; CA = cancer; NC = noncancer.

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	Does the chemical have inhalation toxicity data? (IUR and/or RfC)	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Soil Source? ($C_{vp} > C_{i,a}$,Target?)	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source? ($C_{hc} > C_{i,a}$,Target?)	Target Indoor Air Concentration (TCR=1E-06 or THQ=1) MIN($C_{ia,c}$,$C_{ia,nc}$) ($\mu g/m^3$)	Toxicity Basis	Target Sub-Slab and Near-source Soil Gas Concentration (TCR=1E-06 or THQ=1) C_{sg},Target ($\mu g/m^3$)	Target Groundwater Concentration (TCR=1E-06 or THQ=1) C_{gw},Target ($\mu g/L$)	Is Target Groundwater Concentration < MCL? (C_{gw} < MCL?)
Benzene	71-43-2	Yes	Yes	Yes	Yes	3.60E-01	CA	1.20E+01	1.59E+00	Yes (5)

Pure Phase Vapor Concentration C_{vp}\ (25 °C)\ ($\mu g/m^3$)	Maximum Groundwater Vapor Concentration C_{hc}\ ($\mu g/m^3$)	Temperature for Maximum Groundwater Vapor Concentration (°C)	Lower Explosive Limit LEL (% by volume)	LEL Ref	IUR $(ug/m^3)^{-1}$	IUR Ref	RfC (mg/m^3)	RfC Ref	Mutagenic Indicator	Carcinogenic VISL TCR=1E-06 $C_{ia,c}$ ($\mu g/m^3$)	Noncarcinogenic VISL THQ=1 $C_{ia,nc}$ ($\mu g/m^3$)
3.98E+08	4.06E+08	25	1.20	CRC	7.80E-06	I	3.00E-02	I	No	3.60E-01	3.13E+01

Resident Vapor Intrusion Risk

Chemical	CAS Number	Site Sub-Slab and Exterior Soil Gas Concentration C_{sg} \ ($\mu g/m^3$)	Site Indoor Air Concentration $C_{i,a}$ \ ($\mu g/m^3$)	VI Carcinogenic Risk CDI ($\mu g/m^3$)	VI Carcinogenic Risk CR	VI Hazard CDI (mg/m^3)	VI Hazard HQ	IUR $(ug/m^3)^{-1}$	IUR Ref	Chronic RfC (mg/m^3)	RfC Ref	Temperature (°C)\ for Groundwater Vapor Concentration	Mutagen?
Benzene	71-43-2	19.2	5.76E-01	2.05E-01	1.60E-06	5.52E-04	1.84E-02	7.80E-06	I	3.00E-02	I	25	No
*Sum		-	-	-	1.60E-06	-	1.84E-02	-		-		-	

Chemical Properties

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	Does the chemical have inhalation toxicity data? (IUR and/or RfC)	MW	MW Ref	Vapor Pressure VP (mm Hg)	VP Ref	S (mg/L)	S Ref	MCL (ug/L)	HLC (atm-m ^{3}/mole)	Henry's Law Constant (unitless)
Benzene	71-43-2	Yes	Yes	78.12	PHYSPROP	9.48E+01	PHYSPROP	1.79E+03	PHYSPROP	5	5.55E-03	2.27E-01

H` and HLC Ref	Henry's Law Constant Used in Calcs (unitless)	Normal Boiling Point BP (K)	BP Ref	Critical Temperature T_c\ (K)	T_c\ Ref	Enthalpy of vaporization at the normal boiling point $\Delta H_{v,b}$\ (cal/mol)	$\Delta H_{v,b}$\ Ref	Lower Explosive Limit LEL (% by volume)	LEL Ref
PHYSPROP	2.27E-01	353.15	PHYSPROP	5.62E+02	CRC	7342.26	CRC	1.20	CRC

Attachment 11

Geophysical/Ferromagnetic Survey Investigation Report

501 Cambria Avenue, Suite 281, Bensalem, PA 19020
215-366-7389
eastcoastgeophysics.com

Date:
3/28/2024

Site Location:
2225 College Street, Columbia, SC 29205

Attention:
Dominion Due Diligence Group (D3G)
201 Wylderose Drive, Midlothian, VA 23113

Regards:
Bradley Moore
East Coast Geophysics Inc.
501 Cambria Avenue Suite 281, Bensalem, Pennsylvania, 19020

1. BACKGROUND AND PROJECT OBJECTIVES

This report presents the findings of the geophysical survey completed at 2225 College Street, Columbia, SC on March 15, 2024. The survey consisted of accessible areas on the northside of the property. Surface conditions consisted of pavement, grass, and concrete. Site project objectives are:

- Locate and mark detectable underground utilities and/or anomalies within close proximity to client proposed soil boring locations.

2. EQUIPMENT

This project used the following equipment to perform the geophysical survey on the property:

- *GSSI SIR-4000 Cart Mounted Ground Penetrating Radar System*

Ground Penetrating Radar is a non-invasive geophysical method in which electromagnetic pulses probe the subsurface, allowing targets to be imaged in real time. The EM pulses that are transmitted into the subsurface are reflected from various interfaces within the ground, including soil horizons, ground water, and manmade features such as underground storage tanks and utilities. The GPR antenna consists of a transmitter, which is used to create the EM pulse, and a receiver which collects returning signals. The high frequency waves created by the antenna can be generated in a range of 10 MHz to 2.6 GHz. The frequency of the antenna will vary the depth of penetrations, signal clarity, and attenuation into the subsurface. The antenna used for general field work by ECG is 400 MHz; this frequency range has the capability to transmit to a depth of up to 10 feet below ground surface. Surface and subsurface conditions can greatly reduce the effective depth of the signal penetration; these conditions include conductive soils, slag/fill material and standing water.

- *Radiodetection RD7100+ and TX-5 Transmitter*

RD7000 is an advanced high-range precision utility detector capable of detecting utilities up to 15 feet below ground surface. The RD7000+ has the capability of locating a variety of pipes and cables using either passive or active modes. Passive signals can be traced with only the transmitter using "natural" signals present in many conductors. These signals can be generated from an array of sources including power cables, power system return currents, and long wave radio frequencies. Active signals are known AC frequencies induced onto a target pipe or cable. User induced signals can help positively identify lines throughout areas of congested utilities.

- *Fisher TW-6 Pipe and Cable Locator*

The Fisher TW-6 Pipe and cable locator uses electromagnetic induction to locate conductive materials, such as manholes, tanks, pipes, cables, and other metallic materials in the subsurface. The transmitter generates an AC current which produces an electromagnetic field similar to a dipole magnet. When the transmitter passes over a conductive feature, the generated electromagnetic field becomes distorted as a result of the interference with the natural electromagnetic field created by the conductive feature. The distortion of the generated field is detected by the receiver which emits a tone that is correlated to the conductivity of the feature.

3. PROCEDURE

ECG personnel begins with a utility survey utilizing active detection with the RD-7100+. This is performed by directly hooking up to known surface features across the site such as lamp posts, electric / communication boxes, and valves. The surveyor then performs a passive scan with the RD-7000+ receiver to detect any energized utilities that may have not been located with the active scan. Any detected utilities are then marked in the field.

ECG personnel then walk across the survey area with the TW-6 in 3-5 foot spacing increments. The approximate size and shape of any conductive targets detected is then marked in white marking paint to be further investigated with GPR.

GPR is then utilized to confirm the approximate depth of any utilities detected with the RD-7100+ and the size, shape, and depth of any anomalies located with the TW-6.

4. RESULTS

- No anomalies were detected in close proximity to the client proposed soil boring location or around the generator on the north side of the property.
- Underground Utilities – The following utilities were detected within close proximity to the boring location: gas, water, storm sewer, and electric.

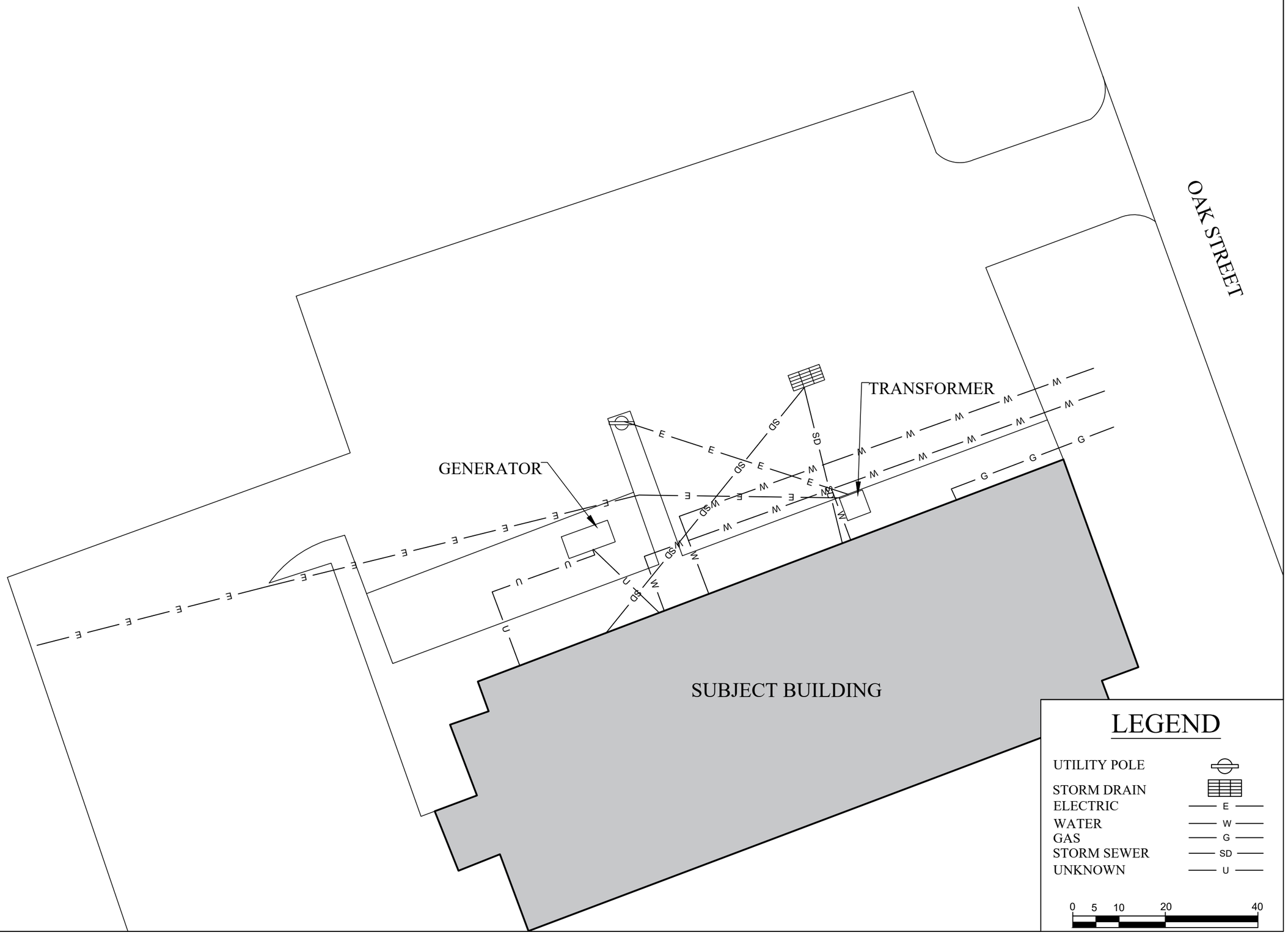
Site map (032824) is attached portraying all detected subsurface features.

5. SITE LIMITATIONS

- Ground Penetrating Radar - GPR depth of penetration was limited to 0-3 feet bgs. The limiting factor can be due to conductive soils limiting the depth of signal penetration.
- The TW-6 cannot be utilized within close proximity to parked vehicles, reinforced concrete, or any other large metallic features.

6. DISCLAIMER

The limitations of a geophysical survey from both the site and equipment are important to consider when performing intrusive work at a survey site. The equipment is unable to maintain a constant depth of penetration or a constant level of effectiveness over the course of a survey due to subsurface and environmental conditions. The results provided both in this report and in the field should be used in conjunction with other methods including but not limited to, site plans, as-builts, sanborn maps, field observations, public-mark out services, soft-digging, pre-clearing, and historical documentation of the site. No survey or survey method can accurately show an exact image of all subsurface conditions. The presence of non-detectable subsurface utilities and structures is always a risk at any site. Please take caution when proceeding with invasive work.



EAST COAST GEOPHYSICS, INC.

SITE
2225 COLLEGE ST,
COLUMBIA, SC

CLIENT
D3G

DRAWING NO.
032824

PROJECT NO.
031524

SHEET NO.
1 OF 1

SCALE
1 : 20

DATE
03/28/2024

DRAWN
BAM

N

NOTES:

East Coast Geophysics, Inc. shall not be liable for damages of any kind arising out of the use of this information. Drawings are georeferenced based on satellite imagery and are not considered to be survey quality. These drawings are intended to be used as reference only.