TOXICOLOGICAL RISK ASSESSMENT OF AIR EMISSIONS

Kealba (Barro Group) Landfill

Prepared for:

Barro Group Pty Ltd
191 Drummond Street
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SLR Ref: 640.30188.00000-R01
Version No: -v3.0
August 2021

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Barro Group Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
640.30188.00000-R01-v3.0	26 August 2021	Tarah Hagen, MSc, DABT, RACTRA and Giorgio De Nola, MSc, RACTRA	Tarah Hagen	Tarah Hagen
640.30188.00000-R01-v2.0	24 May 2021	Tarah Hagen, MSc, DABT, RACTRA and Giorgio De Nola, MSc, RACTRA	Tarah Hagen	Tarah Hagen

PRECIS

Residents living near the Kealba landfill have raised concerns for their health because of odours understood to be emitted from works undertaken at the landfill to remediate hotspots that have developed deep under the landfill.

In response to these concerns, Barro engaged SLR to prepare a Human Health Risk Assessment (HHRA) to help the community understand the adverse health effects potentially associated with exposure to substances in the air near the landfill. This HHRA is not a health study monitoring specific individual health responses in the community. Instead, it predicts whether chemicals in the air could be responsible for odour or result in short- or long-term health effects.

The HHRA was undertaken by assessing the measured data collected by Barro for 77 toxic and/or odorous volatile (and semi-volatile) organic compounds (referred to as VOCs). The 77 VOCs were assessed because these form the standard analytic suite measured by laboratories when gathering information about air emissions. This data was collected over the course of 18 months of monitoring at the northern and western boundary of the landfill.

The HHRA assessed the VOC data against the relevant Australian and international health based guidelines listed in the report. As a result of this assessment, the HHRA found that the 77 VOCs are unlikely to be responsible for odour or cause health effects. However, SLR (and Barro) recognises that there may be other compounds in the air that may be causing odour outside of the 77 VOCs tested. Therefore, Barro is undertaking further odour assessments at the landfill and these assessments are ongoing.

EXECUTIVE SUMMARY

Introduction

Ambient air quality monitoring is occurring on a regular basis (every two to three days) at two locations on the boundary of the Kealba Landfill owned and operated by Barro Group Pty Ltd (Barro Group). Barro Group requested that SLR examine the existing ambient air monitoring dataset (collected between December 2019 and March 2021) and assess the potential for adverse health effects and odours to be experienced by people living beyond the landfill boundary.

SLR has prepared this screening human health risk assessment (HHRA) for the 77 chemicals of interest (CoI) included in the ambient air quality monitoring.

Methodology and Results

The HHRA herein was conducted using methodology consistent with international guidance and best practice. It evaluated the possibility of:

- Short-term exposures from inhalation of CoI that may result in:
  - Acute systemic effects.
  - Impact on amenity including odour and irritation.
- Long-term or lifetime exposures from inhalation of CoI that may result in
  - Non-cancer (Chronic) health effects.
  - Cancer health effects.

Measurable Levels of CoI

Air monitoring results collected over a 24-hour period are available for two locations, one each on the northern and western boundaries of the landfill. Of the 77 CoI considered in this assessment, only 13 had measurable levels (above reporting limits) and were included in quantitative assessments for short-term inhalation exposures and long-term and lifetime inhalation exposures. Freon 11 (87%, 255 of 292 results), and Freon 12 (13%, 113 of 292 results) were the two CoI that were most frequently measured (Section 3.1).

As data were collected over numerous 24-hour averaging periods there was a need to modify the concentrations to match the time frame relevant to the guideline used. Overall, 24-hour averages were used for long-term and lifetime exposures whereas, for short-term exposures and impacts on amenity, air concentrations were adjusted upwards to 15-minute averaging times using two established mathematical relationships.

Because of the large number of concentrations below the limits of reporting, data were censored to allow calculation of average air concentrations (used for the chronic and cancer risk assessments, refer to Section 3.2). Data censoring involves, for concentrations reported as less than the limit of reporting, replacing the reporting limits with half the reporting limit as suggested by Australian guidance for undertaking health risk assessments.

EXECUTIVE SUMMARY

Short-term Inhalation Exposures

Acute Health Effects (1 day to 15 days)

The assessment of risk of harm from short-term (i.e. acute) exposures to the CoI was undertaken by calculating a ratio of the maximum measured air concentration to an acute air guideline value that is protective of human health, the latter sourced from national and international reputable agencies. Referred to as a Hazard Quotient (HQ), this ratio was estimated for each CoI with measured results above reporting limits. HQ are summed together based on the assumption that health effects are additive to estimate a Hazard Index (HI). Acute HQ and HI less than unity (<1) indicate there is no concern regarding acute health effects, i.e. air concentrations measured are low and acceptable.

An acute HI of 0.9 was estimated using maximum measured air concentrations for CoI. Benzene (Acute HQ = 0.89) was the CoI primarily responsible for the estimated HI.

Measured benzene concentrations at the boundary of the landfill are at the low end of the range for air in metropolitan Melbourne indicating that the likely source of benzene (and other petroleum hydrocarbons) is potentially from non-landfill related emissions such as vehicular traffic on surrounding busy roads. Acute HI were also calculated for individual days with measured results. The vast majority of acute HI estimated were approximately 0.1.

Overall, it is concluded there is little likelihood for acute health effects to eventuate from exposure to the CoI evaluated in this risk assessment.

Impact on Amenity - Irritation and Odour (15 minutes)

Potential impact on amenity was assessed by comparing 15-minute air concentrations with publicly available odour thresholds and irritation thresholds. The latter are concentrations at which odour or reversible sensory irritation (i.e. itchy eyes, runny nose) may be experienced. The resulting ratios are referred to as the Odour Threshold Index and Irritation Index respectively. It was assumed that effects on amenity from different CoI were additive. Amenity is unlikely to be impacted where the estimated indices are less than 0.1. This is lower than used for acute and chronic health effects and considered conservative as there were several chemicals for which no odour or irritation threshold was found.

An irritation index of 0.0004 (well below a target of 0.1) (Section 4.2.2) was estimated for the 77 CoI indicating that it is unlikely that people at the boundary of the landfill would experience irritation of eyes and/or airways from inhalation exposure to the 77 CoI considered in this assessment.

An odour threshold index of 0.09 was estimated on a single day which represents a low and acceptable risk of odour being perceived at the site boundary (Section 4.2.3) from the 77 CoI evaluated in this report. Odour indices on the majority of sampling days were estimated to be ~0.01 representing a negligible risk of odour being experienced.

Overall, it is concluded it is unlikely that amenity was affected at the site boundary on the days of testing based on available data for the 77 CoI included in the monitoring program.

EXECUTIVE SUMMARY

Long-term or Lifetime Inhalation Exposures

Chronic Health Effects (365 days+)

The risk for health effects from long-term (i.e. chronic) exposures was assessed in the same way as for short-term (i.e. acute) exposures with the exception that average concentrations for CoI were used instead of maximum air concentrations (and air guideline values protective of chronic health effects were used). Chronic HQ and HI less than unity (<1) indicate there is no concern regarding chronic (non-cancer) health effects.

There were only two compounds measured repeatedly in air (Freon 11 and Freon 12). A chronic HI of 0.0002 was estimated using average air concentrations for these two CoI, well below the acceptable HI of 1. Measured concentrations of Freon 11 and Freon 12 at the site boundary were similar to background concentrations measured in suburban Sydney.

Therefore, potential risk of harm from chronic exposure to CoI assessed in this report is considered negligible.

There are several CoI that were not at measurable levels in any of the 292 air samples collected thus far that have chronic AGVs that are lower than or approximate the laboratory reporting limits. As a prudent measure, negotiations are currently underway with the laboratory to determine whether lower reporting limits can be achieved (in future testing and in the existing dataset) for future assessments.

Cancer Risk (Lifetime)

Total lifetime cancer risk, referred to as incremental lifetime cancer risk (ILCR), was calculated by summing individual ILCR estimates for each measured CoI that is considered to be a carcinogen and act by directly altering genetic material (i.e. they are genotoxic or potentially genotoxic). A low and acceptable ILCR (or cancer risk) in Australia is considered to be $1x10^{-5}$ (i.e. 1 in 100,000).

A low and acceptable lifetime cancer risk was estimated for residents potentially exposed to air beyond the site boundary (ILCR = $7.4x10^{-6}$) consisting predominantly of contributions from benzene (ILCR = $3.8x10^{-6}$) and trichloroethene (ILCR = $3.6x10^{-6}$) (Section 5.3). Benzene is likely attributed to vehicular traffic on surrounding streets and measurable levels of trichloroethene occurred on a single day with strong northerly winds (towards the landfill).

Similar to the chronic assessment of health risks, further assessment of lifetime cancer risk for several CoI would benefit from having lower reporting limits.

Level of Uncertainty

Overall, the assumptions made in the screening HHRA undertaken herein are conservative and are more likely to overestimate than underestimate the potential risk of harm (refer to Section 6). Nevertheless, further assessment of odour is currently underway separately to this risk assessment (as other chemicals, not included in the analytical suite considered in this report, may be responsible for odour at the site boundary). It is also considered prudent to lower the reporting limits for some CoI to assist assessments of chronic and cancer risk.

EXECUTIVE SUMMARY

Recommendations

It is recommended:

- The results of the odour assessment conducted in this report be made available to consultants conducting the separate odour assessment for the landfill.
- The reporting limits be investigated to determine whether they can be lowered for the existing dataset and future monitoring events. Negotiations are currently underway with the reporting laboratory and environmental consultant to confirm whether target reporting limits provided in this assessment (Section 5.4) can be practically achieved.
- Future monitoring should continue with lower reporting limits.

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1 Introduction & Scope

Barro Group Pty Ltd (Barro Group) owns and operates the Kealba (Barro Group) Landfill, located on the corner of McIntyre Road/Sunshine Avenue and the Metropolitan Ring Road, Kealba in Melbourne. Ambient air quality monitoring for a large number of chemicals is regularly (every few days) undertaken at two locations on the boundary of the landfill property (i.e. north and west of the landfill) (see Figure 1-1). There are existing residences and commercial properties directly across Sunshine Avenue to the west of the landfill (closest ~60m from the landfill boundary) and north of the landfill (closest ~20m from landfill boundary).

Barro Group has requested SLR Consulting Pty Ltd (SLR) examine the existing ambient air monitoring data (collected between December 2019 and March 2021) in relation to the potential for adverse health effects and odours to be experienced by people living in close proximity to the landfill boundary. To this end, SLR has undertaken a screening human health risk assessment (HHRA) for the chemicals of interest included in the ambient air quality monitoring. This HHRA has been written by Ms Tarah Hagen[1] and Mr De Nola.

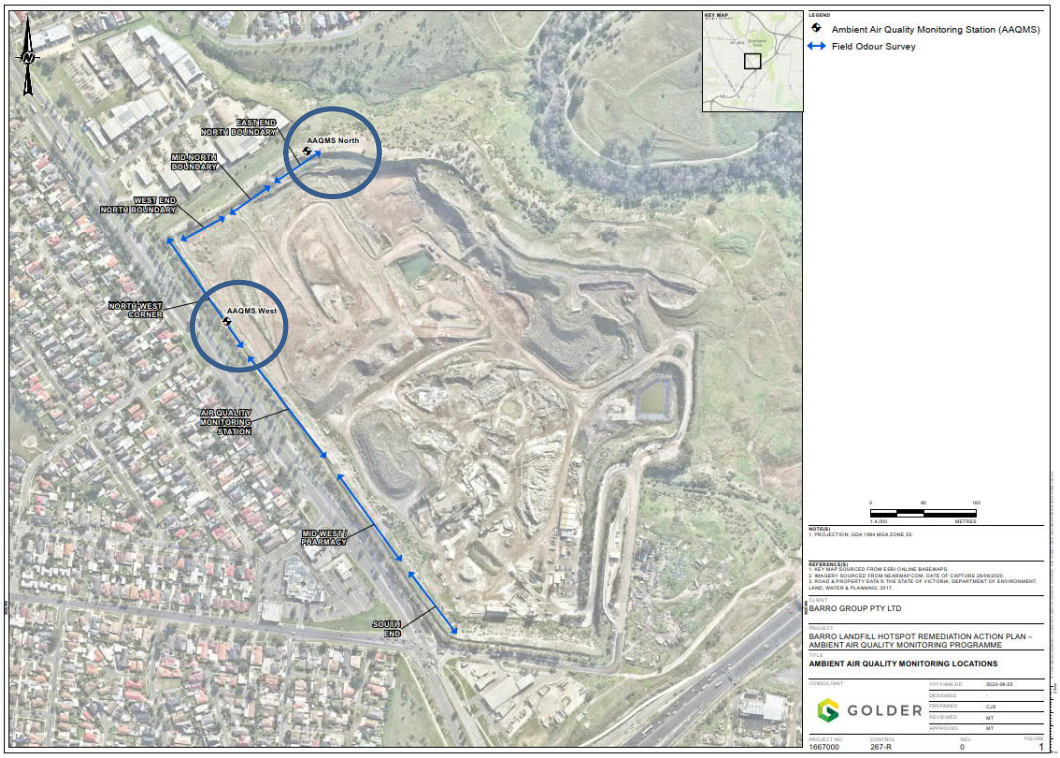


Figure 1-1 Location of ambient air quality monitoring stations at Kealba (Barro Group) Landfill (circled). Figure created by Golder, provided by Barro Group Pty Ltd

[1] Ms Hagen's qualifications are MSc (Environmental Toxicology), Diplomate of the American Board of Toxicology (DABT), and Registered Member of the Australasian College of Toxicology & Risk Assessment (RACTRA). Mr De Nola's qualification are MSc (Toxicology) and Registered Member of the Australasian College of Toxicology & Risk Assessment (RACTRA).

2 Methodological considerations

2.1 General

The screening HHRA herein broadly follows the guidance provided by enHealth (2012), World Health Organisation (WHO 1999, 2010) and the US Environmental Protection Agency (US EPA 1989, 1999).

The general HHRA methodology follows the steps detailed in enHealth (2012). These steps include:

- *Issue Identification*

  Barro Group would like to understand the potential for adverse health effects and odours to be experienced by people living in close proximity to the landfill boundary as a result of exposure to chemicals potentially arising from the landfill.

- *Hazard assessment*

  - Chemicals of Interest (CoI) are the suite of 77 volatile (or semi-volatile) organic compounds included in the ambient air monitoring undertaken at the northern and western boundary of the landfill property (Section 2.2).
  - Concentration (or dose) response is assessed by considering ambient air quality guidelines and/or other health-based screening guidelines for the CoI for short-term (acute) and long-term (chronic) exposures in air (Section 4.1.1, and 5.1). In addition, odour and irritation were assessed by sourcing odour and irritation thresholds for individual chemicals from the literature (refer to Section 4.2.1).

- *Exposure assessment*

  The available monitoring data were analysed in order to define exposure concentrations for acute and chronic exposure (Section 3). This analysis was hampered by the large amount of measurements which were less than the laboratory limits of reporting and the fact that the laboratory limits of reporting were sometimes higher than the health-based air guideline values used for comparison.

- *Risk characterisation*

  This is undertaken by comparing measured concentrations of CoI with air guideline values, health-based screening values, odour thresholds or irritations thresholds. Potential health risk (or risk of experiencing odour or sensory irritation) is judged from the resulting hazard quotients (HQ) for individual substances and combined hazard index (HI). The acceptability of the calculated cancer risk for relevant compounds is judged by comparison with 'acceptable' risk levels determined by Australian authorities.

This HHRA is a screening or Tier 1 risk assessment. The purpose of a screening risk assessment is to efficiently determine if, at the potential exposures suggested by the measured concentrations of the CoI, health impacts (or odour or sensory irritation) are possible and if so discover the likely causative agents. Thus the risk assessment herein uses a number of procedures to decide which of the wide suite of analytes included in the ambient air monitoring either on their own or as a mixture are potential threats to public health and may be candidates for further detailed assessment.

By necessity, to ensure protection of public health this risk assessment is conservative; that is, it errs on the side of safety by over predicting the likelihood for health risk. However, to provide reality and contextual information in the assessment a qualitative analysis has been undertaken for the uncertainty inherent in the assessment. Although aspects of uncertainty are raised within the section where a particular topic is discussed, they are drawn together in the uncertainty overview at Section 6.

National and international regulatory agencies consider a 'safe' exposure level to be the same as, or less than, the relevant regulatory health-based guideline or standard (e.g. an ambient air guideline value (AGV)). Hence, an unacceptable health risk potentially occurs when the measured concentration of a CoI is greater than the regulatory standard. The process of characterising the health risk by comparing measured concentrations of CoI to an AGV is common practice in risk assessments for air pollutants. It is a pragmatic approach used to identify important chemicals in polluted air or industrial emissions. The ratio of the concentration of the CoI to AGV is called the 'hazard quotient' (HQ). By adding hazard quotients together to yield a hazard index (HI), an appreciation of the likelihood of an adverse health outcome from exposure to the CoI as a mixture can be obtained. This is further described in Sections 2.3.1 and 2.3.2.

A schematic overview of the basics of the risk assessment process is in Figure 2-1.

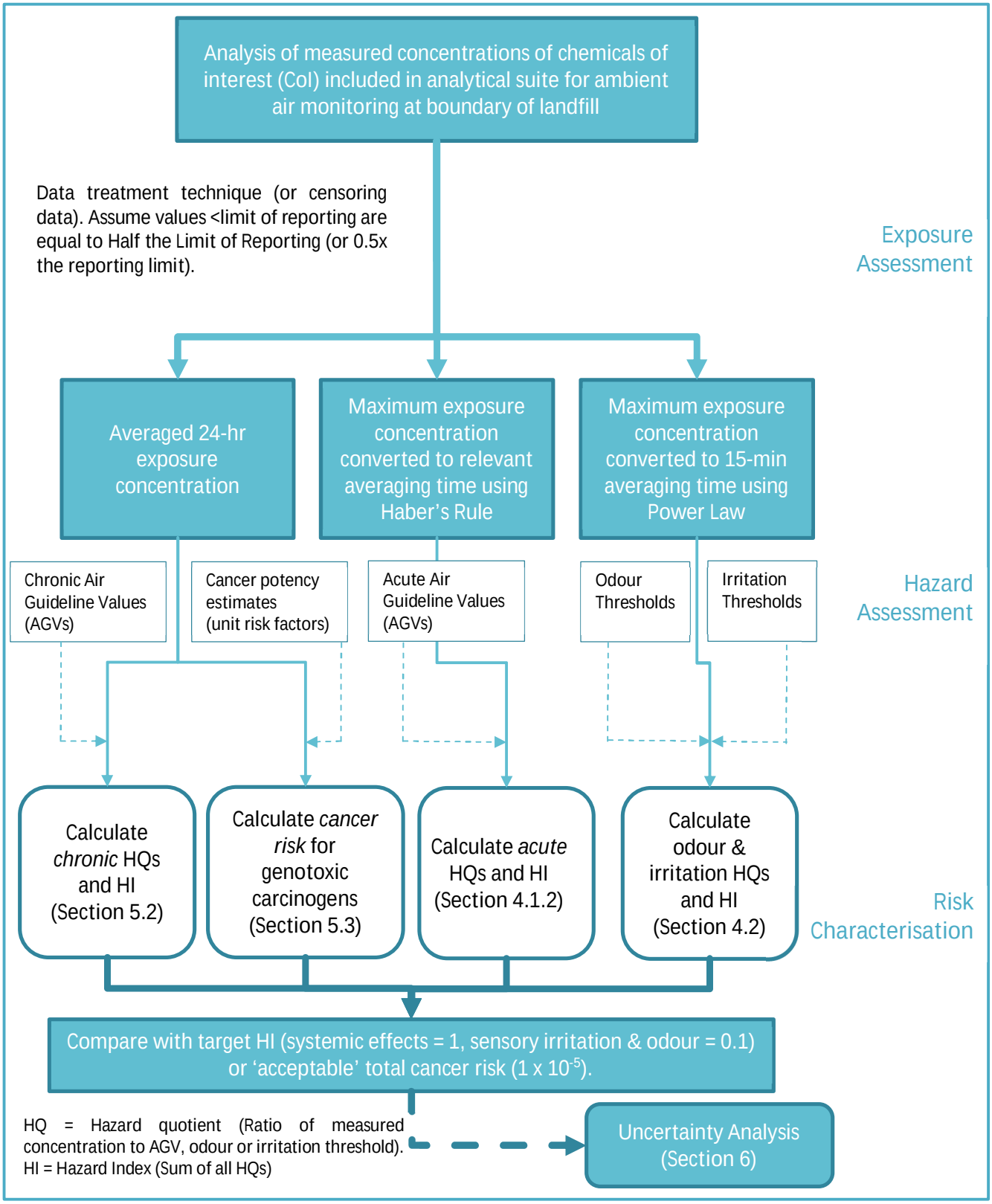


Figure 2-1 Overview of the methodology of the screening health risk assessment

2.2 Chemicals of Interest (CoI)

Golder Associates Pty Ltd (Golder), on behalf of Barro Group, undertook ambient air monitoring sampling at two locations at the boundary of the Kealba landfill. SLR has been provided with ambient air monitoring data in the form of an excel spreadsheet[2] for a wide suite of 77 volatile (or semi-volatile) organic compounds collected periodically (every few days) between December 2019 and March 2021. A total of 292 samples have been collected by Golder during this timeframe and analysed by SGS Australia Pty Ltd. SLR was not involved in designing the sampling, analysis, and quality plan (SAQP) for this work.

According to the latest monitoring report (Golder 2021), sampling of volatile (and semi-volatile) organic compounds occurred in accordance with Golder Associates Test Method C9 "*Canister (Evacuated) Sampling for VOC and Reduced Sulphur Compounds: In Ambient Air and Source Emissions."* Although Golder (2021) indicates sampling occurred in 6-Litre electro-polished (SUMMA) stainless steel canisters fitted with a flow restricting device set to sample over a 24-hour period, the testing laboratory has confirmed[3] that the interior of the canisters were silicon-coated[4]. The canister is under negative pressure and when opened, slowly draws an air sample into the canister. The canister is closed at the end of the monitoring period. Thus, the analytical results correspond to a 24-hour averaging period. Sample analysis was conducted by Gas Chromatography / Mass Spectrometry (GC/MS) in accordance with US EPA Method TO-15. The method uncertainty varies with the level of chemical detected and has been reported between 25.5% and 47.4% (Golder 2021). Both Golder and SGS (the analytical laboratory) are NATA accredited to undertake the sampling and analysis, respectively.

All 77 chemicals forming part of the analytical suite were considered CoI in this HHRA.

2.3 Risk characterisation methodology

2.3.1 Introduction to hazard quotients and the hazard index

Risk of exposure to chemicals acting via a threshold mode of action can be assessed by comparing estimated exposures to health-based screening guidelines generated to protect public health.

Screening guidelines used in the screening assessment that are health based are acute or chronic air quality guidelines.

This comparison is performed by calculating a hazard quotient (HQ) which is the ratio of the ambient air concentration measured at the landfill boundary to the relevant guideline value. The HQ is calculated for each CoI using the simple equation below.

$$HQ = Air\ concentration\ \left(\frac{\mu g}{m^3}\right) \div Health-based\ air\ guideline\ value\ \left(\frac{\mu g}{m^3}\right)$$

.....Equation 2.3.1

[2] Excel spreadsheet entitled '1667000-367-M-VOC Summary', received by SLR on 26 March 2021.

[3] Verbal correspondence between SGS Australia and SLR Consulting on 9 April 2021.

[4] If canisters were indeed electro-polished, this could have resulted in the loss of certain polar compounds.

For the hazard quotient to be informative both the air concentration and the air guideline value must relate to the same time frame of exposure. In this risk assessment for acute exposure, where required the air concentration has been adjusted from a 24-hr average to the time frame for which the guideline applies (usually determined by the conditions of exposure in the toxicity/health studies used for establishing the guideline). The adjustment is made by use of Haber's Law (Gaylor 2000, NHMRC 2006) which states that a constant level or severity of a specific physiological response (E) is proportional to the product of concentration (C) and time of exposure (T). Thus for chemical concentration C_2 with exposure time T_2 to give the same toxicological effect as concentration C_1 and exposure time T_1 the following equation applies; $C^n_1 \times T_1 = E = C^n_2 \times T_2$, this is solved for C_2. The exponential 'n' is a chemical specific parameter that is specific for a particular toxicological effect, a chemical may have different values for 'n' for different toxicological end points. When n>1 the toxicity of the chemical is primarily the result of the concentration in air, when n<1 the duration of exposure is the more important determinant of toxicity. The exponent 'n' should be determined from concentration – time – effect data for each chemical. This is however impractical even if the data for each of the CoI were available. NHMRC (2006) recommends for downward extrapolation of the averaging time, a value of n=3 be used, whereas for upward extrapolation a value of n=1 be used. This adjustment was only required to be made for a few chemicals.

For assessing the potential effects of mixtures of monitored chemicals, it has been assumed individual chemicals may have additive effects and an overall hazard index (HI) has been calculated.

$$HI = \sum HQ_{a.....z}$$

.....Equation 2.3.2

Where:
HI = The sum of HQ's for all pollutants from a to z.

This process assumes:

- there is a threshold level of exposure below which no adverse health effects will occur,
- either the toxicological effect of chemicals and/or the dose is additive, and
- multiple subthreshold exposures may result in an adverse health effect.

In strict toxicological terms it is only valid to sum the effects and/or dose of chemicals if they have the same mode of toxicological action and affect the same target tissues. Similarly, it would not be expected for substances in a mixture to have interactive health impacts if they were individually present at concentrations significantly below their biological threshold levels (i.e. below their true low observed adverse effect concentration)[5]. Some investigators therefore prefer only to sum hazard quotients for pollutants that affect common organs, thus yielding effect-specific cumulative HIs (Fox et al. 2004, Morello-Frosch et al. 2000). Others, while recognising that adding HQs with different health end points will not give an accurate idea of the non-cancer HI nonetheless add all HQs together (Pratt et al. 2000). Some investigators limit this latter practice to only those pollutants whose HQ is greater than unity (Tam and Neumann 2004) (i.e. for substances whose concentrations may be exceeding guidelines and perhaps nearing their biological thresholds). enHealth (2012) indicates ideally, HIs should be categorised into groups of chemicals that induce the same type of effect or act by the same mechanism of action.

[5] Because the true LOAEC cannot be readily established empirically, for public health purposes the experimental no observed adverse effect concentration (NOAEC) is often taken as being the threshold exposure level for eliciting an adverse health effect. Sometimes any meaningful biological effect, whether adverse or not, is taken as the threshold exposure, such an exposure level is called the no observed effect concentration (NOEC). It should be noted however that the NOEC, the NOAEC and the LOAEC are all influenced by the experimental design of toxicology studies, especially the concentration spacing intervals. It should especially be noted that because guideline values usually have large uncertainty/safety factors incorporated in them, that a HQ less than one signifies the air concentration is much less than the biological threshold concentration for causing an effect.

In the present HHRA, the HQs for all CoI (i.e. all volatile and semi-volatile organic compounds or VOCs) were summed to calculate an overall HI. This conservatively assumes these chemicals will act in an additive manner.

2.3.2 Interpretation of Hazard Quotients and Hazard Indices

An 'unacceptable' risk, as defined by regulatory standards and requirements, is often determined as an exposure being larger than the guideline used to calculate the hazard quotient, i.e. the HQ or HI>1. This definition of unacceptable risk does not equate with imminent adverse health effects or even high risk of adverse health effects. It simply means that the regulatory guideline value has been exceeded. The guidelines have inherent safety margins incorporated within them.

Notwithstanding their use in this risk assessment, HQs and HIs are relatively blunt tools used to assist in characterising and prioritising risks. Great care must be taken to the level of importance that is placed on the numerical value of the HI. Hazard indices should not be used in isolation of other pertinent data such as mechanistic information on the toxic mode of action and knowledge of the conservatism incorporated into the exposure assessment and guideline values.

2.3.3 Irritation index

Sensory irritation can be a direct effect from brief exposure to industrial emissions or polluted air containing substances able to stimulate the trigeminal nerve endings in the mucosa of the eye and upper respiratory tract. Even though the irritation may be relatively mild, it being manifested as itchy eyes or a tingling nose, if it happens frequently and perhaps in conjunction with odour it can affect the general amenity of a person's environment and their well-being. As with odour there is wide variation in the human population in the ability to sense this type of irritation. Sensory irritation is concentration related, the higher the concentration the greater the intensity of the response but also the greater the likelihood of more people being able to sense the chemical. It is noted that an individual's expectations, past experiences and whether the irritation co-occurs with odour can markedly alter the perception and response to sensory irritants. The assessment herein addresses direct sensory irritation that may result from physical contact with the eye and mucosal surfaces of the upper respiratory tract.

The ability of a chemical to cause direct sensory irritation after an acute exposure to it can be assessed by comparison of the emitted concentration to an 'irritation threshold'. The irritation threshold has been defined (Ruth 1986) as the concentration level where irritation begins. However, some irritation thresholds record the concentration at which 50% of a test panel experience irritation. The sensory irritation response is generally considered to be additive or partially additive (Hau et al. 2000).

Using the assumption that sensory irritation is additive, an irritation index can be calculated where:

$$Irritation\ Index = \sum (acute\ exposure\ concentration \div irritation\ threshold)\ for\ all\ CoI$$

.....Equation 2.3.3

The calculation above (using Equation 2.3.3) yields an irritation quotient when estimated for individual CoI and prior to summing them together.

Irritant chemicals can be segregated into eye, nose or throat irritants; in this assessment a gross conservative assumption has been made that all compounds could be an eye, nose or throat irritant and that target tissue site did not matter. In addition, it was assumed all the irritants could have an additive effect. With these conservative assumptions, irritation quotients and irritation indices were calculated. These are directly analogous to hazard quotients and hazard indices.

The irritation index provides a semi-quantitative evaluation of the likelihood that a mixture of substances may be associated with sensory irritation. By analogy with the HI, it could be assumed that if the irritation index is substantially less than 1 then the emission is unlikely to present an irritation hazard, however if the irritation index is greater than 1 then an irritation hazard may exist that requires further assessment. However, response of sensory irritation, and the biological processes leading to an irritation sensation are quite different from those that cause toxicity. Consequently, adjustments to the default irritation index of unity need to be made in order to take into account:

- variation between individuals in irritation response when substance concentration is near the irritation threshold,
- the fact that not all substances identified in the emissions have experimentally derived irritation thresholds, and
- the fluctuations in air concentrations that may occur over 24 hours. [6]

Irritation thresholds are determined in a similar manner as odour thresholds and are variously reported as the response where 50% of the exposed population reliably perceives irritation, or as the lowest concentration reported to cause sensory irritation in any of the exposed population, statistically the latter should be about the 5% response level. To account for possible variation[7] in sensory irritation response within a population exposed at threshold irritation concentrations, an adjustment to the default target hazard index of unity is made by dividing it by 3. Thus the starting target hazard index, prior to further adjustment to account for compounds that have no irritation data is 0.33.

Of the 77 substances included in the analytical suite, irritation thresholds were identified for 27 (Table A3, Appendix A). If it is assumed the distribution of irritation thresholds amongst the 50 compounds for which an irritation threshold was not found is the same as for the 27 chemicals which did have an irritation threshold, then the target irritation index for which irritation from combined exposure is not expected is 0.1 (number chemicals with irritation threshold/total number = 0.33 x 27/77 = 0.1).

Thus, the target irritation index signifying a reasonable degree of certainty that sensory irritation is unlikely to be experienced by responsive individuals is 0.1.

[6] This consideration is addressed by adjusting the measured 24 hour average concentrations to a 15 minute average using the power rule [$C_2 = C_1 \times (T_1/T_2)^p$ where $p = 0.2$] because Haber's Rule does not apply in these situations (where an AGV is not grounded on a toxicological or health effect).

[7] A ten-fold uncertainty factor is commonly used to account for potential variability in toxicological response to a chemical between individuals in an exposed population. This intra-species uncertainty factor is comprised of 3.2 to account for toxicokinetic variability between individuals (i.e. systemic differences in metabolism, distribution and excretion of the chemical), and 3.2 for toxicodynamic (tissue response) differences (enHealth 2012). Irritation is a site of contact phenomenon that does not involve the biological processes involved with the toxicokinetic portion of the ten-fold uncertainty factor. Consequently, a factor of 3 has been used to account for inter- individual variation for the irritation response around the reported irritation thresholds. It should be noted that this approach is treating the irritation index in the same manner as NOECs are treated for the derivation of health guidelines for the protection of public health. The approach is conservative and exceedance above the target irritation index does not necessarily mean irritation will occur. If the calculated irritation index is more than three times the target index then the likelihood that sensitive individuals may experience irritation increases.

Mild sensory irritation usually has a relatively short biological response time dictated by the time required for the chemical(s) to achieve threshold concentrations in the relevant tissue, i.e. the eye, nasal mucosa, nasopharyngeal epithelium. Using the eye as an example (since for many chemicals it is the most sensitive of the tissues) the time required for elicitation of sensory irritation is dependent upon the time taken for the chemical to transfer from the air to the fluid bathing the eye. This is driven by the concentration in the air and the chemical-physical properties of the substance. For water soluble chemicals the time may be quite short. On this basis the maximum measured 24-hour average concentrations were converted to 15-minute concentrations using the Power Law and the irritation quotient calculated. Note this is conservative as the maximum concentration of one chemical may not necessarily occur on the same day as the maximum for another chemical.

As applied in this risk assessment if the irritation index for the VOC mixture at either air monitoring location is 0.1 or less then it is unlikely that sensory irritation will be experienced. If it is greater than 0.1 then it may still be unlikely sensory irritation will occur but further assessment may be warranted to determine the frequency at which the target irritation index is exceeded.

2.3.4 Odour Threshold Index

Chemicals can be detected by people at very low concentrations and sometimes well below the health-based acute exposure guidelines, i.e. people can smell many chemicals before they cause them harm after short or intermittent exposures up to a few days. One way to assess the likelihood for odour to be experienced is to compare measured air concentrations with odour thresholds from the literature (see Section 4.2.3). Odour thresholds represent the minimum concentration of a chemical at which a change of odour is noticeable (Ruth 1986). They do not represent concentrations at which exposure to the chemical is harmful.

It is conservatively assumed in this screening assessment that odour is also additive. This is a generic assumption also made when performing odour analysis using odour intensity and odour units. According to Page (2011), odour intensity of chemical mixtures may be greater than the odour intensity from the sum of odour intensities from individual chemicals (synergetic) or odour intensity may be less (antagonistic) based on "*numerous olfactometric quantification after mixing of chemicals and odor samples led to numerous different results*"[8]. When mixing odorous compounds, synergetic or antagonistic effects can be observed.

Using the assumption that odour is additive, an odour threshold index can be calculated where:

$$Odour\ Threshold\ Index = \sum (acute\ exposure\ concentration\ \div Odour\ threshold)\ for\ all\ CoI$$

.....Equation 2.3.4

As for the irritation quotient, an odour threshold quotient is estimated when Equation 2.3.4 is used for an individual CoI (prior to summing them together).

As applied in this risk assessment for the irritation index, an odour threshold index of 0.1 or less is considered indicative that it is unlikely that odour will be experienced. If it is greater than 0.1 then it may still be unlikely odour will be experienced but further assessment may be warranted to determine the frequency at which the target odour threshold index is exceeded.

[8] The article by Page (2011) can be found online at this location (last accessed 20 April 2021) http://www.odotech.com/en/odors-additives-terms-intensity/.

2.3.5 Calculating cancer risk

The lifetime risk of developing cancer for exposure to carcinogens whose mode of action is by directly altering genetic material (i.e. they are genotoxic) is calculated by multiplying the average lifetime chemical exposure by an estimate of the carcinogenic potency of the chemical. The former is typically taken to be the annual average measured concentration in air[9]. The latter is commonly called the unit risk factor. For air borne carcinogens, the 'unit' is generally 1µg/m^3 and depending on the nature of the data used to determine the carcinogenic potency, the numerical value refers to the probability of developing or dying of cancer. Animal or human studies may indicate lifetime exposure to 1 µg/m^3 of a substance may carry a risk of 1 chance in 2,000 of developing cancer (the cancer potency); this is often interpreted as meaning, if 2000 people were exposed to 1 µg/m^3 for their lifetime then one individual may develop cancer. This probability is expressed as 0.5 in 1000, or 0.5 x 10^{-3} per µg/m^3, written as 0.5 x 10^{-3} (µg/m^3)$^{-1}$. Equation 2.3.5 below was used to estimate incremental lifetime cancer risk (ILCR) taking into account the average time a person will reside in an area (30 years) and the average lifetime (70 years) as per enHealth risk assessment guidelines (enHealth 2012).

$$ILCR = \frac{average\ 24hr\ air\ concentration\ \left({}^{\mu g}/_{m^3}\right) x\ unit\ risk\ factor\ ({}^{\mu g}/_{m^3})^{-1} x\ Resident\ time\ (30\ yrs)}{Lifetime\ (70\ yrs)}$$

……Equation 2.3.5

In this risk assessment literature values of carcinogenic potency have been used without evaluating the veracity of the potency value. Where several unit risk values are in the literature, the value indicative of the highest potency has been used except where there is appropriate precedence for either an Australian authority or the World Health Organization (WHO)[10] using a different value for deriving a guideline or standard, in which case the latter has been used in the risk assessment.

It is common practice to assume cancer risks due to different genotoxic carcinogenic air pollutants are additive. Summing the individual cancer risks is used to estimate a total lifetime risk of developing cancer. However, unit risk estimates are upper bound 95% confidence estimates and do not reflect the central tendency or average. When several upper bound estimates are added together, a question is raised as to whether the predicted cancer risk is plausible. The greater the number of carcinogens being considered the more unlikely the true risk for each carcinogen will lie near the upper bound estimate. The process of adding upper bound cancer risk estimates together is inherently conservative. Cogliano (1997) has shown that the resulting risk estimate becomes increasingly improbable the greater the number of risk estimates added, but nonetheless is not necessarily misleading. However, to obtain a cancer risk estimate closer to the true risk Cogliano (1997) considers central estimates of risk yield a more plausible result. This requires central estimates of cancer potency which are generally not readily available.

In this HHRA total lifetime cancer risk has been conservatively calculated by summing the estimated inhalational cancer risks for all CoI potentially acting via a genotoxic mode of action. For the purposes of carcinogenicity, a *de minimis* risk, i.e. trivial or negligible risk, is usually taken to be a risk level of less than or equal to one in a million (1 x 10^{-6}) or one in one hundred thousand (1 x 10^{-5}). The level of risk typically considered 'acceptable' by Australian regulatory agencies is 1 x 10^{-5} (enHealth 2012, NEPM 2013).

[9] In this HHRA, this is the average of all the 24-hour average measured air concentrations.

[10] Australian health authorities regularly have a preference to use guidance from the WHO where guidance values are available from multiple international agencies.

2.3.6 Further assessment of CoPCs

If the screening assessment described in preceding sections indicates a potential for exposures of certain CoI to exceed guideline values, these CoI would be termed 'Chemicals of Potential Concern', or 'CoPCs', and a more detailed assessment would be warranted. Such a detailed assessment is beyond the current scope of works.

3 Exposure Assessment

3.1 Measurable Compounds

As discussed in Section 2.2, SLR was provided with ambient air monitoring data for a wide suite of 77 volatile (or semi-volatile) organic compounds collected periodically (every few days) between December 2019 and March 2021 (total number of samples = 292). SLR was not involved in designing the SAQP or selecting the desired limits of reporting (LoR). The dataset presented challenges for application in this HHRA, as a large proportion of samples were below respective chemicals' LoRs (Table 3-1). Only 13 of the 77 chemicals returned at least one measurable (i.e. >LoR) concentration. Table 3-1 presents the chemicals in order of frequency of returning a measurable concentration, from highest to lowest.

Table 3-1 Proportion of samples with measured concentrations greater than the laboratory limit of reporting

Chemical	# of samples where concentration was measurable (i.e. >LoR) (1)	% of samples (of total) where concentration was measurable (i.e. >LoR)
Freon 12 (Dichlorodifluoromethane)	255	87%
Freon 11 (Trichlorofluoromethane)	113	39%
Toluene	37	13%
Benzene	21	7%
2-Butanone (Methyl Ethyl Ketone)	3	1%
Ethyl Benzene	3	1%
Hexane	3	1%
Tetrachloroethene	3	1%
1,1,2-Trichloroethane	2	0.7%
Trichloroethene	2	0.7%
Cyclohexane	1	0.3%
Heptane	1	0.3%
2,2,4-Trimethylpentane	1	0.3%
Chemicals with all concentration less than the reporting limits measurable (i.e. <LoR) Acrolein; Acrylonitrile; tert-Amyl Methyl Ether; Bromodichloromethane; Bromoform; Bromomethane; 1,3-Butadiene; tert-Butyl Alcohol; n-Butylbenzene; sec-Butylbenzene; tert-Butylbenzene; Carbon Tetrachloride; Chlorobenzene; Chloroethane; Chloroform; Chloromethane; 2-Chloroprene; 3-Chloropropene; 2-Chlorotoluene; Cumene; o-Cymene; Dibromochloromethane; 1,2-Dibromoethane (EDB); 1,2-Dichlorobenzene; 1,3-Dichlorobenzene; 1,4-Dichlorobenzene; 1,1-Dichloroethane; 1,2-Dichloroethane; 1,1-Dichloroethene; cis-1,2-Dichloroethene; trans-1,2-Dichloroethene; 1,2-Dichloropropoane; cis-1,3-Dichloropropene; trans-1,3-Dichloropropene; Diisopropyl Ether; 1,4-Dioxane; Ethyl Acetate; Ethyl tert-Butyl Ether; 4-Ethyltoluene; Freon 113; Freon 114; Hexachlorobutadiene; 2-Hexanone; m- and p-Xylene; Methyl Methacrylate; Methyl tert-Butyl Ether; 4-Methyl-2-pentanone; Naphthalene; 2-Propanol; Propene; Propylbenzene; Styrene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrahydrofuran; 1,2,4-Trichlorobenzene; 1,1,1-Trichloroethane; 1,2,4-Trimethylbenzene; 1,3,5-Trimethylbenzene; Vinyl Acetate; Vinyl Bromide; Vinyl Chloride; o-Xylene		

LoR = Limit of Reporting (LoRs varied by chemical and ranged from 1 to 65 µg/m^3).

1. Out of a total of 292 samples collected between December 2019 and March 2021.

The data were provided as 24-hour average concentrations. As discussed in Section 2.3, the average of all 24-hour measurements (including data <LoR as per treatment strategies (data censoring) outlined in Section 3.2 below) was calculated for each chemical and used for comparison with chronic AGVs and calculation of cancer risks (for relevant chemicals).

For comparison with acute AGVs, the maximum 24-hour average measurement (or maximum LoR treated as per the data censoring strategy in Section 3.2) was converted to the appropriate averaging time applicable to the acute AGV (see Section 2.3.3) using Haber's Rule.

For an assessment of potential impacts on amenity and comparison with odour thresholds, the maximum 24-hour average measurements (or maximum LoR treated as per the data censoring strategy in Section 3.2) was converted to a 15-minute average concentration using the Power Rule (see also Section 2.3.3). It is noted that the level of uncertainty in application of the data for HHRA increases the larger the extrapolation required. This should be kept in mind when interpreting the resulting HQs and HIs.

3.2 Data censoring

Censoring of the available data was required to be undertaken as LoRs for individual chemicals varied considerably (i.e. from ~1 to 65 µg/m^3) and the LoRs for some chemicals exceeded chronic AGVs. Analytical data was censored when estimating averaged concentrations for comparison with chronic AGV which are expressed as annual averages. Censoring data involves adopting one of the following values for the LoR when estimating an averaged concentration of all the data:

- The LoR, or
- Half the LoR, or
- Nil or Not present (i.e. concentration = 0 µg/m^3).

In this HHRA, concentrations reported to be <LoR were assumed to be half the LoR when estimating average concentrations as suggested in Australian risk assessment guidelines (enHealth 2012). The impact that this assumption may have on overall conclusions has been explored in the uncertainty analysis (see Section 6).

3.3 Exposure Point Concentrations

The exposure point concentrations used in this HHRA for the 13 measurable compounds are presented below in Table 3-2. The analytical results for all 77 chemicals are provided in Table B1, Appendix B.

Table 3-2 Summary of Exposure Point Concentrations (µg/m^3) Used.

Compound	Average Limit of Reporting (1)	Maximum 24-hour Concentration	Concentration Converted to 15 min avg time (3)	Annual average (<LoR conc assumed to be at half the LoR) (4)
Benzene	2.3	24	59.8	1.5
2-Butanone (Methyl Ethyl Ketone)	2.3	10	24.9	1.2
Cyclohexane	1.8	11 (2)	27.4	1.0
Ethyl Benzene	2.8	7.5	18.7	1.4
Trichlorofluoromethane (Freon 11)	1.4	3.8	9.5	1.1
Dichlorodifluoromethane (Freon 12)	1.9	7.1	17.7	2.6
Heptane	3.2	14 (2)	34.9	1.7
Hexane	2.8	36	89.7	1.5
Tetrachloroethene	5.1	60 (2)	149.5	2.8
Toluene	2.8	8.8	21.9	1.8
1,1,2-Trichloroethane	3.7	25	62.3	1.9
Trichloroethene	4.1	14 (2)	34.9	2.1
2,2,4-Trimethylpentane	4.1	47	117.1	2.2

LOR = Limit of reporting

(1) The average limit of reporting (LOR) is based on the full value (not 0.5x LOR). LOR on days with a detect were not included.

(2) 24-hour air concentration was adjusted using Haber's Law to match the 15-minute exposure time of the adopted acute air guideline value.

(3) 24-hour air concentration was adjusted to a 15-minute averaging time using Power's Law for evaluating potential impacts on amenity (inhalation and odour).

(4) Average concentration of all 292 samples was taken to be the annual average for comparison with chronic AGVs.

4 Acute Assessment

4.1 Acute systemic toxicity

4.1.1 Acute Air Guideline Values

Acute air guideline values (AGVs) for CoI were sourced from competent national and international agencies. A preference was given to ambient AGVs derived for the general public for which details on their derivation were available. Agencies which derive acute AGVs for some chemicals (and provide background documentation describing the basis of the values) include:

- US Agency for Toxic Substances and Disease Registry (ATSDR) – Acute Minimal Risk Levels (MRLs) (for exposures <14 days). Where acute MRLs were used in this HHRA, concentrations were not adjusted from the 24-hour timeframe, as these AGVs apply for exposures <14 days.
- United States Environmental Protection Agency (US EPA) Integrated Risk Information System (IRIS) – Acute Reference Concentrations (RfCs) (24 hour averaging time).
- Texas Commission on Environmental Quality (TCEQ) – Acute Reference Values (ReVs) (1 hour averaging time). Where acute ReVs were used in this HHRA, concentrations were adjusted to a 1-hour averaging time.
- California Office of Environmental Health and Hazard Assessment (OEHHA) – Acute Reference Exposure Levels (RELs) (1-hour averaging time). Where acute RELs were used in this HHRA, concentrations were adjusted to a 1-hour averaging time.

If no acute AGVs could be found for a particular CoI from any of the references mentioned above, the following additional resources were also considered:

- US EPA/National Research Centre Acute Exposure Guideline Levels (AEGLs). AEGLs are not strictly acute ambient AGVs but are used by emergency planners and responders as guidance in dealing with accidental releases of chemicals into the air. They are designed to protect the elderly and children, and other individuals who may be susceptible and therefore can be applied to public chemical exposures in the absence of other AGVs. AEGLs are available for five relatively short exposure periods and are provided for three different 'levels' which dictate the severity of the toxic effects caused by the exposure, with Level 1 being the least and Level 3 the most severe. For this HHRA, Level 1 AEGLs for a 10-minute exposure timeframe were used where no other acute AGVs were found and if the AEGL was derived from a No Observed Effect Concentration (NOEC). Level 1 AEGLs are typically set to protect against notable discomfort, irritation or certain asymptomatic non-sensory effects. Therefore, there may be some cross-over between AEGLs and sensory irritation thresholds. The effects are not disabling and are transient and reversible upon exposure cessation. Where AEGLs were used in this HHRA, concentrations were adjusted to a 10-minute averaging time.
- Where none of the above resources had acute AGVs for a particular chemical, occupational Short-Term Exposure Levels (STELs) from Safe Work's Hazardous Chemical Information (HCIS) were used (15-minute averaging time). It is recognised the STELs are set for workplace environments and may not necessarily be sufficiently protective of the general public which will include potentially more susceptible individuals (e.g. children, the elderly, people with pre-existing conditions). To account for this uncertainty, where STELs were used in this HHRA, an uncertainty factor of 10 was applied to the value (consistent with default uncertainty factors which cater for human variability as per enHealth 2012). As STELs are set for 15-minute averaging times, exposure concentrations were adjusted to a 15-minute averaging time where these values were used.

A summary of acute guideline values and their basis for the 77 compounds considered in this assessment is provided in Table A1, Appendix A.

4.1.2 Results and Discussion – Acute Exposures

The maximum air concentrations for the 13 compounds with at least one result that was measured above reporting limits are compared against the adopted acute AGV(where available) in Table 4-1 below. HQs are also provided.

Table 4-1 Summary of Acute Air Guideline Values (µg/m^3), Maximum 24-hour Air Concentration (µg/m^3) and Hazard Quotients for Compounds Measured in Air Above Reporting limits.

Compound	Average Limit of Reporting (µg/m^3) (5)	Acute Air Guideline Value (µg/m^3)	Maximum 24-hour Concentration (µg/m^3)	Hazard Quotient
Benzene	2.3	27	24	0.89
2-Butanone (Methyl Ethyl Ketone)	2.3	2,940	10	0.0034
Cyclohexane	1.8	105,000 (2)	50 (1)	0.00048
Ethyl Benzene	2.8	21,710	7.5	0.00035
Trichlorofluoromethane (Freon 11)	1.4	- (7,000) (3)	3.8	- (0.00054) (4)
Dichlorodifluoromethane (Freon 12)	1.9	- (2,000) (3)	7.1	- (0.0036) (4)
Heptane	3.2	205,000 (2)	64 (1)	0.00031
Hexane	2.8	- (2,000) (3)	36	- (0.018) (4)
Tetrachloroethene	5.1	102,000 (2)	275 (1)	0.0027
Toluene	2.8	7,500	8.8	0.0012
1,1,2-Trichloroethane	3.7	164	25	0.15
Trichloroethene	4.1	21,600 (2)	64 (1)	0.003
2,2,4-Trimethylpentane	4.1	-	47	-

(1) 24-hour air concentration was adjusted using Haber's Law to match the 15-minute exposure time needed for the short term exposure limit (STEL).

(2) Acute air guideline value is based on an occupational guideline value (STEL) divided by an uncertainty factor of 10 as no suitable ambient acute guideline value was available.

(3) No acute AGVs were found for these chemicals. However, sub-chronic Reference Concentrations (RfC) relevant for exposures of 15 to 364 days are available for Freon 11 (7,000 µg/m^3, USEPA 2009), Freon 12 (2,000 µg/m^3, USEPA 2010), and hexane (2,000 µg/m^3, USEPA 2009b).

(4) HQ in brackets were estimated using sub-chronic air guideline values.

(5) The average limit of reporting (LOR) is based on the full value (not 0.5x LOR). LOR on days with a detect were not included.

The proportion of the acute HQ estimated from available air quality data for benzene (HQ = 0.89), 1,1,2-Trichloroethane (HQ = 0.15) and the sum of the other 11 compounds reported above measurable levels on at least one occasion (HQ = 0.011)[11] is shown in Figure 4-1. The maximum HQs for benzene and 1,1,2-Trichloroethane occurred on different days (sampling dates of 02/02/20 and 29/04/2020, respectively). Hence, the maximum HI estimated for any one day is 0.90.

[11] Includes the sum of estimated HQs for 2-Butanone (Methyl Ethyl Ketone), Cyclohexane, Ethyl Benzene, Heptane, Tetrachloroethene, toluene and 2,2,4-Trimethyl pentane. It does not include HQ estimated using intermediate MRL for Freon 11, Freon 12 and hexane.

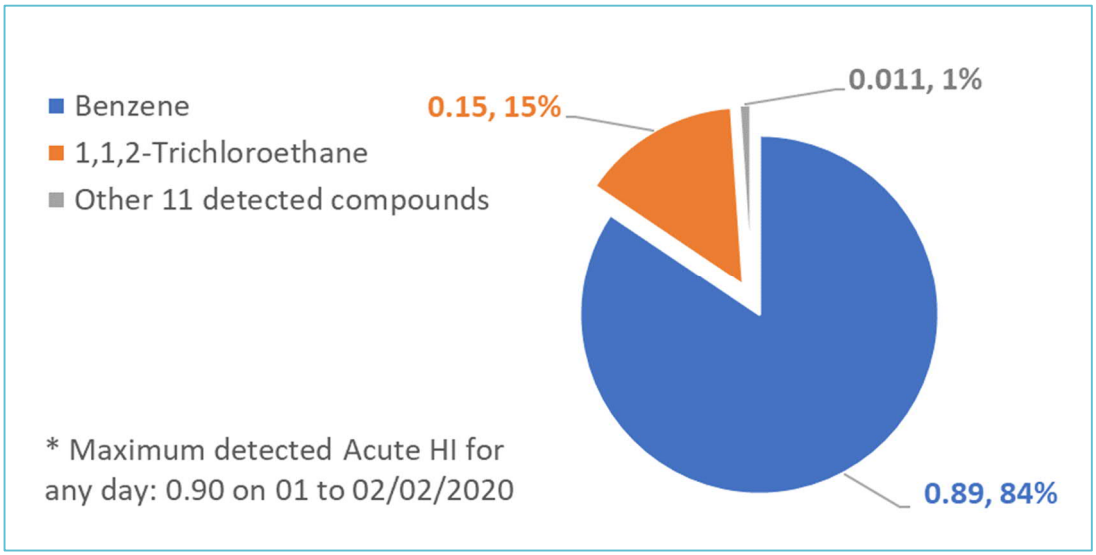
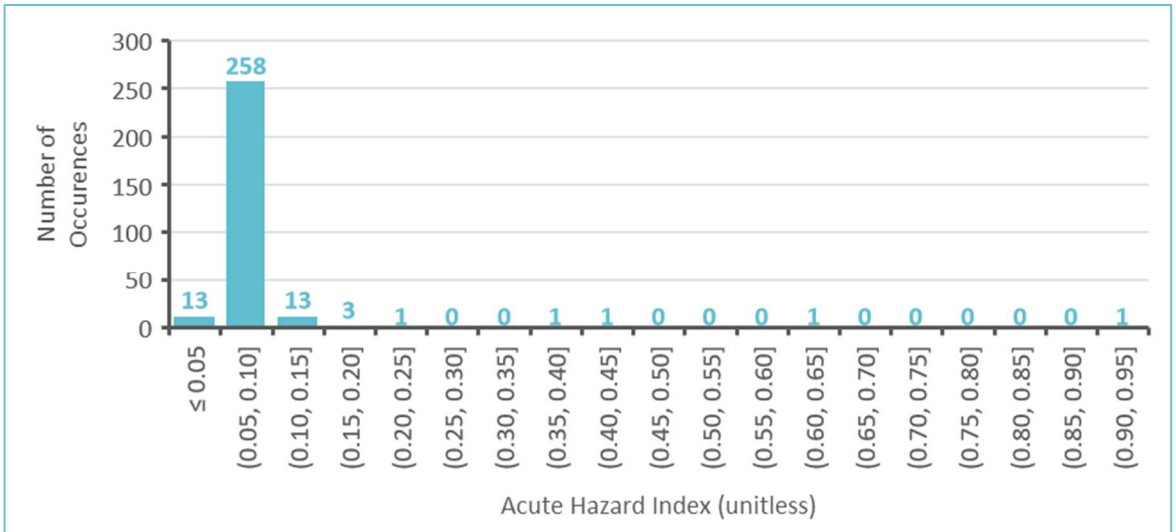


Figure 4-1 Maximum Hazard Quotients for Acute (24-hour) Exposure Period and Proportions (%) of total Hazard Index

There were 21 occasions on which the HI exceeded 0.1 (i.e. 10% of the target HI) from 292 discrete samples over the sampling period (from 07/12/2019 to 16/03/2021) (see Figure 4-2). The majority of these were due to measured benzene concentrations ranging from 3 µg/m^3 to a maximum of 24 µg/m^3.



*The acute Hazard Index (HI) has been calculated for each individual day. Each individual result was placed in to a 'Bin' shown on the x-axis above spanning an acute HI range of 0.05. A column (and the value on the column) represents the number of individual occurrences (i.e. sampling days) that the acute HI fell within the given range (or bin)

Figure 4-2 Histogram Showing Number of Occurrences (i.e. Sampling Days) that Acute Hazard Indices Fell Within a Specific Range.

The majority (i.e. 98.6%) of the benzene results and the calculated average 24-hour benzene concentration (2.5 µg/m^3) are within the average 24-hour benzene concentrations measured at other locations across Melbourne; these range from 1.5 to 5.5 µg/m^3 (see Table 4-2). In the dataset evaluated for this HHRA, toluene and ethyl benzene were also commonly measured above reporting limits on days that benzene was. This is because these compounds are commonly encountered in air adjacent to busy roads and highways. It is possible that benzene, toluene, ethyl benzene and other petroleum hydrocarbons (hexane, heptane, cyclohexane and 2,2,4-trimethylpentane) measured at the monitoring locations could stem from landfill related activities (e.g. car and truck movements) however it is considered more likely that they stem from emissions from vehicular movements along the busy Sunshine Avenue and the Western Ring Road.

Table 4-2 Mean 24-hour average air concentrations at EPA Victoria Monitoring Locations (reproduced from CRC CARE 2011) and Reporting Limits for Benzene, Toluene, Ethyl benzene and Xylenes (µg/m^3).

Melbourne Location	Benzene	Toluene	Ethyl benzene	o & m,p Xylenes
Average limit of reporting (in this assessment)	2.5	2.9	2.8	2.8 or 6
Eltham	1.5	10.9	0.9	3.0
Newport / Spotswood	3.1	16.1	3.9	20.4
Springvale Road	5.5	11.7	1.7	7.8
Westgate Freeway	4.2	22.6	2.2	6.9
Melbourne CBD	1.8	7.9	1.7	6.2

(1) The average limit of reporting (LoR) is as used in this assessment and based on the full value (not 0.5x LOR)..

(2) o & m,p Xylenes were not measured above reporting limits on any sampling day. It is provided here for context only as it is commonly associated with benzene, toluene and ethyl benzenes.

There was no suitable acute exposure guideline identified for the two compounds most frequently encountered in the monitoring program at the Kealba (Barro Group) Landfill, i.e. Freon 11 and Freon 12. Therefore, a comparison of the maximum measured 24-hour concentration for these compounds was made against sub-chronic guideline values (US EPA 2009, 2010). Sub-chronic AGVs would also be protective of acute exposures. Sub-chronic exposures in this instance refers to repeated inhalation exposure of more than 30 days[12]. This comparison indicated that Freon 11 and Freon 12 represent a negligible risk of harm from acute exposure.

4.2 Impacts on Amenity (Irritation and Odour)

Brief exposure to chemicals in air may cause people to experience symptoms of mild irritation (manifested as itchy eyes or a tingling nose) and/or sense an odour that may affect their wellbeing and/or environment, i.e. irritation and/or odour may negatively (or positively, if the odour is pleasant) affect their amenity. The concept of irritation and irritation thresholds was previously described in Section 2.3.3. and the concept of odour and odour thresholds was discussed in Section 2.3.4.

[12] The USEPA defines sub-chronic exposure as "*Repeated exposure by the oral, dermal, or inhalation route for more than 30 days, up to approximately 10% of the life span in humans (more than 30 days up to approximately 90 days in typically used laboratory animal species)*". Refer to this website last accessed 20 April 2021: https://sor.epa.gov/sor_internet/registry/termreg/searchandretrieve/termsandacronyms/search.do?search=&term=chronic&matchCriteria=Contains&checkedAcronym=true&checkedTerm=true&hasDefinitions=false%23formTop

As assessment of potential impacts on amenity was included in this report as an additional consideration to risk of harm from exposure to volatile organic compounds in air (i.e. an impact on amenity does not necessarily constitute a risk of harm). For odour, findings in this report are limited to the potential for one of the 77 CoI to be responsible for any noticeable odour at the site boundary. This assessment is complementary to any detailed odour assessment which we understand is being undertaken separately since other chemicals (not included in the 77 CoI) could be responsible for any odours at the site boundary.

4.2.1 Guideline Values for amenity

A number of literature sources[13] were consulted to identify irritation thresholds for CoI. In total, irritation thresholds were found for 27 CoI (refer to Table A2, Appendix A) and they predominantly stem from Ruth (1986) and were supplemented with values from ATSDR. Ruth (1986) is a compilation list of thresholds for irritation and odour gathered from a review of available information "*published in several less accessible formats*".

There is wide range of odour thresholds available in the literature for the same chemicals owing to the different definitions and methods used by researchers to determine them. Hence, in this HHRA, for the majority of CoI odour thresholds were selected for each chemical based on preferences (or order) as follows:

- Ruth (1986). NB: The value at the low end of the range was adopted.
- Falcy and Mallard (2005).
- Williams & Ringsdorf (2020).
- Other sources (e.g. Falcy and Mallard 2005, ATSDR, US EPA, WHO).

A comparison of odour threshold values from the various sources was made to check that the chosen value was similar in concentration to other available odour threshold values. In some instances, where three or more odour threshold values were available, the value indicated by the order of sources given above was not adopted and a more appropriate value consistent with the range of available values was adopted. For example, where multiple odour thresholds were sourced for the same chemical and the odour threshold from Ruth (1986) was much higher (10x or more) or lower (0.1x or less) then an odour threshold from the remaining values was adopted instead.

The odour thresholds selected for all chemicals are presented in Table A2, Appendix A.

4.2.2 Results and Discussions – Irritation

Irritation quotients estimated for eight of the 13 CoI with measured concentrations greater than the laboratory reporting limits are shown in Table 4-3. As irritation may occur after short exposure periods (e.g. 15-minutes), the maximum measured air concentration (from all analyses) was converted (increased by ~2.5 times) using the Power Law (see also Section 2.3.3). An overall irritation index of 0.0004 was calculated (and is well below the target of 0.1).

This indicates the concentrations of CoI measured in air would be unlikely to result in irritation of eyes and airways of people at the boundary of the landfill.

[13] The sources included WHO Environmental Health Criteria documents, WHO Concise International Chemical Assessment Documents, toxicological profiles from the Agency for Toxic Substances and Disease Registry (ATSDR), as well as peer-reviewed scientific papers dealing with irritation thresholds (Ruth 1986, Abraham et al. 1986).

Table 4-3 Summary of Irritation Guidelines (µg/m^3), Concentrations Converted to 15-minute averaging time (µg/m^3), Irritation Quotient and Overall Irritation Index for Chemicals Measured in Air Above Reporting limits.

Compound	Average Limit of Reporting	Irritation Guideline Value	Concentration Converted to 15 min avg time (1)	Irritation Quotients
Benzene	2.3	9,000,000	59.8	0.000007
2-Butanone (Methyl Ethyl Ketone)	2.3	590,000	24.9	0.00004
Cyclohexane	1.8	1,050,000	27.4	0.00003
Ethyl Benzene	2.8	870,000	18.7	0.00002
Trichlorofluoromethane (Freon 11)	1.4	No value	9.5	-
Dichlorodifluoromethane (Freon 12)	1.9	No value	17.7	-
Heptane	3.2	No value	34.9	-
Hexane	2.8	1,800,000	89.7	0.00005
Tetrachloroethene	5.1	710,200	149.5	0.0002
Toluene	2.8	380,000	21.9	0.00006
1,1,2-Trichloroethane	3.7	No value	62.3	-
Trichloroethene	4.1	864,000	34.9	0.00004
2,2,4-Trimethylpentane	4.1	No value	117.1	-
			Irritation Index	0.0004

(1) For amenity (irritation and odour), the maximum measured air concentration (from all analyses) was converted (increased by ~2.5 times) using the Power Law to suit the more biologically relevant shorter exposure period.

4.2.3 Results and Discussions – Odour

An overall odour threshold index of 0.09 was estimated using the maximum concentration reported for the 13 CoI, refer to Table 4-4 below. The highest contribution to the overall odour threshold index was from methyl ethyl ketone (0.034) and petroleum hydrocarbons; benzene (0.013), cyclohexane (0.019), and hexane (0.017).

Table 4-4 Summary of Odour Guidelines (µg/m^3), Concentrations Converted to 15-minute averaging time (µg/m^3) and Odour Index for Compounds Measured in Air Above Reporting limits.

Compound	Average Limit of Reporting (1)	Odour Threshold (2)	Concentration Converted to 15 min avg time (3)	Odour Threshold Quotient
Benzene	2.3	4,500	59.8	0.013
2-Butanone (Methyl Ethyl Ketone)	2.3	738	24.9	0.034
Cyclohexane	1.8	1,435	27.4	0.019
Ethyl Benzene	2.8	8,700	18.7	0.0021
Trichlorofluoromethane (Freon 11)	1.4	28,000	9.5	0.00034
Dichlorodifluoromethane (Freon 12)	1.9	No value	17.7	-
Heptane	3.2	200,000	34.9	0.00017
Hexane	2.8	5,287	89.7	0.017

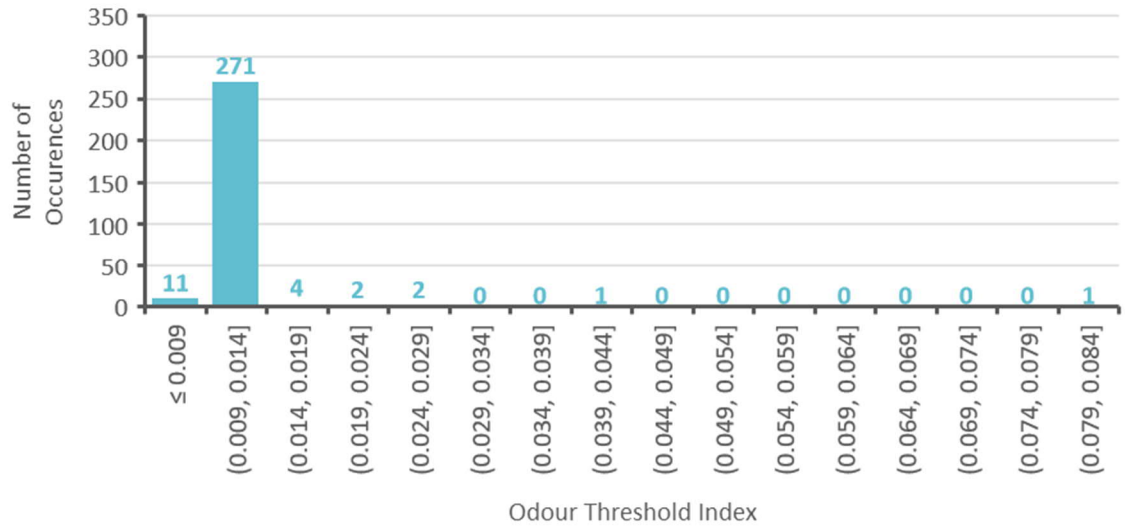
Compound	Average Limit of Reporting (1)	Odour Threshold (2)	Concentration Converted to 15 min avg time (3)	Odour Threshold Quotient
Tetrachloroethene	5.1	31,356	149.5	0.0048
Toluene	2.8	8,025	21.9	0.0027
1,1,2-Trichloroethane	3.7	No value	62.3	-
Trichloroethene	4.1	150,467	34.9	0.00023
2,2,4-Trimethylpentane	4.1	3,130	117.1	-
			Odour Threshold Index	0.09

(1) The average limit of reporting (LOR) is based on the full value (not 0.5x LOR). LOR on days with a detect were not included.

(2) Refer to Table A2, Appendix A for the source of Odour Thresholds.

(3) For amenity (irritation and odour), the maximum measured air concentration (from all analyses) was converted (increased by ~2.5 times) using the Power Law to suit the more biologically relevant shorter exposure period.

The odour threshold index was also estimated for each individual day and shown in the histogram in Figure 4-3 below. The odour threshold index is displayed in 'Bins' on the x-axis which span ranges of 0.005. It is evident from the Figure that only on one occasion was the odour threshold index 0.080 and the vast majority of odour threshold indices (271 of 292) were approximately 0.001 (in the range of 0.009 to 0.014). For these reasons, it is considered unlikely that people would be able to smell any of the 77 compounds included in the analytical schedule even if the individual odours were additive.



*The odour threshold index has been calculated for each individual day. Each individual result was placed into a 'Bin' shown on the x-axis above spanning the specified range of odour threshold indices in increments of 0.005. A column (and the value on the column) represents the number of individual occurrences (i.e. sampling days) that odour threshold indices fell within that range of odour threshold indices (or bin).

Figure 4-3 Histogram Showing Number of Occurrences (i.e. Sampling Days) that Odour Threshold Indices Fell Within a Specific Range.

5 Chronic and Cancer Assessment

5.1 Guidelines for Chronic and Cancer Assessment

Chronic AGVs were sourced from competent national and international agencies with a preference given to values for which information on their derivation was available (as done for acute AGVs). Preference was given to the following two sources of information:

- Schedule B7, the Guideline on the Derivation of Health-Based Investigation Levels, National Environment Protection (Assessment of Site Contamination) Measure 1999. (NEPC 2013b).
- Air Quality Guidelines from the World Health Organisation (WHO 2000).

If a chronic AGV could not be found for a particular CoI from one of the sources listed above or more up-to-date toxicological information was available since the guideline had been promulgated, a health-based chronic AGV was adopted from one of the following sources:

- US Agency for Toxic Substances and Disease Registry (ATSDR) – Chronic MRLs (for exposures >365 years).
- US EPA Integrated Risk Information System (IRIS) – Chronic Reference Concentrations (RfCs).
- OEHHA – Chronic Reference Exposure Levels (REL).
- TCEQ – Chronic Reference Values (ReVs).
- Ontario Ministry of the Environment – Ambient Air Quality Criteria (AAQC). It is noted the basis for these AGVs were not available; nevertheless, this source was consulted where no other AGVs were available.
- Where no chronic AGV could be found for a CoI from any of the sources listed above, the generic Concentration of No Toxicological Concern (CoNTC) was used (Drew and Frangos 2007). The CoNTC is a generic concentration applied in HHRAs in the same manner as a chronic AGV. The value of the selected CoNTC is dependent on the Cramer class (or hazard potential) of a CoI. The hazard potential of a CoI is determined based on its chemistry, likely metabolism and whether it is a normal constituent of food or the body (Cramer et al. 1978, WA DoH 2010). The appropriate Cramer (or hazard) class of a CoI can be determined by using purpose-built software called Toxtree® (IdeaConsult 2018).

A summary of chronic AGVs and their basis for the 77 CoIs is provided in Table A4, Appendix B. The chronic AGVs are defined by various agencies as a concentration of a CoI in air that can be breathed in every day over a lifetime without adverse health effects. Thus, the appropriate averaging time is a long-term 24-hour average, i.e. an annual average. Therefore, in this HHRA, HQs and ILCR were estimated using an annual averaged concentration of all analytical results. On days when the chemical was not measurable (below reporting limits) then the reporting limits were censored, i.e. the reporting limit was replaced with a value that was half (0.5x) the reporting limit as suggested in enHealth (2012).

Inhalation unit risk factors (IURF), or guideline values for assessment of cancer risk, were obtained from the same sources as for chronic AGVs. As described in Section 2.3.5, consistent with Australian risk assessment methodology (enHealth 2012), cancer risk estimates (ILCR) were only estimated for those CoI that are considered to be i) carcinogenic and ii) have a genotoxic mode of action. Whether a CoI is assessed as a carcinogen in this report was informed by the International Agency for Research on Cancer (IARC) classifications as summarised in the latest alphabetical listing[14]. If CoI are classified by IARC as being either carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B), they were considered further as to whether they potentially act via a genotoxic mode of action. Whether a genotoxic mode of action is relevant for carcinogenicity of a particular CoI classified as a Group 1, 2A or 2A carcinogen was informed by information in the respective IARC monographs and publicly available literature. Many CoI included in this assessment were not classifiable as to their carcinogenicity to humans (i.e. IARC Group 3).

The carcinogenicity classifications and IURF for the 77 CoI are summarised in Table A4, Appendix B. The following 15 CoI were identified as being potentially carcinogenic with a genotoxic mode of action:

- Acrolein (Group 2A).
- Acrylonitrile (2B).
- Benzene (1).
- Bromodichloromethane (2B).
- 1,3-Butadiene (Group 1).
- alpha-Chlorotoluene (Group 2A).
- 1,2-Dibromoethane (Group 2A).
- 1,1-Dichloroethane (Group 2B).
- 1,2-Dichloroethane (Group 2B).
- cis&trans-1,3-Dichloropropene (group 2B).
- Styrene (Group 2A).
- Trichloroethene (Group 1).
- Vinyl Acetate (Group 2B).
- Vinyl Bromide (Group 2A).
- Vinyl Chloride (Group 1).

There were a number of CoI identified as being carcinogenic but based on weight of evidence considerations were not considered to assert their carcinogenicity by a genotoxic mode of action[15]. Vinyl acetate was also identified as a carcinogen that acts via genotoxic mode of action but was not included in the evaluation here as assessment of chronic risk is protective carcinogenicity (as carcinogenicity is only be relevant above threshold concentrations, ECHA 2008), carcinogenicity was observed in rats which were considered more sensitive than humans for this chemical (ECHA 2008) and an IURF has not been estimated for this compound. Therefore, vinyl acetate is not considered further for cancer risk in this assessment.

[14] The IARC alphabetical listing was last accessed on 26 April at this location: https://monographs.iarc.who.int/list-of-classifications/

[15] CoI rated as carcinogenic but that were not considered to act via a genotoxic mode of action included: Carbon Tetrachloride (Group 2B), Chloroform (Group 2B), 2-Chloroprene (Group 2B), Cumene (Group 2B), 1,4-Dichlorobenzene (Group 2B), 1,1-

5.2 Chronic Toxicity Results and Conclusions

Two freon compounds, trichlorofluoromethane (Freon 11) and dichlorodifluoromethane (Freon 12) were regularly measurable above their LoRs in air samples, 133 times and 255 times respectively in 292 samples. These two compounds are the only compounds for which a chronic HQ was calculated as shown in Table 5-1. A chronic HI of 0.0002 was estimated with the dominant contributor being trichlorofluoromethane (Freon 11).

Freon 11 and Freon 12 were frequently detected (>90%) in outdoor air samples from Sydney suburbs with average air concentrations for each of approximately 6 µg/m^3 (1 ppb) (DEC 2004). Average 24-hour air concentrations in Sydney suburbs are comparable to the average air concentrations measured in samples from the landfill boundary of 1.1 µg/m^3 for Freon 11 (maximum = 3.8 µg/m^3) and 2.6 µg/m^3 for Freon 12 (maximum = 7.1 µg/m^3) indicating the landfill was unlikely the source of these two freon gases. Repeated exposure to these two freon compounds at the reported concentrations represents a negligible risk of harm to any persons at the site boundary.

Table 5-1 Chronic Air Guideline Values, Average 0.5x Limits of Reporting and Hazard Quotients for regularly measurable compounds.

Compound	Number of Measurable Results	Average of 0.5x Limit of Reporting (1)	Chronic AGV (µg/m^3) (2)	Average annual Concentration	Hazard Quotient
Trichlorofluoromethane (Freon 11)	113	0.7	6,000	1.1	0.0002
Dichlorodifluoromethane (Freon 12)	255	1.0	500,000	2.6	0.000005
				Chronic Hazard Index	0.0002

(1) The average limit of reporting (LOR) is based on the full value (not 0.5x LOR). LOR on days with a detect were not included.
(2) Refer to Table A3, Appendix A for source of Chronic AGVs.

The remaining 11 chemicals with measurable concentrations that had a limited number of detections are shown below in Table 5-2. The average annual concentrations for these 11 chemicals were well below the adopted chronic AGV except for two compounds, trichloroethene and 1,1,2-trichloroethane. The calculated average trichloroethene concentration (2.1 µg/m^3) was marginally higher than the chronic AGV (2 µg/m^3) whereas the average 1,1,2-trichloroethane concentration (1.9 µg/m^3) was well above the relevant chronic AGV (0.2 µg/m^3). These exceedances result from the reporting limits being higher than the chronic AGV. The current dataset is insufficient to allow for a determination of risk of harm to people potentially exposed to these two chemicals without further assessment (discussed further below).

There were a low number of measurable results for benzene (21), toluene (37) and the other remaining chemicals (3 or less each) shown in Table 5-2 therefore estimation of chronic HQs and HIs was not considered warranted. The source of benzene, toluene, ethyl benzene and some of the other compounds (e.g. cyclohexane, trimethylpentane etc.) may be vehicular emissions from local busy roads rather than landfill related (refer to Section 4.1.2). Chronic (repeated) exposure to these chemicals represents a negligible risk of harm based on average concentrations derived from the dataset.

Dichloroethane (Group 2B), 1,2-Dichloropropane (Group 1), Ethyl benzene (Group 2B), 4-Methyl-2-pentanone (Group 2B), Naphthalene (Group 2B), 1,1,1,2-Tetrachloroethane (Group 2B), 1,1,2,2-Tetrachloroethane (Group 2B), and Tetrachloroethene (Group 2A).

Table 5-2 Summary of Chronic AGVs (µg/m^3) and Average Concentrations for remaining chemicals with measurable results.

Compound	Number of Measurable Results	Chronic AGV (µg/m^3) (2)	Average Concentration (1)
Benzene	21	30	1.5
2-Butanone (Methyl Ethyl Ketone)	3	5000	1.2
Cyclohexane	1	6000	1.0
Ethyl Benzene	3	1000	1.4
Heptane	1	9000	1.7
Hexane	3	670	1.5
Tetrachloroethene	3	200	2.8
Toluene	37	5000	1.8
1,1,2-Trichloroethane	2	0.2	1.9
Trichloroethene	2	2	2.1
2,2,4-Trimethylpentane	1	540	2.2

Bolded values indicate that the chronic AGV has been exceeded by calculated average concentration, Chronic AGV = Chronic Air Guideline Value; LoR = Limit of Reporting.

(1) The average concentration was estimated by assuming concentrations <LoR were present at half the LoR (0.5x LoR).

(2) Refer to Table A3, Appendix A for source of Chronic AGVs.

There are several chemicals for which there were no measurable results (above limits of reporting) but have chronic AGV that is lower than (or very close to) the average of half the limit of reporting. These chemicals are listed below in Table 5-3. Along with trichloroethene and 1,1,2-trichloroethane discussed above, further assessment of these chemicals is required before a conclusion can be drawn regarding the potential risk of harm from exposure. Table 5-3 also provides the ideal target limit of reporting for these CoI; the latter being 10% of the selected chronic AGV.

Table 5-3 Chronic Air Guideline Values, Average 0.5x Limits of Reporting and Target Limit of Reporting (at HQ of 0.1).

Compound	Chronic AGV (µg/m^3) (1)	Average of 0.5x Limit of Reporting (µg/m^3)	Target Limit of Reporting (µg/m^3) at 10% of chronic AGV
Acrolein	0.35	1.6	0.035
Acrylonitrile	5	4.1	0.5
tert-Amyl Methyl Ether	0.2	1.4	0.02
Bromoform	0.2	2.8	0.02
3-Chloropropene	1	1.6	0.1
2-Chlorotoluene	0.2	2.1	0.02
alpha-Chlorotoluene	1	1.6	0.1
o-Cymene	5	2.8	0.5
Dibromochloromethane	0.2	2.8	0.02
1,2-Dibromoethane (EDB)	9	2.8	0.9

Compound	Chronic AGV (µg/m^3) (1)	Average of 0.5x Limit of Reporting (µg/m^3)	Target Limit of Reporting (µg/m^3) at 10% of chronic AGV
1,3-Dichlorobenzene	0.2	2.3	0.02
1,1-Dichloroethene	2.4	4.1	0.24
1,2-Dichloropropane	4	1.4	0.4
trans-1,3-Dichloropropene	31	4.6	3.1
Hexachlorobutadiene	0.2	8.2	0.02
Naphthalene	3	1.8	0.3
1,2,4-Trichlorobenzene	2	1.6	0.2
Vinyl Bromide	3	4.1	0.3

Bolded shaded values indicate that the Average of 0.5x Limit of Reporting exceeds the chronic AGV.

(1) Refer to Table A3, Appendix A for source of Chronic AGVs.

5.3 Cancer Risk

A total incremental lifetime cancer risk (ILCR) was estimated for 2 of the 15 chemicals identified as being potentially carcinogenic with a genotoxic mode of action (see Section 5.1), benzene and trichloroethene. This is because these are the only two genotoxic carcinogens with at least one measurable result above reporting limits, i.e. there were no measurable results for the other 13 chemicals identified as carcinogens with a genotoxic mode of action.

An ILCR of 7.4×10^{-6} for the two chemicals with measurable levels in air was estimated with roughly equal contributions from benzene (3.8×10^{-6}) and trichloroethene (3.6×10^{-6}). This represents low and acceptable cancer risk from exposure to benzene and trichloroethene in air following inhalation exposure.

For benzene, the average 24-hour air concentration (1.5 µg/m^3) was only marginally higher than the average 0.5x limit or reporting (1.2 µg/m^3) and, as previously discussed, is within the range of benzene air concentrations in metropolitan Melbourne (Section 4.1.2). For trichloroethene, the average 24-hour air concentration was the same as the average 0.5x limit of reporting (2.1 µg/m^3) noting that there were only 2 measurable results from 292 samples. Both these measurable results were from samples taken over the same 24-hour period (28 – 29/04/2020) at the northern monitoring location (14 µg/m^3) and western monitoring location (4.4 µg/m^3). Strong northerly winds[16] of approximately 50 km/hr (27 knots)[17,18] indicate the source of trichloroethene in air on this day was unlikely the landfill and most likely stemming from an area to the north.

[16] The strength of wind speed is based on the Beaufort wind scale as indicated by the Bureau of Meteorology website last accessed 26 April 2021: http://www.bom.gov.au/marine/knowledge-centre/reference/wind.shtml

[17] Wind data retrieved for the Essendon Airport Monitoring Station from the Bureau of Meteorology last accessed 26 April 2021: http://www.bom.gov.au/climate/dwo/202004/html/IDCJDW3026.202004.shtml or http://www.bom.gov.au/climate/data/ using station number 086038.

[18] Note that 1 knot = 1.85 kilometres per hour (km/hr).

There are several chemicals (13 in total) that were not measurable in any of the 292 samples collected but for which respective reporting limits were too high to conduct a meaningful assessment for cancer risk (Table 5-4). This is because the average of 0.5x Limit of Reporting is higher than the air concentration that represents a $1x10^{-5}$ cancer risk, refer to Table 5-4. It would also be beneficial to lower the reporting limits (either in the original dataset or in future monitoring events) for these 13 chemicals (as suggested for benzene and trichloroethene above) so that a meaningful assessment of cancer risk could be performed. A target limit of reporting has been estimated assuming a target cancer risk level of $1x10^{-6}$ to account for additivity, residents may live in the area for 30 years (as per NEPM 2013) and an average lifetime is 70 years, i.e. the target limit of reporting = $1x10^{-6}$ ÷ Unit Risk Factor (see Table A4, Appendix A) x 70 years ÷ 30 years x 2. The latter additional factor of 2 (is included when calculating the target limit of reporting to account for data censoring techniques (i.e. replacing reporting limits with 0.5x limit of reporting) since the target limit of reporting in some instances are potentially practically unachievable.

Table 5-4 Inhalation Unit Risk Value [$(\mu g/m^3)^{-1}$], Average 0.5x Limits of Reporting, Air Concentration at $1x10^{-5}$ cancer risk levels and Suggested Target Limit of Reporting (at $1x10^{-6}$ cancer risk levels assuming 30 years resident time).

Compound	Inhalation Unit Risk Value [$(\mu g/m^3)^{-1}$] (1)	Average of 0.5x Limit of Reporting ($\mu g/m^3$)	Air Concentration at $1x10^{-5}$ Cancer Risk ($\mu g/m^3$)	Target Limit of Reporting at $1x10^{-6}$ cancer risk and 30 years assumed exposure ($\mu g/m^3$)
Acrylonitrile	$1.7x10^{-5}$	4.1	0.59	0.28
Bromodichloromethane	$3.7x10^{-5}$	2.3	0.27	0.13
1,3-Butadiene	$3.0x10^{-5}$	0.7	0.33	0.16
2-Chloroprene	$3.0x10^{-4}$	2.5	0.033	0.016
alpha-Chlorotoluene	$4.9x10^{-5}$	1.6	0.20	0.095
1,2-Dibromoethane (EDB)	$6.0x10^{-4}$	2.8	0.017	0.0078
1,2-Dichloroethane	$2.6x10^{-5}$	2.3	0.39	0.18
cis-1,3-Dichloropropene	$4.0x10^{-6}$	1.4	2.5	1.2
trans-1,3-Dichloropropene	$4.0x10^{-6}$	1.6	2.5	1.2
Vinyl Bromide	$3.2x10^{-5}$	1.8	0.31	0.15
Vinyl Chloride	$4.4x10^{-6}$	0.9	2.3	1.1

Bolded values indicate that the air concentration at which a lifetime exposure may constitute a $1x10^{-5}$ cancer risk is higher than the average of 0.5x the LoR. LoR = Limit of Reporting.

(2) Refer to Table A4, Appendix A to identify the source of Odour Thresholds

5.4 Further Assessment

Of the CoI evaluated in this report, there are 25 for which further detailed assessment of chronic and potential carcinogenic risk may need to be undertaken to enable a definitive conclusion regarding potential risk of harm to be made(see Table 5-5). This is because the reporting limits for these 25 CoI are near and/or above relevant chronic AGVs. SLR has estimated a desirable target reporting limit (shown in the table below in orange shaded bolded text) required to enable further detailed assessment to be undertaken. The target reporting limit was the lower of the two target values for assessment of chronic or cancer risk required to address limitations in the existing dataset (discussed earlier). The reporting laboratory could be requested to re-evaluate the reporting limits in the existing dataset to determine whether there is scope to re-evaluate (lower) them. In some instances, laboratories have the capacity to report to lower reporting limits however confirmation is required as to whether this can be done for the existing dataset. If so, then it may be a lengthy process for the laboratory considering that the existing dataset has 292 sets of analytical results.

It is recommended the environmental consultant should also evaluate the reporting limits in the existing monitoring program to determine whether lower reporting limits can be used in future monitoring rounds, preferably at the targets set out in Table 5-5 below. It is recognised there may be instances where the reporting limits listed below cannot be practically achieved.

Table 5-5 Suggested Reporting Limits Required for Further Assessment and Current (averaged) Limits of Reporting.

Compound	Reporting Limits for further Assessment (µg/m^3)			Average of 0.5x Limit of Reporting (µg/m^3)
	Required for Chronic Risk	Required for Cancer Risk	Target	
Acrolein	0.035	-	0.035	1.6
Acrylonitrile	5	0.28	0.28	4.1
tert-Amyl Methyl Ether	0.02	-	0.02	1.4
Bromodichloromethane	-	0.13	0.13	2.3
Bromoform	0.02	-	0.02	2.8
Benzene	-	0.78	0.17	1.2
1,3-Butadiene	-	0.16	0.16	0.7
2-Chloroprene	-	0.016	0.016	2.5
3-Chloropropene	0.1	-	0.1	1.6
2-Chlorotoluene	0.02	-	0.02	2.1
alpha-Chlorotoluene	0.1	0.095	0.095	1.6
Dibromochloromethane	0.02	-	0.02	2.8
1,2-Dibromoethane (EDB)	0.9	0.0078	0.0078	2.8
1,3-Dichlorobenzene	0.02	-	0.02	3.0
1,1-Dichloroethene	0.24	-	0.24	4.1
1,2-Dichloroethane	-	0.18	0.18	2.3
1,2-Dichloropropane	0.4	-	0.4	4.1
cis-1,3-Dichloropropene	-	1.2	1.2	1.4
trans-1,3-Dichloropropene	3.1	1.2	1.2	1.6

Compound	Reporting Limits for further Assessment (µg/m^3)			Average of 0.5x Limit of Reporting (µg/m^3)
	Required for Chronic Risk	Required for Cancer Risk	Target	
Hexachlorobutadiene	0.02	-	0.02	4.6
Naphthalene	0.3	-	0.3	1.8
Trichloroethene	-	1.2	1.2	2.1
1,2,4-Trichlorobenzene	0.2	-	0.2	8.2
Vinyl Bromide	0.3	0.15	0.15	1.8
Vinyl Chloride	-	1.1	1.1	0.9

Target reporting limit shown in orange shaded bolded text

6 Uncertainty Analysis

A general discussion of the uncertainties inherent when preparing risk assessments of this type is provided below in Table 6-1. As examples, uncertainty arises due to limitations in the available data (e.g. data gaps), using maximum air concentrations and the use of generic/default exposure parameter values which may introduce excessive conservatism into risk estimates.

Table 6-1 Discussion of Uncertainties in HHRA

Key Assumption or parameter	Uncertainty Discussion	Potential Change in Conclusions
Maximum 24-hour air concentrations adopted in acute exposures and assessment of amenity impacts	Use of maximum 24-hour air concentrations may give an impression that risk from acute exposure to a CoI or risk to amenity (irritation or dour) is unacceptable for an extended period. To account for this, histograms were prepared to give an indication of the range of the estimated hazard indices, odour threshold indices and irritation indices. Most of the calculated indices for short-term exposures were well below acceptable levels. Overall, use of maximum values did not affect the conclusions of this HHRA.	Nil
CoPC considered in this HHRA were limited to 77 CoI.	There may be other chemicals in air that were not monitored and not included in the extended TO-15 suite used for analysis. This could affect the odour assessment however it is understood that separate odour assessments have or are being undertaken at the landfill site.	Possible change for odour.
Exposure Frequency	It is assumed exposure by a resident will be continuous for 24 hours a day, 365 days/year for 30 years. Should the resident not spend a portion of their day in their home, or exposure time be reduced, then the estimated chronic HQs and cancer risks would be lower. These assumptions have limited impact on the acute assessment.	Unchanged (noting possibly lower risk estimates).
Data is suitable for risk assessment purposes	Data quality was not evaluated for this project. It was assumed the data was suitable for the preparation of this assessment.	Not determined
AGV	Acute and chronic air guideline values are typically based on levels at which no effects are observed in animal studies with large uncertainty factors applied (100x or more). Therefore uncertainty in these values has already been accounted for and their use probably results in an overestimate of potential risk of harm.	No change (Probably decreased risk estimates).
IURF	IURF are typically derived using animal studies and doses that are considerably higher than where cancer effects have been noted and are estimated by extrapolating down to lower doses using linear functions. This most likely overestimates ILCR.	No change (Probably decreased risk estimates).
Reporting Limits	As discussed in Section 5.4, the reporting limits in some instances were higher than chronic AGVs for select CoI and a meaningful assessment of chronic and cancer risk could not be undertaken (for these CoI). Negotiations are underway with the reporting laboratory and consultant to determine whether lower reporting limits can be achieved. Lower reporting limits could lead to more measurable results being reported and possibly increases in cumulative risk estimates for chronic adverse effects.	Possibly (as a result in increased chronic and cancer risk estimates if CoI are found to be present at concentrations below the current LORs).

Key Assumption or parameter	Uncertainty Discussion	Potential Change in Conclusions
Data censoring	Due to the large amount of concentrations below respective limits of reporting, data censoring techniques needed to be employed to calculate average concentrations for use in chronic and cancer risk assessments. The value used in estimating average air concentrations was achieved by replacing values below the LoR with 0.5x LoR This data censoring technique assumes that there is always a certain amount of a compound present and likely results in overestimation of risk estimates, particularly when data are averaged over 292 results. If chemicals are actually found not to be present where concentrations are reported as <LoR, the estimated risk indices estimated would be lowered.	No change (Probably decreased risk estimates).

The majority of the assumptions made in this HHRA are likely conservative and err on the side of safety.

There are two key parameters/assumptions identified in Table 6-1 that have the potential to change the risk profile for residents living in the vicinity of the landfill who may be exposed to the chemicals monitored at the boundary of the landfill. These parameters are: i) the odour assessment is limited to 77 CoI and ii) the reporting limits for some CoI were above chronic AGVs and too high for the cancer risk assessment. It is understood a separate odour study has or is being conducted. Although the assessment herein has indicated that the 77 CoI evaluated in this report are unlikely to be responsible for any odours at the site boundary (should odours be experienced), it is possible that other chemicals or entities could still result in odour being experienced at the site boundary. With respect to the uncertainties related to the LoRs, as discussed in Section 5.4, negotiations are currently underway with the reporting laboratory to potentially lower the reporting limits for some CoI.

7 Conclusions

Measurable Levels of CoI

Chemical concentrations have been monitored at two locations, one each on the northern and western boundaries of the landfill. Of the 77 CoI considered in this assessment, only 13 had measurable concentrations (above reporting limits) and were considered in quantitative assessments for acute health risk, risk to amenity, chronic health risk and cancer risk. Freon 11 (87%, 255 of 292 results), and Freon 12 (13%, 113 of 292 results) were the two CoI that were consistently measured in the available data (Section 3.1).

Data were censored in order to calculate average air concentrations (used for the chronic and cancer risk assessments, refer to Section 3.2). Data censoring involves replacing the reporting limits with half the reporting limit as suggested by enHealth (2012). Exposure point concentrations used in the risk assessment are summarised for acute, amenity and chronic/cancer risk estimates in Section 3.3.

Acute Health Risk

The risk of harm from acute (i.e. short-term) exposures to most CoI is considered negligible (Section 4.1.2). A HI of 0.9 (representing a low and acceptable risk of harm) was estimated for potential exposures on a single day with the majority of HI being approximately 0.1 (representing a negligible risk of harm). Benzene constituted the majority of the estimated HI and its presence was potentially due to non-landfill related vehicular traffic emissions.

Risk to Amenity (Irritation and Odour)

It is unlikely that people at the boundary of the landfill would experience irritation of eyes and/or airways from inhalation exposure to the 77 CoI considered in this assessment based on a calculated irritation index of 0.0004 (well below a target of 0.1) (Section 4.2.2).

An odour threshold index of 0.09 was estimated on a single day representing a low and acceptable risk of odour being perceived at the site boundary (Section 4.2.3) as a result of exposure to the 77 CoI considered in the assessment. Odour threshold indices estimated on the majority of sampling days were ~0.01 representing a negligible risk of odour being experienced.

It is unlikely that amenity is being affected at the site boundary as a result of exposure to the 77 CoI considered in this HHRA.

Chronic Health Risk

There were only two compounds measured repeatedly in air (Freon 11 and Freon 12). A chronic HI of 0.0002 was estimated using average air concentrations for these two CoI, well below the acceptable HI of 1. Therefore, potential risk of harm from chronic exposure to CoI assessed in this report is considered negligible.

Nevertheless, monitoring ad assessment is ongoing and the reporting limits for several CoI should be lowered. Negotiations are currently underway with the laboratory to determine whether lower reporting limits can be achieved (in future testing and in the existing dataset).

Cancer Risk

A low and acceptable lifetime cancer risk was estimated for residents potentially exposed to air beyond the site boundary (ILCR = $7.4x10^{-6}$), consisting predominantly from contributions of benzene (ILCR = $3.8x10^{-6}$) and trichloroethene (ILCR = $3.6x10^{-6}$) (Section 5.3). Benzene is likely attributed to vehicular traffic on surrounding streets and measurable levels of trichloroethene occurred on a single day with strong northerly winds (towards the landfill).

Similar to the chronic assessment of health risks, the reporting limits for several of the CoI are too high and negotiations are underway with the laboratory to achieve lower reported limits.

Level of Uncertainty

Overall, the assumptions made in the screening HHRA undertaken herein are conservative and are more likely to overestimate than underestimate the potential risk of harm (refer to Section 6). Nevertheless, further assessment of odour is currently underway separately to this risk assessment (as other chemicals, not included in the analytical suite considered in this report, may be responsible for odour at the site boundary). It is also considered prudent to lower the reporting limits for some CoI to assist assessments of chronic and cancer risk..

Recommendations

It is recommended:

- The results of the odour assessment conducted in this report be made available to consultants conducting the separate odour assessment for the landfill.
- The reporting limits be investigated to determine whether they can be lowered for the existing dataset and future monitoring events. Negotiations are currently underway with the reporting laboratory and environmental consultant to confirm whether target reporting limits provided in this assessment (Section 5.4) can be practically achieved.
- Future monitoring should continue with lower reporting limits.

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APPENDIX A AIR GUIDELINES AND ODOUR AND IRRITATION THRESHOLDS

Table A1 Acute Air Guideline Values

Table A2 Odour and Irritation Thresholds

Table A3 Chronic Air Guideline Values

Table A4 Carcinogenicity Classification and Inhalation Unit Risks

Table A1: Acute air guideline values (AGV) for chemicals assessed in this HHRA

Chemical	Health endpoint for guideline value	Critical effect level (mg/m^3)	UF	AGV ($\mu g/m^3$)	AT	Reference
Acrolein	Decrease in respiratory rate, nose and throat irritation in humans.	LOAEC 0.3 ppm (0.69 mg/m^3)	100	Acute MRL 7 $\mu g/m^3$	24h	ATSDR 2007c
Acrylonitrile	Ocular irritation in human subjects.	LOAEC 4.6 ppm (9.98 mg/m^3)	3	AEGL 3,000 $\mu g/m^3$	10 min	NRC 2014
tert-Amyl Methyl Ether	No acute inhalation guideline value was found for this chemical.					
Benzene	Depression in B- and T-lymphocyte mitogen-induced blastogenesis in mice.	LOAEC 10.2 ppm (32.6 mg/m^3) $LOAEC_{ADJ}$ is 2.55 ppm (8.15 mg/m^3)	300	Acute MRL 0.009 ppm (27 $\mu g/m^3$)	24h	ATSDR 2007d
Bromodichloromethane	No acute inhalation guideline value was found for this chemical.					
Bromoform	No acute inhalation guideline value was found for this chemical					
Bromomethane	No acute inhalation guideline value was found for this chemical.					
1,3-Butadiene	No detail on value derivation was found.			Acute REL 660 $\mu g/m^3$	1 h	OEHHA 2019
2-Butanone (Methyl Ethyl Ketone)	Neurological (headache, fatigue, feeling of intoxication) in humans.	LOAEC 99.15 ppm (292.4 mg/m^3)	100	Acute MRL 1 ppm (2,940 $\mu g/m^3$)	24h	ATSDR 2020a
tert-Butyl Alcohol	No detail on value derivation was found.			STEL(2) 45,500 $\mu g/m^3$	15 min	Safe Work HICS 2021
n-Butylbenzene	No acute inhalation guideline value was found for this chemical.					
sec-Butylbenzene	No acute inhalation guideline value was found for this chemical.					
tert-Butylbenzene	No acute inhalation guideline value was found for this chemical.					
Carbon Tetrachloride	Fatty degeneration and increased liver weights in rats.	NOAEL 5 ppm (31.46 mg/m^3) LOAEL 10 ppm (62.91 mg/m^3)	30	Intermediate MRL 190 $\mu g/m^3$	24	ATSDR 2005b
Chlorobenzene	Slight CNS effects (drowsiness, heavy feeling in the head, and headache) and local irritation in rats and humans.	NOAEC 10 ppm (46.04 mg/m^3)	1	AEGL 47,000 $\mu g/m^3$	10 min	US EPA 2020c
Chloroethane	There was no acute inhalation guideline value available.					
Chloroform	Histological changes in proximal tubules of kidney; hepatocyte necrosis and severe diffuse vacuolar degeneration of hepatocytes.	NOAEC (HEC) 3 ppm (14.65 mg/m^3)	30	Acute MRL 490 $\mu g/m^3$	24h	ATSDR 1997

Chemical	Health endpoint for guideline value	Critical effect level (mg/m^3)	UF	AGV ($\mu g/m^3$)	AT	Reference
Chloromethane	No detail on value derivation was found.			STEL [(2)] 20,700 $\mu g/m^3$	15 min	Safe Work HICS 2021
2-Chloroprene	There was no acute inhalation guideline value available.					
3-Chloro propene	No detail on value derivation was found.			STEL[(2)] 600 $\mu g/m^3$	15 min	Safe Work HICS 2021
2-Chloro toluene	There was no acute inhalation guideline value available.					
alpha-Chloro toluene	There was no acute inhalation guideline value available.					
Cumene	Mild eye and respiratory irritation.	LOAEC 150 ppm (737.3 mg/m^3)	10	AEGL-1 250,000 $\mu g/m^3$	10 min	US EPA 2007a
Cyclohexane	No detail on value derivation was found.			STEL[(2)] 105, 000 $\mu g/m^3$	15 min	Safe Work HCIS 2021
o-Cymene	There was no acute inhalation guideline value available.					
Dibromochloro methane	There was no acute inhalation guideline value available.					
1,2-Dibromo ethane (EDB)	There was no acute inhalation guideline value available.					
1,2-Dichloro benzene	No detail on value derivation was found.			STEL [(2)] 30,100 $\mu g/m^3$	15 min	Safe Work HICS 2021
1,3-Dichloro benzene	There was no acute inhalation guideline value available.					
1,4-Dichloro benzene	Moderate or severe eosinophilic changes in the nasal olfactory epithelium in rats.	NOAEC 19.8 ppm (122.3 mg/m^3) LOAEC 74.8 ppm (462.02 mg/m^3) $BMCL_{10}$ of 9.51 ppm (58.74 mg/m^3) $BMCL_{10}$ (HEC) 0.27 ppm (1.67 mg/m^3)	30	Acute MRL 62 $\mu g/m^3$	24 h	ATSDR 2006a
1,1-Dichloro ethane	There was no acute inhalation guideline value available.					
1,2-Dichloro ethane	There was no acute inhalation guideline value available.					
1,1-Dichloro ethene	No detail on value derivation was found.			STEL [(2)] 7,900 $\mu g/m^3$	15 min	Safe Work HICS 2021
cis-1,2-Dichloro ethene	There was no acute inhalation guideline value available.					
trans-1,2-Dichloro ethene	Fatty degeneration of the hepatic lobules and Kupffer cells, Slight increases in capillary hyperaemia and alveolar septum distention; Fibrous swelling, hyperemia and modified muscular striation in rats.	LOAEL 200 ppm (792 mg/m^3)	1000	Acute MRL 0.2 ppm (0.8 mg/m^3) 785 $\mu g/m^3$	1 h	ATSDR 1996b

Chemical	Health endpoint for guideline value	Critical effect level (mg/m^3)	UF	AGV ($\mu g/m^3$)	AT	Reference
1,2-Dichloro propane (Propylene dichloride)	No detail on value derivation was found.			STEL[(2)] 50,800 $\mu g/m^3$	15 min	Safe Work HCIS 2021
cis-1,3-Dichloro propene	There was no acute inhalation guideline value available.					
trans-1,3-Dichloro propene	There was no acute inhalation guideline value available.					
Diisopropyl Ether	No detail on value derivation was found.			STEL[(2)] 130,000 $\mu g/m^3$	15 min	Safe Work HCIS 2021
1,4-Dioxane	Nasal and eye irritation in healthy human volunteers.	NOAEC 20 ppm (72.07 mg/m^3)	10	Acute MRL 7,210 $\mu g/m^3$	24h	ATSDR 2012
Ethyl Acetate	No detail on value derivation was found.			STEL [(2)] 144,000 $\mu g/m^3$	15 min	Safe Work HCIS 2021
Ethyl Benzene	Ototoxicity in rats: deterioration in compound action potential (CAP) auditory thresholds and significant outer hair cell loss.	$BMCL_{1SD}$ of 81.10 µmol/L ($BMCL_{1SD}$ (HEC) 154 ppm) [(1)]	30	Acute MRL 5 ppm (21,700 $\mu g/m^3$)[3]	24h	ATSDR 2010a
Ethyl tert-Butyl Ether	There was no acute inhalation guideline value available.					
4-Ethyltoluene	There was no acute inhalation guideline value available.					
Freon 11 (Trichlorofluoromethane)	There was no acute inhalation guideline value available.					
Freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane)	No detail on value derivation was found.			STEL[(2)] 959,000 $\mu g/m^3$	15 min	Safe Work HCIS 2021
Freon 114 (Dichlorotetrafluoro ethane)	There was no acute inhalation guideline value available.					
Freon 12 (Dichlorodifluoro methane)	There was no acute inhalation guideline value available.					
Heptane	No detail on value derivation was found.			STEL [(2)] 205,000 $\mu g/m^3$	15 min	Safe Work HCIS 2021
Hexachloro butadiene	There was no acute inhalation guideline value available					
Hexane	There was no acute inhalation guideline value available.					
2-Hexanone	There was no acute inhalation guideline value available.					

Chemical	Health endpoint for guideline value	Critical effect level (mg/m^3)	UF	AGV ($\mu g/m^3$)	AT	Reference
m,p-Xylene	Slight respiratory effects (reduced forced vital capacity, increased discomfort in throat and airways in females, and breathing difficulty in both sexes) and subjective symptoms of neurotoxicity (headache, dizziness, a feeling of intoxication.	LOAEC 50 ppm (217 mg/m^3)	30	Acute MRL, 2ppm (8,680 $\mu g/m^3$)	24h	ATSDR 2007b
Methyl Methacrylate	Irritation in the upper respiratory tract.	NOAEC 25-50 ppm (102.4-204.7 mg/m^3) POD 17 ppm (69.61 mg/m^3)	3	Acute AEGL 71,000 $\mu g/m^3$	10 min	US EPA 2008
Methyl tert-butyl ether	Ataxia and duck-walk gait, laboured respiration pattern in rats.	$NOAEC_{ADJ}$ 200 ppm (724 mg/m^3)	100	Acute MRL, 2 ppm (7,210 $\mu g/m^3$)	24 h	ATSDR 1996a
4-Methyl-2-pentanone	There was no acute inhalation guideline value available.					
Naphthalene	No detail on value derivation was found.			STEL[(2)] 7,900 $\mu g/m^3$	15 min	Safe Work HCIS 2021
2-Propanol	No detail on value derivation was found.			STEL[(2)] 123,000 $\mu g/m^3$	15 min	Safe Work HCIS 2021
Propene	There was no acute inhalation guideline value available.					
Propylbenzene	There was no acute inhalation guideline value available.					
Styrene	Lack of alterations in tests of simple reaction time, choice reaction time, memory, or attention in human volunteers.	NOAEC 49 ppm (208.73 mg/m^3)	10	Acute MRL, 5 ppm (21,300 $\mu g/m^3$)	24h	ATSDR 2010b
1,1,1,2-Tetrachloro ethane	There was no acute inhalation guideline value available.					
1,1,2,2-Tetrachloro ethane	There was no acute inhalation guideline value available.					
Tetrachloroethene	No detail on value derivation was found.			STEL[(2)] 102,000 $\mu g/m^3$	15 min	Safe Work HICS 2021
Tetrahydrofuran	There was no acute inhalation guideline value available.					
Toluene	Adverse neurological effects in humans.	LOAEC 15 ppm (56.53mg/m^3)	9	Acute MRL, 2 ppm (7,600 $\mu g/m^3$)	24h	ATSDR 2017
1,2,4-Trichloro benzene	There was no acute inhalation guideline value available.					
1,1,1-Trichloro ethane	Performance on neurobehavioral tests in human subjects exposed for 3.5 hr.	LOAEC 950 mg/m^3	100	Acute RfC 6,000 $\mu g/m^3$	24h	US EPA 2007b
1,1,2-Trichloro ethane	Necrosis of the olfactory epithelium (minimal to mild; nasal level IV) in rats.	LOAEC 58 ppm (316.4 mg/m^3) LOAEC HEC 7.5 ppm (40.9 mg/m^3)	270	Acute MRL 0.03 ppm (160 $\mu g/m^3$)	24h	ATSDR 2021

Chemical	Health endpoint for guideline value	Critical effect level (mg/m^3)	UF	AGV ($\mu g/m^3$)	AT	Reference
Trichloroethene	No detail on value derivation was found.			STEL[(2)] 21,600 $\mu g/m^3$	15 min	Safe Work HCIS 2021
1,2,4-Trimethyl benzene	There was no acute inhalation guideline value available.					
1,3,5-Trimethyl benzene	There was no acute inhalation guideline value available.					
2,2,4-Trimethyl pentane	There was no acute inhalation guideline value available.					
Vinyl Acetate	No detail on value derivation was found.			STEL[(2)] 700 $\mu g/m^3$	15 min	Safe Work HCIS 2021
Vinyl Bromide	There was no acute inhalation guideline value available.					
Vinyl Chloride	Embryonal and developmental toxicity in mouse.	$NOAEC_{adj}$ 15 ppm (38.34 mg/m^3)	30	Acute MRL 0.5ppm, 1,280 $\mu g/m^3$	24h	ATSDR 2006b
o-Xylene	Eye irritation in healthy human volunteers.	LOAEC 860 mg/m^3 NOAEC 100 ppm (430 mg/m^3) EQC 1h 5 ppm (22 mg/m^3)	10	22,000	1h	OEHHA 2008

UF = Uncertainty Factor, AGV = Air Guideline Value, AT = Averaging time. HEC = Human Equivalent Concentration; LOAEC = Low Observed Adverse Effect Concentration; NOAEC = No Observed Adverse Effect Concentration; $NOAEC_{ADJ}$ = NOAEC with adjusted exposure timeframe; EQC 1h = Equivalent 1-hour concentration; STEL = Short Term Exposure Level (15-minute, for occupational exposures); REL = Reference Exposure Level (terminology used by OEHHA); AEGL = Acute Exposure Guideline Level; MRL = Minimal Risk Level (terminology used by ATSDR).

1. ATSDR (2010) estimated the 95% lower confidence limit on the benchmark time-averaged arterial blood concentration of ethylbenzene (MCA) associated with a benchmark response of 1 standard deviation (at 16 kHZ) (i.e. $BMCL_{MCA}$) to be 81.1 µmol/L. This was converted by ATSDR (2010) to a human equivalent exposure concentration (HEC) of 154 ppm using a reference human body weight of 70kg and an assumption of 14-day continuous exposure.

2. STEL ÷10

Table A2: Odour and Irritation Threshold Values for chemicals assessed in this HHRA

Chemical	Odour threshold value (µg/m^3)	Reference	Irritation threshold value (µg/m^3)	Reference
Acrolein	367.00	ATSDR 2007c	1,250	Ruth et al. 1986
Acrylonitrile	3,400	US EPA 1992	No value	-
tert-Amyl Methyl Ether	1,128	Falcy and Malard 2005	No value	-
Benzene	9,900	WHO 1993[1]	9,000,000	Ruth et al. 1986
Bromodichloromethane	No value		No value	-
Bromoform	13,440	Amoore and Hautala 1983	No value	-
Bromomethane	996.00	AIHA 1989	No value	-
1,3-Butadiene	2,040,000	WHO 2001	No value	-
2-Butanone (Methyl Ethyl Ketone)	50,133	US EPA 1992	590,000	Ruth et al. 1986
tert-Butyl Alcohol	142,480	Amoore and Hautala 1983	No value	-
n-Butylbenzene	No value		No value	-
sec-Butylbenzene	No value		No value	-
tert-Butylbenzene	No value		No value	-
Carbon Tetrachloride	520	WHO 1999a	No value	-
Chlorobenzene	4,500	WHO 2001	933,330	Ruth et al. 1986
Chloroethane	11,083	ATSDR 1998	No value	-
Chloroform	415,022	Amoore and Hautala 1983	20,480,000	Ruth et al. 1986
Chloromethane	20,650	Falcy and Malard 2005	1,050,000	Ruth et al. 1986
2-Chloroprene	362	Falcy and Malard 2005	No value	-
3-Chloropropene	1,471	Falcy and Malard 2005	75,000	Ruth et al. 1986
2-Chlorotoluene	1,657	Amoore and Hautala 1983	No value	-
alpha-Chlorotoluene	228	Falcy and Malard 2005	No value	-
Cumene	157	Abraham et al. 2002	No value	-
Cyclohexane	1,435	Ruth et al. 1986	1,050,000	Ruth et al. 1986
o-Cymene	12	Falcy and Malard 2005	No value	-
Dibromochloromethane	No value		No value	-
1,2-Dibromoethane (EDB)	No value		No value	-
1,2-Dichlorobenzene	300	WHO 2001	150,000	Ruth et al. 1986
1,3-Dichlorobenzene	No value		No value	-
1,4-Dichlorobenzene	730	US EPA 1992	240,000	Ruth et al. 1986
1,1-Dichloroethane	647,656.5	ATSDR 2015	No value	-
1,2-Dichloroethane	237,500	WHO 1987	No value	-
1,1-Dichloroethene	753,395	Amoore and Hautala 1983	No value	-
cis-1,2-Dichloroethene	No value		No value	-
trans-1,2-Dichloroethene	No value		No value	-
1,2-Dichloropropane	1,155	ATSDR 2019	No value	-

Chemical	Odour threshold value (µg/m^3)	Reference	Irritation threshold value (µg/m^3)	Reference
cis-1,3-Dichloropropene	4,539	Falcy and Malard 2005	No value	-
trans-1,3-Dichloropropene	4,539	Falcy and Malard 2005	No value	-
Diisopropyl Ether	71	AIHA 1989	1,260,000	Ruth et al. 1986
1,4-Dioxane	43,240	AIHA 1989	180,000	ATSDR 2007a, 2012
Ethyl Acetate	937	RIVM 2009	350,000	Ruth et al. 1986
Ethyl Benzene	2,000	WHO 1996	870,000	Ruth et al. 1986
Ethyl tert-Butyl Ether	190	WHO1998	No value	-
4-Ethyltoluene	No value		No value	-
Freon 11	28,094	Amoore and Hautala 1983	No value	-
Freon 113	344,871	Amoore and Hautala 1983	No value	-
Freon 114	No value		No value	-
Freon 12	No value		No value	-
Heptane	614,724	Amoore and Hautala 1983	No value	-
Hexachlorobutadiene	12,000	WHO 1994	No value	-
Hexane	211,000	WHO 1991	1,800,000	Ruth et al. 1986
2-Hexanone	310	ATSDR 2020b	No value	-
m,p-Xylene	217	ATSDR	220,000	ATSDR 2007
Methyl Methacrylate	200	US EPA 1992	697,000	Ruth et al. 1986
Methyl tert-butyl ether	190	WHO 1998	No value	-
4-Methyl-2-pentanone	3,606	US EPA 1992	410,000	Ruth et al. 1986
Naphthalene	440	ATSDR 2005a	75,000	Ruth et al. 1986
2-Propanol	7,990	WHO 1990	490,000	Ruth et al. 1986
Propene	39,584	AIHA 1989	No value	-
Propylbenzene	50	Jensen et al. 2001	No value	-
Styrene	70	WHO 2000	430,000	Ruth et al. 1986
1,1,1,2-Tetrachloroethane	No value		No value	-
1,1,2,2-Tetrachloroethane	10,301	ATSDR 1998	No value	-
Tetrachloroethene	6,783	ATSDR 2019a	710,200	Ruth et al. 1986
Tetrahydrofuran	5,898	Falcy and Malard 2005	No value	-
Toluene	10,551	US EPA 1992	380,000	ATSDR
1,2,4-Trichlorobenzene	1,400	WHO 1991	40,000	Ruth et al. 1986
1,1,1-Trichloroethane	540,000	WHO 1992	5,428,570	Ruth et al. 1986
1,1,2-Trichloroethane	No value		No value	-
Trichloroethene	440,000	US EPA	864,000	Ruth et al. 1986
1,2,4-Trimethylbenzene	500	Jensen et al. 2001	No value	-
1,3,5-Trimethylbenzene	1,131	Falcy and Malard 2005	No value	-
2,2,4-Trimethylpentane	No value		No value	-
Vinyl Acetate	423	ATSDR 1992	No value	-
Vinyl Bromide	No value		No value	-
Vinyl Chloride	5,363,000	WHO 1999b	No value	-
o-Xylene	100	Jensen et al. 2001	220,000	ATSDR 2007c

1. Midpoint of the reported range

Table A3: Chronic air guideline values for chemicals assessed in this HHRA

Chemical	Health endpoint for guideline value	Point of Departure	Uncertainty factor (UF)	Air guideline value (AGV) (µg/m^3)	Reference
Acrolein	Lesions in respiratory epithelium in rats.	NOAEC 0.2 ppm (0.46 mg/m^3) (1) NOAEC$_{HEC}$ 0.03 ppm (0.069 mg/m^3)	200	Chronic REL, 0.35 µg/m^3	OEHHA 2008
Acrylonitrile	Degeneration and inflammation of nasal respiratory epithelium; hyperplasia of mucous secreting cells in rats.	LOAEC 20 ppm (43.40 mg/m^3) BMC$_{05}$ 1.5 ppm (3.26 mg/m^3) HEC 0.067 ppm (0.14 mg/m^3) (2)	30	Chronic REL, 5 µg/m^3	OEHHA 2008
tert-Amyl Methyl Ether	Concentration of no toxicological concern (CoNTC III) for Cramer Class III compounds (using Toxtree v3.1.0).			CoNTC, 0.20 µg/m^3	WA DoH 2010
Benzene	No detail on value derivation was found.			Chronic RfC, 30 µg/m^3	CRC Care 2011, WHO 2000
Bromodichloro methane	No chronic air guideline value could be found for this chemical.				
Bromoform	Concentration of no toxicological concern (CoNTC III) for Cramer Class III compounds (using Toxtree v3.1.0).			CoNTC, 0.20 µg/m^3	WA DoH 2010
Bromomethane	Degenerative and proliferative lesions of the olfactory epithelium of the nasal cavity in rats.	LOAEC 11.7 mg/m^3 LOAEC$_{ADJ}$ 2.08 mg/m^3 LOAEL (HEC) 0.48 mg/m^3	100	RfC, 5 µg/m^3	USEPA RSL 2020, IRIS 1992
1,3-Butadiene	Ovarian atrophy in rats.	BMCL$_{10}$ 0.88 ppm (HEC) (1.96 mg/m^3) BMC$_{10}$ 1.0 ppm (2.2 mg/m^3)	1000	RfC, 0.9 ppb (2 µg/m^3)	IRIS 2002
2-Butanone (Methyl Ethyl Ketone)	Developmental toxicity (skeletal variations) in mice.	LOAEC 5,202 mg/m^3 LOAEC$_{adj}$ 1,517 mg/m^3	300	RfC, 5000 µg/m^3	US EPA RSL 2020
tert-Butyl Alcohol	Concentration of no toxicological concern (CoNTC I) for Cramer Class I compounds (using Toxtree v3.1.0).			CoNTC, 5 µg/m^3	WA DoH 2010
n-Butyl benzene	Concentration of no toxicological concern (CoNTC III) for Cramer Class III compounds (using Toxtree v3.1.0).			CoNTC, 0.2 µg/m^3	WA DoH 2010

Chemical	Health endpoint for guideline value	Point of Departure	Uncertainty factor (UF)	Air guideline value (AGV) (µg/m^3)	Reference
sec-Butyl benzene	Concentration of no toxicological concern (CoNTC III) for Cramer Class III compounds (using Toxtree v3.1.0).			CoNTC, 0.2 µg/m^3	WA DoH 2010
tert-Butyl benzene	Concentration of no toxicological concern (CoNTC III) for Cramer Class III compounds (using Toxtree v3.1.0).			CoNTC, 0.2 µg/m^3	WA DoH 2010
Carbon Tetrachloride	Fatty changes in the liver of rats	BMCL$_{10}$HEC: 14.3 mg/m^3	100	Chronic RfC, 100 µg/m^3	IRIS 2010
Chlorobenzene	Kidney effects included increased weights, tubule dilation, inflammation of the interstitial cells, and regeneration of the epithelium in male rats; Liver effects: increased organ weight and hepatocellular hypertrophy.	LEC$_{10adj}$ 46 mg/m^3	100 for subchronic; Additional 10 UF for chronic	Chronic RfC, 50 µg/m^3	US EPA 2006
Chloroethane	Minimal foetotoxicity (delayed ossification of skull bones) in mice	NOAEC 1,504 ppm (3,972 mg/m^3)	100	Chronic MRL, 15 ppm (39,600 µg/m^3)	ATSDR 1998
Chloroform	Hepatotoxicity: hepatomegaly, liver enlargement, fatty liver and jaundice in occupationally exposed subjects.	LOAEL 2 ppm (9.77 mg/m^3)	100	Chronic MRL, 980 µg/m^3	ATSDR 1997
Chloromethane	Cerebellar lesions in mouse inhalation study.	NOAEC 50 ppm (103.2 mg/m^3) NOAEC (HEC) 94.6 mg/m^3	1000	Chronic RfC, 90 µg/m^3	US EPA RSL (2020)
2-Chloroprene	Increase in incidence of olfactory atrophy, alveolar hyperplasia, and splenic hematopoietic proliferation in rats and mice.	BMDL (HEC) 2 mg/m^3	100	Chronic RfC, 20 µg/m^3	US EPA RSL (2020)
3-Chloro propene	Functional and histological peripheral neurotoxicity.	NOAEL (HEC) 3.6 mg/m^3	3000	Chronic RfC, 1 µg/m^3	US EPA RSL (2020)
2-Chloro toluene	Concentration of no toxicological concern (CoNTC III) for Cramer Class III compounds (using Toxtree v3.1.0).			CoNTC, 0.20 µg/m^3	WA DoH 2010
alpha-Chloro toluene	Lung lesions in Guinea pig.	BMCL 1.17 mg/m^3	1000	PPRTV, 1 µg/m^3	US EPA RSL 2020
Cumene	Increased kidney weights in female rats and adrenal weights in male and female rats	NOAEC 496 ppm (2,438 mg/m^3) NOAEC (HEC) 435 mg/m^3	1000	Chronic RfC, 400 µg/m^3	IRIS 1997, US EPA RSL 2020

Chemical	Health endpoint for guideline value	Point of Departure	Uncertainty factor (UF)	Air guideline value (AGV) (µg/m^3)	Reference
Cyclohexane	Reduced rat pup weights in the F1 and F2 generations	NOAEC 6,886 mg/m^3 $BMCL_{1SD}$ (HEC) 1,822 mg/m^3	300	Chronic RfC, 6,000 µg/m^3	IRIS 2003, US EPA RSL 2020
o-Cymene	Concentration of no toxicological concern (CoNTC I) for Cramer Class I compounds (using Toxtree v3.1.0).			CoNTC, 5 µg/m^3	WA DoH 2010
Dibromochloro methane	Concentration of no toxicological concern (CoNTC III) for Cramer Class III compounds (using Toxtree v3.1.0).			CoNTC, 0.20 µg/m^3	WA DoH 2010
1,2-Dibromo ethane (EDB)	Nasal inflammation in mice.	$BMCL_{10}$ (HEC) 2.8 mg/m^3	300	Chronic RfC, 9.3 µg/m^3	IRIS 2004
1,2-Dichloro benzene	No detail on value derivation was found.			200 µg/m^3	US EPA RSL 2020
1,3-Dichloro benzene	Concentration of no toxicological concern (CoNTC III) for Cramer Class III compounds (using Toxtree v3.1.0).			CoNTC, 0.20 µg/m^3	WA DoH 2010
1,4-Dichloro benzene	Reduced body weights and food consumption; tremors; nasal and ocular discharge; increased liver and kidney weights in rats.	NOAEC 50 ppm (300 mg/m^3) HEC 13 ppm (78.2) mg/m^3	100	Chronic REL, 800 µg/m^3	OEHHA 2008
1,1-Dichloro ethane	No detail on value derivation was found.			AGV, 165 µg/m^3	Ontario MoE 2012
1,2-Dichloro ethane	Histological changes in liver of rats and guinea pigs	NOAEC 400 mg/m^3 LOAEC 700 mg/m^3	1000	AGV, 700 µg/m^3	WHO (2000)
1,1-Dichloro ethene	Decreased colour vision.	LOAEC 1.7 ppm (20 mg/m^3)	100	Chronic MRL, 24 µg/m^3	ATSDR 2019b
cis-1,2-Dichloro ethene	Route-to-route extrapolation from oral toxicity reference value (RfD) from US EPA: (0.002 mg/kg/d x 70 kg) ÷ 20 m^3/day. RfD based on $BMDL_{10}$ of 5.1 mg/kg/d associated with increased kidney weight in male rats & 3000-fold uncertainty factor.			Route-to-route extrapolated RfC 7 µg/m^3	US EPA 2010, NEPM (2013)
trans-1,2-Dichloro ethene	Decreased lymphocyte counts	$BMCL_{1SD}$(HEC): 109 mg/m^3	300	PPRTV Screening Level, 40 µg/m^3	US EPA RSL 2020
1,2-Dichloro propane	Hyperplasia of the nasal mucosa	LOAEC 15 ppm (69.3 mg/m^3) $LOAEC_{adj}$ 12.4 mg/m^3 LOAEC (HEC) 1.3 mg/m^3	300	Chronic RfC 4 µg/m^3	IRIS 1991, US EPA RSL 2020

Chemical	Health endpoint for guideline value	Point of Departure	Uncertainty factor (UF)	Air guideline value (AGV) (µg/m^3)	Reference
cis-1,3-Dichloro propene	Hypertrophy/hyperplasia of nasal respiratory epithelium in female mice.	LOAEC of 60 ppm (272 mg/m^3) BMCL$_{10}$ HEC 0.2349 ppm (1.02 mg/m^3)	30	Chronic MRL, 31 µg/m^3	ATSDR 2008
trans-1,3-Dichloropropene	Rudimentary and short 14th ribs in foetal rats.	BMCL(HEC): 66 mg/m^3	100	PPRTV, 700 µg/m^3	US EPA RSL 2020
1,4-Dioxane	Liver, kidney, hematologic changes in rats (none observed in the critical study, but observed in other studies where 1,4-dioxane exposure was by ingestion).	LOAEC$_{adj}$ 50 ppm (180.18 mg/m^3) LOAEC HEC 8.92 ppm (32.14 mg/m^3)	300	Chronic MRL, 110 µg/m^3	ATSDR 2012b
Ethyl Acetate	Decreased body weights, body-weight gains, food efficiency, startle response (both sexes), and decreased food consumption (males).	NOAEL: 209 mg/m^3	3000	PPRTV, 70 µg/m^3	US EPA RSL 2020
Ethyl Benzene	Developmental toxicity in rat and rabbit.	NOAEC(HEC) 100 ppm (434 mg/m^3)	300	Chronic RfC, 1,000 µg/m^3	US EPA RSL 2020
Ethyl tert-Butyl Ether	Increased mortality and decreased mean survival time due to chronic progressive nephropathy in rats.	NOAEC$_{adj}$ 71 ppm (296 mg/m^3)	100	Chronic MRL, 2,900 µg/m^3	ATSDR 1996
4-Ethyl toluene	Concentration of no toxicological concern (CoNTC I) for Cramer Class I compounds (using Toxtree v3.1.0).			CoNTC, 5 µg/m^3	WA DoH 2010
Freon 11	No detail on value derivation was found.			AGV, 6,000 µg/m^3	Ontario MoE 2012
Freon 113	No detail on value derivation was found.			AGV, 800,000 µg/m^3	Ontario MoE 2012
Freon 114	No detail on value derivation was found.			AGV, 700,000 µg/m^3	Ontario MoE 2012
Freon 12	No detail on value derivation was found.			AGV, 500,000 µg/m^3	Ontario MoE 2012
Heptane	Absence of effects on body weight gain, neuromuscular function, and neurotoxicity.	NOAEC 1,500 ppm (6,147 mg/m^3) NOAEC (HEC) 401.8 ppm (1,646.8 mg/m^3)	180	Chronic ReV, 9,000 µg/m^3	TCEQ 2016
Hexachloro butadiene	Concentration of no toxicological concern (CoNTC III) for Cramer Class III compounds (using Toxtree v3.1.0).			CoNTC, 0.20 µg/m^3	WA DoH 2010

Chemical	Health endpoint for guideline value	Point of Departure	Uncertainty factor (UF)	Air guideline value (AGV) (µg/m^3)	Reference
Hexane	Peripheral neuropathy in occupational workers from an offset printing factory.	LOAEC 132 (465 mg/m^3) HEC 57 ppm (204 mg/m^3)	300	Chronic ReV, 670 µg/m^3	TCEQ 2017, US EPA RSL 2020
2-Hexanone	Motor conduction velocity of the sciatic-tribal nerve in monkeys.	BMCL$_{05}$(HEC) 90 mg/m^3	3,000	Chronic RfC, 30 µg/m^3	US EPA RSL (2020)
m- ,p-Xylene	No detail on value derivation was found.			Chronic ReV, 870 µg/m^3	WHO (2000), CRC CARE (2011)
Methyl Methacrylate	Degeneration/ atrophy of olfactory epithelium in male rats.	BMC$_{10}$: 35 ppm (143 mg/m^3) BMC$_{10(ADJ)}$: 25.6 mg/m^3 BMC$_{10}$(HEC): 7.2 mg/m^3	10	Chronic RfC, 700 µg/m^3	USEPA RSL 2020 IRIS 1998
Methyl tert-butyl ether	Nephrotoxicity, increased liver and kidney weight, prostration and periocular swelling in rats.	NOAEC 403 ppm (1,450 mg/m^3) HEC 72 ppm (259.6 mg/m^3)	30	Chronic REL, 8,000 µg/m^3	OEHHA 2008
4-Methyl-2-pentanone	Reduced foetal body weight, skeletal variations, and increased foetal death in mice, and skeletal variations in rats.	NOAEC (HEC) 1026 mg/m^3 LOAEC (HEC) = 3073 mg/m^3	300	Chronic RfC, 3,000 µg/m^3	US EPA RSL 2020
Naphthalene	Nasal effects: hyperplasia and metaplasia in respiratory and olfactory epithelium, respectively in mouse.	LOAEC HEC (9.5 mg/m^3)	3000	Chronic RfC, 3 µg/m^3	US EPA 1998, NEPM (2013)
2-Propanol	No detail on value derivation was found.			7,300 µg/m^3	Ontario MoE 2012
Propene	Hypertrophy/ hyperplasia of the nasal respiratory epithelium in mice	LOAEC 4,985 ppm (8,570 mg/m^3) HEC 190 ppm (327 mg/m^3)	100	Chronic RfC and chronic REL, 3,000 µg/m^3	OEHHA 2008, USEPA RSL 2020
Propyl benzene	Inhalation value based on using ethylbenzene as a surrogate.			PPRTV Screening Value, 1,000 µg/m^3	US EPA RSL 2020 US EPA 2009
Styrene	Subtle effects such as reductions in visuomotor accuracy and verbal learning skills (3–5) and sub-clinical effects on colour vision in occupational settings.	LOAEC 25 ppm (107 mg/m^3) LOAEC$_{ADJ}$ 25.5 mg/m^3	100	AGV, 260 µg/m^3 (weekly average)	WHO 2000
1,1,1,2-Tetrachloro ethane	Derivation of value not provided. TCEQ (2016) indicates the Effect Screening Level value (ESL) is an interim health- based value.			Chronic ESL, 105 µg/m^3	TCEQ 2016

Chemical	Health endpoint for guideline value	Point of Departure	Uncertainty factor (UF)	Air guideline value (AGV) (µg/m^3)	Reference
1,1,2,2-Tetrachloro ethane	Derivation of value not provided. TCEQ (2016) indicates the Effect Screening Level value (ESL) is an interim health- based value.			Chronic ESL, 7 µg/m^3	TCEQ 2016
Tetrachloroethene	Kidney effects indicative of early renal disease and impaired neurobehavioural performance in dry cleaning workers.	LOAEC 102 mg/m^3 LOAEC$_{ADJ}$ 24.3 mg/m^3	100	Indoor AGV, 200 µg/m^3	WHO 2008 NEPC 2013
Tetrahydrofuran	Increased liver weight and centrilobular cytomegaly; CNS effects (narcosis) in male mice.	BMCL$_{10}$ 246 mg/m^3	100	Chronic RfC, 2,000 µg/m^3	USEPA RSL 2020
Toluene	Neurological effects in occupationally-exposed workers.	LOAEC 34 ppm (128 mg/m^3) NOAEC$_{(adj)}$ 46 mg/m^3)	10	Chronic RfC, 5,000 µg/m^3	US EPA (2005) CRC CARE 2011
1,2,4-Trichloro benzene	Significant changes in coproporphyrin and uroporphyrin excretion.	BMCL : 4.6 mg/m^3	3000	PPRTV, 2 µg/m^3	US EPA RSL 2020
1,1,1-Trichlor oethane	Liver histopathologic changes 2-Year inhalation rat study	NOAEL(HEC) 1553 mg/m^3	100	Chronic RfC, 5,000 µg/m^3	US EPA (2007b)
1,1,2-Trichloro ethane	Nasal lesions in male rats.	BMDL$_{10ADJ}$ 3.9 mg/m^3 BMDL(HEC) 0.51 mg/m^3	3000	PPRTV Screening Value, 0.2 µg/m^3	US EPA RSL 2020
Trichloro ethene	Multiple studies: Decreased thymus weight in female mice, increased foetal cardiac malformations in rats (drinking water studies).	HEC$_{99,LOAEL}$ 0.19 mg/m^3 (3) HEC$_{99,BMDL01}$ 0.021 mg/m^3 (3)	100 10	Chronic RfC, 2 µg/m^3	US EPA RSL 2020
1,2,4-Trimethyl benzene 1,3,5-Trimethyl benzene	Decreased pain sensitivity in male Wistar rats.	BMCL$_{1SD}$ (HEC) 18.15 mg/m^3	300	Chronic RfC, 60 µg/m^3	IRIS 2016
2,2,4-Trimethyl pentane	The detailed basis of this value could not be found.			Chronic ESL, 540 µg/m^3	TCEQ (2016)
Vinyl Acetate	Nasal epithelial lesions in rats and mice.	LOAEC 200 ppm (704 mg/m^3) NOAEC 50 ppm (176 mg/m^3) HEC 1.4 ppm (4.9 mg/m^3)	30	Chronic RfC and chronic REL, 200 µg/m^3	US RSL EPA 2020, OEHHA 2008
Vinyl Bromide	Hypertrophy, basophilic and eosinophilic foci, in the liver of rats.	LOAEC 9.7 ppm (43 mg/m^3) LOAEC(HEC): 7.7 mg/m^3	3000	Chronic RfC, 3 µg/m^3	IRIS 1993, US EPA RSL 2020

Chemical	Health endpoint for guideline value	Point of Departure	Uncertainty factor (UF)	Air guideline value (AGV) (µg/m^3)	Reference
Vinyl Chloride	Increased incidence of Liver cell polymorphisms and cysts in rats (dietary study).	NOAEL (HEC) 2.5 mg/m^3	30	Chronic RfC, 100 µg/m^3	US RSL EPA 2020
o-Xylene	No detail on value derivation was found.			Chronic ReV, 870 µg/m^3	WHO (2000), CRC CARE (2011)

AGV = Air Guideline Value; HEC = Human Equivalent Concentration; LOAEC = Low Observed Adverse Effect Concentration; NOAEC = No Observed Adverse Effect Concentration; $NOAEC_{ADJ}$ = NOAEC with adjusted exposure timeframe; $LOAEC_{ADJ}$ = LOAEC with adjusted exposure timeframe; REL = Reference Exposure Level (terminology used by OEHHA); MRL = Minimal Risk Level (terminology used by ATSDR); RfC = Reference Concentration (terminology used by US EPA IRIS); BMC = Benchmark Concentration; BMCL = Lower Bound Benchmark Concentration; PPRTV = Provisional Peer Reviewed Toxicity Value (terminology used by US EPA); ReV = Reference Value (terminology used by TCEQ); ESL = Effect Screening Level (terminology used by TCEQ; uses hazard quotient of 0.3).

1. The observation of a NOAEC eliminates the need for a UF for the LOAEC to NOAEC conversion. Time adjustment from the experimental to continuous exposure gave 36 ppb (0.2 ppm*6 hr/24 hr*5 days/7 days). A Dosimetric Adjustment Factor (DAF) of 0.85 gave an equivalent human exposure concentration of 30 ppb.
2. The resulting BMC_{05} values (1.27, 1.33, 2.18, 1.35 ppm) were averaged to yield a value of 1.5 ppm. Application of the Regional Gas Dose Ratio (RGDR) adjustment resulted in a HEC of 0.067 ppm.
3. The $HEC_{99,LOAEL}$ is the route-to-route extrapolated 99th percentile (due to human toxicokinetic uncertainty and variability) human equivalent concentration to the mouse LOAEL of 0.35 mg/kg/d, using the internal dose metric of trichloroethylene metabolised/kg$^{3/4}$/day. The $HEC_{99.BMDL01}$ is the route-to-route extrapolated 99th percentiles HEC to the rat internal dose $BMDL_{01}$ of 0.0142 mg trichloroethylene oxidised/kg$^{3/4}$/day.

Table A4: Carcinogenicity classification and Inhalation Unit Risk Factor (IURF) for chemicals assessed in this HHRA

Chemical	IARC Rating [1]	Is it Genotoxic?	Reference to Genotoxicity information	IURF	Source of IURF
Acrolein	2A	Yes	IARC (2020)	Insufficient data to derive an IURF	
Acrylonitrile	2B	Yes	WHO (2000)	$1.7x10^{-5}$	WHO (2000)
tert-Amyl Methyl Ether	No information available. Assumed not to be carcinogenic. No IURF required.				
Benzene	1	Yes	WHO (2000)	$6.0 x10^{-6}$	WHO (2000)
Bromodichloromethane	2B	Yes	WHO (2017)	$3.7 x10^{-5}$	USEPA RSL (2012)
Bromoform	3	No	-	Not carcinogenic. No IURF required.	
Bromomethane	3	No	-	Not carcinogenic. No IURF required.	
1,3-Butadiene	1	Yes	WHO (2000)	$3.0 x10^{-5}$	USEPA RSL (2012)
2-Butanone (Methyl Ethyl Ketone)	No information available. Assumed not to be carcinogenic. No IURF required.				
tert-Butyl Alcohol	No information available. Assumed not to be carcinogenic. No IURF required.				
n-Butylbenzene	No information available. Assumed not to be carcinogenic. No IURF required.				
sec-Butylbenzene	No information available. Assumed not to be carcinogenic. No IURF required.				
tert-Butylbenzene	No information available. Assumed not to be carcinogenic. No IURF required.				
Carbon Tetrachloride	2B	No	WHO (2017)	Not genotoxic. No IURF required.	
Chlorobenzene	No information available. Assumed not to be carcinogenic. No IURF required.				
Chloroethane	3	No	-	Not carcinogenic. No IURF required.	
Chloroform	2B	No	WHO (2017)	Not genotoxic. No IURF required.	
Chloromethane	3	No	-	Not carcinogenic. No IURF required.	
2-Chloroprene	2B	Unlikely [4]	(IARC 1999e)	$3.0 x10^{-4}$	USEPA RSL (2012)
3-Chloropropene	3	No	-	Not carcinogenic. No IURF required.	
2-Chlorotoluene	No information available. Assumed not to be carcinogenic. No IURF required.				
alpha-Chlorotoluene	2A	Yes	IARC (1999d)	$4.9 x10^{-5}$	USEPA RSL (2012)
Cumene	2B	No	IARC (2013)	Not genotoxic. No IURF required.	
Cyclohexane	No information available. Assumed not to be carcinogenic. No IURF required.				
o-Cymene	No information available. Assumed not to be carcinogenic. No IURF required.				
Dibromochloromethane	3	-	-	Not carcinogenic. No IURF required.	
1,2-Dibromoethane (EDB)	2A	Yes	IARC (1999c)	$6.0 x10^{-4}$	USEPA RSL (2012)
1,2-Dichlorobenzene	3	No	IARC (1999b)	Not carcinogenic. No IURF required.	
1,3-Dichlorobenzene	3	No	IARC (1999b)	Not carcinogenic. No IURF required.	
1,4-Dichlorobenzene	2B	No	IARC (1999b)	Not genotoxic. No IURF required.	
1,1-Dichloroethane	2B [3]	Unlikely [2]	ATSDR (2015)	Not genotoxic. No IURF required.	
1,2-Dichloroethane	2B	Yes	WHO (2017)	$2.6 x10^{-5}$	USEPA RSL (2012)
1,1-Dichloroethene	3	No	-	Not carcinogenic. No IURF required.	
cis-1,2-Dichloroethene	No information available. Assumed not to be carcinogenic. No IURF required.				
trans-1,2-Dichloroethene	No information available. Assumed not to be carcinogenic. No IURF required.				

Chemical	IARC Rating [1]	Is it Genotoxic?	Reference to Genotoxicity information	IURF	Source of IURF
1,2-Dichloropropane	1	No	IARC (2017)	Not genotoxic. No IURF required.	
cis-1,3-Dichloropropene	2B	Yes	IARC (1987)	4.0×10^{-6}	USEPA RSL (2012)
trans-1,3-dichloropropene	2B	Yes	IARC (1987)	4.0×10^{-6}	USEPA RSL (2012)
Diisopropyl Ether	No information available. Assumed not to be carcinogenic. No IURF required.				
1,4-Dioxane	No information available. Assumed not to be carcinogenic. No IURF required.				
Ethyl Acetate	No information available. Assumed not to be carcinogenic. No IURF required.				
Ethyl Benzene	2B	No	IARC (2000)	Not genotoxic. No IURF required.	
Ethyl tert-Butyl Ether	No information available. Assumed not to be carcinogenic. No IURF required.				
4-Ethyltoluene	No information available. Assumed not to be carcinogenic. No IURF required.				
Freon 11	No information available. Assumed not to be carcinogenic. No IURF required.				
Freon 113	No information available. Assumed not to be carcinogenic. No IURF required.				
Freon 114	No information available. Assumed not to be carcinogenic. No IURF required.				
Freon 12	No information available. Assumed not to be carcinogenic. No IURF required.				
Heptane	No information available. Assumed not to be carcinogenic. No IURF required.				
Hexachlorobutadiene	3	No	-	Not carcinogenic. No IURF required.	
Hexane	No information available. Assumed not to be carcinogenic. No IURF required.				
2-Hexanone	No information available. Assumed not to be carcinogenic. No IURF required.				
m,p-Xylene	3	No	-	Not carcinogenic. No IURF required.	
Methyl Methacrylate	3	No	-	Not carcinogenic. No IURF required.	
Methyl tert-butyl ether	3	No	-	Not carcinogenic. No IURF required.	
4-Methyl-2-pentanone	2B	No	IARC (2013)	Not genotoxic. No IURF required.	
Naphthalene	2B	No	IARC (2002)	Not genotoxic. No IURF required.	
2-Propanol	No information available. Assumed not to be carcinogenic. No IURF required.				
Propene	3	No	-	Not carcinogenic. No IURF required.	
Propylbenzene	No information available. Assumed not to be carcinogenic. No IURF required.				
Styrene	2A	Yes [5]	WHO (2000)	No IURF required [5]	
1,1,1,2-Tetrachloroethane	2B	No	IARC (2018)	Not genotoxic. No IURF required.	
1,1,2,2-Tetrachloroethane	2B	No	IARC (2018)	Not genotoxic. No IURF required.	
Tetrachloroethene	2A	No	WHO (2000)	Not genotoxic. No IURF required.	
Tetrahydrofuran	No information available. Assumed not to be carcinogenic. No IURF required.				
Toluene	3	No	-	Not carcinogenic. No IURF required.	
1,2,4-Trichlorobenzene	No information available. Assumed not to be carcinogenic. No IURF required.				
1,1,1-Trichloroethane	3	No	-	Not carcinogenic. No IURF required.	
1,1,2-Trichloroethane	3	No	-	Not carcinogenic. No IURF required.	
Trichloroethene	1	Yes	WHO (2000)	4.0×10^{-5}	USEPA IRIS (2011), NEPC (2013)
1,2,4-Trimethylbenzene	No information available. Assumed not to be carcinogenic. No IURF required.				

Chemical	IARC Rating (1)	Is it Genotoxic?	Reference to Genotoxicity information	IURF	Source of IURF
1,3,5-Trimethylbenzene	No information available. Assumed not to be carcinogenic. No IURF required.				
2,2,4-Trimethylpentane	No information available. Assumed not to be carcinogenic. No IURF required.				
Vinyl Acetate	2B	Yes	IARC (1995)	No IURF identified. Occurrence is only relevant above threshold concentrations (ECHA 2008)	
Vinyl Bromide	2A	Yes	IARC (1999)	3.2×10^{-5}	USEPA RSL (2012)
Vinyl Chloride	1	Yes	WHO (2000)	4.4×10^{-6}	USEPA IRIS (2012), NEPC (2013)
o-Xylene	3	No	-	Not carcinogenic. No IURF required.	

IURF = Inhalation Unit Risk Factor, IARC = International Agency for Research on Cancer

(1) IARC rating based on alphabetical listings as provided in IARC (2021). Group 1 = Carcinogenic to humans, Group 2A = Probably carcinogenic to humans, Group 2B = Possibly carcinogenic to humans, Group 3 = Not classifiable as to its carcinogenicity to humans

(2) Weight of evidence suggests it is not genotoxic based on ASTDR (2015) evaluation.

(3) Not classified by IARC. Rating based on USEPA (XXXX) classification of Group C for this compound, i.e. possibly carcinogenic to humans

(4) Mixed results have been reported for genotoxicity. Notably, negative results were obtained at higher chloroprene doses (IARC 1999e).

(5) Although genotoxic effects in humans have been observed at relatively low concentrations, they were not considered as critical endpoints for development of an ambient air guideline value by WHO (2000). For protection against neurotoxic effects (considered the most sensitive endpoint), WHO (2000) recommended a guideline of 0.26 mg/m^3 (weekly average). The latter guideline was used in the assessment of chronic exposures to styrene in this report.

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APPENDIX B AIR CONCENTRATION DATASET AND CALCULATION SPREADSHEET

Table B1: Air Concentration Dataset

Location		Acute AGV (ug/m3)	Chronic AGV (ug/m3)	Odour Threshold (ug/m3)	Irritation Threshold (ug/m3)	Unit Risk (per µg/m3)	West	North	West	North	West	North	West	North	North	West	North	West	North	West	North	West	West	North	West	West	North	West	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West
Sample No							19-1722	19-1723	19-1724	19-1725	19-1774	19-1775	19-1776	19-1777	19-1847	19-1848	19-1850	19-1849	19-1852	19-1851	19-1854	19-1853	19-1855	19-1856	19-1857	20-059	20-060	20-061	20-066	20-067	20-068	20-069	20-088	20-089	20-120	20-121	20-248	20-249	20-289	20-290	20-315	20-316	20-318	20-319	20-341
Start date							06-12-2019	06-12-2019	09-12-2019	09-12-2019	12-12-2019	12-12-2019	15-12-2019	15-12-2019	18-12-2019	18-12-2019	21-12-2019	21-12-2019	24-12-2019	24-12-2019	27-12-2019	27-12-2019	30-12-2019	02-01-2020	02-01-2020	05-01-2020	05-01-2020	08-01-2020	11-01-2020	11-01-2020	14-01-2020	14-01-2020	17-01-2020	17-01-2020	21-01-2020	21-01-2020	29-01-2020	29-01-2020	01-02-2020	01-02-2020	04-02-2020	04-02-2020	07-02-2020	07-02-2020	10-02-2020
End date							07-12-2019	07-12-2019	10-12-2019	10-12-2019	13-12-2019	13-12-2019	16-12-2019	16-12-2019	19-12-2019	19-12-2019	22-12-2019	22-12-2019	25-12-2019	25-12-2019	28-12-2019	28-12-2019	31-12-2019	03-01-2020	03-01-2020	06-01-2020	06-01-2020	09-01-2020	12-01-2020	12-01-2020	15-01-2020	15-01-2020	18-01-2020	18-01-2020	22-01-2020	22-01-2020	30-01-2020	30-01-2020	02-02-2020	02-02-2020	05-02-2020	05-02-2020	08-02-2020	08-02-2020	11-02-2020
Compound	**CASNo**						**Concentration (ug/m3)**																																						

Compounds with at least one result above the LOR

Benzene	71-43-2	27	30	4500	9000000	6.0E-06	1.25	1.15	1.25	1.05	1.2	1.2	1.2	1.2	1.35	1.3	1.3	1.2	1.2	1.3	1.3	1.25	1.25	1.25	1.2	2.5	17	3.1	1.05	3.1	11	9.2	1.2	3.3	1.3	1.25	1.15	1.25	1.1	24	1.05	1.2	1.15	1.25	1.1
2-Butanone (Methyl Ethyl Ketone	78-93-3	2940	5000	738	590000		1.25	1.15	1.25	1.05	1.2	1.2	1.2	1.2	1.35	1.3	1.3	1.2	1.2	1.3	1.3	1.25	1.25	1.25	1.2	1.1	1.15	1.2	1.05	1.1	1.1	1.35	1.2	1.25	1.3	1.25	10	1.25	1.1	1.15	1.05	1.2	1.15	1.25	1.1
Cyclohexane	110-82-7	105000	6000	1435	1050000		1	0.95	1	0.85	0.95	0.95	0.95	0.95	1.05	1	1	0.95	0.95	1	1.05	1	1	1	0.95	0.85	0.95	0.95	0.8	0.9	0.9	1.05	0.95	1	1.05	1	0.9	1	0.85	0.9	0.85	0.95	11	1	0.9
Ethyl Benzene	637-92-3	21710	1000	8700	870000		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	7.5	1.45	5.4	1.55	1.45	1.5	1.5	1.45	1.3	4.6	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
Freon 11	76-13-1		6000	28000	No value		0.75	0.7	1.7	2.1	1.6	0.7	2.9	0.75	0.8	0.75	0.75	0.7	0.75	0.75	0.75	0.75	0.75	0.75	0.75	2.5	2.7	2.5	2.6	2.8	2.8	2.5	3.3	2.5	2.9	3.3	2.9	1.8	1.6	1.8	1.5	1.7	1.7	1.6	1.5
Freon 12	142-82-5		500000	No value	No value		1	2.5	3.2	3	2.7	2.9	5.6	2.9	1.05	1	1	0.95	0.95	1	1.05	1	1	1	0.95	5.6	5.7	6	5.5	5.5	5.4	5.4	5.8	5.8	5.5	5.8	3	3.3	3.1	3.1	3	3	3	2.8	2.8
Heptane	87-68-3	205000	9000	200000	No value		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	14	1.75	1.55
Hexane	591-78-6		670	5287	1800000		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	4.2	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	36	3	1.3
Tetrachloroethene	127-18-4	102000	200	31356	710200		2.7	2.55	2.7	2.3	2.6	2.6	2.65	2.65	2.95	2.8	2.8	2.6	2.65	2.8	2.85	2.7	2.8	2.75	2.65	2.35	2.55	2.65	2.25	2.4	2.45	2.9	2.6	2.75	2.85	2.75	2.55	2.75	2.4	2.55	2.3	2.65	2.6	2.7	2.4
Toluene	108-88-3	7500	5000	8025	380000		1.5	1.4	1.5	1.25	1.4	1.4	3.5	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	3.1	7.2	2.9	1.25	1.3	7.2	4.7	2.8	1.5	1.55	1.5	3.9	3.5	1.3	7.9	1.25	1.45	3	3.7	1.3
1,1,2-Trichloroethane	79-00-5	164	0.2	No value	No value		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
Trichloroethene	79-01-6	21600	2	150467	864000	4.0E-06	2.2	2.1	2.2	1.85	2.1	2.1	2.2	2.2	2.4	2.3	2.3	2.15	2.2	2.3	2.3	2.2	2.3	2.25	2.2	1.95	2.1	2.2	1.85	1.95	2	2.4	2.1	2.25	2.3	2.25	2.05	2.25	1.95	2.1	1.9	2.15	2.1	2.2	1.95
2,2,4-Trimethylpentane	000540-84-1		540	3130	No value		2.2	2.1	2.2	1.85	2.1	2.1	2.2	2.2	2.4	2.3	2.3	2.15	2.2	2.3	2.3	2.2	2.3	2.25	2.2	1.95	2.1	2.2	1.85	1.95	2	2.4	2.1	2.25	2.3	2.25	2.05	2.25	1.95	2.1	1.9	2.15	47	2.2	1.95

Acute Hazard Index	0.05985904	0.05515513	0.05985904	0.05009873	0.05733225	0.05733225	0.0579441	0.05767077	0.06458876	0.06206868	0.06206868	0.05762387	0.05767077	0.06224601	0.06207312	0.05954407	0.06018973	0.05987194	0.05767077	0.10439796	0.64311402	0.12823447	0.05009429	0.12669063	0.42038998	0.35543458	0.05751891	0.13579787	0.06207312	0.05987194	0.05848583	0.06013861	0.05261325	0.90231591	0.05010938	0.05735412	0.05639413	0.06015238	0.05261656
Odour Threhsold In	0.01037648	0.00968806	0.01046131	0.00885813	0.00997018	0.00988983	0.01086462	0.01003402	0.01115441	0.01071736	0.01071736	0.01168347	0.01003402	0.01182368	0.01080845	0.01032227	0.01046599	0.01042124	0.01003402	0.01056926	0.02139921	0.01169754	0.00881168	0.01046035	0.01811765	0.01662843	0.01055811	0.01171638	0.01100042	0.01064892	0.0405151	0.01113804	0.00915436	0.02441853	0.00884533	0.01007745	0.08016699	0.01184702	0.00923317

Compounds with nil results above the LOR however at least one guideline value is lower than the maximum (acute) or average (chronic) 0.5x LOR

Acrolein	107-02-8	6.8	0.35	367	1250		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
Acrylonitrile	107-13-1	3300	5	3400	No value	1.7E-05	4.45	4.15	4.45	3.7	4.25	4.25	4.35	4.35	4.8	4.6	4.6	4.25	4.35	4.6	4.65	4.4	4.55	4.5	4.4	3.85	4.2	4.35	3.7	3.95	4	4.8	4.25	4.5	4.65	4.5	4.15	4.5	3.9	4.15	3.75	4.3	4.2	4.45	3.95
tert-Amyl Methyl Ether	994-05-8		0.2	1128	No value		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
Bromodichloromethane	75-27-4		0.2	No value	No value	3.7E-05	2.45	2.3	2.45	2.05	2.35	2.35	2.4	2.45	2.7	2.55	2.55	2.35	2.4	2.55	2.6	2.45	2.55	2.5	2.45	2.15	2.35	2.4	2.05	2.2	2.2	2.65	2.35	2.5	2.6	2.5	2.3	2.5	2.15	2.3	2.1	2.4	2.35	2.45	2.2
Bromoform	75-25-2		0.2	13440	No value		2.95	2.8	2.95	2.5	2.8	2.85	2.9	2.9	3.2	3.05	3.05	2.85	2.9	3.05	3.1	2.95	3.05	3	2.9	2.6	2.8	2.9	2.45	2.65	2.65	3.2	2.8	3	3.1	3	2.75	3	2.6	2.75	2.5	2.85	2.8	2.95	2.65
1,3-Butadiene	106-99-0	660	2	2040000	No value	3.0E-05	0.75	0.7	0.75	0.6	0.7	0.7	0.75	0.75	0.8	0.75	0.75	0.7	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.65	0.7	0.75	0.6	0.65	0.65	0.8	0.7	0.75	0.75	0.75	0.7	0.75	0.65	0.7	0.65	0.7	0.7	0.75	0.65
2-Chloroprene	126-99-8		20	362	No value	3.0E-04	2.7	2.55	2.7	2.3	2.6	2.6	2.65	2.65	2.95	2.8	2.8	2.6	2.65	2.8	2.85	2.7	2.8	2.75	2.65	2.35	2.55	2.65	2.25	2.4	2.45	2.9	2.6	2.75	2.85	2.75	2.55	2.75	2.4	2.55	2.3	2.65	2.6	2.7	2.4
3-Chloropropene	107-05-1	600	1	1471	75000		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
2-Chlorotoluene	95-49-8		0.2	1657	No value		2.2	2.1	2.2	1.85	2.1	2.1	2.2	2.2	2.4	2.3	2.3	2.15	2.2	2.3	2.3	2.2	2.3	2.25	2.2	1.95	2.1	2.2	1.85	1.95	2	2.4	2.1	2.25	2.3	2.25	2.05	2.25	1.95	2.1	1.9	2.15	2.1	2.2	1.95
alpha-Chlorotoluene	100-44-7		1	228	No value	4.9E-05	1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
Dibromochloromethane	124-48-1		0.2	No value	No value		2.95	2.8	2.95	2.5	2.8	2.85	2.9	2.9	3.2	3.05	3.05	2.85	2.9	3.05	3.1	2.95	3.05	3	2.9	2.6	2.8	2.9	2.45	2.65	2.65	3.2	2.8	3	3.1	3	2.75	3	2.6	2.75	2.5	2.85	2.8	2.95	2.65
1,2-Dibromoethane (EDB)	106-93-4		9	No value	No value	6.0E-04	2.95	2.8	2.95	2.5	2.8	2.85	2.9	2.9	3.2	3.05	3.05	2.85	2.9	3.05	3.1	2.95	3.05	3	2.9	2.6	2.8	2.9	2.45	2.65	2.65	3.2	2.8	3	3.1	3	2.75	3	2.6	2.75	2.5	2.85	2.8	2.95	2.65
1,3-Dichlorobenzene	541-73-1		0.2	No value	No value		3.2	3	3.2	2.7	3.05	3.05	3.15	3.15	3.5	3.3	3.3	3.1	3.15	3.3	3.35	3.2	3.3	3.25	3.15	2.8	3	3.15	2.7	2.85	2.9	3.45	3.05	3.25	3.35	3.25	3	3.25	2.85	3	2.7	3.1	3.05	3.2	2.85
1,2-Dichloroethane	107-06-2		700	237500	No value	2.6E-05	2.45	2.3	2.45	2.05	2.35	2.35	2.4	2.45	2.7	2.55	2.55	2.35	2.4	2.55	2.6	2.45	2.55	2.5	2.45	2.15	2.35	2.4	2.05	2.2	2.2	2.65	2.35	2.5	2.6	2.5	2.3	2.5	2.15	2.3	2.1	2.4	2.35	2.45	2.2
cis-1,2-Dichloroethene	156-59-2		0.2	No value	No value		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
1,2-Dichloropropane	78-87-5	50800	4	1155	No value		4.45	4.15	4.45	3.7	4.25	4.25	4.35	4.35	4.8	4.6	4.6	4.25	4.35	4.6	4.65	4.4	4.55	4.5	4.4	3.85	4.2	4.35	3.7	3.95	4	4.8	4.25	4.5	4.65	4.5	4.15	4.5	3.9	4.15	3.75	4.3	4.2	4.45	3.95
cis-1,3-Dichloropropene	542-75-6		31	4539	No value	4.0E-06	1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
trans-1,3-Dichloropropene	108-20-3		31	4539	No value	4.0E-06	1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
Hexachlorobutadiene	110-54-3		0.2	12000	No value		4.95	4.65	4.95	4.15	4.7	4.7	4.85	4.85	5.5	5	5	4.75	4.85	5	5	4.9	5	5	4.85	4.3	4.65	4.85	4.1	4.4	4.45	5.5	4.7	5	5	5	4.6	5	4.35	4.6	4.15	4.8	4.7	4.95	4.4
1,2,4-Trichlorobenzene	120-82-1		2	1400	40000		9	8.5	9	7.5	8.5	8.5	8.5	8.5	9.5	9	9	8.5	8.5	9	9.5	9	9	9	9	7.5	8.5	8.5	7.5	8	8	9.5	8.5	9	9.5	9	8.5	9	8	8.5	7.5	8.5	8.5	9	8
Vinyl Bromide	593-60-2		3	No value	No value	3.2E-05	2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	1	0.95	1	0.85	0.95	0.95	0.95	0.95	1.05	1	1	0.95	0.95	1	1.05	1	1	1	0.95	0.85	0.95	0.95	0.8	0.9	0.9	1.05	0.95	1	1.05	1	0.9	1	0.85	0.9	0.85	0.95	0.95	1	0.9

Compounds with nil results above the LOR and guideline values are greater than 0.5x LOR

Bromomethane	74-83-9		5	996	No value		2.2	2.1	2.2	1.85	2.1	2.1	2.2	2.2	2.4	2.3	2.3	2.15	2.2	2.3	2.3	2.2	2.3	2.25	2.2	1.95	2.1	2.2	1.85	1.95	2	2.4	2.1	2.25	2.3	2.25	2.05	2.25	1.95	2.1	1.9	2.15	2.1	2.2	1.95
tert-Butyl Alcohol	75-65-0	45500	5	142480	No value		1.25	1.15	1.25	1.05	1.2	1.2	1.2	1.2	1.35	1.3	1.3	1.2	1.2	1.3	1.3	1.25	1.25	1.25	1.2	1.1	1.15	1.2	1.05	1.1	1.1	1.35	1.2	1.25	1.3	1.25	1.15	1.25	1.1	1.15	1.05	1.2	1.15	1.25	1.1
n-Butylbenzene	104-51-8		5	No value	No value		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
sec-Butylbenzene	135-98-8	No value	5	No value	No value		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
tert-Butylbenzene	98-06-6		5	No value	No value		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
Carbon Tetrachloride	56-23-5	190	100	520	No value		2.45	2.3	2.45	2.05	2.35	2.35	2.4	2.45	2.7	2.55	2.55	2.35	2.4	2.55	2.6	2.45	2.55	2.5	2.45	2.15	2.35	2.4	2.05	2.2	2.2	2.65	2.35	2.5	2.6	2.5	2.3	2.5	2.15	2.3	2.1	2.4	2.35	2.45	2.2
Chlorobenzene	108-90-7	47000	50	4500	933330		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
Chloroethane	75-00-3		39600	11083	No value		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
Chloroform	67-66-3	490	98	415022	20480000		2.2	2.1	2.2	1.85	2.1	2.1	2.2	2.2	2.4	2.3	2.3	2.15	2.2	2.3	2.3	2.2	2.3	2.25	2.2	1.95	2.1	2.2	1.85	1.95	2	2.4	2.1	2.25	2.3	2.25	2.05	2.25	1.95	2.1	1.9	2.15	2.1	2.2	1.95
Chloromethane	74-87-3	20700	90	20650	1050000		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
Cumene	98-82-8	250000	400	157	No value		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
o-Cymene	99-87-6		5	12	No value		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
1,2-Dichlorobenzene	95-50-1	30100	200	300	150000		3.2	3	3.2	2.7	3.05	3.05	3.15	3.15	3.5	3.3	3.3	3.1	3.15	3.3	3.35	3.2	3.3	3.25	3.15	2.8	3	3.15	2.7	2.85	2.9	3.45	3.05	3.25	3.35	3.25	3	3.25	2.85	3	2.7	3.1	3.05	3.2	2.85
1,4-Dichlorobenzene	106-46-7	12000	60	730	240000		3.2	3	3.2	2.7	3.05	3.05	3.15	3.15	3.5	3.3	3.3	3.1	3.15	3.3	3.35	3.2	3.3	3.25	3.15	2.8	3	3.15	2.7	2.85	2.9	3.45	3.05	3.25	3.35	3.25	3	3.25	2.85	3	2.7	3.1	3.05	3.2	2.85
1,1-Dichloroethane	75-34-3		165	647656.5	No value		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
1,1-Dichloroethene	75-35-4	7900	0.007	753395	No value		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
trans-1,2-Dichloroethene	156-60-5	785	40	No value	No value		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
Diisopropyl Ether	123-91-1	130000	700	71	1260000		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
1,4-Dioxane	141-78-6	7210	110	43240	180000		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
Ethyl Acetate	100-41-4	144000	70	937	350000		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
Ethyl tert-Butyl Ether	622-96-8		2900	190	No value		1.25	1.15	1.25	1.05	1.2	1.2	1.2	1.2	1.35	1.3	1.3	1.2	1.2	1.3	1.3	1.25	1.25	1.25	1.2	1.1	1.15	1.2	1.05	1.1	1.1	1.35	1.2	1.25	1.3	1.25	1.15	1.25	1.1	1.15	1.05	1.2	1.15	1.25	1.1
4-Ethyltoluene	75-69-4		5	No value	No value		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
Freon 113	76-14-2	959000	800000	344871	No value		2.45	2.3	2.45	2.05	2.35	2.35	2.4	2.45	2.7	2.55	2.55	2.35	2.4	2.55	2.6	2.45	2.55	2.5	2.45	2.15	2.35	2.4	2.05	2.2	2.2	2.65	2.35	2.5	2.6	2.5	2.3	2.5	2.15	2.3	2.1	2.4	2.35	2.45	2.2
Freon 114	75-71-8		700000	No value	No value		0.75	0.7	0.75	0.6	0.7	0.7	0.75	0.75	0.8	0.75	0.75	0.7	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.65	0.7	0.75	0.6	0.65	0.65	0.8	0.7	0.75	0.75	0.75	0.7	0.75	0.65	0.7	0.65	0.7	0.7	0.75	0.65
2-Hexanone	108-38-3		30	310	No value		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
m,p-Xylene	106-42-3	8700	870	217	220000		3.2	3	3.2	2.7	3.05	3.05	3.15	3.15	3.5	3.3	3.3	3.1	3.15	3.3	3.35	3.2	3.3	3.25	3.15	2.8	3	3.15	2.7	2.85	2.9	3.45	3.05	3.25	3.35	3.25	3	3.25	2.85	3	2.7	3.1	3.05	3.2	2.85
Methyl Methacrylate	80-62-6	71000	700	200	697000		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
Methyl tert-butyl ether	1634-04-4	7210	8000	190	No value		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
4-Methyl-2-pentanone	108-10-1		3000	3606	410000		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
Naphthalene	91-20-3	7900	3	440	75000		5	4.85	5	4.35	4.95	4.95	5	5	5.5	5.5	5.5	5	5	5.5	5.5	5	5.5	5	5	4.5	4.9	5	4.35	4.6	4.65	5.5	4.95	5	5.5	5.5	4.85	5.5	4.55	4.85	4.4	5	4.9	5	4.6
2-Propanol	67-63-0	123000	7300	7990	490000		24.5	23	24.5	20.5	23.5	23.5	24	24.5	27	25.5	25.5	23.5	24	25.5	26	24.5	25.5	25	24.5	21.5	23.5	24	20.5	22	22	26.5	23.5	25	26	25	23	25	21.5	23	21	24	23.5	24.5	22
Propene	115-07-1		3000	39584	No value		2.45	2.3	2.45	2.05	2.35	2.35	2.4	2.45	2.7	2.55	2.55	2.35	2.4	2.55	2.6	2.45	2.55	2.5	2.45	2.15	2.35	2.4	2.05	2.2	2.2	2.65	2.35	2.5	2.6	2.5	2.3	2.5	2.15	2.3	2.1	2.4	2.35	2.45	2.2
Propylbenzene	103-65-1		1000	50	No value		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
Styrene	100-42-5	21300	260	70	430000		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
1,1,1,2-Tetrachloroethane	630-20-6		105	No value	No value		2.45	2.3	2.45	2.05	2.35	2.35	2.4	2.45	2.7	2.55	2.55	2.35	2.4	2.55	2.6	2.45	2.55	2.5	2.45	2.15	2.35	2.4	2.05	2.2	2.2	2.65	2.35	2.5	2.6	2.5	2.3	2.5	2.15	2.3	2.1	2.4	2.35	2.45	2.2
1,1,2,2-Tetrachloroethane	79-34-5		7	10301	No value		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
Tetrahydrofuran	109-99-9		2000	5898	No value		1	0.95	1	0.85	0.95	0.95	0.95	0.95	1.05	1	1	0.95	0.95	1	1.05	1	1	1	0.95	0.85	0.95	0.95	0.8	0.9	0.9	1.05	0.95	1	1.05	1	0.9	1	0.85	0.9	0.85	0.95	0.95	1	0.9
1,1,1-Trichloroethane	71-55-6	6000	5000	540000	5428570		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
1,2,4-Trimethylbenzene	95-63-6		60	500	No value		2	1.85	2	1.65	1.9	1.9	1.95	1.95	2.15	2.05	2.05	1.9	1.95	2.05	2.05	1.95	2.05	2	1.95	1.7	1.85	1.95	1.65	1.75	1.8	2.1	1.9	2	2.05	2	1.85	2	1.75	1.85	1.65	1.9	1.9	2	1.75
1,3,5-Trimethylbenzene	108-67-8		60	1131	No value		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3
Vinyl Acetate	108-05-4	7000	200	423	No value		1.75	1.6	1.75	1.45	1.65	1.65	1.7	1.7	1.9	1.8	1.8	1.65	1.7	1.8	1.8	1.7	1.75	1.75	1.7	1.5	1.65	1.7	1.45	1.55	1.55	1.85	1.65	1.75	1.8	1.75	1.6	1.75	1.5	1.6	1.45	1.65	1.65	1.75	1.55
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	1	0.95	1	0.85	0.95	0.95	0.95	0.95	1.05	1	1	0.95	0.95	1	1.05	1	1	1	0.95	0.85	0.95	0.95	0.8	0.9	0.9	1.05	0.95	1	1.05	1	0.9	1	0.85	0.9	0.85	0.95	0.95	1	0.9
o-Xylene	95-47-6	8700	870	100	220000		1.5	1.4	1.5	1.25	1.4	1.4	1.45	1.45	1.6	1.55	1.55	1.4	1.45	1.55	1.55	1.45	1.5	1.5	1.45	1.3	1.4	1.45	1.25	1.3	1.35	1.6	1.4	1.5	1.55	1.5	1.4	1.5	1.3	1.4	1.25	1.45	1.4	1.5	1.3

Location		Acute AGV (ug/m3)	Chronic AGV (ug/m3)	Odour Threshold (ug/m3)	Irritation Threshold (ug/m3)	Unit Risk (per µg/m3)	North	West	North	West	North	West	North	West	North	North	West	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North
Sample No							20-342	20-347	20-348	20-349	20-350	20-367	20-368	20-371	20-372	20-393	20-394	20-395	20-396	20-463	20-464	20-479	20-480	20-481	20-482	20-506	20-507	20-508	20-509	20-540	20-541	20-570	20-571	20-576	20-577	20-590	20-591	20-594	20-595	20-605	20-606	20-610	20-611	20-706	20-707
Start date							10-02-2020	13-02-2020	13-02-2020	16-02-2020	16-02-2020	19-02-2020	19-02-2020	22-01-2020	22-01-2020	25-02-2020	25-02-2020	28-02-2020	28-02-2020	03-03-2020	03-03-2020	06-03-2020	06-03-2020	08-03-2020	08-03-2020	11-03-2020	11-03-2020	14-03-2020	14-03-2020	17-03-2020	17-03-2020	20-03-2020	20-03-2020	23-03-2020	23-03-2020	26-03-2020	26-03-2020	29-03-2020	29-03-2020	01-04-2020	01-04-2020	04-04-2020	04-04-2020	25-04-2020	25-04-2020
End date							11-02-2020	14-02-2020	14-02-2020	17-02-2020	17-02-2020	20-02-2020	20-02-2020	23-01-2020	23-01-2020	26-02-2020	26-02-2020	29-02-2020	29-02-2020	04-03-2020	04-03-2020	07-03-2020	07-03-2020	09-03-2020	09-03-2020	12-03-2020	12-03-2020	15-03-2020	15-03-2020	18-03-2020	18-03-2020	21-03-2020	21-03-2020	24-03-2020	24-03-2020	27-03-2020	27-03-2020	30-03-1930	30-03-1930	02-04-2020	02-04-2020	05-04-2020	05-04-2020	26-04-2020	26-04-2020
Compound	**CASNo**																																												

Compounds with at least one result above the LOR

Benzene	71-43-2	27	30	4500	9000000	6.0E-06	1.2	1.15	1.25	1.3	1.05	1	1.15	1.25	1	1.1	1.1	1.05	1.2	1.15	1.15	1.25	1.1	1.15	1.15	1.15	1.15	1.1	1.1	1.25	1.25	1.25	1.15	**4.3**	1.2	1.25	1.2	1.3	1.25	1.3	1.65	1.05	1.1	1.05	1.1
2-Butanone (Methyl Ethyl Ketone	78-93-3	2940	5000	738	590000		1.2	1.15	1.25	1.3	1.05	1	1.15	1.25	1	1.1	1.1	1.05	1.2	1.15	1.15	1.25	1.1	1.15	1.15	1.15	1.15	1.1	1.1	1.25	1.25	1.25	1.15	1.25	1.2	1.25	1.2	1.3	1.25	1.3	1.65	1.05	1.1	1.05	1.1
Cyclohexane	110-82-7	105000	6000	1435	1050000		0.95	0.9	1	1.05	0.85	0.8	0.9	1	0.8	0.85	0.9	0.85	0.95	0.9	0.9	1	0.9	0.9	0.9	0.9	0.95	0.9	0.9	1	1	1	0.9	1	0.95	1	0.95	1.05	1	1.05	1.3	0.85	0.9	0.85	0.9
Ethyl Benzene	637-92-3	21710	1000	8700	870000		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Freon 11	76-13-1		6000	28000	No value		**1.6**	**1.5**	**1.6**	**1.6**	**1.5**	0.6	**2.5**	0.75	**1.7**	0.65	**1.3**	0.65	0.7	**1.4**	0.7	0.75	**1.5**	**1.4**	**1.4**	**1.7**	0.7	**2**	0.65	0.75	0.75	0.75	**1.4**	0.75	0.7	**1.5**	0.7	0.75	**1.6**	0.75	1	**1.5**	**1.6**	**1.8**	0.65
Freon 12	142-82-5		500000	No value	No value		**2.7**	**2.9**	**2.6**	**2.7**	**2.7**	**2.3**	**4.5**	**2.8**	**2.8**	**2.2**	**2.4**	**2.4**	**2.1**	**2.6**	**2.2**	**2.6**	**2.5**	**2.6**	**2.7**	**3**	**2.3**	**2.9**	**2.4**	**2.1**	**2.4**	**2.8**	**2.8**	**2.9**	**2.8**	**3**	**3**	**3**	**3**	**3.1**	**3.3**	**2.8**	**2.9**	**2.7**	**2.5**
Heptane	87-68-3	205000	9000	200000	No value		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
Hexane	591-78-6		670	5287	1800000		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Tetrachloroethene	127-18-4	102000	200	31356	710200		2.7	2.5	2.8	2.9	2.3	2.2	2.5	2.7	2.25	2.4	2.45	2.35	2.65	2.55	2.5	2.8	2.45	2.5	2.55	2.5	2.6	2.45	2.4	2.75	2.75	2.7	2.5	2.75	2.6	2.7	2.65	2.85	2.8	2.85	3.6	2.3	2.45	2.3	2.45
Toluene	108-88-3	7500	5000	8025	380000		1.45	**2.8**	1.5	1.6	**4.1**	1.2	1.35	1.45	1.2	**3.7**	1.35	**3**	1.45	1.4	**2.7**	1.5	1.35	1.35	1.4	1.35	1.4	**8.5**	**8.8**	1.5	1.5	1.5	1.35	**4.6**	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	**3.1**	1.35
1,1,2-Trichloroethane	79-00-5	164	0.2	No value	No value		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
Trichloroethene	79-01-6	21600	2	150467	864000	4.0E-06	2.2	2.05	2.3	2.35	1.85	1.8	2.05	2.2	1.85	1.95	2	1.95	2.15	2.05	2.05	2.3	2	2.05	2.05	2.05	2.1	2	2	2.25	2.25	2.25	2.05	2.25	2.15	2.2	2.15	2.3	2.3	2.3	2.95	1.85	2	1.9	2
2,2,4-Trimethylpentane	000540-84-1		540	3130	No value		2.2	2.05	2.3	2.35	1.85	1.8	2.05	2.2	1.85	1.95	2	1.95	2.15	2.05	2.05	2.3	2	2.05	2.05	2.05	2.1	2	2	2.25	2.25	2.25	2.05	2.25	2.15	2.2	2.15	2.3	2.3	2.3	2.95	1.85	2	1.9	2

						Acute Hazard Index	0.05767302	0.05501953	0.06019085	0.06240099	0.05047873	0.04789756	0.05482619	0.05954407	0.04791046	0.05293437	0.05294331	0.05066392	0.05766012	0.0551423	0.05500619	0.06018973	0.05263843	0.05513107	0.0551423	0.05482619	0.05546339	0.05389664	0.05362721	0.05987194	0.05987194	0.05986969	0.05482619	0.17324824	0.0573429	0.05985904	0.05766012	0.06207312	0.06018973	0.06207312	0.07877497	0.05009873	0.05294331	0.05066093	0.05294331
						Odour Threhsold Ind	0.0101139	0.01002575	0.01054251	0.01098331	0.00969241	0.00833699	0.00966333	0.01032227	0.00847996	0.00981783	0.00931365	0.009398	0.00998879	0.00962269	0.00992317	0.01046599	0.00933151	0.00956511	0.00962269	0.0095919	0.00969267	0.01160356	0.01153449	0.01042124	0.01042124	0.01041725	0.00956511	0.01308141	0.00993059	0.01044345	0.00998879	0.01080845	0.01054188	0.01080845	0.01367111	0.00880456	0.00934044	0.00944844	0.00925561

Compounds with nil results above the LOR however at least one guideline value is l

Acrolein	107-02-8	6.8	0.35	367	1250		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
Acrylonitrile	107-13-1	3300	5	3400	No value	1.7E-05	4.4	4.05	4.55	4.75	3.75	3.6	4.05	4.4	3.65	3.95	4	3.85	4.35	4.15	4.05	4.55	4	4.1	4.15	4.1	4.2	4.05	3.95	4.5	4.5	4.45	4.1	4.45	4.25	4.45	4.35	4.65	4.55	4.65	6	3.7	4.05	3.75	4
tert-Amyl Methyl Ether	994-05-8		0.2	1128	No value		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Bromodichloromethane	75-27-4		0.2	No value	No value	3.7E-05	2.45	2.25	2.55	2.65	2.1	2	2.25	2.45	2.05	2.2	2.2	2.15	2.4	2.3	2.25	2.55	2.2	2.3	2.3	2.25	2.35	2.25	2.2	2.5	2.5	2.5	2.25	2.5	2.35	2.45	2.4	2.6	2.55	2.55	3.25	2.05	2.25	2.1	2.25
Bromoform	75-25-2		0.2	13440	No value		2.9	2.7	3.05	3.15	2.5	2.4	2.7	2.95	2.45	2.6	2.65	2.55	2.9	2.75	2.7	3.05	2.65	2.75	2.75	2.7	2.8	2.7	2.65	3	3	2.95	2.7	3	2.85	2.95	2.9	3.1	3.05	3.1	3.9	2.5	2.7	2.5	2.7
1,3-Butadiene	106-99-0	660	2	2040000	No value	3.0E-05	0.75	0.7	0.75	0.8	0.6	0.6	0.7	0.75	0.6	0.65	0.65	0.65	0.7	0.7	0.7	0.75	0.65	0.7	0.7	0.7	0.7	0.65	0.65	0.75	0.75	0.75	0.7	0.75	0.7	0.75	0.7	0.75	0.75	0.75	1	0.6	0.65	0.65	0.65
2-Chloroprene	126-99-8		20	362	No value	3.0E-04	2.7	2.5	2.8	2.9	2.3	2.2	2.5	2.7	2.25	2.4	2.45	2.35	2.65	2.55	2.5	2.8	2.45	2.5	2.55	2.5	2.6	2.45	2.4	2.75	2.75	2.7	2.5	2.75	2.6	2.7	2.65	2.85	2.8	2.85	3.6	2.3	2.45	2.3	2.45
3-Chloropropene	107-05-1	600	1	1471	75000		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
2-Chlorotoluene	95-49-8		0.2	1657	No value		2.2	2.05	2.3	2.35	1.85	1.8	2.05	2.2	1.85	1.95	2	1.95	2.15	2.05	2.05	2.3	2	2.05	2.05	2.05	2.1	2	2	2.25	2.25	2.25	2.05	2.25	2.15	2.2	2.15	2.3	2.3	2.3	2.95	1.85	2	1.9	2
alpha-Chlorotoluene	100-44-7		1	228	No value	4.9E-05	1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
Dibromochloromethane	124-48-1		0.2	No value	No value		2.9	2.7	3.05	3.15	2.5	2.4	2.7	2.95	2.45	2.6	2.65	2.55	2.9	2.75	2.7	3.05	2.65	2.75	2.75	2.7	2.8	2.7	2.65	3	3	2.95	2.7	3	2.85	2.95	2.9	3.1	3.05	3.1	3.9	2.5	2.7	2.5	2.7
1,2-Dibromoethane (EDB)	106-93-4		9	No value	No value	6.0E-04	2.9	2.7	3.05	3.15	2.5	2.4	2.7	2.95	2.45	2.6	2.65	2.55	2.9	2.75	2.7	3.05	2.65	2.75	2.75	2.7	2.8	2.7	2.65	3	3	2.95	2.7	3	2.85	2.95	2.9	3.1	3.05	3.1	3.9	2.5	2.7	2.5	2.7
1,3-Dichlorobenzene	541-73-1		0.2	No value	No value		3.15	2.95	3.3	3.4	2.7	2.6	2.95	3.2	2.65	2.85	2.9	2.8	3.15	3	2.95	3.3	2.9	2.95	3	2.95	3.05	2.9	2.85	3.25	3.25	3.2	2.95	3.2	3.1	3.2	3.15	3.35	3.3	3.35	4.25	2.7	2.9	2.7	2.9
1,2-Dichloroethane	107-06-2		700	237500	No value	2.6E-05	2.45	2.25	2.55	2.65	2.1	2	2.25	2.45	2.05	2.2	2.2	2.15	2.4	2.3	2.25	2.55	2.2	2.3	2.3	2.25	2.35	2.25	2.2	2.5	2.5	2.5	2.25	2.5	2.35	2.45	2.4	2.6	2.55	2.55	3.25	2.05	2.25	2.1	2.25
cis-1,2-Dichloroethene	156-59-2		0.2	No value	No value		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
1,2-Dichloropropane	78-87-5	50800	4	1155	No value		4.4	4.05	4.55	4.75	3.75	3.6	4.05	4.4	3.65	3.95	4	3.85	4.35	4.15	4.05	4.55	4	4.1	4.15	4.1	4.2	4.05	3.95	4.5	4.5	4.45	4.1	4.45	4.25	4.45	4.35	4.65	4.55	4.65	6	3.7	4.05	3.75	4
cis-1,3-Dichloropropene	542-75-6		31	4539	No value	4.0E-06	1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
trans-1,3-Dichloropropene	108-20-3		31	4539	No value	4.0E-06	1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
Hexachlorobutadiene	110-54-3		0.2	12000	No value		4.85	4.5	5	5.5	4.15	4.05	4.5	4.9	4.05	4.35	4.45	4.3	4.8	4.6	4.55	5	4.45	4.55	4.6	4.55	4.7	4.5	4.4	5	5	4.95	4.55	4.95	4.75	4.95	4.8	5	5	5	6.5	4.15	4.5	4.2	4.45
1,2,4-Trichlorobenzene	120-82-1		2	1400	40000		9	8	9	9.5	7.5	7	8	9	7.5	8	8	7.5	8.5	8.5	8	9	8	8	8.5	8	8.5	8	8	9	9	9	8	9	8.5	9	8.5	9.5	9	9.5	11.5	7.5	8	7.5	8
Vinyl Bromide	593-60-2		3	No value	No value	3.2E-05	1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.95	0.9	1	1.05	0.85	0.8	0.9	1	0.8	0.85	0.9	0.85	0.95	0.9	0.9	1	0.9	0.9	0.9	0.9	0.95	0.9	0.9	1	1	1	0.9	1	0.95	1	0.95	1.05	1	1.05	1.3	0.85	0.9	0.85	0.9

Compounds with nil results above the LOR and guideline values are greater than 0.5

Bromomethane	74-83-9		5	996	No value		2.2	2.05	2.3	2.35	1.85	1.8	2.05	2.2	1.85	1.95	2	1.95	2.15	2.05	2.05	2.3	2	2.05	2.05	2.05	2.1	2	2	2.25	2.25	2.25	2.05	2.25	2.15	2.2	2.15	2.3	2.3	2.3	2.95	1.85	2	1.9	2
tert-Butyl Alcohol	75-65-0	45500	5	142480	No value		1.2	1.15	1.25	1.3	1.05	1	1.15	1.25	1	1.1	1.1	1.05	1.2	1.15	1.15	1.25	1.1	1.15	1.15	1.15	1.15	1.1	1.1	1.25	1.25	1.25	1.15	1.25	1.2	1.25	1.2	1.3	1.25	1.3	1.65	1.05	1.1	1.05	1.1
n-Butylbenzene	104-51-8		5	No value	No value		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
sec-Butylbenzene	135-98-8	No value	5	No value	No value		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
tert-Butylbenzene	98-06-6		5	No value	No value		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
Carbon Tetrachloride	56-23-5	190	100	520	No value		2.45	2.25	2.55	2.65	2.1	2	2.25	2.45	2.05	2.2	2.2	2.15	2.4	2.3	2.25	2.55	2.2	2.3	2.3	2.25	2.35	2.25	2.2	2.5	2.5	2.5	2.25	2.5	2.35	2.45	2.4	2.6	2.55	2.55	3.25	2.05	2.25	2.1	2.25
Chlorobenzene	108-90-7	47000	50	4500	933330		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Chloroethane	75-00-3		39600	11083	No value		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Chloroform	67-66-3	490	98	415022	20480000		2.2	2.05	2.3	2.35	1.85	1.8	2.05	2.2	1.85	1.95	2	1.95	2.15	2.05	2.05	2.3	2	2.05	2.05	2.05	2.1	2	2	2.25	2.25	2.25	2.05	2.25	2.15	2.2	2.15	2.3	2.3	2.3	2.95	1.85	2	1.9	2
Chloromethane	74-87-3	20700	90	20650	1050000		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
Cumene	98-82-8	250000	400	157	No value		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
o-Cymene	99-87-6		5	12	No value		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
1,2-Dichlorobenzene	95-50-1	30100	200	300	150000		3.15	2.95	3.3	3.4	2.7	2.6	2.95	3.2	2.65	2.85	2.9	2.8	3.15	3	2.95	3.3	2.9	2.95	3	2.95	3.05	2.9	2.85	3.25	3.25	3.2	2.95	3.2	3.1	3.2	3.15	3.35	3.3	3.35	4.25	2.7	2.9	2.7	2.9
1,4-Dichlorobenzene	106-46-7	12000	60	730	240000		3.15	2.95	3.3	3.4	2.7	2.6	2.95	3.2	2.65	2.85	2.9	2.8	3.15	3	2.95	3.3	2.9	2.95	3	2.95	3.05	2.9	2.85	3.25	3.25	3.2	2.95	3.2	3.1	3.2	3.15	3.35	3.3	3.35	4.25	2.7	2.9	2.7	2.9
1,1-Dichloroethane	75-34-3		165	647656.5	No value		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
1,1-Dichloroethene	75-35-4	7900	0.007	753395	No value		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
trans-1,2-Dichloroethene	156-60-5	785	40	No value	No value		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Diisopropyl Ether	123-91-1	130000	700	71	1260000		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
1,4-Dioxane	141-78-6	7210	110	43240	180000		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Ethyl Acetate	100-41-4	144000	70	937	350000		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
Ethyl tert-Butyl Ether	622-96-8		2900	190	No value		1.2	1.15	1.25	1.3	1.05	1	1.15	1.25	1	1.1	1.1	1.05	1.2	1.15	1.15	1.25	1.1	1.15	1.15	1.15	1.15	1.1	1.1	1.25	1.25	1.25	1.15	1.25	1.2	1.25	1.2	1.3	1.25	1.3	1.65	1.05	1.1	1.05	1.1
4-Ethyltoluene	75-69-4		5	No value	No value		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Freon 113	76-14-2	959000	800000	344871	No value		2.45	2.25	2.55	2.65	2.1	2	2.25	2.45	2.05	2.2	2.2	2.15	2.4	2.3	2.25	2.55	2.2	2.3	2.3	2.25	2.35	2.25	2.2	2.5	2.5	2.5	2.25	2.5	2.35	2.45	2.4	2.6	2.55	2.55	3.25	2.05	2.25	2.1	2.25
Freon 114	75-71-8		700000	No value	No value		0.75	0.7	0.75	0.8	0.6	0.6	0.7	0.75	0.6	0.65	0.65	0.65	0.7	0.7	0.7	0.75	0.65	0.7	0.7	0.7	0.7	0.65	0.65	0.75	0.75	0.75	0.7	0.75	0.7	0.75	0.7	0.75	0.75	0.75	1	0.6	0.65	0.65	0.65
2-Hexanone	108-38-3		30	310	No value		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
m,p-Xylene	106-42-3	8700	870	217	220000		3.15	2.95	3.3	3.4	2.7	2.6	2.95	3.2	2.65	2.85	2.9	2.8	3.15	3	2.95	3.3	2.9	2.95	3	2.95	3.05	2.9	2.85	3.25	3.25	3.2	2.95	3.2	3.1	3.2	3.15	3.35	3.3	3.35	4.25	2.7	2.9	2.7	2.9
Methyl Methacrylate	80-62-6	71000	700	200	697000		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
Methyl tert-butyl ether	1634-04-4	7210	8000	190	No value		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
4-Methyl-2-pentanone	108-10-1		3000	3606	410000		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Naphthalene	91-20-3	7900	3	440	75000		5	4.75	5.5	5.5	4.35	4.25	4.75	5	4.25	4.6	4.65	4.5	5	4.85	4.75	5.5	4.65	4.8	4.85	4.75	4.9	4.7	4.6	5	5.5	5	4.75	5	5	5	5	5.5	5.5	5.5	7	4.35	4.7	4.4	4.7
2-Propanol	67-63-0	123000	7300	7990	490000		24.5	22.5	25.5	26.5	21	20	22.5	24.5	20.5	22	22	21.5	24	23	22.5	25.5	22	23	23	22.5	23.5	22.5	22	25	25	25	22.5	25	23.5	24.5	24	26	25.5	25.5	32.5	20.5	22.5	21	22.5
Propene	115-07-1		3000	39584	No value		2.45	2.25	2.55	2.65	2.1	2	2.25	2.45	2.05	2.2	2.2	2.15	2.4	2.3	2.25	2.55	2.2	2.3	2.3	2.25	2.35	2.25	2.2	2.5	2.5	2.5	2.25	2.5	2.35	2.45	2.4	2.6	2.55	2.55	3.25	2.05	2.25	2.1	2.25
Propylbenzene	103-65-1		1000	50	No value		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
Styrene	100-42-5	21300	260	70	430000		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
1,1,1,2-Tetrachloroethane	630-20-6		105	No value	No value		2.45	2.25	2.55	2.65	2.1	2	2.25	2.45	2.05	2.2	2.2	2.15	2.4	2.3	2.25	2.55	2.2	2.3	2.3	2.25	2.35	2.25	2.2	2.5	2.5	2.5	2.25	2.5	2.35	2.45	2.4	2.6	2.55	2.55	3.25	2.05	2.25	2.1	2.25
1,1,2,2-Tetrachloroethane	79-34-5		7	10301	No value		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
Tetrahydrofuran	109-99-9		2000	5898	No value		0.95	0.9	1	1.05	0.85	0.8	0.9	1	0.8	0.85	0.9	0.85	0.95	0.9	0.9	1	0.9	0.9	0.9	0.9	0.95	0.9	0.9	1	1	1	0.9	1	0.95	1	0.95	1.05	1	1.05	1.3	0.85	0.9	0.85	0.9
1,1,1-Trichloroethane	71-55-6	6000	5000	540000	5428570		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
1,2,4-Trimethylbenzene	95-63-6		60	500	No value		1.95	1.8	2.05	2.1	1.65	1.6	1.8	1.95	1.6	1.75	1.8	1.7	1.95	1.85	1.8	2.05	1.75	1.85	1.85	1.8	1.9	1.8	1.75	2	2	2	1.8	2	1.9	2	1.95	2.05	2.05	2.05	2.6	1.65	1.8	1.7	1.8
1,3,5-Trimethylbenzene	108-67-8		60	1131	No value		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35
Vinyl Acetate	108-05-4	7000	200	423	No value		1.7	1.6	1.8	1.85	1.45	1.4	1.6	1.7	1.4	1.55	1.55	1.5	1.7	1.6	1.6	1.75	1.55	1.6	1.6	1.6	1.65	1.55	1.55	1.75	1.75	1.75	1.6	1.75	1.65	1.75	1.7	1.8	1.75	1.8	2.3	1.45	1.55	1.45	1.55
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.95	0.9	1	1.05	0.85	0.8	0.9	1	0.8	0.85	0.9	0.85	0.95	0.9	0.9	1	0.9	0.9	0.9	0.9	0.95	0.9	0.9	1	1	1	0.9	1	0.95	1	0.95	1.05	1	1.05	1.3	0.85	0.9	0.85	0.9
o-Xylene	95-47-6	8700	870	100	220000		1.45	1.35	1.5	1.6	1.25	1.2	1.35	1.45	1.2	1.3	1.35	1.3	1.45	1.4	1.35	1.5	1.35	1.35	1.4	1.35	1.4	1.35	1.3	1.5	1.5	1.5	1.35	1.5	1.4	1.5	1.45	1.55	1.5	1.55	1.95	1.25	1.35	1.25	1.35

Appendix B

Location		Acute AGV (ug/m3)	Chronic AGV (ug/m3)	Odour Threshold (ug/m3)	Irritation Threshold (ug/m3)	Unit Risk (per µg/m3)	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West
Sample No							20-709	20-710	20-733	20-734	20-756	20-757	20-759	20-760	20-761	20-762	20-769	20-770	20-790	20-791	20-803	20-804	20-805	20-806	20-811	20-812	20-815	20-816	20-817	20-818	20-834	20-835	20-845	20-846	20-882	20-883	20-884	20-885	20-898	20-899	20-921	20-922	20-923	20-924	20-964
Start date							28-04-2020	28-04-2020	01-05-2020	01-05-2020	04-05-2020	04-05-2020	07-05-2020	07-05-2020	10-05-2020	10-05-2020	13-05-2020	13-05-2020	16-05-2020	16-05-2020	19-05-2020	19-05-2020	22-05-2020	22-05-2020	25-05-2020	25-05-2020	28-05-2020	28-05-2020	31-05-2020	31-05-2020	03-06-2020	03-06-2020	06-06-2020	06-06-2020	09-06-2020	09-06-2020	12-06-2020	12-06-2020	15-06-2020	15-06-2020	18-06-2020	18-06-2020	21-06-2020	21-06-2020	24-06-2020
End date							29-04-2020	29-04-2020	02-05-2020	02-05-2020	05-05-2020	05-05-2020	08-05-2020	08-05-2020	11-05-2020	11-05-2020	14-05-2020	14-05-2020	17-05-2020	17-05-2020	20-05-2020	20-05-2020	23-05-2020	23-05-2020	26-05-2020	26-05-2020	29-05-2020	29-05-2020	01-06-2020	01-06-2020	04-06-2020	04-06-2020	07-06-2020	07-06-2020	10-06-2020	10-06-2020	13-06-2020	13-06-2020	16-06-2020	16-06-2020	19-06-2020	19-06-2020	22-06-2020	22-06-2020	25-06-2020
Compound	**CASNo**																																												

Compounds with at least one result above the LOR

Benzene	71-43-2	27	30	4500	9000000	6.0E-06	1.2	1.2	1.1	1.1	**2.6**	1	1.25	1.25	1.15	1.15	**3.1**	1.2	1.05	1.15	1.1	1.05	1.2	**2.4**	**2.4**	**2.5**	1.25	1.15	1.15	1.2	1.2	1.15	1.1	**2.2**	1.15	1.05	1.15	1.2	1.15	1.15	1.2	1.2	1.05	1.15	1.15
2-Butanone (Methyl Ethyl Ketone	78-93-3	2940	5000	738	590000		1.2	1.2	1.1	1.1	1.1	1	1.25	1.25	1.15	1.15	1.1	1.2	1.05	1.15	1.1	1.05	1.2	1.15	**4.3**	1.15	1.25	1.15	1.15	1.2	1.2	1.15	1.1	1.05	1.15	1.05	1.15	1.2	1.15	1.15	1.2	1.2	1.05	1.15	1.15
Cyclohexane	110-82-7	105000	6000	1435	1050000		0.95	0.95	0.85	0.9	0.9	0.8	1	1	0.9	0.9	0.9	0.95	0.85	0.95	0.9	0.85	0.95	0.9	0.9	0.9	1	0.95	0.9	0.95	0.95	0.9	0.85	0.85	0.9	0.85	0.9	0.95	0.95	0.95	0.95	0.95	0.85	0.9	0.9
Ethyl Benzene	637-92-3	21710	1000	8700	870000		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Freon 11	76-13-1		6000	28000	No value		0.7	0.7	0.65	0.65	**1.5**	**1.5**	0.75	0.75	**1.4**	0.7	0.65	0.7	**1.3**	0.7	**1.3**	**1.3**	**1.5**	**1.4**	**1.9**	**1.7**	0.75	**1.4**	**1.5**	0.75	0.7	**1.4**	**1.7**	**1.8**	**1.5**	**1.4**	**1.6**	**1.5**	0.7	0.7	0.7	0.7	0.65	0.7	**1.4**
Freon 12	142-82-5		500000	No value	No value		0.95	0.95	**2.4**	**2.5**	**2.5**	**2.4**	**2.4**	**2.3**	**2.4**	**2.4**	**2.4**	**2.5**	**2.4**	**2.4**	**2.6**	**2.5**	**2.6**	**2.6**	**3**	**2.8**	**2.6**	**2.4**	**2.8**	**2.7**	**2.5**	**2.4**	**3.3**	**3.1**	**2.9**	**3**	**2.9**	**3**	**2.6**	**2.5**	**2.6**	**2.5**	**2.5**	**2.7**	**2.8**
Heptane	87-68-3	205000	9000	200000	No value		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
Hexane	591-78-6		670	5287	1800000		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Tetrachloroethene	127-18-4	102000	200	31356	710200		2.65	**14**	**60**	2.45	2.45	2.15	2.75	2.75	2.55	2.5	2.45	2.65	2.35	2.55	2.45	2.35	2.65	2.5	2.45	2.5	2.8	2.6	2.55	2.7	2.65	2.5	2.4	2.35	2.5	2.3	2.5	2.65	2.55	2.55	2.65	2.65	2.35	2.5	2.55
Toluene	108-88-3	7500	5000	8025	380000		1.45	**7.1**	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	**3.3**	1.45	1.3	1.4	1.35	1.25	1.45	1.4	**5.4**	**3.9**	1.5	1.4	1.4	1.45	1.45	1.35	**2.7**	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	**3**
1,1,2-Trichloroethane	79-00-5	164	0.2	No value	No value		**8**	**25**	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
Trichloroethene	79-01-6	21600	2	150467	864000	4.0E-06	**4.4**	**14**	1.95	2	2	1.8	2.25	2.25	2.1	2.05	2	2.15	1.95	2.1	2	1.9	2.2	2.05	2	2.05	2.3	2.1	2.1	2.2	2.15	2.05	1.95	1.95	2.05	1.9	2.05	2.15	2.1	2.1	2.15	2.15	1.9	2.05	2.05
2,2,4-Trimethylpentane	000540-84-1		540	3130	No value		2.15	2.15	1.95	2	2	1.8	2.25	2.25	2.1	2.05	2	2.15	1.95	2.1	2	1.9	2.2	2.05	2	2.05	2.3	2.1	2.1	2.2	2.15	2.05	1.95	1.95	2.05	1.9	2.05	2.15	2.1	2.1	2.15	2.15	1.9	2.05	2.05

Acute Hazard Index	0.09502953	0.20199771	0.05521201	0.05294331	0.10849886	0.0478953	0.05987194	0.05987194	0.05515294	0.05514004	0.12727738	0.05735524	0.05043725	0.05515626	0.05294331	0.05041764	0.05767077	0.10143634	0.10241271	0.10547337	0.06018973	0.05546339	0.05515294	0.05767302	0.05766012	0.05482619	0.05279991	0.09302985	0.05482619	0.05041538	0.05482619	0.05735524	0.05515626	0.05515513	0.05766012	0.05735524	0.05041764	0.05482619	0.05535563
Odour Threhsold In	0.01002618	0.01285073	0.01366259	0.00925561	0.01016484	0.00841336	0.01042124	0.01042124	0.00966345	0.0095562	0.0109742	0.00998879	0.00892644	0.00968869	0.00931365	0.00883208	0.01010099	0.01031314	0.02215322	0.0111743	0.01046599	0.00975517	0.00967238	0.01003801	0.00998879	0.00956511	0.00959943	0.00960997	0.00957404	0.00883702	0.00958297	0.01006022	0.00968869	0.00968806	0.00998879	0.00998879	0.00877405	0.00950261	0.01012113

Compounds with nil results above the LOR however at least one guideline value is l

Acrolein	107-02-8	6.8	0.35	367	1250		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
Acrylonitrile	107-13-1	3300	5	3400	No value	1.7E-05	4.35	4.35	3.95	4	4.05	3.55	4.5	4.5	4.15	4.15	4	4.3	3.85	4.2	4	3.8	4.35	4.15	3.95	4.15	4.55	4.25	4.15	4.4	4.35	4.1	3.9	3.85	4.1	3.8	4.1	4.35	4.2	4.15	4.35	4.3	3.8	4.05	4.15
tert-Amyl Methyl Ether	994-05-8		0.2	1128	No value		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Bromodichloromethane	75-27-4		0.2	No value	No value	3.7E-05	2.4	2.4	2.2	2.25	2.25	1.95	2.5	2.5	2.3	2.3	2.2	2.4	2.15	2.35	2.2	2.1	2.45	2.3	2.2	2.3	2.55	2.35	2.3	2.45	2.4	2.25	2.15	2.15	2.25	2.1	2.25	2.4	2.35	2.3	2.4	2.4	2.1	2.25	2.3
Bromoform	75-25-2		0.2	13440	No value		2.9	2.9	2.6	2.65	2.7	2.35	3	3	2.75	2.75	2.65	2.9	2.6	2.8	2.65	2.55	2.9	2.75	2.65	2.75	3.05	2.8	2.75	2.9	2.9	2.7	2.6	2.6	2.75	2.55	2.7	2.9	2.8	2.8	2.9	2.85	2.55	2.7	2.75
1,3-Butadiene	106-99-0	660	2	2040000	No value	3.0E-05	0.7	0.7	0.65	0.65	0.65	0.6	0.75	0.75	0.7	0.7	0.65	0.7	0.65	0.7	0.65	0.65	0.75	0.7	0.65	0.7	0.75	0.7	0.7	0.75	0.7	0.7	0.65	0.65	0.7	0.65	0.7	0.7	0.7	0.7	0.7	0.7	0.65	0.7	0.7
2-Chloroprene	126-99-8		20	362	No value	3.0E-04	2.65	2.65	2.4	2.45	2.45	2.15	2.75	2.75	2.55	2.5	2.45	2.65	2.35	2.55	2.45	2.35	2.65	2.5	2.45	2.5	2.8	2.6	2.55	2.7	2.65	2.5	2.4	2.35	2.5	2.3	2.5	2.65	2.55	2.55	2.65	2.65	2.35	2.5	2.55
3-Chloropropene	107-05-1	600	1	1471	75000		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
2-Chlorotoluene	95-49-8		0.2	1657	No value		2.15	2.15	1.95	2	2	1.8	2.25	2.25	2.1	2.05	2	2.15	1.95	2.1	2	1.9	2.2	2.05	2	2.05	2.3	2.1	2.1	2.2	2.15	2.05	1.95	1.95	2.05	1.9	2.05	2.15	2.1	2.1	2.15	2.15	1.9	2.05	2.05
alpha-Chlorotoluene	100-44-7		1	228	No value	4.9E-05	1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
Dibromochloromethane	124-48-1		0.2	No value	No value		2.9	2.9	2.6	2.65	2.7	2.35	3	3	2.75	2.75	2.65	2.9	2.6	2.8	2.65	2.55	2.9	2.75	2.65	2.75	3.05	2.8	2.75	2.9	2.9	2.7	2.6	2.6	2.75	2.55	2.7	2.9	2.8	2.8	2.9	2.85	2.55	2.7	2.75
1,2-Dibromoethane (EDB)	106-93-4		9	No value	No value	6.0E-04	2.9	2.9	2.6	2.65	2.7	2.35	3	3	2.75	2.75	2.65	2.9	2.6	2.8	2.65	2.55	2.9	2.75	2.65	2.75	3.05	2.8	2.75	2.9	2.9	2.7	2.6	2.6	2.75	2.55	2.7	2.9	2.8	2.8	2.9	2.85	2.55	2.7	2.75
1,3-Dichlorobenzene	541-73-1		0.2	No value	No value		3.15	3.15	2.85	2.9	2.9	2.55	3.25	3.25	3	3	2.9	3.1	2.8	3.05	2.9	2.75	3.15	3	2.85	3	3.3	3.05	3	3.15	3.15	2.95	2.8	2.8	2.95	2.75	2.95	3.15	3.05	3	3.15	3.1	2.75	2.95	3
1,2-Dichloroethane	107-06-2		700	237500	No value	2.6E-05	2.4	2.4	2.2	2.25	2.25	1.95	2.5	2.5	2.3	2.3	2.2	2.4	2.15	2.35	2.2	2.1	2.45	2.3	2.2	2.3	2.55	2.35	2.3	2.45	2.4	2.25	2.15	2.15	2.25	2.1	2.25	2.4	2.35	2.3	2.4	2.4	2.1	2.25	2.3
cis-1,2-Dichloroethene	156-59-2		0.2	No value	No value		1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
1,2-Dichloropropane	78-87-5	50800	4	1155	No value		4.35	4.35	3.95	4	4.05	3.55	4.5	4.5	4.15	4.15	4	4.3	3.85	4.2	4	3.8	4.35	4.15	3.95	4.15	4.55	4.25	4.15	4.4	4.35	4.1	3.9	3.85	4.1	3.8	4.1	4.35	4.2	4.15	4.35	4.3	3.8	4.05	4.15
cis-1,3-Dichloropropene	542-75-6		31	4539	No value	4.0E-06	1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
trans-1,3-Dichloropropene	108-20-3		31	4539	No value	4.0E-06	1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
Hexachlorobutadiene	110-54-3		0.2	12000	No value		4.8	4.8	4.35	4.45	4.5	3.95	5	5	4.6	4.6	4.45	4.8	4.3	4.65	4.45	4.25	4.85	4.6	4.4	4.6	5	4.7	4.6	4.85	4.85	4.55	4.35	4.3	4.55	4.2	4.55	4.8	4.7	4.65	4.85	4.8	4.25	4.55	4.6
1,2,4-Trichlorobenzene	120-82-1		2	1400	40000		8.5	8.5	8	8	8	7	9	9	8.5	8.5	8	8.5	7.5	8.5	8	7.5	8.5	8.5	8	8.5	9	8.5	8.5	9	8.5	8	8	7.5	8	7.5	8	8.5	8.5	8.5	8.5	8.5	7.5	8	8.5
Vinyl Bromide	593-60-2		3	No value	No value	3.2E-05	1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.95	0.95	0.85	0.9	0.9	0.8	1	1	0.9	0.9	0.9	0.95	0.85	0.95	0.9	0.85	0.95	0.9	0.9	0.9	1	0.95	0.9	0.95	0.95	0.9	0.85	0.85	0.9	0.85	0.9	0.95	0.95	0.95	0.95	0.95	0.85	0.9	0.9

Compounds with nil results above the LOR and guideline values are greater than 0.5

Bromomethane	74-83-9		5	996	No value		2.15	2.15	1.95	2	2	1.8	2.25	2.25	2.1	2.05	2	2.15	1.95	2.1	2	1.9	2.2	2.05	2	2.05	2.3	2.1	2.1	2.2	2.15	2.05	1.95	1.95	2.05	1.9	2.05	2.15	2.1	2.1	2.15	2.15	1.9	2.05	2.05
tert-Butyl Alcohol	75-65-0	45500	5	142480	No value		1.2	1.2	1.1	1.1	1.1	1	1.25	1.25	1.15	1.15	1.1	1.2	1.05	1.15	1.1	1.05	1.2	1.15	1.1	1.15	1.25	1.15	1.15	1.2	1.2	1.15	1.1	1.05	1.15	1.05	1.15	1.2	1.15	1.15	1.2	1.2	1.05	1.15	1.15
n-Butylbenzene	104-51-8		5	No value	No value		1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
sec-Butylbenzene	135-98-8	No value	5	No value	No value		1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
tert-Butylbenzene	98-06-6		5	No value	No value		1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
Carbon Tetrachloride	56-23-5	190	100	520	No value		2.4	2.4	2.2	2.25	2.25	1.95	2.5	2.5	2.3	2.3	2.2	2.4	2.15	2.35	2.2	2.1	2.45	2.3	2.2	2.3	2.55	2.35	2.3	2.45	2.4	2.25	2.15	2.15	2.25	2.1	2.25	2.4	2.35	2.3	2.4	2.4	2.1	2.25	2.3
Chlorobenzene	108-90-7	47000	50	4500	933330		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Chloroethane	75-00-3		39600	11083	No value		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Chloroform	67-66-3	490	98	415022	20480000		2.15	2.15	1.95	2	2	1.8	2.25	2.25	2.1	2.05	2	2.15	1.95	2.1	2	1.9	2.2	2.05	2	2.05	2.3	2.1	2.1	2.2	2.15	2.05	1.95	1.95	2.05	1.9	2.05	2.15	2.1	2.1	2.15	2.15	1.9	2.05	2.05
Chloromethane	74-87-3	20700	90	20650	1050000		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
Cumene	98-82-8	250000	400	157	No value		1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
o-Cymene	99-87-6		5	12	No value		1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
1,2-Dichlorobenzene	95-50-1	30100	200	300	150000		3.15	3.15	2.85	2.9	2.9	2.55	3.25	3.25	3	3	2.9	3.1	2.8	3.05	2.9	2.75	3.15	3	2.85	3	3.3	3.05	3	3.15	3.15	2.95	2.8	2.8	2.95	2.75	2.95	3.15	3.05	3	3.15	3.1	2.75	2.95	3
1,4-Dichlorobenzene	106-46-7	12000	60	730	240000		3.15	3.15	2.85	2.9	2.9	2.55	3.25	3.25	3	3	2.9	3.1	2.8	3.05	2.9	2.75	3.15	3	2.85	3	3.3	3.05	3	3.15	3.15	2.95	2.8	2.8	2.95	2.75	2.95	3.15	3.05	3	3.15	3.1	2.75	2.95	3
1,1-Dichloroethane	75-34-3		165	647656.5	No value		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
1,1-Dichloroethene	75-35-4	7900	0.007	753395	No value		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
trans-1,2-Dichloroethene	156-60-5	785	40	No value	No value		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Diisopropyl Ether	123-91-1	130000	700	71	1260000		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
1,4-Dioxane	141-78-6	7210	110	43240	180000		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Ethyl Acetate	100-41-4	144000	70	937	350000		1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
Ethyl tert-Butyl Ether	622-96-8		2900	190	No value		1.2	1.2	1.1	1.1	1.1	1	1.25	1.25	1.15	1.15	1.1	1.2	1.05	1.15	1.1	1.05	1.2	1.15	1.1	1.15	1.25	1.15	1.15	1.2	1.2	1.15	1.1	1.05	1.15	1.05	1.15	1.2	1.15	1.15	1.2	1.2	1.05	1.15	1.15
4-Ethyltoluene	75-69-4		5	No value	No value		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Freon 113	76-14-2	959000	800000	344871	No value		2.4	2.4	2.2	2.25	2.25	1.95	2.5	2.5	2.3	2.3	2.2	2.4	2.15	2.35	2.2	2.1	2.45	2.3	2.2	2.3	2.55	2.35	2.3	2.45	2.4	2.25	2.15	2.15	2.25	2.1	2.25	2.4	2.35	2.3	2.4	2.4	2.1	2.25	2.3
Freon 114	75-71-8		700000	No value	No value		0.7	0.7	0.65	0.65	0.65	0.6	0.75	0.75	0.7	0.7	0.65	0.7	0.65	0.7	0.65	0.65	0.75	0.7	0.65	0.7	0.75	0.7	0.7	0.75	0.7	0.7	0.65	0.65	0.7	0.65	0.7	0.7	0.7	0.7	0.7	0.7	0.65	0.7	0.7
2-Hexanone	108-38-3		30	310	No value		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
m,p-Xylene	106-42-3	8700	870	217	220000		3.15	3.15	2.85	2.9	2.9	2.55	3.25	3.25	3	3	2.9	3.1	2.8	3.05	2.9	2.75	3.15	3	2.85	3	3.3	3.05	3	3.15	3.15	2.95	2.8	2.8	2.95	2.75	2.95	3.15	3.05	3	3.15	3.1	2.75	2.95	3
Methyl Methacrylate	80-62-6	71000	700	200	697000		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
Methyl tert-butyl ether	1634-04-4	7210	8000	190	No value		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
4-Methyl-2-pentanone	108-10-1		3000	3606	410000		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Naphthalene	91-20-3	7900	3	440	75000		5	5	4.6	4.7	4.7	4.15	5	5.5	4.85	4.8	4.65	5	4.5	4.9	4.65	4.45	5	4.8	4.65	4.8	5.5	4.95	4.85	5	5	4.75	4.55	4.5	4.8	4.45	4.75	5	4.9	4.85	5	5	4.45	4.75	4.85
2-Propanol	67-63-0	123000	7300	7990	490000		24	24	22	22.5	22.5	19.5	25	25	23	23	22	24	21.5	23.5	22	21	24.5	23	22	23	25.5	23.5	23	24.5	24	22.5	21.5	21.5	22.5	21	22.5	24	23.5	23	24	24	21	22.5	23
Propene	115-07-1		3000	39584	No value		2.4	2.4	2.2	2.25	2.25	1.95	2.5	2.5	2.3	2.3	2.2	2.4	2.15	2.35	2.2	2.1	2.45	2.3	2.2	2.3	2.55	2.35	2.3	2.45	2.4	2.25	2.15	2.15	2.25	2.1	2.25	2.4	2.35	2.3	2.4	2.4	2.1	2.25	2.3
Propylbenzene	103-65-1		1000	50	No value		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
Styrene	100-42-5	21300	260	70	430000		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
1,1,1,2-Tetrachloroethane	630-20-6		105	No value	No value		2.4	2.4	2.2	2.25	2.25	1.95	2.5	2.5	2.3	2.3	2.2	2.4	2.15	2.35	2.2	2.1	2.45	2.3	2.2	2.3	2.55	2.35	2.3	2.45	2.4	2.25	2.15	2.15	2.25	2.1	2.25	2.4	2.35	2.3	2.4	2.4	2.1	2.25	2.3
1,1,2,2-Tetrachloroethane	79-34-5		7	10301	No value		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
Tetrahydrofuran	109-99-9		2000	5898	No value		0.95	0.95	0.85	0.9	0.9	0.8	1	1	0.9	0.9	0.9	0.95	0.85	0.95	0.9	0.85	0.95	0.9	0.9	0.9	1	0.95	0.9	0.95	0.95	0.9	0.85	0.85	0.9	0.85	0.9	0.95	0.95	0.95	0.95	0.95	0.85	0.9	0.9
1,1,1-Trichloroethane	71-55-6	6000	5000	540000	5428570		1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
1,2,4-Trimethylbenzene	95-63-6		60	500	No value		1.95	1.95	1.75	1.8	1.8	1.6	2	2	1.85	1.85	1.8	1.9	1.7	1.85	1.8	1.7	1.95	1.85	1.75	1.85	2.05	1.9	1.85	1.95	1.95	1.8	1.75	1.7	1.8	1.7	1.8	1.9	1.85	1.85	1.95	1.9	1.7	1.8	1.85
1,3,5-Trimethylbenzene	108-67-8		60	1131	No value		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4
Vinyl Acetate	108-05-4	7000	200	423	No value		1.7	1.7	1.55	1.55	1.55	1.4	1.75	1.75	1.6	1.6	1.55	1.7	1.5	1.65	1.55	1.5	1.7	1.6	1.55	1.6	1.75	1.65	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.65	1.6	1.7	1.7	1.5	1.6	1.6
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.95	0.95	0.85	0.9	0.9	0.8	1	1	0.9	0.9	0.9	0.95	0.85	0.95	0.9	0.85	0.95	0.9	0.9	0.9	1	0.95	0.9	0.95	0.95	0.9	0.85	0.85	0.9	0.85	0.9	0.95	0.95	0.95	0.95	0.95	0.85	0.9	0.9
o-Xylene	95-47-6	8700	870	100	220000		1.45	1.45	1.3	1.35	1.35	1.2	1.5	1.5	1.4	1.4	1.35	1.45	1.3	1.4	1.35	1.25	1.45	1.4	1.3	1.4	1.5	1.4	1.4	1.45	1.45	1.35	1.3	1.3	1.35	1.25	1.35	1.45	1.4	1.4	1.45	1.45	1.25	1.35	1.4

Location		Acute AGV (ug/m3)	Chronic AGV (ug/m3)	Odour Threshold (ug/m3)	Irritation Threshold (ug/m3)	Unit Risk (per µg/m3)	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North
Sample No							20-965	20-966	20-967	20-968	20-969	20-1014	20-1015	20-1016	20-1017	20-1020	20-1021	20-1036	20-1037	20-1063	20-1064	20-1065	20-1066	20-1102	20-1103	20-1104	20-1105	20-1106	20-1107	20-1124	20-1125	20-1128	20-1129	20-1183	20-1184	20-1199	20-1200	20-1216	20-1217	20-1238	20-1239	20-1240	20-1241	20-1252	20-1253
Start date							24-06-2020	27-06-2020	27-06-2020	30-06-2020	30-06-2020	03-07-2020	03-07-2020	06-07-2020	06-07-2020	09-07-2020	09-07-2020	12-07-2020	12-07-2020	15-07-2020	15-07-2020	18-07-2020	18-07-2020	21-07-2020	21-07-2020	24-07-2020	24-07-2020	27-07-2020	27-07-2020	30-07-2020	30-07-2020	02-08-2020	02-08-2020	05-08-2020	05-08-2020	08-08-2020	08-08-2020	11-08-2020	11-08-2020	14-08-2020	14-08-2020	17-08-2020	17-08-2020	20-08-2020	20-08-2020
End date							25-06-2020	28-06-2020	28-06-2020	01-07-2020	01-07-2020	04-07-2020	04-07-2020	07-07-2020	07-07-2020	10-07-2020	10-07-2020	13-07-2020	13-07-2020	16-07-2020	16-07-2020	19-07-2020	19-07-2020	22-07-2020	22-07-2020	25-07-2020	25-07-2020	28-07-2020	28-07-2020	31-07-2020	31-07-2020	03-08-2020	03-08-2020	06-08-2020	06-08-2020	09-08-2020	09-08-2020	12-08-2020	12-08-2020	15-08-2020	15-08-2020	18-08-2020	18-08-2020	21-08-2020	21-08-2020
Compound	**CASNo**																																													

Compounds with at least one result above the LOR

Benzene	71-43-2	27	30	4500	9000000	6.0E-06	1.05	**3.1**	1.15	1.1	1.1	1.2	1.1	1.15	1.1	**5**	**4.8**	1.2	1.2	1.15	1.15	1.15	1.15	1.15	1.15	**3.2**	1.1	1.15	1.1	1.2	1.15	1.15	1.2	1.1	1.2	1.15	1.2	1.35	1.2	1.15	1.15	1.2	1.15	1.2	1.15
2-Butanone (Methyl Ethyl Ketone	78-93-3	2940	5000	738	590000		1.05	1.15	1.15	1.1	1.1	1.2	1.1	1.15	1.1	1.15	1.15	1.2	1.2	1.15	1.15	**5.7**	1.15	1.15	1.15	1.1	1.1	1.15	1.1	1.2	1.15	1.15	1.2	1.1	1.2	1.15	1.2	1.35	1.2	1.15	1.15	1.2	1.15	1.2	1.15
Cyclohexane	110-82-7	105000	6000	1435	1050000		0.85	0.9	0.95	0.9	0.9	0.95	0.85	0.9	0.9	0.9	0.95	0.95	0.95	0.9	0.95	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.95	0.95	0.95	0.95	0.9	0.95	0.95	0.95	1.1	0.95	0.9	0.9	0.95	0.9	0.95	0.9
Ethyl Benzene	637-92-3	21710	1000	8700	870000		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Freon 11	76-13-1		6000	28000	No value		**1.3**	**1.4**	0.7	**1.4**	**1.4**	**2**	**2.4**	0.7	**1.9**	0.7	0.7	0.75	0.7	**2**	**1.5**	**3.4**	**1.4**	**1.6**	0.7	**1.4**	0.65	**1.5**	**1.8**	**1.9**	**1.6**	**1.5**	0.7	0.65	0.7	0.7	0.7	0.8	0.7	0.7	**1.6**	0.7	0.7	0.75	0.7
Freon 12	142-82-5		500000	No value	No value		**2.6**	**2.6**	**2.5**	**2.6**	**2.4**	**3.9**	**4.2**	**3.9**	**4**	0.9	0.95	0.95	0.95	**2.9**	**3.1**	**3**	**3**	**2.6**	**2.4**	**2.4**	**2.4**	**3**	**3**	**3.2**	**3.1**	**2.3**	**2.3**	0.9	0.95	0.95	0.95	1.1	0.95	**2.5**	**2.7**	**2.1**	**2**	**1.9**	**2**
Heptane	87-68-3	205000	9000	200000	No value		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
Hexane	591-78-6		670	5287	1800000		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Tetrachloroethene	127-18-4	102000	200	31356	710200		2.3	2.55	2.55	2.45	2.4	2.65	2.4	2.5	2.45	2.5	2.55	2.65	2.6	2.5	2.55	2.5	2.5	2.5	2.55	2.45	2.4	2.5	2.45	2.65	2.6	2.55	2.6	2.4	2.6	2.6	2.65	2.95	2.65	2.5	2.5	2.6	2.5	2.7	2.5
Toluene	108-88-3	7500	5000	8025	380000		**2.6**	**3.7**	**2.8**	1.35	1.3	1.45	1.3	**3.7**	**3**	1.35	1.4	1.45	1.4	**4.8**	**5.6**	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	**5.7**	**4.6**	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
1,1,2-Trichloroethane	79-00-5	164	0.2	No value	No value		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
Trichloroethene	79-01-6	21600	2	150467	864000	4.0E-06	1.9	2.1	2.1	2	1.95	2.15	1.95	2.05	2	2.05	2.1	2.2	2.15	2.05	2.1	2.05	2.05	2.05	2.05	2	1.95	2.05	2	2.15	2.1	2.1	2.15	1.95	2.15	2.1	2.15	2.45	2.15	2.05	2.05	2.1	2.05	2.2	2.05
2,2,4-Trimethylpentane	000540-84-1		540	3130	No value		1.9	2.1	2.1	2	1.95	2.15	1.95	2.05	2	2.05	2.1	2.2	2.15	2.05	2.1	2.05	2.05	2.05	2.05	2	1.95	2.05	2	2.15	2.1	2.1	2.15	1.95	2.15	2.1	2.15	2.45	2.15	2.05	2.05	2.1	2.05	2.2	2.05

Acute Hazard Index	0.05059426	0.12768183	0.05534292	0.05294331	0.05261656	0.05766012	0.05261437	0.0554444	0.05316331	0.19772366	0.19034144	0.05767077	0.0573429	0.05528619	0.05571626	0.05637381	0.05514004	0.05482619	0.0551423	0.13041621	0.05261656	0.05482619	0.05263843	0.05822679	0.05589006	0.05515626	0.0573429	0.05261656	0.0573429	0.05546339	0.05766012	0.06460159	0.05766012	0.05482619	0.05513107	0.05733225	0.05513107	0.05767302	0.05513107
Odour Threhsold In	0.00924803	0.0114633	0.01012482	0.00932258	0.00922424	0.01010486	0.00922642	0.0102347	0.00988124	0.0116415	0.01171646	0.01003402	0.00993059	0.01069345	0.01106852	0.02515696	0.0096187	0.00958297	0.00956019	0.01048925	0.00915727	0.00957404	0.00935829	0.01141992	0.01076991	0.00976011	0.00993059	0.00915727	0.00993059	0.00969267	0.00998879	0.01128229	0.00998879	0.00950261	0.00958297	0.00988983	0.00950261	0.01003801	0.00950261

Compounds with nil results above the LOR however at least one guideline value is l

Acrolein	107-02-8	6.8	0.35	367	1250		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
Acrylonitrile	107-13-1	3300	5	3400	No value	1.7E-05	3.75	4.15	4.2	4	3.95	4.35	3.95	4.1	4	4.1	4.2	4.35	4.25	4.05	4.2	4.05	4.15	4.1	4.15	4	3.95	4.1	4	4.35	4.25	4.2	4.25	3.95	4.25	4.2	4.35	4.85	4.35	4.1	4.1	4.25	4.1	4.4	4.1
tert-Amyl Methyl Ether	994-05-8		0.2	1128	No value		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Bromodichloromethane	75-27-4		0.2	No value	No value	3.7E-05	2.1	2.3	2.35	2.2	2.2	2.4	2.2	2.3	2.2	2.3	2.35	2.45	2.35	2.25	2.35	2.25	2.3	2.25	2.3	2.2	2.2	2.25	2.2	2.4	2.35	2.35	2.35	2.2	2.35	2.35	2.4	2.7	2.4	2.25	2.3	2.35	2.3	2.45	2.3
Bromoform	75-25-2		0.2	13440	No value		2.5	2.75	2.8	2.65	2.65	2.9	2.6	2.75	2.65	2.75	2.8	2.9	2.85	2.7	2.8	2.7	2.75	2.7	2.75	2.65	2.65	2.7	2.65	2.9	2.8	2.8	2.85	2.65	2.85	2.8	2.9	3.25	2.9	2.7	2.75	2.85	2.75	2.9	2.75
1,3-Butadiene	106-99-0	660	2	2040000	No value	3.0E-05	0.65	0.7	0.7	0.65	0.65	0.7	0.65	0.7	0.65	0.7	0.7	0.75	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.65	0.65	0.7	0.65	0.7	0.7	0.7	0.7	0.65	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.75	0.7
2-Chloroprene	126-99-8		20	362	No value	3.0E-04	2.3	2.55	2.55	2.45	2.4	2.65	2.4	2.5	2.45	2.5	2.55	2.65	2.6	2.5	2.55	2.5	2.5	2.5	2.55	2.45	2.4	2.5	2.45	2.65	2.6	2.55	2.6	2.4	2.6	2.6	2.65	2.95	2.65	2.5	2.5	2.6	2.5	2.7	2.5
3-Chloropropene	107-05-1	600	1	1471	75000		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
2-Chlorotoluene	95-49-8		0.2	1657	No value		1.9	2.1	2.1	2	1.95	2.15	1.95	2.05	2	2.05	2.1	2.2	2.15	2.05	2.1	2.05	2.05	2.05	2.05	2	1.95	2.05	2	2.15	2.1	2.1	2.15	1.95	2.15	2.1	2.15	2.45	2.15	2.05	2.05	2.1	2.05	2.2	2.05
alpha-Chlorotoluene	100-44-7		1	228	No value	4.9E-05	1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
Dibromochloromethane	124-48-1		0.2	No value	No value		2.5	2.75	2.8	2.65	2.65	2.9	2.6	2.75	2.65	2.75	2.8	2.9	2.85	2.7	2.8	2.7	2.75	2.7	2.75	2.65	2.65	2.7	2.65	2.9	2.8	2.8	2.85	2.65	2.85	2.8	2.9	3.25	2.9	2.7	2.75	2.85	2.75	2.9	2.75
1,2-Dibromoethane (EDB)	106-93-4		9	No value	No value	6.0E-04	2.5	2.75	2.8	2.65	2.65	2.9	2.6	2.75	2.65	2.75	2.8	2.9	2.85	2.7	2.8	2.7	2.75	2.7	2.75	2.65	2.65	2.7	2.65	2.9	2.8	2.8	2.85	2.65	2.85	2.8	2.9	3.25	2.9	2.7	2.75	2.85	2.75	2.9	2.75
1,3-Dichlorobenzene	541-73-1		0.2	No value	No value		2.7	3	3.05	2.9	2.85	3.15	2.85	2.95	2.9	3	3.05	3.15	3.1	2.95	3.05	2.95	3	2.95	3	2.9	2.85	2.95	2.9	3.15	3.05	3.05	3.1	2.85	3.1	3.05	3.15	3.5	3.15	2.95	2.95	3.05	2.95	3.15	3
1,2-Dichloroethane	107-06-2		700	237500	No value	2.6E-05	2.1	2.3	2.35	2.2	2.2	2.4	2.2	2.3	2.2	2.3	2.35	2.45	2.35	2.25	2.35	2.25	2.3	2.25	2.3	2.2	2.2	2.25	2.2	2.4	2.35	2.35	2.35	2.2	2.35	2.35	2.4	2.7	2.4	2.25	2.3	2.35	2.3	2.45	2.3
cis-1,2-Dichloroethene	156-59-2		0.2	No value	No value		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
1,2-Dichloropropane	78-87-5	50800	4	1155	No value		3.75	4.15	4.2	4	3.95	4.35	3.95	4.1	4	4.1	4.2	4.35	4.25	4.05	4.2	4.05	4.15	4.1	4.15	4	3.95	4.1	4	4.35	4.25	4.2	4.25	3.95	4.25	4.2	4.35	4.85	4.35	4.1	4.1	4.25	4.1	4.4	4.1
cis-1,3-Dichloropropene	542-75-6		31	4539	No value	4.0E-06	1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
trans-1,3-Dichloropropene	108-20-3		31	4539	No value	4.0E-06	1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
Hexachlorobutadiene	110-54-3		0.2	12000	No value		4.2	4.6	4.7	4.45	4.4	4.8	4.35	4.55	4.45	4.6	4.65	4.85	4.75	4.5	4.65	4.55	4.6	4.55	4.6	4.45	4.4	4.55	4.45	4.85	4.7	4.65	4.75	4.4	4.75	4.7	4.8	5.5	4.85	4.55	4.55	4.7	4.55	4.85	4.6
1,2,4-Trichlorobenzene	120-82-1		2	1400	40000		7.5	8.5	8.5	8	8	8.5	8	8	8	8	8.5	8.5	8.5	8	8.5	8	8.5	8	8.5	8	8	8	8	8.5	8.5	8.5	8.5	8	8.5	8.5	8.5	9.5	8.5	8	8	8.5	8	9	8
Vinyl Bromide	593-60-2		3	No value	No value	3.2E-05	1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.85	0.9	0.95	0.9	0.9	0.95	0.85	0.9	0.9	0.9	0.95	0.95	0.95	0.9	0.95	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.95	0.95	0.95	0.95	0.9	0.95	0.95	0.95	1.1	0.95	0.9	0.9	0.95	0.9	0.95	0.9

Compounds with nil results above the LOR and guideline values are greater than 0.5

Bromomethane	74-83-9		5	996	No value		1.9	2.1	2.1	2	1.95	2.15	1.95	2.05	2	2.05	2.1	2.2	2.15	2.05	2.1	2.05	2.05	2.05	2.05	2	1.95	2.05	2	2.15	2.1	2.1	2.15	1.95	2.15	2.1	2.15	2.45	2.15	2.05	2.05	2.1	2.05	2.2	2.05
tert-Butyl Alcohol	75-65-0	45500	5	142480	No value		1.05	1.15	1.15	1.1	1.1	1.2	1.1	1.15	1.1	1.15	1.15	1.2	1.2	1.15	1.15	1.15	1.15	1.15	1.15	1.1	1.1	1.15	1.1	1.2	1.15	1.15	1.2	1.1	1.2	1.15	1.2	1.35	1.2	1.15	1.15	1.2	1.15	1.2	1.15
n-Butylbenzene	104-51-8		5	No value	No value		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
sec-Butylbenzene	135-98-8	No value	5	No value	No value		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
tert-Butylbenzene	98-06-6		5	No value	No value		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
Carbon Tetrachloride	56-23-5	190	100	520	No value		2.1	2.3	2.35	2.2	2.2	2.4	2.2	2.3	2.2	2.3	2.35	2.45	2.35	2.25	2.35	2.25	2.3	2.25	2.3	2.2	2.2	2.25	2.2	2.4	2.35	2.35	2.35	2.2	2.35	2.35	2.4	2.7	2.4	2.25	2.3	2.35	2.3	2.45	2.3
Chlorobenzene	108-90-7	47000	50	4500	933330		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Chloroethane	75-00-3		39600	11083	No value		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Chloroform	67-66-3	490	98	415022	20480000		1.9	2.1	2.1	2	1.95	2.15	1.95	2.05	2	2.05	2.1	2.2	2.15	2.05	2.1	2.05	2.05	2.05	2.05	2	1.95	2.05	2	2.15	2.1	2.1	2.15	1.95	2.15	2.1	2.15	2.45	2.15	2.05	2.05	2.1	2.05	2.2	2.05
Chloromethane	74-87-3	20700	90	20650	1050000		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
Cumene	98-82-8	250000	400	157	No value		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
o-Cymene	99-87-6		5	12	No value		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
1,2-Dichlorobenzene	95-50-1	30100	200	300	150000		2.7	3	3.05	2.9	2.85	3.15	2.85	2.95	2.9	3	3.05	3.15	3.1	2.95	3.05	2.95	3	2.95	3	2.9	2.85	2.95	2.9	3.15	3.05	3.05	3.1	2.85	3.1	3.05	3.15	3.5	3.15	2.95	2.95	3.05	2.95	3.15	3
1,4-Dichlorobenzene	106-46-7	12000	60	730	240000		2.7	3	3.05	2.9	2.85	3.15	2.85	2.95	2.9	3	3.05	3.15	3.1	2.95	3.05	2.95	3	2.95	3	2.9	2.85	2.95	2.9	3.15	3.05	3.05	3.1	2.85	3.1	3.05	3.15	3.5	3.15	2.95	2.95	3.05	2.95	3.15	3
1,1-Dichloroethane	75-34-3		165	647656.5	No value		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
1,1-Dichloroethene	75-35-4	7900	0.007	753395	No value		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
trans-1,2-Dichloroethene	156-60-5	785	40	No value	No value		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Diisopropyl Ether	123-91-1	130000	700	71	1260000		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
1,4-Dioxane	141-78-6	7210	110	43240	180000		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Ethyl Acetate	100-41-4	144000	70	937	350000		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
Ethyl tert-Butyl Ether	622-96-8		2900	190	No value		1.05	1.15	1.15	1.1	1.1	1.2	1.1	1.15	1.1	1.15	1.15	1.2	1.2	1.15	1.15	1.15	1.15	1.15	1.15	1.1	1.1	1.15	1.1	1.2	1.15	1.15	1.2	1.1	1.2	1.15	1.2	1.35	1.2	1.15	1.15	1.2	1.15	1.2	1.15
4-Ethyltoluene	75-69-4		5	No value	No value		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Freon 113	76-14-2	959000	800000	344871	No value		2.1	2.3	2.35	2.2	2.2	2.4	2.2	2.3	2.2	2.3	2.35	2.45	2.35	2.25	2.35	2.25	2.3	2.25	2.3	2.2	2.2	2.25	2.2	2.4	2.35	2.35	2.35	2.2	2.35	2.35	2.4	2.7	2.4	2.25	2.3	2.35	2.3	2.45	2.3
Freon 114	75-71-8		700000	No value	No value		0.65	0.7	0.7	0.65	0.65	0.7	0.65	0.7	0.65	0.7	0.7	0.75	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.65	0.65	0.7	0.65	0.7	0.7	0.7	0.7	0.65	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.75	0.7
2-Hexanone	108-38-3		30	310	No value		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
m,p-Xylene	106-42-3	8700	870	217	220000		2.7	3	3.05	2.9	2.85	3.15	2.85	2.95	2.9	3	3.05	3.15	3.1	2.95	3.05	2.95	3	2.95	3	2.9	2.85	2.95	2.9	3.15	3.05	3.05	3.1	2.85	3.1	3.05	3.15	3.5	3.15	2.95	2.95	3.05	2.95	3.15	3
Methyl Methacrylate	80-62-6	71000	700	200	697000		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
Methyl tert-butyl ether	1634-04-4	7210	8000	190	No value		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
4-Methyl-2-pentanone	108-10-1		3000	3606	410000		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Naphthalene	91-20-3	7900	3	440	75000		4.4	4.85	4.9	4.65	4.6	5	4.6	4.8	4.65	4.8	4.9	5	5	4.75	4.9	4.75	4.8	4.75	4.85	4.65	4.6	4.75	4.65	5	4.95	4.9	5	4.6	4.95	4.95	5	5.5	5	4.75	4.8	4.95	4.8	4.8	4.8
2-Propanol	67-63-0	123000	7300	7990	490000		21	23	23.5	22	22	24	22	23	22	23	23.5	24.5	23.5	22.5	23.5	22.5	23	22.5	23	22	22	22.5	22	24	23.5	23.5	23.5	22	23.5	23.5	24	27	24	22.5	23	23.5	23	24.5	23
Propene	115-07-1		3000	39584	No value		2.1	2.3	2.35	2.2	2.2	2.4	2.2	2.3	2.2	2.3	2.35	2.45	2.35	2.25	2.35	2.25	2.3	2.25	2.3	2.2	2.2	2.25	2.2	2.4	2.35	2.35	2.35	2.2	2.35	2.35	2.4	2.7	2.4	2.25	2.3	2.35	2.3	2.45	2.3
Propylbenzene	103-65-1		1000	50	No value		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
Styrene	100-42-5	21300	260	70	430000		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
1,1,1,2-Tetrachloroethane	630-20-6		105	No value	No value		2.1	2.3	2.35	2.2	2.2	2.4	2.2	2.3	2.2	2.3	2.35	2.45	2.35	2.25	2.35	2.25	2.3	2.25	2.3	2.2	2.2	2.25	2.2	2.4	2.35	2.35	2.35	2.2	2.35	2.35	2.4	2.7	2.4	2.25	2.3	2.35	2.3	2.45	2.3
1,1,2,2-Tetrachloroethane	79-34-5		7	10301	No value		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
Tetrahydrofuran	109-99-9		2000	5898	No value		0.85	0.9	0.95	0.9	0.9	0.95	0.85	0.9	0.9	0.9	0.95	0.95	0.95	0.9	0.95	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.95	0.95	0.95	0.95	0.9	0.95	0.95	0.95	1.1	0.95	0.9	0.9	0.95	0.9	0.95	0.9
1,1,1-Trichloroethane	71-55-6	6000	5000	540000	5428570		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
1,2,4-Trimethylbenzene	95-63-6		60	500	No value		1.7	1.85	1.85	1.8	1.75	1.95	1.75	1.85	1.8	1.85	1.85	1.95	1.9	1.8	1.85	1.8	1.85	1.8	1.85	1.75	1.75	1.8	1.75	1.95	1.9	1.85	1.9	1.75	1.9	1.9	1.95	2.15	1.95	1.8	1.85	1.9	1.85	1.95	1.85
1,3,5-Trimethylbenzene	108-67-8		60	1131	No value		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35
Vinyl Acetate	108-05-4	7000	200	423	No value		1.45	1.6	1.65	1.55	1.55	1.7	1.55	1.6	1.55	1.6	1.65	1.7	1.65	1.6	1.65	1.6	1.6	1.6	1.6	1.55	1.55	1.6	1.55	1.7	1.65	1.65	1.65	1.55	1.65	1.65	1.7	1.9	1.7	1.6	1.6	1.65	1.6	1.7	1.6
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.85	0.9	0.95	0.9	0.9	0.95	0.85	0.9	0.9	0.9	0.95	0.95	0.95	0.9	0.95	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.95	0.95	0.95	0.95	0.9	0.95	0.95	0.95	1.1	0.95	0.9	0.9	0.95	0.9	0.95	0.9
o-Xylene	95-47-6	8700	870	100	220000		1.25	1.4	1.4	1.35	1.3	1.45	1.3	1.35	1.35	1.35	1.4	1.45	1.4	1.35	1.4	1.35	1.4	1.35	1.4	1.35	1.3	1.35	1.35	1.45	1.4	1.4	1.4	1.3	1.4	1.4	1.45	1.6	1.45	1.35	1.35	1.4	1.35	1.45	1.35

Location		Acute AGV (ug/m3)	Chronic AGV (ug/m3)	Odour Threshold (ug/m3)	Irritation Threshold (ug/m3)	Unit Risk (per µg/m3)	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West
Sample No							20-1256	20-1257	20-1266	20-1267	20-1288	20-1289	20-1311	20-1312	20-1331	20-1332	20-1361	20-1362	20-1379	20-1380	20-1382	20-1383	20-1390	20-1391	20-1403	20-1404	20-1435	20-1436	20-1450	20-1451	20-1464	20-1465	20-1510	20-1511	20-1494	20-1495	20-1559	20-1560	20-1561	20-1562	20-1594	20-1595	20-1614	20-1615	20-1618
Start date							23-08-2020	23-08-2020	26-08-2020	26-08-2020	29-08-2020	29-08-2020	01-09-2020	01-09-2020	04-09-2020	04-09-2020	07-09-2020	07-09-2020	10-09-2020	10-09-2020	13-09-2020	13-09-2020	16-09-2020	16-09-2020	19-09-2020	19-09-2020	22-09-2020	22-09-2020	25-09-2020	25-09-2020	28-09-2020	28-09-2020	01-10-2020	01-10-2020	04-10-2020	04-10-2020	07-10-2020	07-10-2020	10-10-2020	10-10-2020	13-10-2020	13-10-2020	16-10-2020	16-10-2020	19-10-2020
End date							24-08-2020	24-08-2020	27-08-2020	27-08-2020	30-08-2020	30-08-2020	02-09-2020	02-09-2020	05-09-2020	05-09-2020	08-09-2020	08-09-2020	11-09-2020	11-09-2020	14-09-2020	14-09-2020	17-09-2020	17-09-2020	20-09-2020	20-09-2020	23-09-2020	23-09-2020	26-09-2020	26-09-2020	29-09-2020	29-09-2020	02-10-2020	02-10-2020	05-10-2020	05-10-2020	08-10-2020	08-10-2020	11-10-2020	11-10-2020	14-10-2020	14-10-2020	17-10-2020	17-10-2020	20-10-2020
Compound	**CASNo**																																													

Compounds with at least one result above the LOR

Benzene	71-43-2	27	30	4500	9000000	6.0E-06	1	1.1	1.1	1.15	1.05	1.15	1.2	1.1	1.3	1.2	1.2	1	1.2	1	1.15	1.25	1.05	1.05	1.1	1.15	1.15	1.2	1	1.15	1.15	1	1.1	1.15	1.05	1.05	1.15	1.25	1.15	1.05	1.1	1.15	1.1	1.2	1.1
2-Butanone (Methyl Ethyl Ketone)	78-93-3	2940	5000	738	590000		1	1.1	1.1	1.15	1.05	1.15	1.2	1.1	1.3	1.2	1.2	1	1.2	1	1.15	1.25	1.05	1.05	1.1	1.15	1.15	1.2	1	1.15	1.15	1	1.1	1.15	1.05	1.05	1.15	1.25	1.15	1.05	1.1	1.15	1.1	1.2	1.1
Cyclohexane	110-82-7	105000	6000	1435	1050000		0.8	0.85	0.9	0.9	0.85	0.9	0.95	0.9	1.05	0.95	0.95	0.8	0.95	0.8	0.95	1	0.85	0.85	0.9	0.9	0.9	0.95	0.8	0.95	0.9	0.8	0.9	0.9	0.85	0.8	0.95	1	0.9	0.85	0.9	0.9	0.9	0.95	0.85
Ethyl Benzene	637-92-3	21710	1000	8700	870000		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Freon 11	76-13-1		6000	28000	No value		0.6	0.65	0.65	0.7	0.6	0.7	0.75	1.6	0.8	0.75	0.7	0.6	1.4	1.3	0.7	0.75	0.65	0.65	0.65	0.7	0.7	0.75	0.6	0.7	0.7	0.6	0.65	0.7	0.6	0.6	0.7	0.75	0.7	0.65	0.65	0.7	0.65	0.7	0.65
Freon 12	142-82-5		500000	No value	No value		3	3	2	1.9	2.1	2	2.4	2.2	1.05	2.1	0.95	1.8	2.5	2.4	2.4	2.5	3	3	3	2.9	3	2.7	2.6	2.7	2.8	2.8	2.9	2.9	2.5	3	3	2.9	2.9	2.9	3	2.7	2.8	2.7	2.6
Heptane	87-68-3	205000	9000	200000	No value		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
Hexane	591-78-6		670	5287	1800000		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Tetrachloroethene	127-18-4	102000	200	31356	710200		2.2	2.4	2.45	2.5	2.25	2.55	2.65	2.45	2.85	2.65	2.6	2.15	2.65	2.15	2.55	2.8	2.35	2.3	2.45	2.5	2.5	2.7	2.25	2.6	2.55	2.2	2.45	2.5	2.3	2.25	2.6	2.75	2.55	2.35	2.4	2.5	2.4	2.65	2.35
Toluene	108-88-3	7500	5000	8025	380000		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
1,1,2-Trichloroethane	79-00-5	164	0.2	No value	No value		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
Trichloroethene	79-01-6	21600	2	150467	864000	4.0E-06	1.8	1.95	2	2.05	1.85	2.1	2.2	2	2.35	2.2	2.15	1.75	2.15	1.75	2.1	2.3	1.9	1.9	2	2.05	2.05	2.2	1.85	2.1	2.05	1.8	2	2.05	1.85	1.85	2.1	2.25	2.05	1.9	1.95	2.05	2	2.15	1.95
2,2,4-Trimethylpentane	000540-84-1		540	3130	No value		1.8	1.95	2	2.05	1.85	2.1	2.2	2	2.35	2.2	2.15	1.75	2.15	1.75	2.1	2.3	1.9	1.9	2	2.05	2.05	2.2	1.85	2.1	2.05	1.8	2	2.05	1.85	1.85	2.1	2.25	2.05	1.9	1.95	2.05	2	2.15	1.95

Acute Hazard Index	0.04789756	0.05261325	0.05294331	0.05482619	0.05009648	0.05515294	0.05767077	0.05263843	0.06238977	0.05767077	0.0573429	0.04757977	0.05735412	0.04757865	0.05515513	0.06019982	0.05041764	0.05041426	0.05294331	0.05482619	0.05482619	0.05767302	0.04822543	0.05546339	0.0551423	0.04789756	0.05294331	0.05482619	0.05009873	0.05009429	0.05546339	0.05987194	0.0551423	0.05042661	0.05261656	0.05482619	0.05262721	0.05766012	0.05230611
Odour Threhsold In	0.00833699	0.00906954	0.00925561	0.00950261	0.00872022	0.00960095	0.01003402	0.00934044	0.01085431	0.01003402	0.00993059	0.00829224	0.01005067	0.00835411	0.00968806	0.0105202	0.00877405	0.00876944	0.00925561	0.00950261	0.00950261	0.01003801	0.00843595	0.00969267	0.00956019	0.00833699	0.00925561	0.00950261	0.0087242	0.00863311	0.00969267	0.01042124	0.00956019	0.00882763	0.00915727	0.00950261	0.00919804	0.00998879	0.00906555

Compounds with nil results above the LOR however at least one guideline value is l

Acrolein	107-02-8	6.8	0.35	367	1250		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
Acrylonitrile	107-13-1	3300	5	3400	No value	1.7E-05	3.6	3.9	4.05	4.1	3.7	4.15	4.35	4	4.7	4.35	4.25	3.55	4.3	3.55	4.2	4.6	3.8	3.8	4.05	4.05	4.05	4.4	3.7	4.25	4.15	3.65	4	4.05	3.75	3.7	4.25	4.5	4.15	3.85	3.95	4.1	3.95	4.35	3.9
tert-Amyl Methyl Ether	994-05-8		0.2	1128	No value		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.1	1.15	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Bromodichloromethane	75-27-4		0.2	No value	No value	3.7E-05	2	2.15	2.25	2.3	2.05	2.3	2.45	2.2	2.6	2.4	2.35	1.95	2.4	1.95	2.3	2.55	2.1	2.1	2.25	2.25	2.25	2.45	2.05	2.35	2.3	2	2.2	2.25	2.1	2.05	2.35	2.5	2.3	2.15	2.2	2.25	2.2	2.4	2.15
Bromoform	75-25-2		0.2	13440	No value		2.4	2.6	2.7	2.75	2.5	2.75	2.9	2.65	3.15	2.9	2.85	2.35	2.85	2.35	2.8	3.05	2.55	2.55	2.7	2.7	2.7	2.9	2.45	2.8	2.75	2.4	2.65	2.7	2.5	2.45	2.8	3	2.75	2.55	2.65	2.7	2.65	2.9	2.6
1,3-Butadiene	106-99-0	660	2	2040000	No value	3.0E-05	0.6	0.65	0.65	0.7	0.6	0.7	0.75	0.65	0.8	0.75	0.7	0.6	0.7	0.6	0.7	0.75	0.65	0.65	0.65	0.7	0.7	0.75	0.6	0.7	0.7	0.6	0.65	0.7	0.6	0.6	0.7	0.75	0.7	0.65	0.65	0.7	0.65	0.7	0.65
2-Chloroprene	126-99-8		20	362	No value	3.0E-04	2.2	2.4	2.45	2.5	2.25	2.55	2.65	2.45	2.85	2.65	2.6	2.15	2.65	2.15	2.55	2.8	2.35	2.3	2.45	2.5	2.5	2.7	2.25	2.6	2.55	2.2	2.45	2.5	2.3	2.25	2.6	2.75	2.55	2.35	2.4	2.5	2.4	2.65	2.35
3-Chloropropene	107-05-1	600	1	1471	75000		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
2-Chlorotoluene	95-49-8		0.2	1657	No value		1.8	1.95	2	2.05	1.85	2.1	2.2	2	2.35	2.2	2.15	1.75	2.15	1.75	2.1	2.3	1.9	1.9	2	2.05	2.05	2.2	1.85	2.1	2.05	1.8	2	2.05	1.85	1.85	2.1	2.25	2.05	1.9	1.95	2.05	2	2.15	1.95
alpha-Chlorotoluene	100-44-7		1	228	No value	4.9E-05	1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
Dibromochloromethane	124-48-1		0.2	No value	No value		2.4	2.6	2.7	2.75	2.5	2.75	2.9	2.65	3.15	2.9	2.85	2.35	2.85	2.35	2.8	3.05	2.55	2.55	2.7	2.7	2.7	2.9	2.45	2.8	2.75	2.4	2.65	2.7	2.5	2.45	2.8	3	2.75	2.55	2.65	2.7	2.65	2.9	2.6
1,2-Dibromoethane (EDB)	106-93-4		9	No value	No value	6.0E-04	2.4	2.6	2.7	2.75	2.5	2.75	2.9	2.65	3.15	2.9	2.85	2.35	2.85	2.35	2.8	3.05	2.55	2.55	2.7	2.7	2.7	2.9	2.45	2.8	2.75	2.4	2.65	2.7	2.5	2.45	2.8	3	2.75	2.55	2.65	2.7	2.65	2.9	2.6
1,3-Dichlorobenzene	541-73-1		0.2	No value	No value		2.6	2.8	2.9	2.95	2.7	3	3.15	2.9	3.4	3.15	3.1	2.55	3.1	2.55	3	3.3	2.75	2.75	2.9	2.95	2.95	3.15	2.65	3.05	3	2.6	2.9	2.95	2.7	2.65	3.05	3.25	3	2.8	2.85	2.95	2.85	3.15	2.8
1,2-Dichloroethane	107-06-2		700	237500	No value	2.6E-05	2	2.15	2.25	2.3	2.05	2.3	2.45	2.2	2.6	2.4	2.35	1.95	2.4	1.95	2.3	2.55	2.1	2.1	2.25	2.25	2.25	2.45	2.05	2.35	2.3	2	2.2	2.25	2.1	2.05	2.35	2.5	2.3	2.15	2.2	2.25	2.2	2.4	2.15
cis-1,2-Dichloroethene	156-59-2		0.2	No value	No value		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
1,2-Dichloropropane	78-87-5	50800	4	1155	No value		3.6	3.9	4.05	4.1	3.7	4.15	4.35	4	4.7	4.35	4.25	3.55	4.3	3.55	4.2	4.6	3.8	3.8	4.05	4.05	4.05	4.4	3.7	4.25	4.15	3.65	4	4.05	3.75	3.7	4.25	4.5	4.15	3.85	3.95	4.1	3.95	4.35	3.9
cis-1,3-Dichloropropene	542-75-6		31	4539	No value	4.0E-06	1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
trans-1,3-Dichloropropene	108-20-3		31	4539	No value	4.0E-06	1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
Hexachlorobutadiene	110-54-3		0.2	12000	No value		4	4.35	4.5	4.55	4.15	4.6	4.85	4.45	5	4.85	4.75	3.95	4.8	3.9	4.65	5	4.25	4.2	4.45	4.5	4.5	4.85	4.1	4.7	4.6	4.05	4.45	4.5	4.15	4.1	4.7	5	4.6	4.3	4.4	4.55	4.4	4.85	4.3
1,2,4-Trichlorobenzene	120-82-1		2	1400	40000		7	8	8	8	7.5	8.5	8.5	8	9.5	8.5	8.5	7	8.5	7	8.5	9	1.7	1.7	8	8	8	9	7.5	8.5	8.5	7.5	8	8	7.5	7.5	8.5	9	8.5	7.5	8	8	8	8.5	8
Vinyl Bromide	593-60-2		3	No value	No value	3.2E-05	1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.8	0.85	0.9	0.9	0.85	0.9	0.95	0.9	1.05	0.95	0.95	0.8	0.95	0.8	0.95	1	0.85	0.85	0.9	0.9	0.9	0.95	0.8	0.95	0.9	0.8	0.9	0.9	0.85	0.8	0.95	1	0.9	0.85	0.9	0.9	0.9	0.95	0.85

Compounds with nil results above the LOR and guideline values are greater than 0.5

Bromomethane	74-83-9		5	996	No value		1.8	1.95	2	2.05	1.85	2.1	2.2	2	2.35	2.2	2.15	1.75	2.15	1.75	2.1	2.3	1.9	1.9	2	2.05	2.05	2.2	1.85	2.1	2.05	1.8	2	2.05	1.85	1.85	2.1	2.25	2.05	1.9	1.95	2.05	2	2.15	1.95
tert-Butyl Alcohol	75-65-0	45500	5	142480	No value		1	1.1	1.1	1.15	1.05	1.15	1.2	1.1	1.3	1.2	1.2	1	1.2	1	1.15	1.25	1.05	1.05	1.1	1.15	1.15	1.2	1	1.15	1.15	1	1.1	1.15	1.05	1.05	1.15	1.25	1.15	1.05	1.1	1.15	1.1	1.2	1.1
n-Butylbenzene	104-51-8		5	No value	No value		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
sec-Butylbenzene	135-98-8	No value	5	No value	No value		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
tert-Butylbenzene	98-06-6		5	No value	No value		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
Carbon Tetrachloride	56-23-5	190	100	520	No value		2	2.15	2.25	2.3	2.05	2.3	2.45	2.2	2.6	2.4	2.35	1.95	2.4	1.95	2.3	2.55	2.1	2.1	2.25	2.25	2.25	2.45	2.05	2.35	2.3	2	2.2	2.25	2.1	2.05	2.35	2.5	2.3	2.15	2.2	2.25	2.2	2.4	2.15
Chlorobenzene	108-90-7	47000	50	4500	933330		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Chloroethane	75-00-3		39600	11083	No value		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Chloroform	67-66-3	490	98	415022	20480000		1.8	1.95	2	2.05	1.85	2.1	2.2	2	2.35	2.2	2.15	1.75	2.15	1.75	2.1	2.3	1.9	1.9	2	2.05	2.05	2.2	1.85	2.1	2.05	1.8	2	2.05	1.85	1.85	2.1	2.25	2.05	1.9	1.95	2.05	2	2.15	1.95
Chloromethane	74-87-3	20700	90	20650	1050000		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
Cumene	98-82-8	250000	400	157	No value		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
o-Cymene	99-87-6		5	12	No value		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
1,2-Dichlorobenzene	95-50-1	30100	200	300	150000		2.6	2.8	2.9	2.95	2.7	3	3.15	2.9	3.4	3.15	3.1	2.55	3.1	2.55	3	3.3	2.75	2.75	2.9	2.95	2.95	3.15	2.65	3.05	3	2.6	2.9	2.95	2.7	2.65	3.05	3.25	3	2.8	2.85	2.95	2.85	3.15	2.8
1,4-Dichlorobenzene	106-46-7	12000	60	730	240000		2.6	2.8	2.9	2.95	2.7	3	3.15	2.9	3.4	3.15	3.1	2.55	3.1	2.55	3	3.3	2.75	2.75	2.9	2.95	2.95	3.15	2.65	3.05	3	2.6	2.9	2.95	2.7	2.65	3.05	3.25	3	2.8	2.85	2.95	2.85	3.15	2.8
1,1-Dichloroethane	75-34-3		165	647656.5	No value		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
1,1-Dichloroethene	75-35-4	7900	0.007	753395	No value		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
trans-1,2-Dichloroethene	156-60-5	785	40	No value	No value		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Diisopropyl Ether	123-91-1	130000	700	71	1260000		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
1,4-Dioxane	141-78-6	7210	110	43240	180000		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Ethyl Acetate	100-41-4	144000	70	937	350000		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
Ethyl tert-Butyl Ether	622-96-8		2900	190	No value		1	1.1	1.1	1.15	1.05	1.15	1.2	1.1	1.3	1.2	1.2	1	1.2	1	1.15	1.25	1.05	1.05	1.1	1.15	1.15	1.2	1	1.15	1.15	1	1.1	1.15	1.05	1.05	1.15	1.25	1.15	1.05	1.1	1.15	1.1	1.2	1.1
4-Ethyltoluene	75-69-4		5	No value	No value		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Freon 113	76-14-2	959000	800000	344871	No value		2	2.15	2.25	2.3	2.05	2.3	2.45	2.2	2.6	2.4	2.35	1.95	2.4	1.95	2.3	2.55	2.1	2.1	2.25	2.25	2.25	2.45	2.05	2.35	2.3	2	2.2	2.25	2.1	2.05	2.35	2.5	2.3	2.15	2.2	2.25	2.2	2.4	2.15
Freon 114	75-71-8		700000	No value	No value		0.6	0.65	0.65	0.7	0.6	0.7	0.75	0.65	0.8	0.75	0.7	0.6	0.7	0.6	0.7	0.75	0.65	0.65	0.65	0.7	0.7	0.75	0.6	0.7	0.7	0.6	0.65	0.7	0.6	0.6	0.7	0.75	0.7	0.65	0.65	0.7	0.65	0.7	0.65
2-Hexanone	108-38-3		30	310	No value		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
m,p-Xylene	106-42-3	8700	870	217	220000		2.6	2.8	2.9	2.95	2.7	3	3.15	2.9	3.4	3.15	3.1	2.55	3.1	2.55	3	3.3	2.75	2.75	2.9	2.95	2.95	3.15	2.65	3.05	3	2.6	2.9	2.95	2.7	2.65	3.05	3.25	3	2.8	2.85	2.95	2.85	3.15	2.8
Methyl Methacrylate	80-62-6	71000	700	200	697000		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
Methyl tert-butyl ether	1634-04-4	7210	8000	190	No value		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
4-Methyl-2-pentanone	108-10-1		3000	3606	410000		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Naphthalene	91-20-3	7900	3	440	75000		4.2	4.55	4.7	4.8	4.35	4.85	5	4.65	5.5	5	4.95	4.15	5	4.1	4.85	5.5	4.45	4.4	4.7	4.75	4.75	5	4.3	4.95	4.85	4.25	4.65	4.75	4.35	4.3	4.95	5	4.85	4.5	4.6	4.75	4.65	5	4.5
2-Propanol	67-63-0	123000	7300	7990	490000		20	21.5	22.5	23	20.5	23	24.5	22	26	24	23.5	19.5	24	19.5	23	25.5	21	21	22.5	22.5	22.5	24.5	20.5	23.5	23	20	22	22.5	21	20.5	23.5	25	23	21.5	22	22.5	22	24	21.5
Propene	115-07-1		3000	39584	No value		2	2.15	2.25	2.3	2.05	2.3	2.45	2.2	2.6	2.4	2.35	1.95	2.4	1.95	2.3	2.55	2.1	2.1	2.25	2.25	2.25	2.45	2.05	2.35	2.3	2	2.2	2.25	2.1	2.05	2.35	2.5	2.3	2.15	2.2	2.25	2.2	2.4	2.15
Propylbenzene	103-65-1		1000	50	No value		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
Styrene	100-42-5	21300	260	70	430000		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
1,1,1,2-Tetrachloroethane	630-20-6		105	No value	No value		2	2.15	2.25	2.3	2.05	2.3	2.45	2.2	2.6	2.4	2.35	1.95	2.4	1.95	2.3	2.55	2.1	2.1	2.25	2.25	2.25	2.45	2.05	2.35	2.3	2	2.2	2.25	2.1	2.05	2.35	2.5	2.3	2.15	2.2	2.25	2.2	2.4	2.15
1,1,2,2-Tetrachloroethane	79-34-5		7	10301	No value		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
Tetrahydrofuran	109-99-9		2000	5898	No value		0.8	0.85	0.9	0.9	0.85	0.9	0.95	0.9	1.05	0.95	0.95	0.8	0.95	0.8	0.95	1	0.85	0.85	0.9	0.9	0.9	0.95	0.8	0.95	0.9	0.8	0.9	0.9	0.85	0.8	0.95	1	0.9	0.85	0.9	0.9	0.9	0.95	0.85
1,1,1-Trichloroethane	71-55-6	6000	5000	540000	5428570		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
1,2,4-Trimethylbenzene	95-63-6		60	500	No value		1.6	1.75	1.8	1.8	1.65	1.85	1.95	1.75	2.1	1.95	1.9	1.55	1.9	1.55	1.85	2.05	1.7	1.7	1.8	1.8	1.8	1.95	1.65	1.9	1.85	1.6	1.8	1.8	1.65	1.65	1.9	2	1.85	1.7	1.75	1.8	1.75	1.95	1.7
1,3,5-Trimethylbenzene	108-67-8		60	1131	No value		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3
Vinyl Acetate	108-05-4	7000	200	423	No value		1.4	1.5	1.55	1.6	1.45	1.6	1.7	1.55	1.85	1.7	1.65	1.4	1.65	1.35	1.6	1.8	1.5	1.45	1.55	1.6	1.6	1.7	1.45	1.65	1.6	1.4	1.55	1.6	1.45	1.45	1.65	1.75	1.6	1.5	1.55	1.6	1.55	1.7	1.5
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.8	0.85	0.9	0.9	0.85	0.9	0.95	0.9	1.05	0.95	0.95	0.8	0.95	0.8	0.95	1	0.85	0.85	0.9	0.9	0.9	0.95	0.8	0.95	0.9	0.8	0.9	0.9	0.85	0.8	0.95	1	0.9	0.85	0.9	0.9	0.9	0.95	0.85
o-Xylene	95-47-6	8700	870	100	220000		1.2	1.3	1.35	1.35	1.25	1.4	1.45	1.35	1.55	1.45	1.4	1.2	1.45	1.2	1.4	1.55	1.25	1.25	1.35	1.35	1.35	1.45	1.25	1.4	1.4	1.2	1.35	1.35	1.25	1.25	1.4	1.5	1.4	1.3	1.3	1.35	1.3	1.45	1.3

Location		Acute AGV (ug/m3)	Chronic AGV (ug/m3)	Odour Threshold (ug/m3)	Irritation Threshold (ug/m3)	Unit Risk (per µg/m3)	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North
Sample No							20-1619	20-1679	20-1680	20-1681	20-1682	20-1683	20-1684	20-1699	20-1700	20-1704	20-1705	20-1732	20-1733	20-1734	20-1735	20-1798	20-1799	20-1823	20-1824	20-1829	20-1830	20-1857	20-1858	20-1900	20-1901	20-1913	20-1914	20-1938	20-1938	20-2001	20-2002	20-2009	20-2010	20-2027	20-2028	20-2036	20-2037	20-2070	20-2071
Start date							19-10-2020	22-10-2020	22-10-2020	25-10-2020	25-10-2020	28-10-2020	28-10-2020	31-10-2020	31-10-2020	03-11-2020	03-11-2020	06-11-2020	06-11-2020	09-11-2020	09-11-2020	12-11-2020	12-11-2020	15-11-2020	15-11-2020	18-11-2020	18-11-2020	21-11-2020	21-11-2020	24-11-2020	24-11-2020	27-11-2020	27-11-2020	30-11-2020	30-11-2020	03-12-2020	03-12-2020	06-12-2020	06-12-2020	09-12-2020	09-12-2020	12-12-2020	12-12-2020	15-12-2020	15-12-2020
End date							20-10-2020	23-10-2020	23-10-2020	26-10-2020	26-10-2020	29-10-2020	29-10-2020	01-11-2020	01-11-2020	04-11-2020	04-11-2020	07-11-2020	07-11-2020	10-11-2020	10-11-2020	13-11-2020	13-11-2020	16-11-2020	16-11-2020	19-11-2020	19-11-2020	22-11-2020	22-11-2020	25-11-2020	25-11-2020	28-11-2020	28-11-2020	01-12-2020	01-12-2020	04-12-2020	04-12-2020	07-12-2020	07-12-2020	10-12-2020	10-12-2020	13-12-2020	13-12-2020	16-12-2020	16-12-2020
Compound	**CASNo**																																													
Compounds with at least one result above the LOR																																														
Benzene	71-43-2	27	30	4500	9000000	6.0E-06	1.15	1.1	1.1	1.15	1.1	1.15	1.25	1.15	1.1	1.25	1.2	1.15	1.05	1.15	1.15	1.2	1.2	1.4	1.25	1.2	1.35	1.15	1.15	1.2	1.15	1.15	1.2	1.25	1.3	1.15	1.05	1.1	1.1	1.2	1.15	1.1	1.3	1.15	1.25
2-Butanone (Methyl Ethyl Ketone	78-93-3	2940	5000	738	590000		1.15	1.1	1.1	1.15	1.1	1.15	1.25	1.15	1.1	1.25	1.2	1.15	1.05	1.15	1.15	1.2	1.2	1.4	1.25	1.2	1.35	1.15	1.15	1.2	1.15	1.15	1.2	1.25	1.3	1.15	1.05	1.1	1.1	1.2	1.15	1.1	1.3	1.15	1.25
Cyclohexane	110-82-7	105000	6000	1435	1050000		0.95	0.9	0.9	0.9	0.85	0.9	1	0.95	0.85	1	0.95	0.9	0.85	0.9	0.95	1	0.95	1.1	1	0.95	1.05	0.9	0.95	0.95	0.9	0.95	0.95	1	1	0.9	0.85	0.85	0.9	0.95	0.9	0.9	1.05	0.95	1
Ethyl Benzene	637-92-3	21710	1000	8700	870000		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Freon 11	76-13-1		6000	28000	No value		0.7	0.65	0.65	0.7	0.65	0.7	0.75	0.7	0.65	0.75	0.7	1.5	0.65	0.7	0.7	0.75	0.7	0.85	0.75	0.7	0.8	0.7	0.7	0.75	0.7	0.7	0.75	0.75	0.75	0.7	0.65	0.65	0.65	0.7	0.7	0.65	0.75	0.7	0.75
Freon 12	142-82-5		500000	No value	No value		2.8	2.9	2.8	2.8	2.9	2.7	2.7	2.5	2.4	2.3	2.4	1.9	1.8	0.9	0.95	3.2	2.7	2.9	2.9	1.9	1.05	1.8	0.95	0.95	0.9	2.2	0.95	2.2	2.7	3.4	2.4	2	2.1	2.4	2.2	2.8	2.4	2.7	2.9
Heptane	87-68-3	205000	9000	200000	No value		1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
Hexane	591-78-6		670	5287	1800000		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Tetrachloroethene	127-18-4	102000	200	31356	710200		2.55	2.45	2.45	2.5	2.4	2.55	2.75	2.55	2.4	2.75	2.65	2.55	2.35	2.5	2.6	2.7	2.6	3.05	2.75	2.6	2.95	2.5	2.6	2.7	2.5	2.6	2.7	2.75	2.8	2.5	2.35	2.4	2.45	2.65	2.55	2.45	2.8	2.55	2.7
Toluene	108-88-3	7500	5000	8025	380000		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
1,1,2-Trichloroethane	79-00-5	164	0.2	No value	No value		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
Trichloroethene	79-01-6	21600	2	150467	864000	4.0E-06	2.1	2	2	2.05	1.95	2.1	2.25	2.1	1.95	2.25	2.15	2.05	1.9	2.05	2.1	2.2	2.15	2.5	2.25	2.15	2.4	2.05	2.1	2.2	2.05	2.1	2.2	2.25	2.3	2.05	1.95	1.95	2	2.15	2.1	2	2.3	2.1	2.2
2,2,4-Trimethylpentane	000540-84-1		540	3130	No value		2.1	2	2	2.05	1.95	2.1	2.25	2.1	1.95	2.25	2.15	2.05	1.9	2.05	2.1	2.2	2.15	2.5	2.25	2.15	2.4	2.05	2.1	2.2	2.05	2.1	2.2	2.25	2.3	2.05	1.95	1.95	2	2.15	2.1	2	2.3	2.1	2.2
Acute Hazard Index							0.05515626	0.05294331	0.05294331	0.05482619	0.05261325	0.05515294	0.05987194	0.05515626	0.05261437	0.05987194	0.05735524	0.0551423	0.05042661	0.05514004	0.05546339	0.05767521	0.05735187	0.06710546	0.05987194	0.05735187	0.06458763	0.05514004	0.05546339	0.05767302	0.05482619	0.05546339	0.05767302	0.05987194	0.06206868	0.05482619	0.05043725	0.05261437	0.05294331	0.05735524	0.05515294	0.05262946	0.06207087	0.05515513	0.05955416
Odour Threhsold In							0.00968869	0.00925561	0.00925561	0.00950261	0.00906954	0.00960095	0.01042124	0.00968869	0.00907017	0.01042124	0.00998879	0.00963161	0.00882763	0.0095562	0.00969267	0.01012512	0.00998418	0.01158686	0.01042124	0.00998418	0.01115379	0.0095562	0.00969267	0.01003801	0.00950261	0.00969267	0.01003801	0.01042124	0.01071736	0.00950261	0.0088684	0.00907017	0.00925561	0.00998879	0.00960095	0.00920203	0.01080446	0.00968806	0.01037648
Compounds with nil results above the LOR however at least one guideline value is l																																														
Acrolein	107-02-8	6.8	0.35	367	1250		1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
Acrylonitrile	107-13-1	3300	5	3400	No value	1.7E-05	4.2	4.05	4.05	4.05	3.9	4.15	4.5	4.2	3.9	4.45	4.35	4.15	3.85	4.15	4.25	4.4	4.3	5	4.5	4.3	4.8	4.15	4.2	4.4	4.05	4.2	4.4	4.5	4.6	4.05	3.85	3.9	4	4.3	4.15	3.95	4.6	4.15	4.45
tert-Amyl Methyl Ether	994-05-8		0.2	1128	No value		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Bromodichloromethane	75-27-4		0.2	No value	No value	3.7E-05	2.35	2.25	2.25	2.25	2.15	2.3	2.5	2.35	2.2	2.5	2.4	2.3	2.15	2.3	2.35	2.45	2.4	2.8	2.5	2.4	2.65	2.3	2.35	2.45	2.25	2.35	2.45	2.5	2.55	2.25	2.15	2.2	2.2	2.4	2.3	2.2	2.55	2.3	2.45
Bromoform	75-25-2		0.2	13440	No value		2.8	2.7	2.7	2.7	2.6	2.75	3	2.8	2.6	2.95	2.9	2.75	2.55	2.75	2.8	2.95	2.85	3.35	3	2.85	3.2	2.75	2.8	2.9	2.7	2.8	2.9	3	3.05	2.7	2.55	2.6	2.65	2.9	2.75	2.65	3.1	2.8	2.95
1,3-Butadiene	106-99-0	660	2	2040000	No value	3.0E-05	0.7	0.65	0.65	0.7	0.65	0.7	0.75	0.7	0.65	0.75	0.7	0.7	0.65	0.7	0.7	0.75	0.7	0.85	0.75	0.7	0.8	0.7	0.7	0.75	0.7	0.7	0.75	0.75	0.75	0.7	0.65	0.65	0.65	0.7	0.7	0.65	0.75	0.7	0.75
2-Chloroprene	126-99-8		20	362	No value	3.0E-04	2.55	2.45	2.45	2.5	2.4	2.55	2.75	2.55	2.4	2.75	2.65	2.55	2.35	2.5	2.6	2.7	2.6	3.05	2.75	2.6	2.95	2.5	2.6	2.7	2.5	2.6	2.7	2.75	2.8	2.5	2.35	2.4	2.45	2.65	2.55	2.45	2.8	2.55	2.7
3-Chloropropene	107-05-1	600	1	1471	75000		1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
2-Chlorotoluene	95-49-8		0.2	1657	No value		2.1	2	2	2.05	1.95	2.1	2.25	2.1	1.95	2.25	2.15	2.05	1.9	2.05	2.1	2.2	2.15	2.5	2.25	2.15	2.4	2.05	2.1	2.2	2.05	2.1	2.2	2.25	2.3	2.05	1.95	1.95	2	2.15	2.1	2	2.3	2.1	2.2
alpha-Chlorotoluene	100-44-7		1	228	No value	4.9E-05	1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
Dibromochloromethane	124-48-1		0.2	No value	No value		2.8	2.7	2.7	2.7	2.6	2.75	3	2.8	2.6	2.95	2.9	2.75	2.55	2.75	2.8	2.95	2.85	3.35	3	2.85	3.2	2.75	2.8	2.9	2.7	2.8	2.9	3	3.05	2.7	2.55	2.6	2.65	2.9	2.75	2.65	3.1	2.8	2.95
1,2-Dibromoethane (EDB)	106-93-4		9	No value	No value	6.0E-04	2.8	2.7	2.7	2.7	2.6	2.75	3	2.8	2.6	2.95	2.9	2.75	2.55	2.75	2.8	2.95	2.85	3.35	3	2.85	3.2	2.75	2.8	2.9	2.7	2.8	2.9	3	3.05	2.7	2.55	2.6	2.65	2.9	2.75	2.65	3.1	2.8	2.95
1,3-Dichlorobenzene	541-73-1		0.2	No value	No value		3.05	2.9	2.9	2.95	2.8	3	3.25	3.05	2.85	3.2	3.15	3	2.75	3	3.05	3.2	3.1	3.6	3.25	3.1	3.45	3	3.05	3.15	2.95	3.05	3.15	3.25	3.3	2.95	2.8	2.85	2.9	3.1	3	2.85	3.35	3	3.2
1,2-Dichloroethane	107-06-2		700	237500	No value	2.6E-05	2.35	2.25	2.25	2.25	2.15	2.3	2.5	2.35	2.2	2.5	2.4	2.3	2.15	2.3	2.35	2.45	2.4	2.8	2.5	2.4	2.65	2.3	2.35	2.45	2.25	2.35	2.45	2.5	2.55	2.25	2.15	2.2	2.2	2.4	2.3	2.2	2.55	2.3	2.45
cis-1,2-Dichloroethene	156-59-2		0.2	No value	No value		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
1,2-Dichloropropane	78-87-5	50800	4	1155	No value		4.2	4.05	4.05	4.05	3.9	4.15	4.5	4.2	3.9	4.45	4.35	4.15	3.85	4.15	4.25	4.4	4.3	5	4.5	4.3	4.8	4.15	4.2	4.4	4.05	4.2	4.4	4.5	4.6	4.05	3.85	3.9	4	4.3	4.15	3.95	4.6	4.15	4.45
cis-1,3-Dichloropropene	542-75-6		31	4539	No value	4.0E-06	1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
trans-1,3-Dichloropropene	108-20-3		31	4539	No value	4.0E-06	1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
Hexachlorobutadiene	110-54-3		0.2	12000	No value		4.65	4.5	4.5	4.5	4.35	4.6	5	4.65	4.35	4.95	4.8	4.6	4.25	4.6	4.7	4.9	4.75	5.5	5	4.75	5.5	4.6	4.7	4.85	4.5	4.7	4.85	5	5	4.5	4.3	4.35	4.45	4.8	4.6	4.4	5	4.65	4.95
1,2,4-Trichlorobenzene	120-82-1		2	1400	40000		8.5	8	8	8	8	8.5	9	8.5	8	9	8.5	8.5	7.5	8.5	8.5	9	8.5	10	9	8.5	9.5	8.5	8.5	9	8	8.5	9	9	9	8	7.5	8	8	8.5	8.5	8	9	8.5	9
Vinyl Bromide	593-60-2		3	No value	No value	3.2E-05	1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.95	0.9	0.9	0.9	0.85	0.9	1	0.95	0.85	1	0.95	0.9	0.85	0.9	0.95	1	0.95	1.1	1	0.95	1.05	0.9	0.95	0.95	0.9	0.95	0.95	1	1	0.9	0.85	0.85	0.9	0.95	0.9	0.9	1.05	0.95	1
Compounds with nil results above the LOR and guideline values are greater than 0.5																																														
Bromomethane	74-83-9		5	996	No value		2.1	2	2	2.05	1.95	2.1	2.25	2.1	1.95	2.25	2.15	2.05	1.9	2.05	2.1	2.2	2.15	2.5	2.25	2.15	2.4	2.05	2.1	2.2	2.05	2.1	2.2	2.25	2.3	2.05	1.95	1.95	2	2.15	2.1	2	2.3	2.1	2.2
tert-Butyl Alcohol	75-65-0	45500	5	142480	No value		1.15	1.1	1.1	1.15	1.1	1.15	1.25	1.15	1.1	1.25	1.2	1.15	1.05	1.15	1.15	1.2	1.2	1.4	1.25	1.2	1.35	1.15	1.15	1.2	1.15	1.15	1.2	1.25	1.3	1.15	1.05	1.1	1.1	1.2	1.15	1.1	1.3	1.15	1.25
n-Butylbenzene	104-51-8		5	No value	No value		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
sec-Butylbenzene	135-98-8	No value	5	No value	No value		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
tert-Butylbenzene	98-06-6		5	No value	No value		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
Carbon Tetrachloride	56-23-5	190	100	520	No value		2.35	2.25	2.25	2.25	2.15	2.3	2.5	2.35	2.2	2.5	2.4	2.3	2.15	2.3	2.35	2.45	2.4	2.8	2.5	2.4	2.65	2.3	2.35	2.45	2.25	2.35	2.45	2.5	2.55	2.25	2.15	2.2	2.2	2.4	2.3	2.2	2.55	2.3	2.45
Chlorobenzene	108-90-7	47000	50	4500	933330		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Chloroethane	75-00-3		39600	11083	No value		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Chloroform	67-66-3	490	98	415022	20480000		2.1	2	2	2.05	1.95	2.1	2.25	2.1	1.95	2.25	2.15	2.05	1.9	2.05	2.1	2.2	2.15	2.5	2.25	2.15	2.4	2.05	2.1	2.2	2.05	2.1	2.2	2.25	2.3	2.05	1.95	1.95	2	2.15	2.1	2	2.3	2.1	2.2
Chloromethane	74-87-3	20700	90	20650	1050000		1.65	1.35	1.35	1.35	1.3	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
Cumene	98-82-8	250000	400	157	No value		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
o-Cymene	99-87-6		5	12	No value		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
1,2-Dichlorobenzene	95-50-1	30100	200	300	150000		3.05	2.9	2.9	2.95	2.8	3	3.25	3.05	2.85	3.2	3.15	3	2.75	3	3.05	3.2	3.1	3.6	3.25	3.1	3.45	3	3.05	3.15	2.95	3.05	3.15	3.25	3.3	2.95	2.8	2.85	2.9	3.1	3	2.85	3.35	3	3.2
1,4-Dichlorobenzene	106-46-7	12000	60	730	240000		3.05	2.9	2.9	2.95	2.8	3	3.25	3.05	2.85	3.2	3.15	3	2.75	3	3.05	3.2	3.1	3.6	3.25	3.1	3.45	3	3.05	3.15	2.95	3.05	3.15	3.25	3.3	2.95	2.8	2.85	2.9	3.1	3	2.85	3.35	3	3.2
1,1-Dichloroethane	75-34-3		165	647656.5	No value		1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
1,1-Dichloroethene	75-35-4	7900	0.007	753395	No value		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
trans-1,2-Dichloroethene	156-60-5	785	40	No value	No value		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Diisopropyl Ether	123-91-1	130000	700	71	1260000		1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
1,4-Dioxane	141-78-6	7210	110	43240	180000		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Ethyl Acetate	100-41-4	144000	70	937	350000		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
Ethyl tert-Butyl Ether	622-96-8		2900	190	No value		1.15	1.1	1.1	1.15	1.1	1.15	1.25	1.15	1.1	1.25	1.2	1.15	1.05	1.15	1.15	1.2	1.2	1.4	1.25	1.2	1.35	1.15	1.15	1.2	1.15	1.15	1.2	1.25	1.3	1.15	1.05	1.1	1.1	1.2	1.15	1.1	1.3	1.15	1.25
4-Ethyltoluene	75-69-4		5	No value	No value		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Freon 113	76-14-2	959000	800000	344871	No value		2.35	2.25	2.25	2.25	2.15	2.3	2.5	2.35	2.2	2.5	2.4	2.3	2.15	2.3	2.35	2.45	2.4	2.8	2.5	2.4	2.65	2.3	2.35	2.45	2.25	2.35	2.45	2.5	2.55	2.25	2.15	2.2	2.2	2.4	2.3	2.2	2.55	2.3	2.45
Freon 114	75-71-8		700000	No value	No value		0.7	0.65	0.65	0.7	0.65	0.7	0.75	0.7	0.65	0.75	0.7	0.7	0.65	0.7	0.7	0.75	0.7	0.85	0.75	0.7	0.8	0.7	0.7	0.75	0.7	0.7	0.75	0.75	0.75	0.7	0.65	0.65	0.65	0.7	0.7	0.65	0.75	0.7	0.75
2-Hexanone	108-38-3		30	310	No value		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
m,p-Xylene	106-42-3	8700	870	217	220000		3.05	2.9	2.9	2.95	2.8	3	3.25	3.05	2.85	3.2	3.15	3	2.75	3	3.05	3.2	3.1	3.6	3.25	3.1	3.45	3	3.05	3.15	2.95	3.05	3.15	3.25	3.3	2.95	2.8	2.85	2.9	3.1	3	2.85	3.35	3	3.2
Methyl Methacrylate	80-62-6	71000	700	200	697000		1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
Methyl tert-butyl ether	1634-04-4	7210	8000	190	No value		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
4-Methyl-2-pentanone	108-10-1		3000	3606	410000		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Naphthalene	91-20-3	7900	3	440	75000		4.9	4.7	4.7	4.75	4.55	4.85	5.5	4.9	4.6	5	5	4.85	4.45	4.8	4.95	5	5	6	5	5	5.5	4.8	4.95	5	4.75	4.95	5	5.5	5.5	4.75	4.5	4.6	4.65	5	4.85	4.65	5.5	4.85	5
2-Propanol	67-63-0	123000	7300	7990	490000		23.5	22.5	22.5	22.5	21.5	23	25	23.5	22	25	24	23	21.5	23	23.5	24.5	24	28	25	24	26.5	23	23.5	24.5	22.5	23.5	24.5	25	25.5	22.5	21.5	22	22	24	23	22	25.5	23	24.5
Propene	115-07-1		3000	39584	No value		2.35	2.25	2.25	2.25	2.15	2.3	2.5	2.35	2.2	2.5	2.4	2.3	2.15	2.3	2.35	2.45	2.4	2.8	2.5	2.4	2.65	2.3	2.35	2.45	2.25	2.35	2.45	2.5	2.55	2.25	2.15	2.2	2.2	2.4	2.3	2.2	2.55	2.3	2.45
Propylbenzene	103-65-1		1000	50	No value		1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
Styrene	100-42-5	21300	260	70	430000		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
1,1,1,2-Tetrachloroethane	630-20-6		105	No value	No value		2.35	2.25	2.25	2.25	2.15	2.3	2.5	2.35	2.2	2.5	2.4	2.3	2.15	2.3	2.35	2.45	2.4	2.8	2.5	2.4	2.65	2.3	2.35	2.45	2.25	2.35	2.45	2.5	2.55	2.25	2.15	2.2	2.2	2.4	2.3	2.2	2.55	2.3	2.45
1,1,2,2-Tetrachloroethane	79-34-5		7	10301	No value		1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
Tetrahydrofuran	109-99-9		2000	5898	No value		0.95	0.9	0.9	0.9	0.85	0.9	1	0.95	0.85	1	0.95	0.9	0.85	0.9	0.95	1	0.95	1.1	1	0.95	1.05	0.9	0.95	0.95	0.9	0.95	0.95	1	1	0.9	0.85	0.85	0.9	0.95	0.9	0.9	1.05	0.95	1
1,1,1-Trichloroethane	71-55-6	6000	5000	540000	5428570		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
1,2,4-Trimethylbenzene	95-63-6		60	500	No value		1.85	1.8	1.8	1.8	1.75	1.85	2	1.85	1.75	2	1.9	1.85	1.7	1.85	1.9	1.95	1.9	2.25	2	1.9	2.15	1.85	1.9	1.95	1.8	1.9	1.95	2	2.05	1.8	1.7	1.75	1.8	1.9	1.85	1.75	2.05	1.85	1.95
1,3,5-Trimethylbenzene	108-67-8		60	1131	No value		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5
Vinyl Acetate	108-05-4	7000	200	423	No value		1.65	1.55	1.55	1.6	1.5	1.6	1.75	1.65	1.55	1.75	1.7	1.6	1.5	1.6	1.65	1.7	1.65	1.95	1.75	1.65	1.85	1.6	1.65	1.7	1.6	1.65	1.7	1.75	1.8	1.6	1.5	1.55	1.55	1.7	1.6	1.55	1.8	1.6	1.75
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.95	0.9	0.9	0.9	0.85	0.9	1	0.95	0.85	1	0.95	0.9	0.85	0.9	0.95	1	0.95	1.1	1	0.95	1.05	0.9	0.95	0.95	0.9	0.95	0.95	1	1	0.9	0.85	0.85	0.9	0.95	0.9	0.9	1.05	0.95	1
o-Xylene	95-47-6	8700	870	100	220000		1.4	1.35	1.35	1.35	1.3	1.4	1.5	1.4	1.3	1.5	1.45	1.4	1.3	1.4	1.4	1.45	1.45	1.65	1.5	1.45	1.6	1.4	1.4	1.45	1.35	1.4	1.45	1.5	1.55	1.35	1.3	1.3	1.35	1.45	1.4	1.3	1.55	1.4	1.5

Appendix B

Location		Acute AGV (ug/m3)	Chronic AGV (ug/m3)	Odour Threshold (ug/m3)	Irritation Threshold (ug/m3)	Unit Risk (per µg/m3)	West	North	West	North	West	North	West	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	North	West	North	West	North	West	North	West	North	West	North	West
Sample No							20-2099	20-2100	20-2127	20-2128	20-2153	20-2154	20-2155	20-2164	20-2165	20-2170	20-2171	20-2184	20-2185	20-2190	20-2191	20-2200	20-2201	20-2222	20-2223	20-2239	20-2240	21-0020	21-0021	21-0024	21-0025	21-0034	21-0035	21-0050	21-0053	20-0054	21-0069	21-0070	21-0077	21-0078	21-0084	21-0085	21-0097	21-0098	21-172
Start date							18-12-2020	18-12-2020	21-12-2020	21-12-2020	24-12-2020	24-12-2020	27-12-2020	30-12-2020	30-12-2020	02-01-2021	02-01-2021	05-01-2021	05-01-2020	08-01-2021	08-01-2021	11-01-2021	11-01-2021	14-01-2021	14-01-2021	17-01-2021	17-01-2021	20-01-2021	20-01-2021	23-01-2021	23-01-2021	26-01-2021	26-01-2021	29-01-2021	01-02-2021	01-02-2021	04-02-2021	04-02-2021	07-02-2021	07-02-2021	10-02-2021	10-02-2021	13-02-2021	13-02-2021	16-02-2021
End date							19-12-2020	19-12-2020	22-12-2020	22-12-2020	25-12-2020	25-12-2020	28-12-2020	31-12-2020	31-12-2020	03-01-2021	03-01-2021	06-01-2021	06-01-2020	09-01-2021	09-01-2021	12-01-2021	12-01-2021	15-01-2021	15-01-2021	18-01-2021	18-01-2021	21-01-2021	21-01-2021	24-01-2021	24-01-2021	27-01-2021	27-01-2021	30-01-2021	02-02-2021	02-02-2021	05-02-2021	05-02-2021	08-02-2021	08-02-2021	11-02-2021	11-02-2021	14-02-2021	14-02-2021	17-02-2021
Compound	**CASNo**																																												

Compounds with at least one result above the LOR

Benzene	71-43-2	27	30	4500	9000000	6.0E-06	1.15	1.1	1.1	1.6	1.05	1.05	1.15	1.3	**3.5**	1.15	1	1.1	1.05	1.1	1.05	1.3	1.2	1.2	**2.4**	1	1.1	1.1	1	1.05	1.05	1.05	1	1.1	1.05	1.05	1.1	1.1	1.1	1.05	1.15	1.05	1.1	1.15	1.15
2-Butanone (Methyl Ethyl Ketone	78-93-3	2940	5000	738	590000		1.15	1.1	1.1	1.6	1.05	1.05	1.15	1.3	1.2	1.15	1	1.1	1.05	1.1	1.05	1.3	1.2	1.2	1.1	1	1.1	1.1	1	1.05	1.05	1.05	1	1.1	1.05	1.05	1.1	1.1	1.1	1.05	1.15	1.05	1.1	1.15	1.15
Cyclohexane	110-82-7	105000	6000	1435	1050000		0.9	0.9	0.9	1.3	0.85	0.85	0.9	1.05	0.95	0.9	0.8	0.85	0.85	0.9	0.85	1.05	0.95	0.95	0.9	0.8	0.85	0.85	0.8	0.85	0.85	0.85	0.8	0.9	0.85	0.85	0.9	0.85	0.85	0.85	0.95	0.85	0.85	0.9	0.9
Ethyl Benzene	637-92-3	21710	1000	8700	870000		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Freon 11	76-13-1		6000	28000	No value		0.7	0.65	0.65	0.95	**1.6**	**1.5**	**1.6**	**3.8**	**3.6**	**3**	**2.7**	**1.5**	**1.6**	0.65	**1.7**	0.75	**1.4**	0.7	0.65	**1.4**	0.65	**1.4**	**1.4**	**1.5**	**1.5**	0.6	**1.3**	0.65	0.6	0.6	**1.6**	**1.3**	**1.7**	**1.3**	0.7	0.6	0.65	0.7	0.7
Freon 12	142-82-5		500000	No value	No value		0.9	0.9	**2.8**	**2.9**	**3.1**	**2.7**	**2.6**	**7.1**	**6.3**	**5.9**	**5.1**	**2.5**	**2.4**	**2.4**	**2.5**	**2.4**	**2.4**	**2.5**	**2.2**	**2.2**	**2.1**	**2.7**	**2.3**	**2.3**	**2.3**	**2.3**	**2.4**	**1.8**	**1.8**	**1.8**	**2.1**	**2.3**	**2.2**	**2**	**1.9**	**2.1**	**2.1**	**2.2**	**2**
Heptane	87-68-3	205000	9000	200000	No value		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
Hexane	591-78-6		670	5287	1800000		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Tetrachloroethene	127-18-4	102000	200	31356	710200		2.5	2.4	2.45	3.55	2.3	2.35	2.5	2.9	2.65	2.55	2.2	2.4	2.3	2.45	2.35	**17**	2.65	2.65	2.45	2.25	2.35	2.4	2.2	2.35	2.35	2.3	2.2	2.45	2.3	2.3	2.45	2.4	2.35	2.3	2.55	2.25	2.4	2.5	2.5
Toluene	108-88-3	7500	5000	8025	380000		1.35	1.3	1.35	1.95	1.25	1.25	1.35	**3.4**	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
1,1,2-Trichloroethane	79-00-5	164	0.2	No value	No value		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
Trichloroethene	79-01-6	21600	2	150467	864000	4.0E-06	2.05	1.95	2	2.9	1.9	1.9	2.05	2.35	2.2	2.1	1.8	1.95	1.85	2	1.95	2.3	2.15	2.15	2	1.85	1.95	1.95	1.8	1.9	1.9	1.85	1.8	2	1.85	1.85	2	1.95	1.95	1.9	2.1	1.85	1.95	2.05	2.05
2,2,4-Trimethylpentane	000540-84-1		540	3130	No value		2.05	1.95	2	2.9	1.9	1.9	2.05	2.35	2.2	2.1	1.8	1.95	1.85	2	1.95	2.3	2.15	2.15	2	1.85	1.95	1.95	1.8	1.9	1.9	1.85	1.8	2	1.85	1.85	2	1.95	1.95	1.9	2.1	1.85	1.95	2.05	2.05

Acute Hazard Index	0.05482619	0.05261656	0.05294331	0.07689209	0.05041538	0.05041764	0.05482619	0.06264099	0.14285595	0.05515294	0.04789756	0.05261325	0.05009873	0.05263843	0.05043725	0.06271126	0.05766012	0.05766012	0.10078658	0.04822543	0.05261099	0.05261325	0.04789756	0.05042661	0.05041764	0.05009873	0.04789756	0.05294331	0.05009873	0.05009873	0.05263843	0.05261437	0.05230611	0.05010938	0.05515513	0.05009648	0.05261437	0.05482619	0.05482619
Odour Threhsold Ind	0.00950261	0.00915727	0.00925561	0.01342411	0.00885488	0.00884994	0.00958297	0.01174049	0.01156626	0.00980631	0.00852449	0.00914543	0.00881349	0.00925561	0.00896215	0.01193662	0.01005129	0.00998879	0.00997784	0.00850738	0.00906555	0.00913651	0.00840842	0.00890353	0.00884994	0.0087242	0.00839949	0.00925561	0.0087242	0.0087242	0.00934044	0.0091282	0.0091593	0.00882747	0.00968806	0.00872022	0.00907017	0.00950261	0.00950261

Compounds with nil results above the LOR however at least one guideline value is l

Acrolein	107-02-8	6.8	0.35	367	1250		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
Acrylonitrile	107-13-1	3300	5	3400	No value	1.7E-05	4.1	3.95	4	6	3.8	3.8	4.1	4.75	4.35	4.15	3.6	3.9	3.75	4	3.85	4.65	4.35	4.35	4	3.7	3.9	3.9	3.6	3.85	3.8	3.75	3.6	4.05	3.75	3.75	4	3.95	3.9	3.75	4.15	3.7	3.95	4.1	4.1
tert-Amyl Methyl Ether	994-05-8		0.2	1128	No value		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Bromodichloromethane	75-27-4		0.2	No value	No value	3.7E-05	2.25	2.2	2.25	3.25	2.1	2.1	2.3	2.65	2.4	2.3	2	2.15	2.1	2.2	2.15	2.6	2.4	2.4	2.2	2.05	2.15	2.15	2	2.15	2.1	2.1	2	2.25	2.05	2.05	2.2	2.2	2.15	2.1	2.3	2.05	2.2	2.25	2.3
Bromoform	75-25-2		0.2	13440	No value		2.75	2.65	2.65	3.9	2.55	2.55	2.75	3.15	2.9	2.75	2.4	2.6	2.5	2.65	2.6	3.1	2.9	2.9	2.65	2.45	2.6	2.6	2.4	2.55	2.55	2.5	2.4	2.7	2.5	2.5	2.65	2.6	2.6	2.5	2.8	2.5	2.6	2.75	2.75
1,3-Butadiene	106-99-0	660	2	2040000	No value	3.0E-05	0.7	0.65	0.65	0.95	0.65	0.65	0.7	0.8	0.75	0.7	0.6	0.65	0.6	0.65	0.65	0.75	0.7	0.7	0.65	0.6	0.65	0.65	0.6	0.65	0.65	0.6	0.6	0.65	0.6	0.6	0.65	0.65	0.65	0.65	0.7	0.6	0.65	0.7	0.7
2-Chloroprene	126-99-8		20	362	No value	3.0E-04	2.5	2.4	2.45	3.55	2.3	2.35	2.5	2.9	2.65	2.55	2.2	2.4	2.3	2.45	2.35	2.85	2.65	2.65	2.45	2.25	2.35	2.4	2.2	2.35	2.35	2.3	2.2	2.45	2.3	2.3	2.45	2.4	2.35	2.3	2.55	2.25	2.4	2.5	2.5
3-Chloropropene	107-05-1	600	1	1471	75000		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
2-Chlorotoluene	95-49-8		0.2	1657	No value		2.05	1.95	2	2.9	1.9	1.9	2.05	2.35	2.2	2.1	1.8	1.95	1.85	2	1.95	2.3	2.15	2.15	2	1.85	1.95	1.95	1.8	1.9	1.9	1.85	1.8	2	1.85	1.85	2	1.95	1.95	1.9	2.1	1.85	1.95	2.05	2.05
alpha-Chlorotoluene	100-44-7		1	228	No value	4.9E-05	1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
Dibromochloromethane	124-48-1		0.2	No value	No value		2.75	2.65	2.65	3.9	2.55	2.55	2.75	3.15	2.9	2.75	2.4	2.6	2.5	2.65	2.6	3.1	2.9	2.9	2.65	2.45	2.6	2.6	2.4	2.55	2.55	2.5	2.4	2.7	2.5	2.5	2.65	2.6	2.6	2.5	2.8	2.5	2.6	2.75	2.75
1,2-Dibromoethane (EDB)	106-93-4		9	No value	No value	6.0E-04	2.75	2.65	2.65	3.9	2.55	2.55	2.75	3.15	2.9	2.75	2.4	2.6	2.5	2.65	2.6	3.1	2.9	2.9	2.65	2.45	2.6	2.6	2.4	2.55	2.55	2.5	2.4	2.7	2.5	2.5	2.65	2.6	2.6	2.5	2.8	2.5	2.6	2.75	2.75
1,3-Dichlorobenzene	541-73-1		0.2	No value	No value		2.95	2.85	2.9	4.2	2.75	2.75	2.95	3.4	3.15	3	2.6	2.8	2.7	2.9	2.8	3.35	3.15	3.15	2.9	2.65	2.8	2.8	2.6	2.8	2.75	2.7	2.6	2.9	2.7	2.7	2.9	2.85	2.8	2.7	3	2.7	2.85	2.95	2.95
1,2-Dichloroethane	107-06-2		700	237500	No value	2.6E-05	2.25	2.2	2.25	3.25	2.1	2.1	2.3	2.65	2.4	2.3	2	2.15	2.1	2.2	2.15	2.6	2.4	2.4	2.2	2.05	2.15	2.15	2	2.15	2.1	2.1	2	2.25	2.05	2.05	2.2	2.2	2.15	2.1	2.3	2.05	2.2	2.25	2.3
cis-1,2-Dichloroethene	156-59-2		0.2	No value	No value		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
1,2-Dichloropropane	78-87-5	50800	4	1155	No value		4.1	3.95	4	6	3.8	3.8	4.1	4.75	4.35	4.15	3.6	3.9	3.75	4	3.85	4.65	4.35	4.35	4	3.7	3.9	3.9	3.6	3.85	3.8	3.75	3.6	4.05	3.75	3.75	4	3.95	3.9	3.75	4.15	3.7	3.95	4.1	4.1
cis-1,3-Dichloropropene	542-75-6		31	4539	No value	4.0E-06	1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.75	1.6	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
trans-1,3-Dichloropropene	108-20-3		31	4539	No value	4.0E-06	1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
Hexachlorobutadiene	110-54-3		0.2	12000	No value		4.55	4.4	4.45	6.5	4.2	4.25	4.55	5.5	4.85	4.6	3.95	4.35	4.15	4.45	4.3	5	4.8	4.8	4.4	4.1	4.3	4.35	4	4.25	4.25	4.15	4.05	4.5	4.15	4.15	4.45	4.35	4.3	4.15	4.65	4.15	4.35	4.55	4.55
1,2,4-Trichlorobenzene	120-82-1		2	1400	40000		8	8	8	11.5	7.5	7.5	8	9.5	8.5	8.5	7	8	7.5	8	7.5	9.5	8.5	8.5	8	7.5	8	8	7	7.5	7.5	7.5	7	8	7.5	7.5	8	8	8	7.5	8.5	7.5	8	8	8
Vinyl Bromide	593-60-2		3	No value	No value	3.2E-05	1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.9	0.9	0.9	1.3	0.85	0.85	0.9	1.05	0.95	0.9	0.8	0.85	0.85	0.9	0.85	1.05	0.95	0.95	0.9	0.8	0.85	0.85	0.8	0.85	0.85	0.85	0.8	0.9	0.85	0.85	0.9	0.85	0.85	0.85	0.95	0.85	0.85	0.9	0.9

Compounds with nil results above the LOR and guideline values are greater than 0.5

Bromomethane	74-83-9		5	996	No value		2.05	1.95	2	2.9	1.9	1.9	2.05	2.35	2.2	2.1	1.8	1.95	1.85	2	1.95	2.3	2.15	2.15	2	1.85	1.95	1.95	1.8	1.9	1.9	1.85	1.8	2	1.85	1.85	2	1.95	1.95	1.9	2.1	1.85	1.95	2.05	2.05
tert-Butyl Alcohol	75-65-0	45500	5	142480	No value		1.15	1.1	1.1	1.6	1.05	1.05	1.15	1.3	1.2	1.15	1	1.1	1.05	1.1	1.05	1.3	1.2	1.2	1.1	1	1.1	1.1	1	1.05	1.05	1.05	1	1.1	1.05	1.05	1.1	1.1	1.1	1.05	1.15	1.05	1.1	1.15	1.15
n-Butylbenzene	104-51-8		5	No value	No value		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
sec-Butylbenzene	135-98-8	No value	5	No value	No value		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
tert-Butylbenzene	98-06-6		5	No value	No value		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
Carbon Tetrachloride	56-23-5	190	100	520	No value		2.25	2.2	2.25	3.25	2.1	2.1	2.3	2.65	2.4	2.3	2	2.15	2.1	2.2	2.15	2.6	2.4	2.4	2.2	2.05	2.15	2.15	2	2.15	2.1	2.1	2	2.25	2.05	2.05	2.2	2.2	2.15	2.1	2.3	2.05	2.2	2.25	2.3
Chlorobenzene	108-90-7	47000	50	4500	933330		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Chloroethane	75-00-3		39600	11083	No value		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Chloroform	67-66-3	490	98	415022	20480000		2.05	1.95	2	2.9	1.9	1.9	2.05	2.35	2.2	2.1	1.8	1.95	1.85	2	1.95	2.3	2.15	2.15	2	1.85	1.95	1.95	1.8	1.9	1.9	1.85	1.8	2	1.85	1.85	2	1.95	1.95	1.9	2.1	1.85	1.95	2.05	2.05
Chloromethane	74-87-3	20700	90	20650	1050000		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
Cumene	98-82-8	250000	400	157	No value		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
o-Cymene	99-87-6		5	12	No value		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
1,2-Dichlorobenzene	95-50-1	30100	200	300	150000		2.95	2.85	2.9	4.2	2.75	2.75	2.95	3.4	3.15	3	2.6	2.8	2.7	2.9	2.8	3.35	3.15	3.15	2.9	2.65	2.8	2.8	2.6	2.8	2.75	2.7	2.6	2.9	2.7	2.7	2.9	2.85	2.8	2.7	3	2.7	2.85	2.95	2.95
1,4-Dichlorobenzene	106-46-7	12000	60	730	240000		2.95	2.85	2.9	4.2	2.75	2.75	2.95	3.4	3.15	3	2.6	2.8	2.7	2.9	2.8	3.35	3.15	3.15	2.9	2.65	2.8	2.8	2.6	2.8	2.75	2.7	2.6	2.9	2.7	2.7	2.9	2.85	2.8	2.7	3	2.7	2.85	2.95	2.95
1,1-Dichloroethane	75-34-3		165	647656.5	No value		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
1,1-Dichloroethene	75-35-4	7900	0.007	753395	No value		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
trans-1,2-Dichloroethene	156-60-5	785	40	No value	No value		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Diisopropyl Ether	123-91-1	130000	700	71	1260000		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
1,4-Dioxane	141-78-6	7210	110	43240	180000		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Ethyl Acetate	100-41-4	144000	70	937	350000		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
Ethyl tert-Butyl Ether	622-96-8		2900	190	No value		1.15	1.1	1.1	1.6	1.05	1.05	1.15	1.3	1.2	1.15	1	1.1	1.05	1.1	1.05	1.3	1.2	1.2	1.1	1	1.1	1.1	1	1.05	1.05	1.05	1	1.1	1.05	1.05	1.1	1.1	1.1	1.05	1.15	1.05	1.1	1.15	1.15
4-Ethyltoluene	75-69-4		5	No value	No value		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Freon 113	76-14-2	959000	800000	344871	No value		2.25	2.2	2.25	3.25	2.1	2.1	2.3	2.65	2.4	2.3	2	2.15	2.1	2.2	2.15	2.6	2.4	2.4	2.2	2.05	2.15	2.15	2	2.15	2.1	2.1	2	2.25	2.05	2.05	2.2	2.2	2.15	2.1	2.3	2.05	2.2	2.25	2.3
Freon 114	75-71-8		700000	No value	No value		0.7	0.65	0.65	0.95	0.65	0.65	0.7	0.8	0.75	0.7	0.6	0.65	0.6	0.65	0.65	0.75	0.7	0.7	0.65	0.6	0.65	0.65	0.6	0.65	0.65	0.6	0.6	0.65	0.6	0.6	0.65	0.65	0.65	0.65	0.7	0.6	0.65	0.7	0.7
2-Hexanone	108-38-3		30	310	No value		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
m,p-Xylene	106-42-3	8700	870	217	220000		2.95	2.85	2.9	4.2	2.75	2.75	2.95	3.4	3.15	3	2.6	2.8	2.7	2.9	2.8	3.35	3.15	3.15	2.9	2.65	2.8	2.8	2.6	2.8	2.75	2.7	2.6	2.9	2.7	2.7	2.9	2.85	2.8	2.7	3	2.7	2.85	2.95	2.95
Methyl Methacrylate	80-62-6	71000	700	200	697000		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
Methyl tert-butyl ether	1634-04-4	7210	8000	190	No value		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
4-Methyl-2-pentanone	108-10-1		3000	3606	410000		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Naphthalene	91-20-3	7900	3	440	75000		4.8	4.6	4.7	7	4.45	4.45	4.8	5.5	5	4.85	4.15	4.55	4.35	4.65	4.5	5.5	5	5	4.65	4.3	4.55	4.55	4.2	4.5	4.45	4.35	4.25	4.7	4.35	4.35	4.65	4.6	4.5	4.4	4.85	4.35	4.6	4.8	4.8
2-Propanol	67-63-0	123000	7300	7990	490000		22.5	22	22.5	32.5	21	21	23	26.5	24	23	20	21.5	21	22	21.5	26	24	24	22	20.5	21.5	21.5	20	21.5	21	21	20	22.5	20.5	20.5	22	22	21.5	21	23	20.5	22	22.5	23
Propene	115-07-1		3000	39584	No value		2.25	2.2	2.25	3.25	2.1	2.1	2.3	2.65	2.4	2.3	2	2.15	2.1	2.2	2.15	2.6	2.4	2.4	2.2	2.05	2.15	2.15	2	2.15	2.1	2.1	2	2.25	2.05	2.05	2.2	2.2	2.15	2.1	2.3	2.05	2.2	2.25	2.3
Propylbenzene	103-65-1		1000	50	No value		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
Styrene	100-42-5	21300	260	70	430000		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
1,1,1,2-Tetrachloroethane	630-20-6		105	No value	No value		2.25	2.2	2.25	3.25	2.1	2.1	2.3	2.65	2.4	2.3	2	2.15	2.1	2.2	2.15	2.6	2.4	2.4	2.2	2.05	2.15	2.15	2	2.15	2.1	2.1	2	2.25	2.05	2.05	2.2	2.2	2.15	2.1	2.3	2.05	2.2	2.25	2.3
1,1,2,2-Tetrachloroethane	79-34-5		7	10301	No value		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
Tetrahydrofuran	109-99-9		2000	5898	No value		0.9	0.9	0.9	1.3	0.85	0.85	0.9	1.05	0.95	0.9	0.8	0.85	0.85	0.9	0.85	1.05	0.95	0.95	0.9	0.8	0.85	0.85	0.8	0.85	0.85	0.85	0.8	0.9	0.85	0.85	0.9	0.85	0.85	0.85	0.95	0.85	0.85	0.9	0.9
1,1,1-Trichloroethane	71-55-6	6000	5000	540000	5428570		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
1,2,4-Trimethylbenzene	95-63-6		60	500	No value		1.8	1.75	1.8	2.6	1.7	1.7	1.8	2.1	1.95	1.85	1.6	1.75	1.65	1.75	1.7	2.05	1.95	1.95	1.75	1.65	1.75	1.75	1.6	1.7	1.7	1.65	1.6	1.8	1.65	1.65	1.75	1.75	1.7	1.65	1.85	1.65	1.75	1.8	1.8
1,3,5-Trimethylbenzene	108-67-8		60	1131	No value		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35
Vinyl Acetate	108-05-4	7000	200	423	No value		1.6	1.55	1.55	2.25	1.5	1.5	1.6	1.85	1.7	1.6	1.4	1.5	1.45	1.55	1.5	1.8	1.7	1.7	1.55	1.45	1.5	1.5	1.4	1.5	1.5	1.45	1.4	1.55	1.45	1.45	1.55	1.55	1.5	1.45	1.6	1.45	1.55	1.6	1.6
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.9	0.9	0.9	1.3	0.85	0.85	0.9	1.05	0.95	0.9	0.8	0.85	0.85	0.9	0.85	1.05	0.95	0.95	0.9	0.8	0.85	0.85	0.8	0.85	0.85	0.85	0.8	0.9	0.85	0.85	0.9	0.85	0.85	0.85	0.95	0.85	0.85	0.9	0.9
o-Xylene	95-47-6	8700	870	100	220000		1.35	1.3	1.35	1.95	1.25	1.25	1.35	1.6	1.45	1.4	1.2	1.3	1.25	1.35	1.3	1.55	1.45	1.45	1.35	1.25	1.3	1.3	1.2	1.3	1.25	1.25	1.2	1.35	1.25	1.25	1.35	1.3	1.3	1.25	1.4	1.25	1.3	1.35	1.35

Location		Acute AGV (ug/m3)	Chronic AGV (ug/m3)	Odour Threshold (ug/m3)	Irritation Threshold (ug/m3)	Unit Risk (per µg/m3)	North	West	North	West	North	West	North	West	North	West	North	West	North	West	North	West	Max (cf. acute guidelines & odour/irritation thresholds)	Converted to relevant acute avg time (using Haber Rule)	Acute HQ	Converted to 15 min avg time (using Power Law)	Odour HQ	Irritation HQ	Average (conc assumed to be at half the LoR)	STDEV	Chronic HQ	Cancer risk	Number of samples >LoR
Sample No							21-173	21-176	21-177	21-217	21-218	21-233	21-234	21-235	21-236	21-273	21-274	21-277	21-278	21-314	21-315	21-330	21-331	21-343										
Start date							16-02-2021	19-02-2021	19-02-2021	22-02-2021	22-02-2021	25-02-2021	25-02-2021	28-02-2021	28-02-2021	03-03-2021	03-03-2021	06-03-2021	06-03-2021	09-03-2021	09-03-2021	12-03-2021	12-03-2021	15-03-2021										
End date							17-02-2021	20-02-2021	20-02-2021	23-02-2021	23-02-2021	26-02-2021	26-02-2021	01-03-2021	01-03-2021	04-03-2021	04-03-2021	07-03-2021	07-03-2021	10-03-2021	10-03-2021	13-03-2021	13-03-2021	16-03-2021										
Compound	**CASNo**																																
Compounds with at least one result above the LOR																																	
Benzene	71-43-2	27	30	4500	9000000	6.0E-06	1.1	1.15	1.15	1	1.05	1.05	1.15	1.05	1.05	1.05	1.05	1.05	1.1	1.05	1.05	1.15	1.1	1.1	24	69	**0.89**	59.8	0.013	0.000007	1.5	1.84	0.05	3.76E-06	21
2-Butanone (Methyl Ethyl Keton	78-93-3	2940	5000	738	590000		1.1	1.15	1.15	1	1.05	1.05	1.15	1.05	1.05	1.05	1.05	1.05	1.1	1.05	1.05	1.15	1.1	1.1	10	10	0.003	24.9	0.034	0.00004	1.2	0.62	0.0002		3
Cyclohexane	110-82-7	105000	6000	1435	1050000		0.9	0.95	0.9	0.8	0.85	0.85	0.95	0.85	0.85	0.85	0.85	0.85	0.9	0.85	0.8	0.9	0.9	0.9	11	50	0.00048	27.4	0.019	0.00003	1.0	0.59	0.0002		1
Ethyl Benzene	637-92-3	21710	1000	8700	870000		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	7.5	8	0.0003	18.7	0.0021	0.00002	1.4	0.48	0.001		3
Freon 11	76-13-1		6000	28000	No value		0.65	0.7	0.7	0.6	0.65	0.6	0.7	**1.3**	**1.3**	0.65	0.6	0.65	0.65	0.65	**1.3**	0.7	**1.5**	0.65	3.8	11		9.5	0.00034		1.1	0.63	0.0002		113
Freon 12	142-82-5		500000	No value	No value		0.9	**2.5**	0.9	**2**	**2**	**2.4**	**2.2**	**2.3**	**2.3**	**2**	**2**	**2**	**2**	**2**	**2**	**2.1**	**2.2**	2.2	7.1	20		17.7			2.6	1.02	0.000005		255
Heptane	87-68-3	205000	9000	200000	No value		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	14	64	0.0003	34.9	0.00017		1.7	0.74	0.0002		1
Hexane	591-78-6		670	5287	1800000		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	36	104		89.7	0.017	0.00005	1.5	2.04	0.002		3
Tetrachloroethene	127-18-4	102000	200	31356	710200		2.45	2.6	2.5	2.2	2.3	2.25	2.55	2.3	2.3	2.3	2.25	2.35	2.45	2.3	2.25	2.5	2.4	2.4	60	275	0.003	149.5	0.0048	0.0002	2.8	3.53	0.01		3
Toluene	108-88-3	7500	5000	8025	380000		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	8.8	25	0.0012	21.9	0.0027	0.00006	1.8	1.17	0.000		37
1,1,2-Trichloroethane	79-00-5	164	0.2	No value	No value		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	25	25	0.15	62.3			1.9	1.41	**9.7**		2
Trichloroethene	79-01-6	21600	2	150467	864000	4.0E-06	2	2.1	2.05	1.8	1.9	1.85	2.1	1.9	1.9	1.9	1.85	1.9	2	1.9	1.85	2.05	2	2	14	64	0.003	34.9	0.00023	0.00004	2.1	0.73	**1.1**	3.63E-06	2
2,2,4-Trimethylpentane	000540-84-1		540	3130	No value		2	2.1	2.05	1.8	1.9	1.85	2.1	1.9	1.9	1.9	1.85	1.9	2	1.9	1.85	2.05	2	2	47	136		117.1			2.2	2.63	0.004		1
																																7.4.E-06	

	Minimum HI	Maximum HI	Number >0.1	% > 0.1	
Acute Hazard Index	0.047578653	0.902315906	21.00	7%	291
Odour Threhsold In	0.008292236	0.080166991	0.00	0%	

Compounds with nil results above the LOR however at least one guideline value is l																																
Acrolein	107-02-8	6.8	0.35	367	1250		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	7		5.7			1.6	0.12			0
Acrylonitrile	107-13-1	3300	5	3400	No value	1.7E-05	3.95	4.25	4.15	3.6	3.75	3.7	4.2	3.8	3.8	3.75	3.7	3.85	3.95	3.8	3.7	4.1	3.95	3.95	6	31		14.9			4.1	0.32			0
tert-Amyl Methyl Ether	994-05-8		0.2	1128	No value		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.11			0
Bromodichloromethane	75-27-4		0.2	No value	No value	3.7E-05	2.2	2.35	2.3	2	2.1	2.05	2.35	2.1	2.1	2.1	2.05	2.15	2.2	2.1	2.05	2.25	2.2	2.2	3.25	9		8.1			2.3	0.18			0
Bromoform	75-25-2		0.2	13440	No value		2.65	2.8	2.75	2.4	2.5	2.5	2.8	2.55	2.55	2.5	2.5	2.55	2.65	2.55	2.45	2.7	2.65	2.65	3.9	11		9.7			2.8	0.21			0
1,3-Butadiene	106-99-0	660	2	2040000	No value	3.0E-05	0.65	0.7	0.7	0.6	0.65	0.6	0.7	0.65	0.65	0.65	0.6	0.65	0.65	0.65	0.6	0.7	0.65	0.65	1	3		2.5			0.7	0.05			0
2-Chloroprene	126-99-8		20	362	No value	3.0E-04	2.45	2.6	2.5	2.2	2.3	2.25	2.55	2.3	2.3	2.3	2.25	2.35	2.45	2.3	2.25	2.5	2.4	2.4	3.6	10		9.0			2.5	0.19			0
3-Chloropropene	107-05-1	600	1	1471	75000		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	11		5.7			1.6	0.12			0
2-Chlorotoluene	95-49-8		0.2	1657	No value		2	2.1	2.05	1.8	1.9	1.85	2.1	1.9	1.9	1.9	1.85	1.9	2	1.9	1.85	2.05	2	2	2.95	9		7.3			2.1	0.16			0
alpha-Chlorotoluene	100-44-7		1	228	No value	4.9E-05	1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	7		5.7			1.6	0.12			0
Dibromochloromethane	124-48-1		0.2	No value	No value		2.65	2.8	2.75	2.4	2.5	2.5	2.8	2.55	2.55	2.5	2.5	2.55	2.65	2.55	2.45	2.7	2.65	2.65	3.9	11		9.7			2.8	0.21			0
1,2-Dibromoethane (EDB)	106-93-4		9	No value	No value	6.0E-04	2.65	2.8	2.75	2.4	2.5	2.5	2.8	2.55	2.55	2.5	2.5	2.55	2.65	2.55	2.45	2.7	2.65	2.65	3.9	11		9.7			2.8	0.21			0
1,3-Dichlorobenzene	541-73-1		0.2	No value	No value		2.85	3.05	3	2.6	2.7	2.7	3.05	2.75	2.75	2.7	2.7	2.75	2.85	2.75	2.7	2.95	2.85	2.85	4.25	12		10.6			3.0	0.23			0
1,2-Dichloroethane	107-06-2		700	237500	No value	2.6E-05	2.2	2.35	2.3	2	2.1	2.05	2.35	2.1	2.1	2.1	2.05	2.15	2.2	2.1	2.05	2.25	2.2	2.2	3.25	9		8.1			2.3	0.18			0
cis-1,2-Dichloroethene	156-59-2		0.2	No value	No value		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	7		6.5			1.8	0.14			0
1,2-Dichloropropane	78-87-5	50800	4	1155	No value		3.95	4.25	4.15	3.6	3.75	3.7	4.2	3.8	3.8	3.75	3.7	3.85	3.95	3.8	3.7	4.1	3.95	3.95	6	27		14.9			4.1	0.32			0
cis-1,3-Dichloropropene	542-75-6		31	4539	No value	4.0E-06	1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.11			0
trans-1,3-Dichloropropene	108-20-3		31	4539	No value	4.0E-06	1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	7		5.7			1.6	0.12			0
Hexachlorobutadiene	110-54-3		0.2	12000	No value		4.4	4.7	4.6	4	4.15	4.15	4.7	4.2	4.2	4.2	4.15	4.25	4.4	4.2	4.1	4.55	4.4	4.4	6.5	19		16.2			4.6	0.35			0
1,2,4-Trichlorobenzene	120-82-1		2	1400	40000		8	8.5	8.5	7	7.5	7.5	8.5	7.5	7.5	7.5	7.5	7.5	8	7.5	7.5	8	8	8	11.5	33		28.7			8.2	0.83			0
Vinyl Bromide	593-60-2		3	No value	No value	3.2E-05	1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	7		6.5			1.8	0.14			0
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.9	0.95	0.9	0.8	0.85	0.85	0.95	0.85	0.85	0.85	0.85	0.85	0.9	0.85	0.8	0.9	0.9	0.9	1.5	4		3.7			0.9	0.08			0

Compounds with nil results above the LOR and guideline values are greater than 0.5																																	
Bromomethane	74-83-9		5	998	No value		2	2.1	2.05	1.8	1.9	1.85	2.1	1.9	1.9	1.9	1.85	1.9	2	1.9	1.85	2.05	2	2	2.95	9		7.3			2.1	0.16			0
tert-Butyl Alcohol	75-65-0	45500	5	142480	No value		1.1	1.15	1.15	1	1.05	1.05	1.15	1.05	1.05	1.05	1.05	1.05	1.1	1.05	1.05	1.15	1.1	1.1	1.65	8		4.1			1.2	0.09			0
n-Butylbenzene	104-51-8		5	No value	No value		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	7		6.5			1.8	0.14			0
sec-Butylbenzene	135-98-8	No value	5	No value	No value		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	7		6.5			1.8	0.14			0
tert-Butylbenzene	98-06-6		5	No value	No value		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	7		6.5			1.8	0.14			0
Carbon Tetrachloride	56-23-5	190	100	520	No value		2.2	2.35	2.3	2	2.1	2.05	2.35	2.1	2.1	2.1	2.05	2.15	2.2	2.1	2.05	2.25	2.2	2.2	3.25	9		8.1			2.3	0.18			0
Chlorobenzene	108-90-7	47000	50	4500	933330		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	10		4.9			1.4	0.10			0
Chloroethane	75-00-3		39600	11083	No value		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.10			0
Chloroform	67-66-3	490	98	415022	20480000		2	2.1	2.05	1.8	1.9	1.85	2.1	1.9	1.9	1.9	1.85	1.9	2	1.9	1.85	2.05	2	2	2.95	9		7.3			2.1	0.16			0
Chloromethane	74-87-3	20700	90	20650	1050000		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	11		5.7			1.6	0.13			0
Cumene	98-82-8	250000	400	157	No value		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	14		6.5			1.8	0.14			0
o-Cymene	99-87-6		5	12	No value		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	7		6.5			1.8	0.14			0
1,2-Dichlorobenzene	95-50-1	30100	200	300	150000		2.85	3.05	3	2.6	2.7	2.7	3.05	2.75	2.75	2.7	2.7	2.75	2.85	2.75	2.7	2.95	2.85	2.85	4.25	19		10.6			3.0	0.23			0
1,4-Dichlorobenzene	106-46-7	12000	60	730	240000		2.85	3.05	3	2.6	2.7	2.7	3.05	2.75	2.75	2.7	2.7	2.75	2.85	2.75	2.7	2.95	2.85	2.85	4.25	19		10.6			3.0	0.23			0
1,1-Dichloroethane	75-34-3		165	647656.5	No value		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	7		5.7			1.6	0.12			0
1,1-Dichloroethene	75-35-4	7900	0.007	753395	No value		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	9		4.9			1.4	0.10			0
trans-1,2-Dichloroethene	156-60-5	785	40	No value	No value		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	2.0		4.9			1.4	0.10			0
Diisopropyl Ether	123-91-1	130000	700	71	1260000		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	11		5.7			1.6	0.12			0
1,4-Dioxane	141-78-6	7210	110	43240	180000		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.10			0
Ethyl Acetate	100-41-4	144000	70	937	350000		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	12		6.5			1.8	0.14			0
Ethyl tert-Butyl Ether	622-96-8		2900	190	No value		1.1	1.15	1.15	1	1.05	1.05	1.15	1.05	1.05	1.05	1.05	1.05	1.1	1.05	1.05	1.15	1.1	1.1	1.65	5		4.1			1.2	0.09			0
4-Ethyltoluene	75-69-4		5	No value	No value		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.10			0
Freon 113	76-14-2	959000	800000	344871	No value		2.2	2.35	2.3	2	2.1	2.05	2.35	2.1	2.1	2.1	2.05	2.15	2.2	2.1	2.05	2.25	2.2	2.2	3.25	15		8.1			2.3	0.18			0
Freon 114	75-71-8		700000	No value	No value		0.65	0.7	0.7	0.6	0.65	0.6	0.7	0.65	0.65	0.65	0.6	0.65	0.65	0.65	0.6	0.7	0.65	0.65	1	3		2.5			0.7	0.05			0
2-Hexanone	108-38-3		30	310	No value		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.10			0
m,p-Xylene	106-42-3	8700	870	217	220000		2.85	3.05	3	2.6	2.7	2.7	3.05	2.75	2.75	2.7	2.7	2.75	2.85	2.75	2.7	2.95	2.85	2.85	4.25	12		10.6			3.0	0.23			0
Methyl Methacrylate	80-62-6	71000	700	200	697000		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	12		5.7			1.6	0.12			0
Methyl tert-butyl ether	1634-04-4	7210	8000	190	No value		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	2.0		4.9			1.4	0.10			0
4-Methyl-2-pentanone	108-10-1		3000	3606	410000		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.10			0
Naphthalene	91-20-3	7900	3	440	75000		4.65	4.95	4.8	4.2	4.4	4.35	4.9	4.45	4.4	4.4	4.35	4.45	4.65	4.4	4.35	4.75	4.6	4.6	7	32		17.4			4.8	0.38			0
2-Propanol	67-63-0	123000	7300	7990	490000		22	23.5	23	20	21	20.5	23.5	21	21	21	20.5	21.5	22	21	20.5	22.5	22	22	32.5	149		81.0			23.0	1.76			0
Propene	115-07-1		3000	39584	No value		2.2	2.35	2.3	2	2.1	2.05	2.35	2.1	2.1	2.1	2.05	2.15	2.2	2.1	2.05	2.25	2.2	2.2	3.25	9		8.1			2.3	0.18			0
Propylbenzene	103-65-1		1000	50	No value		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	7		5.7			1.6	0.12			0
Styrene	100-42-5	21300	260	70	430000		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.10			0
1,1,1,2-Tetrachloroethane	630-20-6		105	No value	No value		2.2	2.35	2.3	2	2.1	2.05	2.35	2.1	2.1	2.1	2.05	2.15	2.2	2.1	2.05	2.25	2.2	2.2	3.25	9		8.1			2.3	0.18			0
1,1,2,2-Tetrachloroethane	79-34-5		7	10301	No value		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	7		5.7			1.6	0.12			0
Tetrahydrofuran	109-99-9		2000	5898	No value		0.9	0.95	0.9	0.8	0.85	0.85	0.95	0.85	0.85	0.85	0.85	0.85	0.9	0.85	0.8	0.9	0.9	0.9	1.3	4		3.2			0.9	0.07			0
1,1,1-Trichloroethane	71-55-6	6000	5000	540000	5428570		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	3		6.5			1.8	0.14			0
1,2,4-Trimethylbenzene	95-63-6		60	500	No value		1.75	1.9	1.85	1.6	1.65	1.65	1.85	1.7	1.7	1.65	1.65	1.7	1.75	1.7	1.65	1.8	1.75	1.75	2.6	7		6.5			1.8	0.14			0
1,3,5-Trimethylbenzene	108-67-8		60	1131	No value		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.10			0
Vinyl Acetate	108-05-4	7000	200	423	No value		1.55	1.65	1.6	1.4	1.45	1.45	1.65	1.5	1.45	1.45	1.45	1.5	1.55	1.45	1.45	1.6	1.55	1.55	2.3	11		5.7			1.6	0.12			0
Vinyl Chloride	75-01-4	1300	100	5363000	No value	4.4E-06	0.9	0.95	0.9	0.8	0.85	0.85	0.95	0.85	0.85	0.85	0.85	0.85	0.9	0.85	0.8	0.9	0.9	0.9	1.3	4		3.2			0.9	0.07			0
o-Xylene	95-47-6	8700	870	100	220000		1.3	1.4	1.4	1.2	1.25	1.25	1.4	1.25	1.25	1.25	1.25	1.3	1.3	1.25	1.25	1.35	1.3	1.3	1.95	6		4.9			1.4	0.10			0

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