ANNEX A2.3

Phases 3 & 4 Water Quality Modelling

This document has been written in line with the requirements of the RAPID gate two guidance and to comply with the regulatory process pursuant to Severn Trent Water's and Affinity Water's statutory duties. The information presented relates to material or data which is still in the course of completion. Should the solution presented in this document be taken forward, Severn Trent Water and Affinity Water will be subject to the statutory duties pursuant to the necessary consenting process, including environmental assessment and consultation as required. This document should be read with those duties in mind.

Grand Union Canal Transfer SRO
Affinity Water, Severn Trent Water, Canal & River Trust

Grand Union Canal SRO Gate 2 Water Quality Modelling Phase 3 and 4

Final Report

October 2022

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This report describes work commissioned by Affinity Water, by purchase order AWP120028269 dated 19/01/2022. Affinity Water's representative for the contract was [redacted].

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Purpose

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Abbreviations

AA	Annual Average
AOD	Above Ordnance Datum
BAT	Best Available Technology
BOD	Biochemical Oxygen Demand
DO	Dissolved Oxygen
EA	Environment Agency
EQS	Environmental Quality Standard
FIS	Fundamental Intermittent Standards
GUC	Grand Union Canal
LOD	Limit of Detection
MAC	Maximum Allowable Concentration
MPER	Metals Permitting (software package)
PC	Process Contribution
PEC	Predicted Environmental Concentration
PNEC	Probable No-Effect Concentration
RMDV	Recommended Maximum Discharge Value
RQP	River Quality Planning (software package)
SRO	Strategic Resource Option
STW	Severn Trent Water
UPM	Urban Pollution Management
WFD	Water Framework Directive
WTW	Water Treatment Works

1 Overview

1.1 Introduction

This report presents phases 3 and 4 of the Gate 2 water quality modelling for the Grand Union Canal (GUC) Strategic Resource Option (SRO). This proposed scheme would use the canal system to transfer treated effluent from Severn Trent Water's (STW) Minworth Wastewater Treatment Works (WwTW) from Atherstone to Leighton Buzzard, where it will be abstracted, treated and put into Affinity Water's (AfW) public water supply.

The modelling and associated survey works for Gate 2 were carried out in four phases:

- Phase 1 – scoping of modelling and survey requirements
- Phase 2 – surveys
- Phase 3 – Model development / enhancement
- Phase 4 – Concept design

The Phase 1 scoping was documented in a separate report by JBA, Annex A2.3.1 (JBA Consulting, 2022). Phase 2, the water quality sampling assessment, is ongoing and is led by Atkins, see Annex B1.4 (Atkins, 2021). The Phase 1 scoping report identified two strands of water quality modelling to be prepared to inform and support the Gate 2 submission:

- Point of discharge modelling, using the Environment Agency's River Quality Planning (RQP) suite of tools, to assess the impact of the proposed transfer of Minworth effluent at the point of discharge, the Coventry Canal at Atherstone.
- Hydrodynamic water quality modelling, using the Flood Modeller Pro model of the canal used for the hydraulic assessment. A hybrid approach was proposed, using a single conservative pollutant to assess dilution of the discharged effluent over a long flow time series.

1.2 Scope

1.2.1 Development of the scope

The discharge of treated effluent to a surface water body carries the risk of causing pollution, and therefore requires consent from the Environment Agency (EA) under the Environmental Permitting regulations.

This risk was initially investigated in the Gate 1 Water Quality Stages 1 & 2 report (APEM Ltd, 2021). At Stage 1, this compared the existing water quality at the canal discharge locations with the existing Minworth effluent. An updated Gate 2 assessment was required in order to take account of the following:

- Focus on the impact of discharge to the Coventry Canal at Atherstone Top Lock, which is now the preferred point of discharge for the treated effluent transfer into the canal system,
- Updated flow data for the Coventry Canal at Atherstone, following revision of the hydrology and modelling in Aquator as presented in Annex A2.1 (JBA Consulting , 2022),
- An assessment of the utilisation of the scheme (Affinity Water, 2022),
- Further water quality sampling at the Minworth WwTW and the point of discharge in the Coventry Canal at Atherstone.

In addition, the Gate 2 scope has considered comments made by the EA regarding the Gate 1 assessment:

- Concern raised over whether no-deterioration could be achieved for Total Phosphate, given the nationally agreed Technically Achievable Limit (TAL) of 0.25mg/l as an annual average.
- The screening approach should not screen out substances which do not have an EQS as deterioration may still occur. As this is a new discharge, deterioration should be assessed for all determinands.
- Deterioration should be assessed by WFD class, EQS or where these are not available the Probable No Effects Concentration (PNEC), and for a 10% deterioration, or 3% deterioration where already in WFD Bad class or exceeding the EQS.
- Confirm that the Levels of Detection (LODs) are below the EQS.
- A minimum of 12 samples should be used for the gate 2 assessment.
- The assessment should follow the EA's H1 Assessment process, which is required for new bespoke environmental permit applications (although it was subsequently agreed that the application for an environmental permit will take place after completion of Gate 2, and therefore the H1 assessment is not part of this study).

Finally, the Environment Agency commented on the hydrodynamic modelling approach, documented in the Phase 1 report, which proposed to use a single conservative determinands to assess dilution along the length of the canal, using a long flow time-series. They were concerned that, as this approach would not individually model each determinand, it would not take sufficient account of the variability of flow and water quality in the Minworth discharge and the canal, and therefore may not be sufficiently precautionary. Given this, it was decided that a single modelling approach, using the EA's River Quality Planning (RQP) suite, should be applied to test impact at the point of discharge and at points further downstream on the canal.

The following final scope was therefore agreed following consultation with Affinity Water, Severn Trent Water, Canal & River Trust and Environment Agency:

1.2.2 Stage 1 – Scoping and Screening

- Meet with Severn Trent Water (STW) and Jacobs, the Minworth process designers to discuss the current treatment design approach.
- Meet with the Environment Agency's West Midlands (WMD) permitting team, STW and Affinity Water. to present the proposed methodology and consider the EA's approach to permitting of SROs involving effluent transfers.
- Analyse water quality using sampling results up to and including batch 12 (or later) to ensure that a minimum of 12 samples are used for most determinands.
- Screening assessment. The Environment Agency have stated (Environment Agency, 2022) that all determinands sampled at both Minworth and in the Coventry Canal at Atherstone should be modelled. Therefore, no screening of determinands was required, however a screening exercise in line with EA guidance has been undertaken for completeness. This is inconsistent with the EA's own methodology (Environment Agency, 2019) and further engagement with the EA is recommended to ensure a consistent position is available moving forwards.
- It was, however, agreed with the EA that screening would be appropriate to determine which determinands should be modelled at the two downstream water quality monitoring locations, Site 5 (Daventry) and Site 6 (Leighton Buzzard).

1.2.3 Stage 2 – Water quality impact modelling at the point of discharge

- Clean sampling data for outliers and step changes.
- Define model input parameters for canal flow, canal quality, discharge flow and discharge quality.

- Impact modelling. Using Monte Carlo (and MPer for bioavailable metals), assess the impact of the proposed discharge. The assessment will consider, for each determinand screened-in, whether the discharge may:
  - Be "potentially significant", following the tests specified by the EA for hazardous pollutants.
  - Cause a WFD class deterioration (where class boundaries or an EQS are defined)
  - Lead to a deterioration of greater than 10%, or greater than 3% where the waterbody is already in Bad class or exceeding the EQS for that determinand.
- Where a deterioration is predicted, use Monte Carlo/MPer in "calculate the required discharge quality" mode to identify the treatment standard which would achieve no deterioration.

1.2.4 Stage 3 – Water quality impact modelling at downstream sampling sites

- Screening assessment for Site 5 (Daventry).
- Repeat stage 2, using the mixed, downstream effluent quality for site 3 (Atherstone) as the discharge quality for Site 5 (Daventry).
- Repeat, using the mixed, downstream effluent quality for site 5 (Daventry) as the discharge quality for Site 6 (Leighton Buzzard).

2 Methodology

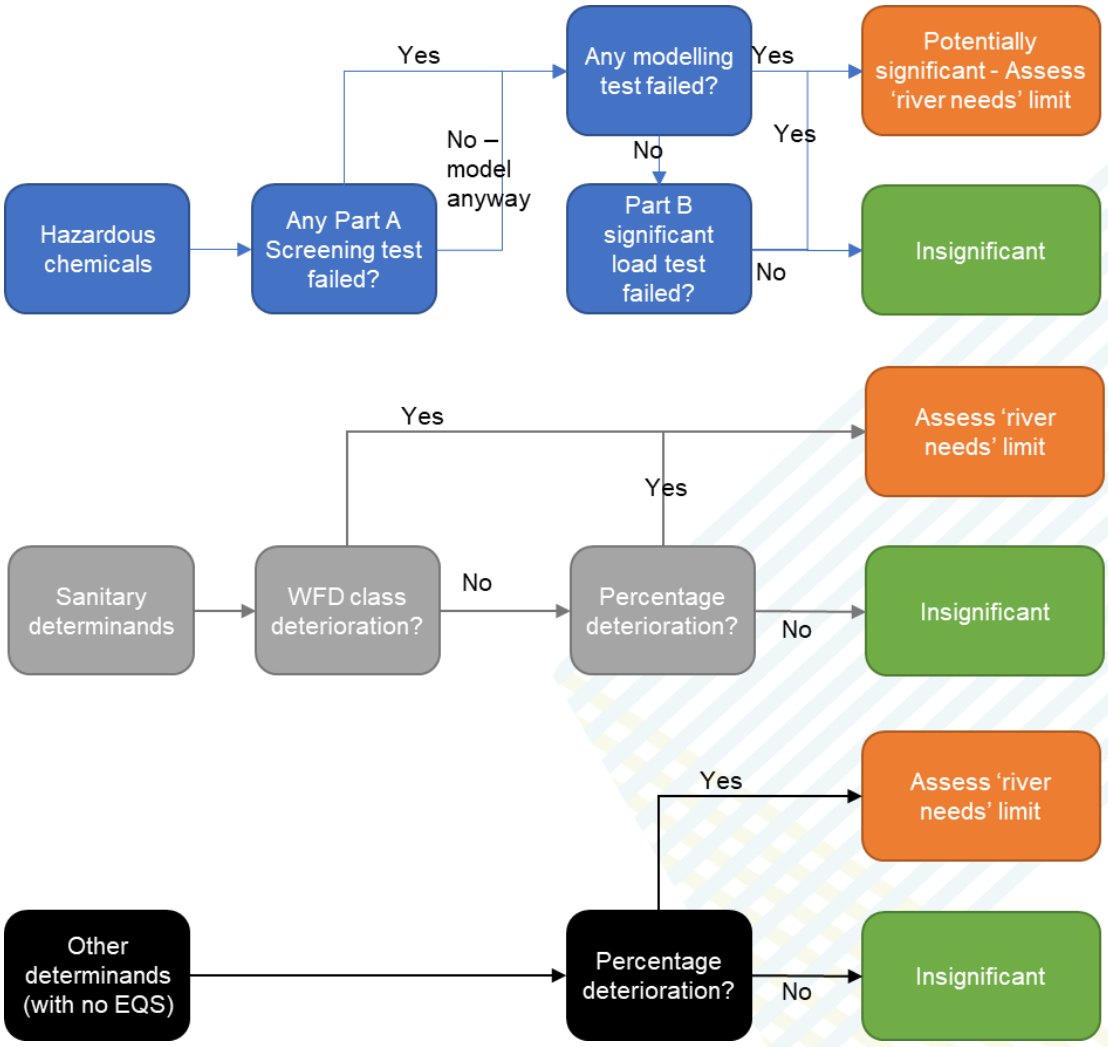
2.1 Introduction

The approach to this assessment was developed from the following sources:

- The Environment Agency's operational instruction on permitting of hazardous chemicals and elements in discharges to surface waters (Environment Agency, 2019). This includes advice on screening, cleaning quality data, modelling and tests to apply to assess whether a discharge is "potentially significant". It includes details of all current Environmental Quality Standards (EQSs) for hazardous substances.
- Similar guidance for assessing continuous discharges of sanitary determinands (Biological Oxygen Demand (BOD), ammonia, suspended solids) and nutrients (phosphorous and nitrogen). (Environment Agency, 2014). This includes Water Framework Directive (WFD). This includes WFD class standards for these determinands.
- EA operational instruction on assessing no deterioration under the WFD. (Environment Agency, 2012).

The structure of the assessment is shown in Figure 2-1:

Figure 2-1: Assessment flow chart

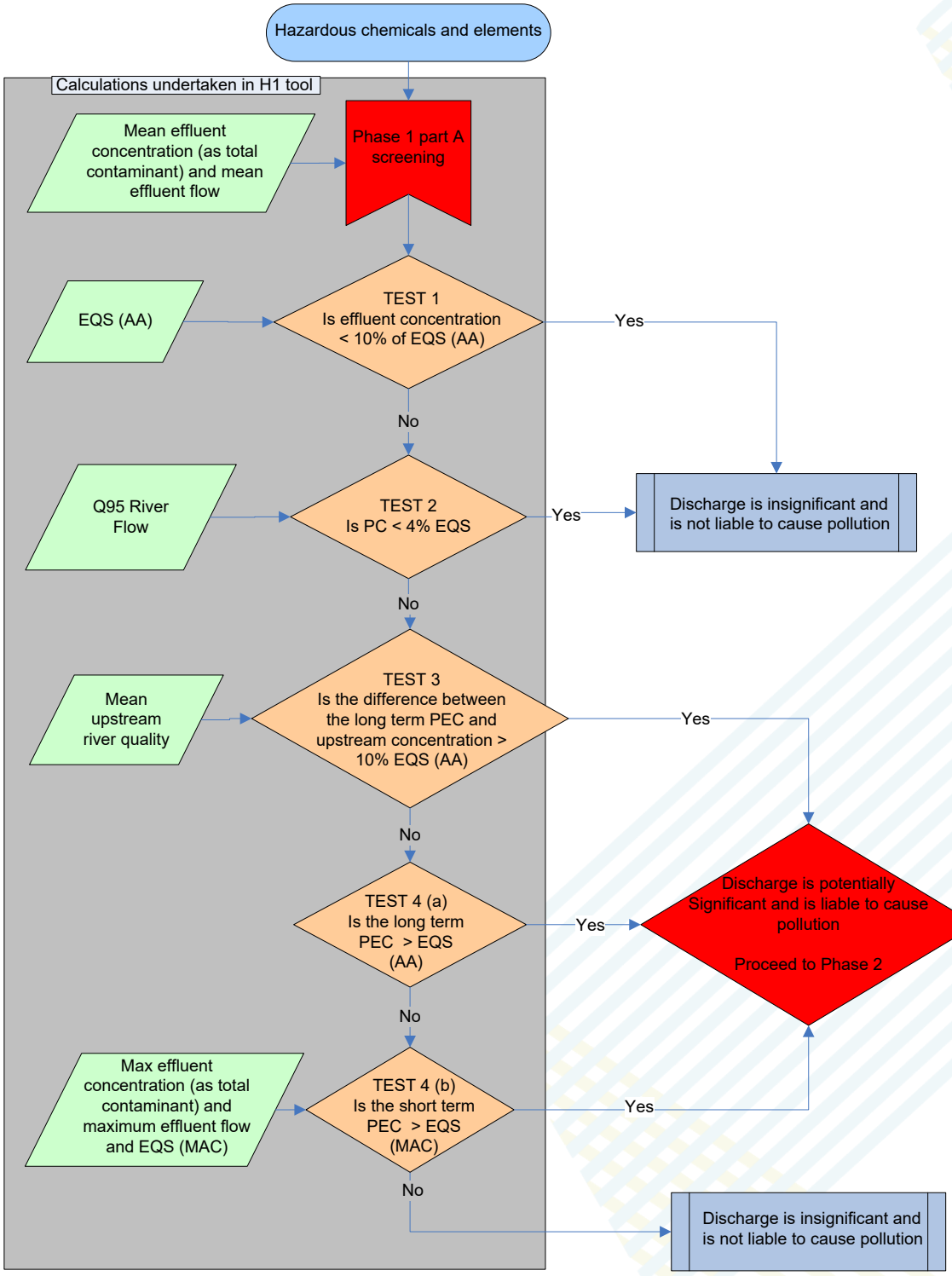


Adapted from figure 1 in (Environment Agency, 2019)

2.2 Screening

The EA Part A screening assessment for hazardous chemicals was applied to all determinands with an EQS. Screening tests were applied to raw (uncleaned) data. The process is set out in Figure 2-2.

Figure 2-2: Screening assessment



Note that the screening assessment requires an EQS to test against. Of the 162 determinands sampled in both the Minworth effluent and the proposed point of discharge at Atherstone, 52 do not have an EQS set and therefore the screening tests could not be applied. For assessing the impacts of the discharge at site 3 (Atherstone), this did not matter as it had been agreed that all determinands would be modelled. Determinands were, however, screened for modelling at sites 5 (Daventry) and 6 (Leighton Buzzard). For those determinands without an EQS, it was agreed with the EA to screen out if the mean and 95-percentile concentrations at the downstream site were worse than the modelled mixed mean and 95-percentile downstream of the proposed discharge at Atherstone, because in such cases the transfer could only improve, not deteriorate, water quality.

For those Priority Hazardous Substances where a significant load is defined (as a mass per year), the significant load test was also applied.

2.3 Modelling at the point of discharge

- Modelling was undertaken within the EA's River Quality Planning (RQP) suite. The Monte Carlo model was used for this assessment, with the exception of bioavailable metals (copper, lead, manganese, nickel and zinc) which used the Metals Permitting (MPer) tool.
- Flow statistics were determined for the proposed discharge and the receiving waterbody (see section 3).
- Modelling was undertaken using checked and processed data, as described in section 4.
- For all determinands with an EQS, Tests 1 and 2 as defined in Figure 2-3 were applied. In addition, the WFD class deterioration test was applied.
- As identified in Figure 2-3, the final two tests of whether there is likely to be deterioration in the effluent quality and whether there are locally-specific sensitivities were not performed. The rationale for this is addressed in sections 5.2.3 and 5.2.4.
- For the 52 sampled determinands where no EQS is set, it was not possible to undertake the full range of tests, however these were assessed for percentage deterioration, and to calculate the treatment standard that would be required to ensure no-deterioration.
- For each determinand three scenarios were modelled;
  - Impact of the discharge at existing concentrations,
  - Treatment required to meet the target (EQS), and
  - Treatment required to prevent deterioration.
- The tests relevant to each scenario and determinands type are summarised in Table 2-1.

Table 2-1: Relevance of tests to different determinands and scenarios

Scenario	Test	Test relevant to Hazardous Chemicals?	Test relevant to other determinands with an EQS?	Test relevant to determinands without an EQS?
Impact of the discharge at existing concentrations	Hazardous chemicals test 1a – is AA EQS exceeded or met with <95% confidence?	✓		
	Hazardous chemicals test 1b – is MAC EQS exceeded?	✓ (where MAX EQS is defined)		

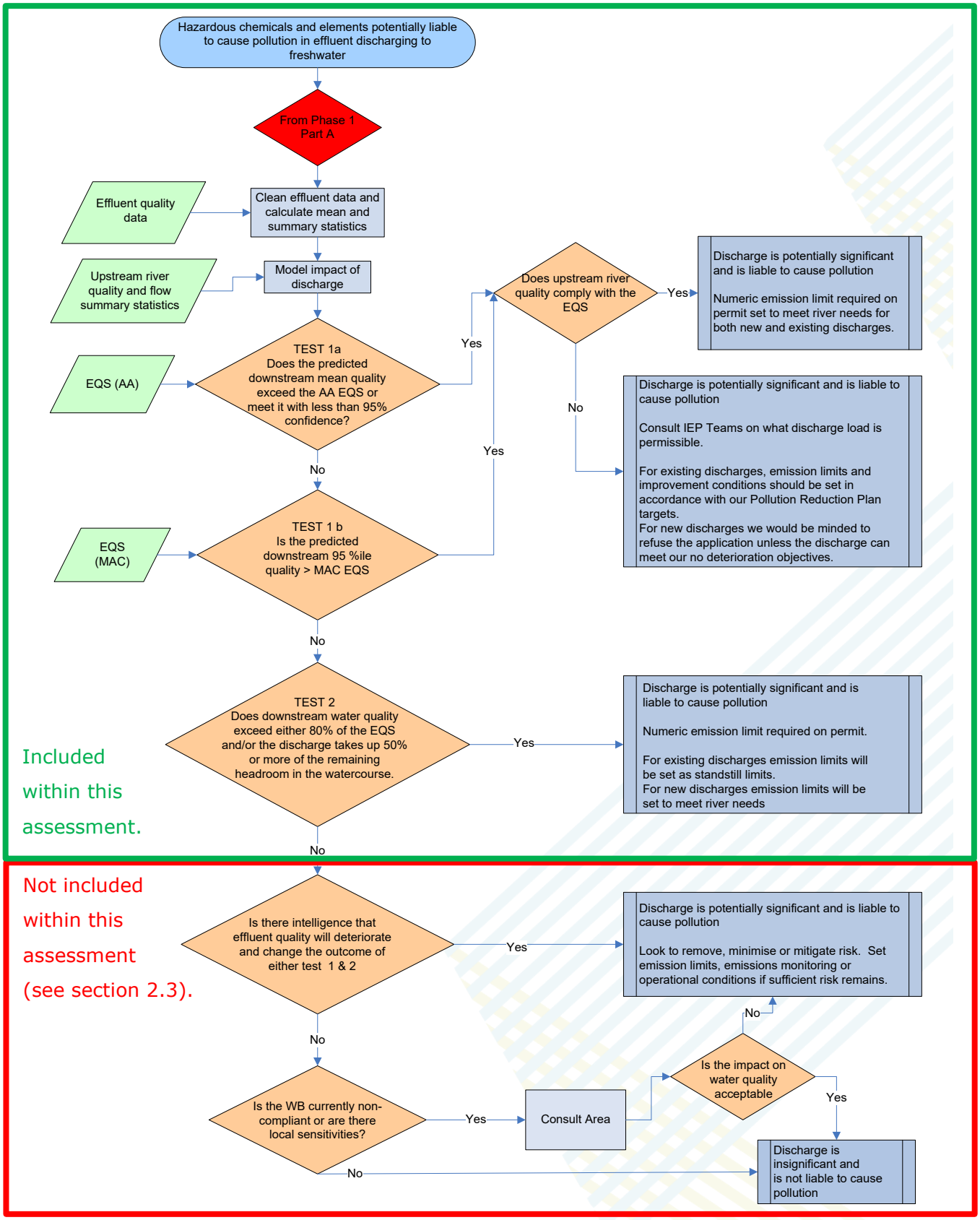
Scenario	Test	Test relevant to Hazardous Chemicals?	Test relevant to other determinands with an EQS?	Test relevant to determinands without an EQS?
	Hazardous chemicals test 2a – is d/s water quality >80% of EQS?	✓		
	Hazardous chemicals test 2b – is >50% of remaining EQS Headroom used?	✓		
	WFD – is a class deterioration predicted?	✓	✓	
	WFD – Is deterioration >10% (or >3% where EQS already exceeded)?	✓	✓	✓
Treatment required to meet the target (EQS)	What percentage treatment reduction is required to meet the AA EQS?	✓	✓	
	What percentage treatment reduction is required to meet the MAC EQS?	✓ (where MAX EQS is defined)	✓	
Treatment required to prevent deterioration	What percentage treatment reduction is required to prevent deterioration?	✓	✓	✓

2.4 Modelling downstream sites

For the downstream sampling sites 5 (Daventry) and 6 (Leighton Buzzard), the following additional assumptions were made:

- The "upstream" (background) water quality and flow in the canal at these locations would be defined using the water quality sampling and the Aquator model.
- The "discharge" flow would be the flow statistics for the Minworth effluent transfer, in other words no gains or losses of flow would be allowed for.
- The "discharge" quality statistics for each determinand at site 5 (Daventry) would be taken from the modelled, mixed results for that determinand at site 3 (Atherstone). So, whilst dilution, deposition and decay of substances along the canal route was not accounted for, the dilution occurring at the point of discharge was represented.
- Likewise, the "discharge" quality statistics for each determinand at site 6 (Leighton Buzzard) would be taken from the modelled, mixed results for that determinand at site 5 (Daventry).

Figure 2-3: Modelling process for Hazardous Substances



3 Flow data analysis

3.1 Canal flow

The Monte Carlo models require Mean and 95-percentile exceedance flows for the canal at the point of inflow. These were derived from a 60-year modelled period (1961-2021) from the calibrated Aquator model. The model report was subsequently reviewed by AfW, STW, The Trust and the EA. For full details see Annex A2.1 (JBA Consulting , 2022).

The modelled flow statistics applied in the water quality model were:

Table 3-1: Canal flow statistics from Aquator model

Sampling location	Aquator model reference	Mean flow	95-percentile flow
3 – Atherstone top lock	CC Atherstone Top Lock	5.364 Ml/d (0.062 m3/s)*	0.307Ml/d (0.004 m3/s)*
5 – Daventry	GU Lock 7	3.89 Ml/d (0.045 m3/s)	0.32 Ml/d (0.004 m3/s)
6 – Leighton Buzzard	GU Locks 28-29	3.63 Ml/d (0.042 m3/s)	1.53 Ml/d (0.018 m3/s)

* Note that The Trust gauge flow over the bypass weir at Atherstone Top Lock, where flows of up to 3Ml/d have been gauged. As reported in Annex A2.1, the model does not accurately represent this bypass flow, and it is considered that this may be due to the control curves used in the model pounds preventing the level from reaching the by weir and causing it to spill, or the fact that the model does not model this lock explicitly, but as part of a group of 6 locks.

It is, therefore, likely that the canal flow statistics at this location are conservative as they may under-estimate canal flows, at least during wetter weather periods. Further collaborative work with The Trust to review these control curves is recommended at Gate 3.

3.2 Discharge flow

The demand profile for the GUC SRO developed in the Affinity Water assessment "Capacity Needs and Utilisation Profile for Strategic Options" (Affinity Water, 2022) was simplified into a typical discharge value for each month. This is the same demand which has been applied to the "with-scheme" Aquator and hydraulic models. The monthly demand values relate to three levels of deployable output as shown in Table 3-2. In all cases it is assumed that the transfer discharge will be 15% greater than the Deployable Output, as stated in the capacity needs and utilisation assessment:

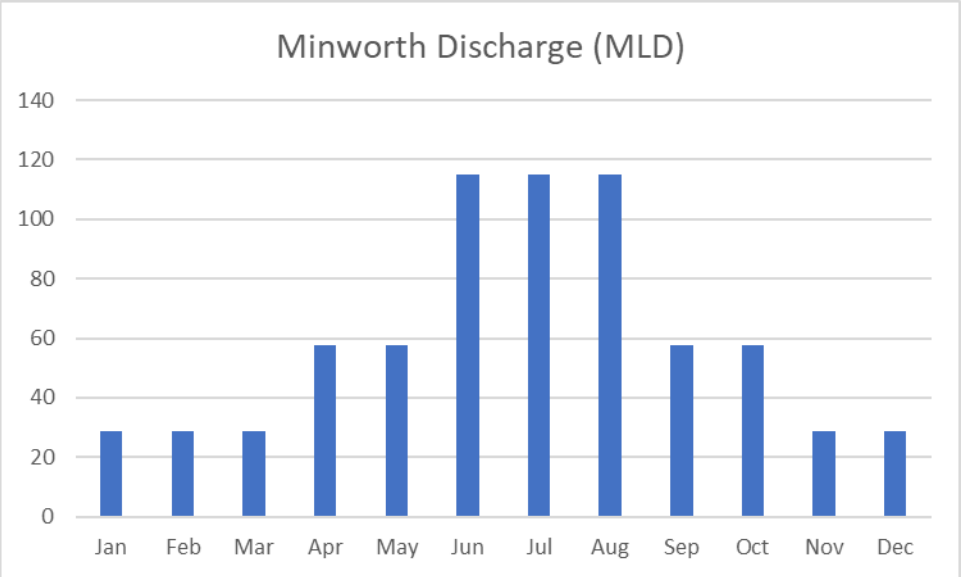
Table 3-2: Deployable Output levels

Deployable Output	Transfer discharge (DO +15%)	Notes
100Ml/d	115Ml/d	
50Ml/d	57.5Ml/d	
25Ml/d	27.85Ml/d	25% minimum turnover usage. This is considered to be required in order to maintain treatment and transfer assets.

The monthly utilisation is shown in Figure 3-1. This was applied to the water quality models as:

Mean	59.90 Ml/d
Standard Deviation	35.65 Ml/d

Figure 3-1: Monthly utilisation



3.3 Correlation of canal and Minworth discharge flow

The Monte Carlo and MPer models include a measure of correlation between data sequences. Where data sequences are closely related they are said to be correlated. An example would be a flow discharge from a WwTW into a river with a similar catchment area and time of concentration as the urban drainage system, in which case it is likely that there would be a high degree of correlation between river flow and discharge flow. The 'r' value is used to express the degree of correlation between two data sequences – a value of one means that the two data are totally correlated, a value of zero means that they are completely unrelated.

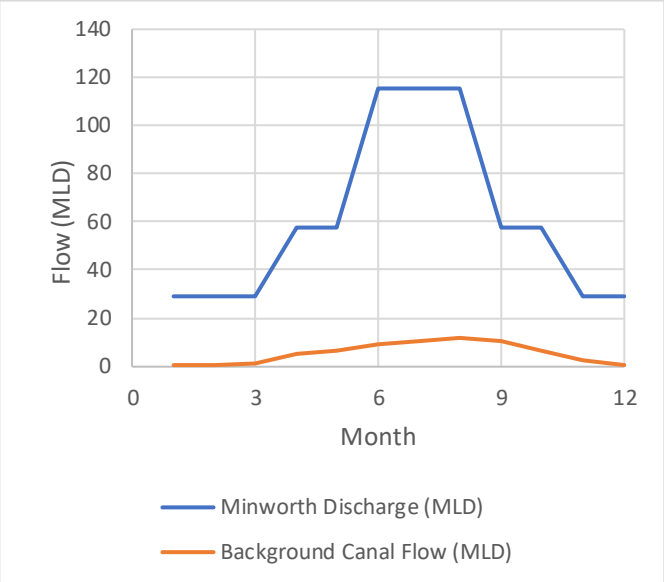
The correlation between the canal flow and discharge flow was assessed as follows:

- The 60-year flow results for the Aquator model at the three sampling locations were further analysed to identify monthly mean flows.
- Using the Excel Correlation tool, the correlation of monthly mean canal flow and monthly discharge from Minworth was correlated. Results indicate a strong positive correlation of 0.88 at site 3, 0.89 at site 5 and 0.91 at site 6. Data for site 3 is shown in Figure 3-2. This strong positive correlation is largely explained by higher rates of lockage (boat movement) and seepage (bed losses) defined in the Aquator model during the summer, which drives a demand from pumped feeders, resulting in higher canal flow during the summer than the winter. At the same time, demand in the Affinity Water area for the transfer is highest in the summer when consumer demand is high and yields from surface and groundwater resources are reduced.

Figure 3-2: Correlation of canal and discharge flow, site 3

Monthly flows

Month	Minworth Discharge (MLD)	Background Canal Flow (MLD)
Jan	28.75	0.3456
Feb	28.75	0.2592
Mar	28.75	1.2096
Apr	57.5	5.3568
May	57.5	6.3936
Jun	115	8.8128
Jul	115	10.2816
Aug	115	12.0096
Sep	57.5	10.4544
Oct	57.5	6.6528
Nov	28.75	2.2464
Dec	28.75	0.3456



Correlation

	Minworth Discharge (MLD)	Background Canal Flow (MLD)
Minworth Discharge (MLD)	1	
Canal Flow (MLD)	0.88	1

4 Water quality data analysis

4.1 Data sources

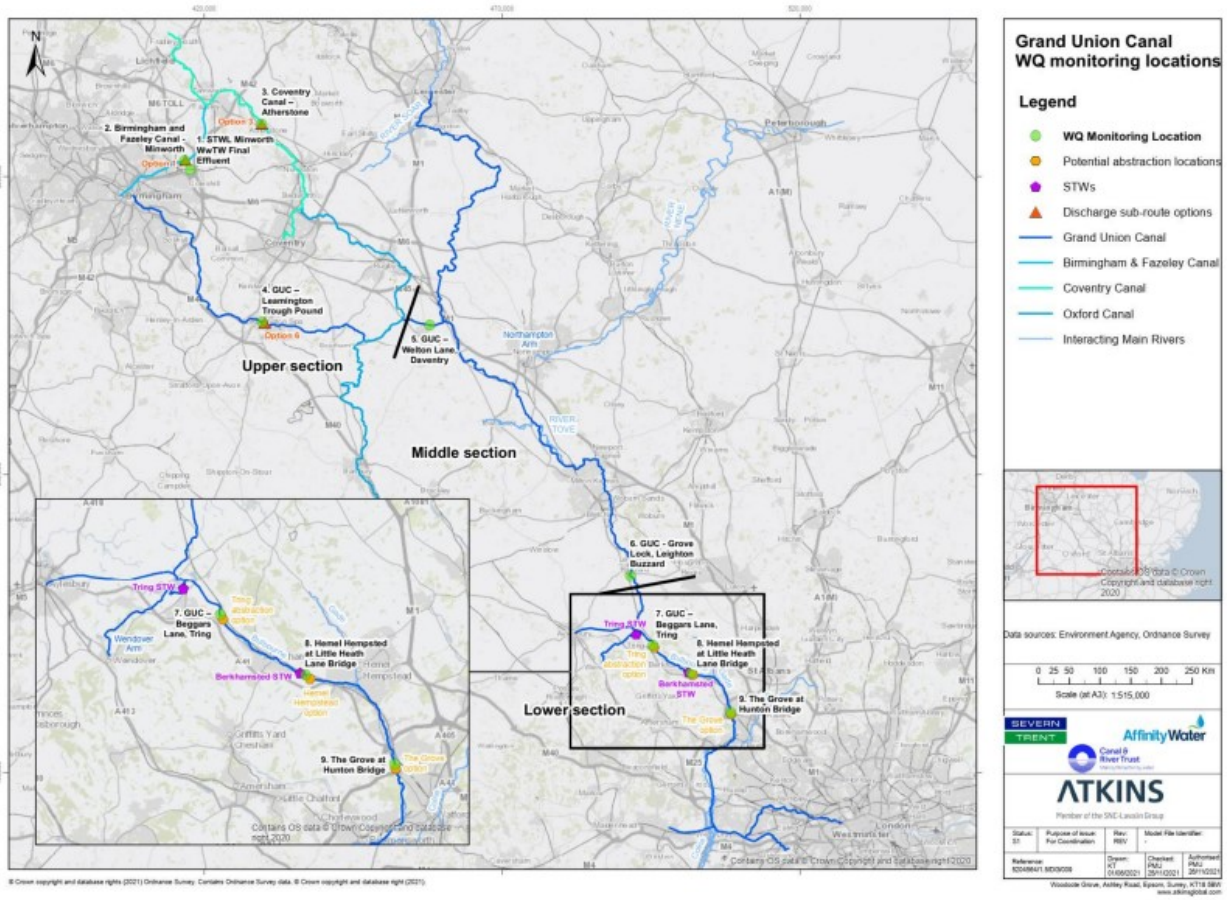
4.1.1 Water quality monitoring

The data examined and modelled was taken from the Water Quality Monitoring database – Round 13 v1.0 (Atkins, 2022). As shown in Figure 4-1, sampling was undertaken at nine locations, of which four sites are of interest to this study (the remainder not being significant following the selection of the preferred route for the transfer):

- Site 1, Minworth WwTW final effluent. Note that this is sampling the present-day final effluent (which will receive further treatment prior to discharge into the Canal).
- Site 3, Coventry Canal at Atherstone Top Lock
- Site 5, Grand Union Canal at Daventry
- Site 6, Grand Union Canal at Leighton Buzzard

13 rounds of sampling were undertaken, all were monthly spot samples taken between April 2021 and March 2022, except June 2021, in which two samples were taken. Laboratory analysis of samples was undertaken to confirm concentration of each determinand.

Figure 4-1: Plan of GUC SRO water quality sampling stations



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4.2 Data checks and preparation

The following data checks and preparation steps were undertaken prior to modelling:

- Treatment of "less-than" values
- Outliers
- Step changes

Note that the screening assessment was undertaken using the raw data prior to data checks being undertaken.

4.2.1 Treatment of "less-than" values

For each determinand, the laboratory sets a Limit of Detection (LOD). This is the lowest concentration which the test undertaken can reliably determine. Where this limit is reached, the laboratory results state that the value is said to be "qualified" as "less-than" the LOD. So, for example, the LOD for doramectin is 5ug/l. This concentration wasn't detected in the Coventry Canal at Atherstone, so the results are reported as <5ug/l.

For initial screening, the EA guidance (Environment Agency, 2019) recommends that the "face-value" is used. So, in the case of doramectin, the screening tests are based on the assumption that all individual samples were of a concentration of 5ug/l.

For modelling, the EA recommend that samples which are less than the LOD are considered to be half of the LOD. In the example of doramectin, this resulted in sample values being adjusted to 2.5ug/l.

Where a high proportion of samples, either in the discharge (site 1) or receiving waters (sites 3, 5 and 6) are qualified, there is a significant risk that this will influence the reliability of the results. In the presentation of results (tables in sections 5, 6, 7 and 8), determinands where 50% or more of the discharge and/or canal samples are qualified are marked with a **(Q)**. Results for these determinands should be treated with extra caution. A summary of qualified values is provided in Appendix D.

Note that for seven determinands (sulphide or hydrogen sulphide, abamectin, cyfluthrin, doramectin, ivermectin, methiocarb and silver dissolved), the LOD is greater than the Annual Average EQS (or greater than the 95 percentile EQS for cyfluthrin). For these determinands it is not possible to reliably assess current or future performance compared to the EQS.

4.2.2 Outliers

Outliers are values which differ significantly from the normal range of values encountered, inclusion of which in the Monte Carlo modelling might skew the results. Time series graphs were generated for all determinands to be assessed in the water quality impact assessment. Outliers were identified where they were 3 times the standard deviation above or below the mean value. Due to the way concentrations of some determinands were reported, we chose to include these statistical outliers in the modelling. This is because when examined they present little variation from the other values that were sampled. This reasoning for the inclusion or exclusion is outlined in Table 4-1 and Table 4-2 for Site 1 and 3 respectively.

4.2.3 Step changes

Step changes are permeant increases or decreases in the range of concentrations sampled. They may represent a new discharge, improved treatment at an existing discharge, or additional, unknown changes to the sources of contaminants. Step changes were identified visually using graphs for each determinand, when these were identified the corresponding graph has been included below. The graphs for every determinand are available if required.

4.2.4 Ammonia

The sampling results include values for ammoniacal nitrogen (mg/l as N), ammonia (mg/l as NH3) and ammonia (mg/l as N). The second two represent un-ionized ammonia, and the values are identical for all sites assessed.

The relevant EQSs are set for Ammoniacal Nitrogen, and therefore this determinand has been assessed in this study. Unionized ammonia is not normally consented in treated effluent, being more of a concern from untreated intermittent discharges, and is subject to a separate set of quality standards, the Fundamental Intermittent Standards (FIS), which require different modelling tools to assess compliance. For these reasons, un-ionized ammonia has not been included within this assessment.

4.3 Results for Site 1 Minworth WwTW - final effluent

4.3.1 Outliers

Table 4-1 identifies 14 possible outliers identified in the Site 1 data, and whether they are included (7) or excluded (7) when calculating the mean and standard deviation in the Monte Carlo analysis.

Table 4-1: Outliers, Site 1 Minworth WwTW - final effluent

Determinand	Outlying data point value	Date of sample	Include in modelling	Reason for decision
3-methylphenol (m-cresol)	0.03ug	10/01/2022	yes	only result not <0.02
octylphenols 4-(1,1',3,3'-tetramethylbutyl)phenol	0.01ug	10/01/2022	yes	only result not <0.01
ammoniacal nitrogen	1.1mg	19/04/2021	no	next closest is 0.41
chloronitrotoluenes	0.14ug	10/01/2022	no	only result that's not <0.02
cadmium total	0.05ug	01/06/2021	no	only result that's not <0.02
chlorine free	0.5mg	10/07/2021	no	exact values - all others 0.1
chlorine total	0.5mg	10/07/2021	no	exact values - all others 0.1
chloroform	1ug	07/02/2022	yes	only result not <1.0
chlorophyll	21ug	01/06/2021	yes	only result not <20.0
chromium total	140ug	10/05/2021	no	next closest is 12
chlorothalonil	0.35ug	21/06/2021	yes	only result not <0.035
dibutyl phthalate	0.1ug	10/05/2021	no	next closest is 0.04 - most are 0.01
diethyl phthalate	0.04ug	10/05/2021	yes	only result not <0.02

Determinand	Outlying data point value	Date of sample	Include in modelling	Reason for decision
MCPA	0.03ug	01/06/2021	yes	only result not <0.02

4.3.2 Step Changes

Maneb

There is potentially a step change for Maneb, a fungicide used to control potato and tomato blight, with the last two rounds of sampling as shown in Figure 4-2 below. The technical lead at Minworth was contacted. He could not identify obvious reason for a step change in concentrations of Maneb, although possibly it could be related to activities at a vegetable processing plant within the catchment. Two points is too few to be confident that this represents a lasting change, and all data points were included for this determinand.

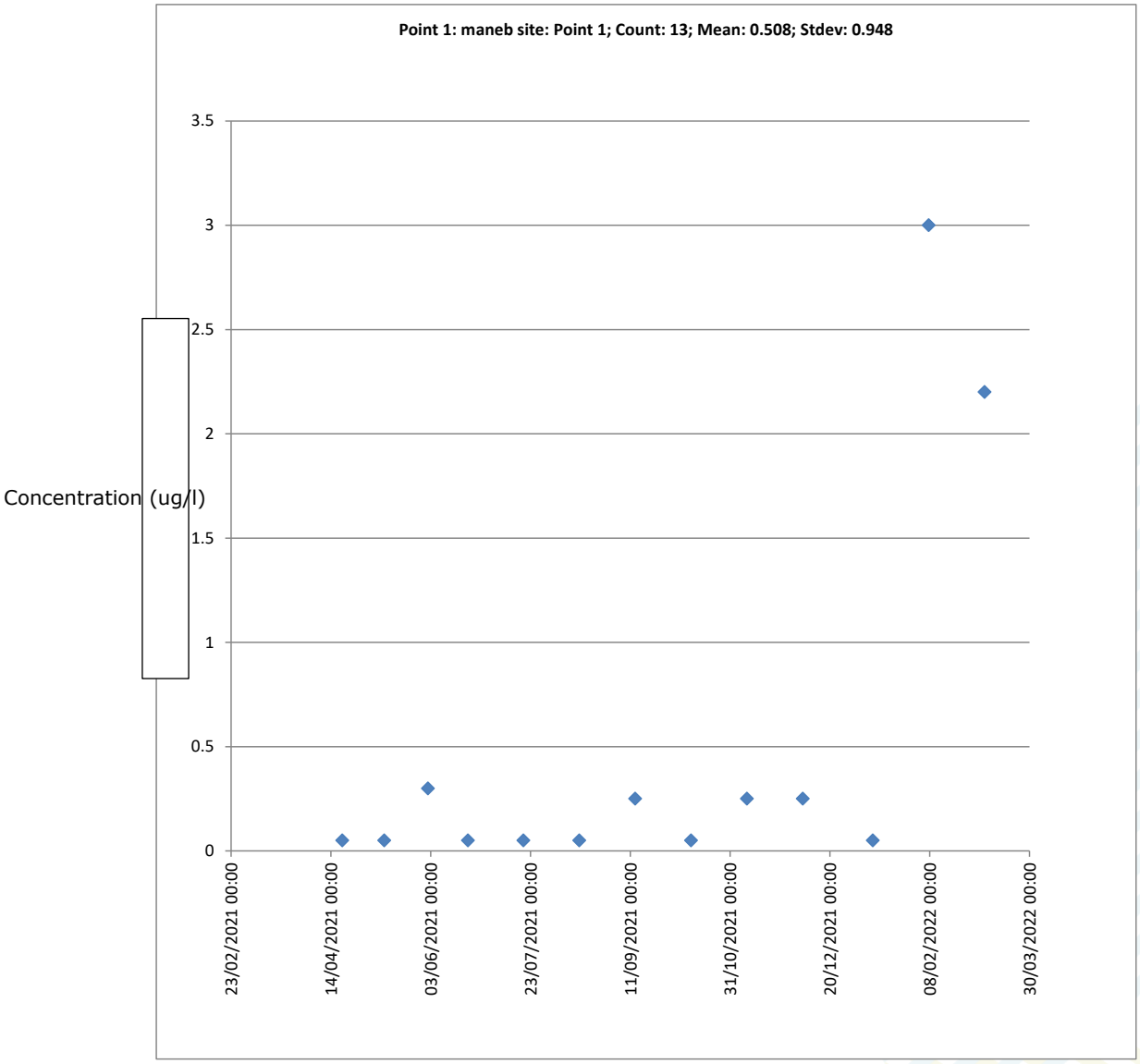


Figure 4-2: Maneb (ug/l) at Site 1

4.4 Results for Site 3 – Coventry Canal at Atherstone

4.4.1 Outlier data points

Table 4-2 identifies possible 28 outliers identified in the Site 1 data, and whether they are included (9) or excluded (19) when calculating the mean and standard deviation in the Monte Carlo analysis.

Table 4-2 – Outliers, Site 3 – Coventry Canal at Atherstone

Determinand	Outlying data point value	Date	Include in modelling	Reason for decision
3-methylphenol (m-cresol)	0.032ug	06/12/2021	yes	only result that's not <0.02 - halved to <0.01
4-methylphenol (p-cresol)	0.1ug	06/12/2021	no	except 0.05 only value not <0.02 halved to 0.01
aluminium dissolved	280ug	16/08/2021	no	next lowest value 54
bromide	2.5mg	07/02/2022	no	next lowest value 0.28
chemical oxygen demand (COD)	240mg	19/04/2021	no	next lowest value 28
cadmium dissolved	0.92ug	07/02/2022	no	next lowest value 0.25
cadmium total	1.14ug	07/02/2022	no	next lowest value 0.43
chromium total	20ug	21/06/2021	no	next lowest value 1.8
di(2-ethylhexyl)phthalate (DEHP)	0.19ug	07/02/2022	yes	only result that's not <1.5 - halved to <0.075
dibutyl phthalate	0.1ug	10/05/2021	no	except 0.03 only value not <0.02 halved to 0.01
iron dissolved	370ug	16/08/2021	no	next lowest value 49
glyphosate	0.12ug	21/06/2021	yes	only result that's not <0.1 - halved to <0.05
mecoprop	0.03ug	19/04/2021	yes	only result that's not <0.02 - halved to <0.01
maneb	1.5ug	07/02/2022	no	next lowest value 0.25
mancozeb	1.3ug	07/02/2022	no	next lowest value 0.3
np4	0.06ug	19/04/2021	yes	only result that's not <0.04 - halved to 0.02
polychloro chloromethyl sulphonamido diphenyl ethe	0.5ug	06/12/2021	no	only result that's not <0.2 - halved to 0.1

Determinand	Outlying data point value	Date	Include in modelling	Reason for decision
lead dissolved	2.8ug	16/08/2021	no	next lowest value 0.52
permethrin	0.002ug	19/07/2021	yes	except 0.001 only value not <0.001 halved to 0.0005
tin dissolved	0.9ug	06/12/2021	no	except 0.5 only value not <0.4 halved to 0.2
tin total	0.9ug	06/12/2021	no	except 0.5 only value not <0.4 halved to 0.2
tetrachloroethane	0.25ug	06/12/2021	no	only result that's not <0.1 - halved to 0.05
triphenyltin compounds (as tryphenyltin cation)	0.009ug	01/06/2021	no	except <0.0002 only value not <0.002 halved to 0.001
tributyl phosphate	0.02ug	11/10/2021	yes	only result that's not <0.02 - halved to 0.01
triclosan	0.02ug	19/04/2021	yes	only result that's not <0.01 - halved to 0.005
zinc dissolved	180ug	07/02/2021	no	next lowest value 63 - already taken out of the data
zinc total	210ug	07/02/2022	no	next lowest value 77 - already taken out of the data
octylphenol triethoxylate	0.02ug	19/04/2021	yes	only result that's not <0.02 - halved to 0.01

4.4.2 Step changes in data

No strong step changes were detected for any determinand at this site. However, Nitrate as NO_3 and N did show a potential step change in the data as shown below in Figure 4-3 and Figure 4-4. This may represent a seasonal change, perhaps as a result of agricultural runoff. The Trust's Environmental Scientist responsible for the Coventry Canal commented *"'I can confirm that we have had no pollution reports along the Coventry Canal in Atherstone. I don't know the exact point location you are referring to but I have observed a number of outfalls in this location that are recorded on our GIS system. These include:*

- *Severn Trent Outfall 120 (Trust Functional Location CC-027-035) – X 430642, Y 297462*
- *Private Sewage Discharge (EA consented EPRUP3623GL) ASHLEIGH NURSERY SCHOOL, CV9 2PA – X 430252, Y 298142*
- *X2 Highway England Outfalls 13 & 14 (Trust Functional Location CC-028-016) – X 430214, Y 298183*

It's also worth noting that this can be a busy stretch for boats and there are a number of canal basins along this section in which we sometimes have sewage discharge issues. Also land-use shows allotments near Atherstone at 1 Penny Hapenny Ct, Atherstone CV9 2AA, potential source of nitrate".

With no clear evidence to indicate that this is a permanent step change, all data points were used for the water quality impact analysis for these determinands.

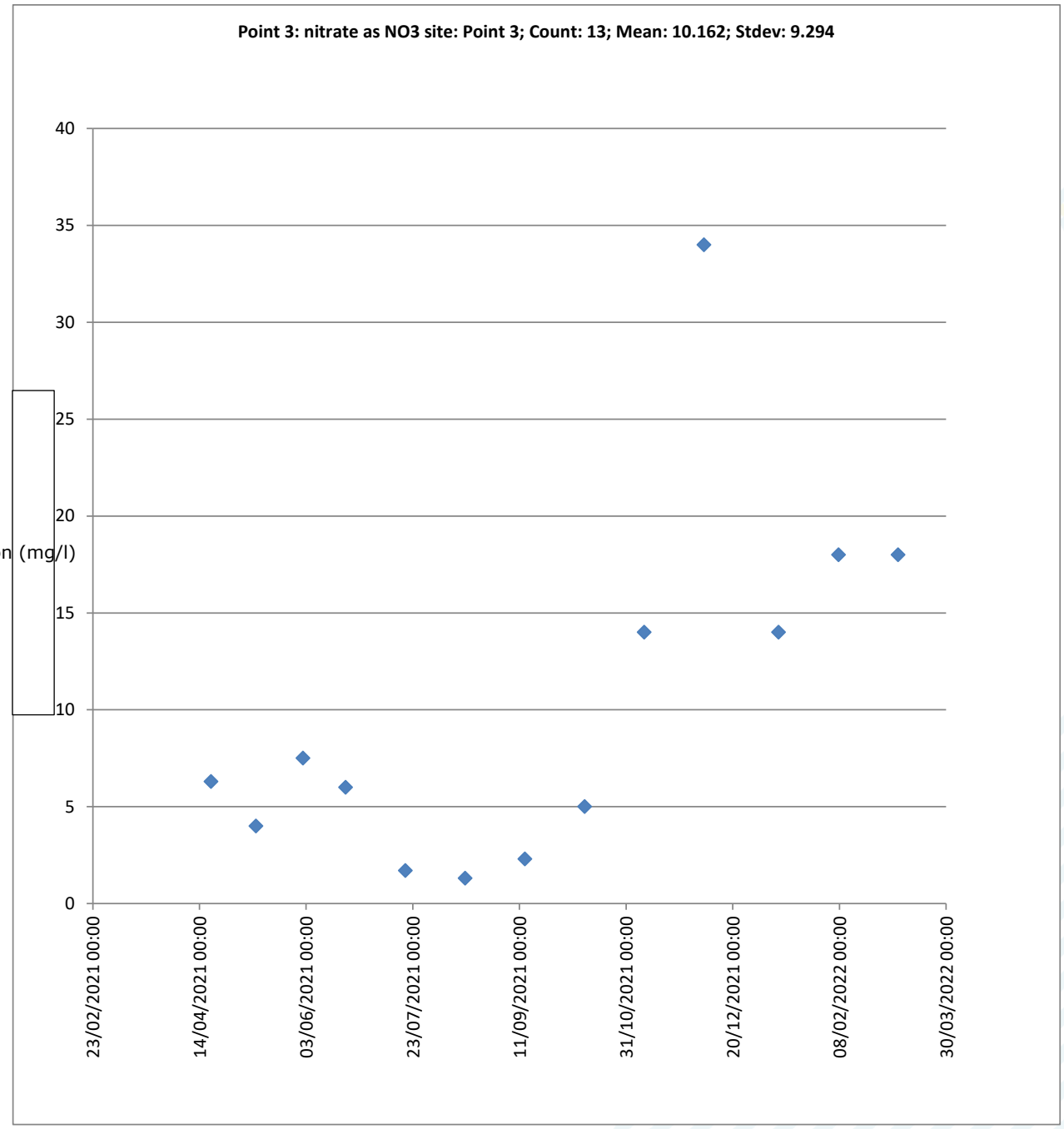


Figure 4-3 – Nitrate as NO3 mg/l at Site 3

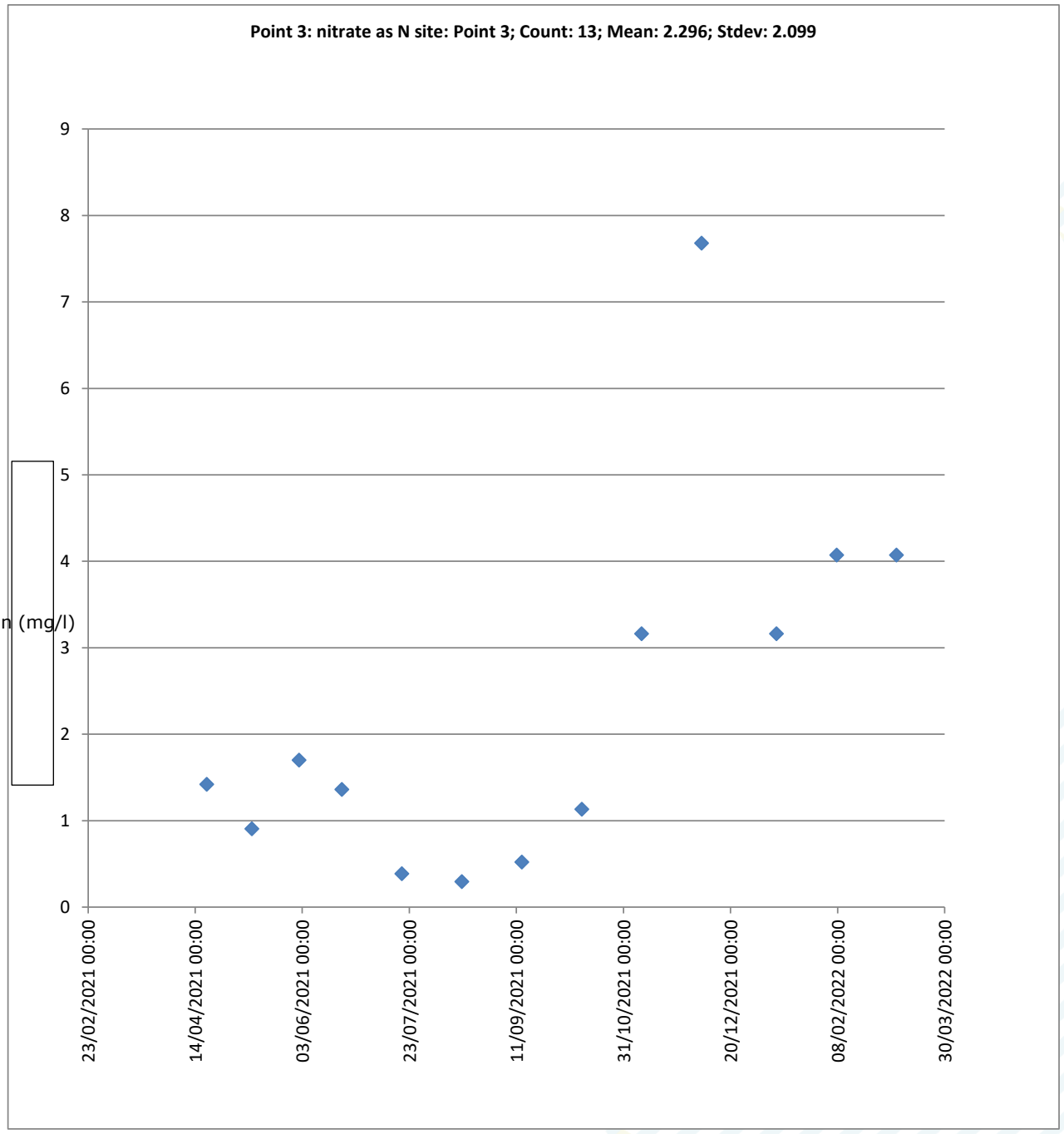


Figure 4-4 – Nitrate as N mg/l at Site 3

4.5 Results for Site 5 GUC at Daventry

4.5.1 Outliers

Table 4-3 identifies 10 possible outliers identified in the Site 5 data, all of which have been included in the Monte Carlo analysis.

Table 4-3 Outliers, Site 5-GUC and Daventry

Determinand	Outlying data point value	Date	Include in modelling	Reason for decision
antimony dissolved	2.1ug/l	10/05/2021	yes	all other values <0.57
antimony total	2.1ug/l	10/05/2021	yes	all other values <0.57
cadmium dissolved	0.03ug/l	06/12/2021	yes	only value not 0.01
cadmium total	0.1ug/l	07/03/2022	yes	all other values <0.03
cypermethrin	0.00009ug/l	10/05/2021	yes	only value not 0.00004
mercury dissolved	0.016ug/l	19/04/2021	yes	all other values <0.006
nickel total	15ug/l	07/03/2022	yes	all other values <3.5
tributyltin compounds (as tributyltin cation)	0.00008ug/l	16/08/2021	yes	lowest value is 0.000015
triclosan	0.02ug/l	19/04/2021	yes	only value not 0.005
zinc total	110ug/l	10/01/2022	yes	all other values <33

4.5.2 Step changes in data

No strong step changes were detected for any determinand at this site. However, Nitrate as NO_3 and N did show a potential step change in the data as shown below in Figure 4-5- Nitrate as NO3 mg/l at site 5 and Figure 4-6- Nitrate as N mg/l at Site 5, Figure 4-3. This may represent a seasonal change, perhaps as a result of agricultural runoff. The pattern is very similar to that observed at site 3 (see Figure 4-3 and Figure 4-4).

With no clear evidence to indicate that this is a permanent step change, all data points were used for the water quality impact analysis for these determinands.

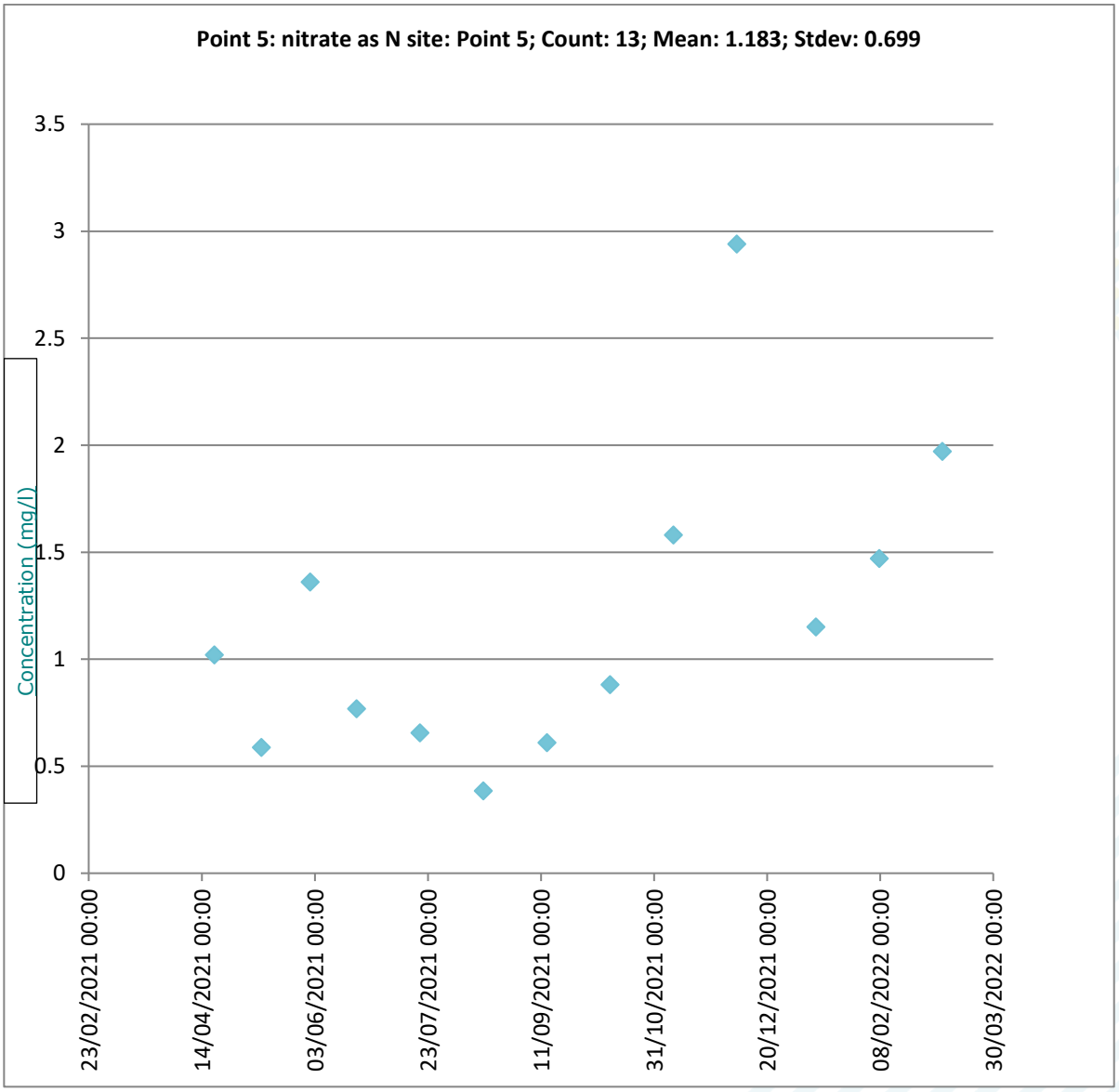


Figure 4-5- Nitrate as NO3 mg/l at site 5

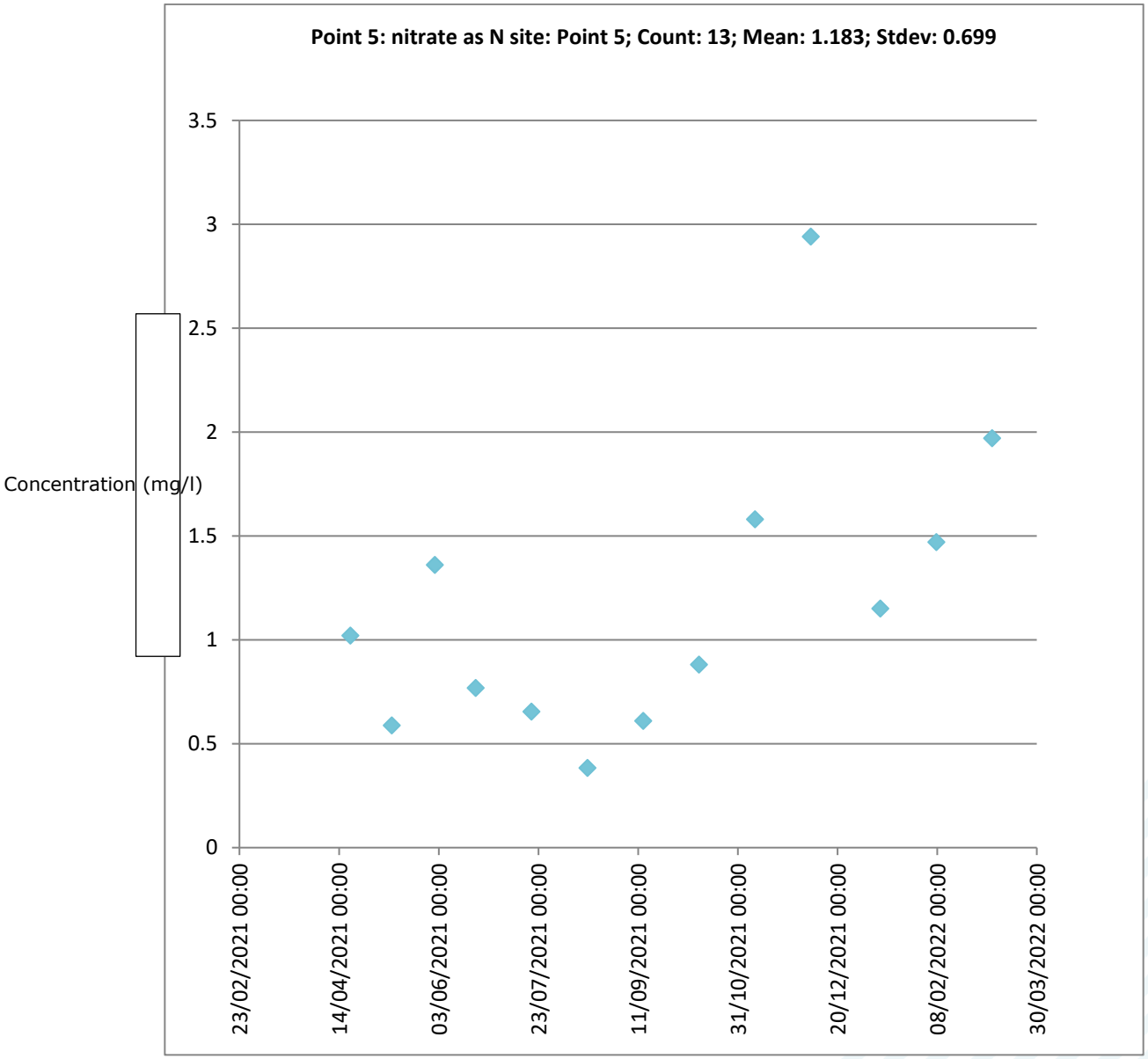


Figure 4-6- Nitrate as N mg/l at Site 5

4.6 Results for Site 6 GUC at Leighton Buzzard

4.6.1 Outliers

Table 4-4: Outliers, Site 5, GUC at Daventry identifies 8 possible outliers identified in the Site 6 data, and whether they are included (9) or excluded (1) when calculating the mean and standard deviation in the Monte Carlo analysis.

Table 4-4: Outliers, Site 5, GUC at Daventry

Determinand	Outlying data point value	Date	Include in modelling	Reason for decision
chromium total	8.6ug/l	09/11/2021	yes	all other values <3.4ug/l
nickel dissolved	7.1ug/l	20/10/2021	yes	all other values <2.1

Determinand	Outlying data point value	Date	Include in modelling	Reason for decision
nickel total	9.4ug/l	20/10/2021	yes	all other values <4.1
perfluorooctanoic acid (PFOA)	0.0051ug/l	14/09/2021	yes	all other values <0.0024
sulphide or hydrogen sulphide	210ug/l	12/10/2021	yes	all other values <28
zinc total	46ug/l	20/10/2021	yes	all other values <19
benzo(a)pyrene	0.134ug/l	20/10/2021	yes	all other values <0.0272
fluoranthene	0.109ug/l	20/10/2021	no	all other values <0.023

4.6.2 Step changes in data

No strong step changes were detected for any determinand at this site.

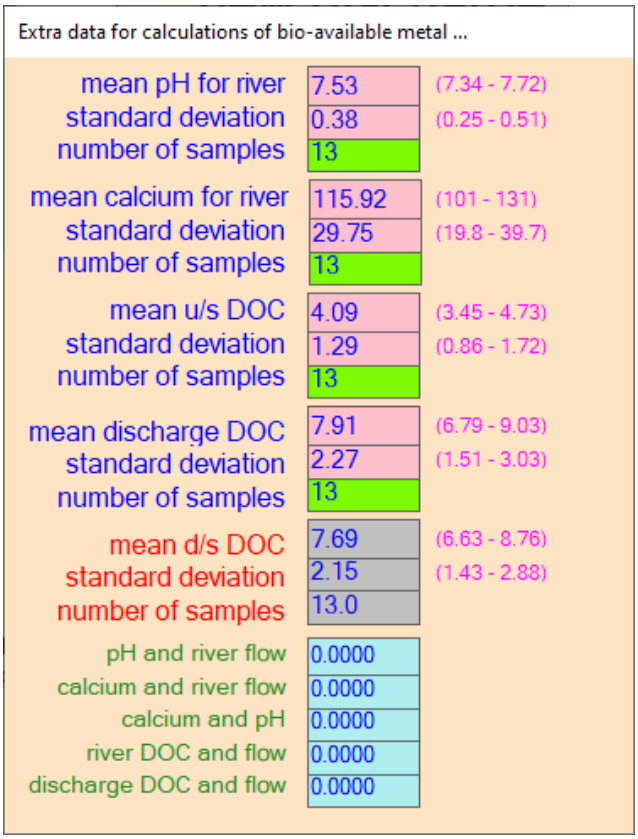
4.7 Correlation of flow and quality

The RQP default correlations for river flow and quality (-0.3) and for effluent flow and quality (-0.2) were applied, indicating that effluent and river quality is considered to reduce slightly with higher flows. Neither the canal system, where flow is largely driven by boat usage, and the effluent transfer, demand for which will be driven by hydrologic and seasonal changes in the Affinity Water area, are expected to act like a typical wastewater discharge into a river.

4.8 Bioavailable metals

In order to model bioavailable metals in the MPer application, additional quality statistics are required for pH, calcium and dissolved organic carbon (DOC) in the discharge and for DOC in the upstream watercourse. MPer uses these to calculate the bioavailable concentrations of copper, lead, manganese, nickel and zinc. The values used are shown below.

Figure 4-7: Extra data for bioavailable calculations in MPer



4.9 Environmental quality standards

4.9.1 General approach

- The EQSs applied in the modelling and to assess the tests in the screening and modelling stages were obtained from the EA's instructions on hazardous chemicals (Environment Agency, 2019) and sanitary determinands (Environment Agency, 2014).
- For these determinands, the Catchment Data Explorer (Environment Agency, 2022) was consulted to obtain the relevant class standards, however the Canal is shown as 'not assessed' for physico-chemical quality elements. Therefore, the relevant class boundaries have been assumed based on the existing water quality, as described below for the three sites.

4.9.2 Site 3- Coventry Canal at Atherstone Top Lock

- For BOD and ammonia standards, the river type needs to be defined based on altitude and alkalinity. Atherstone top lock is at c.85mAOD, and has a mean alkalinity of 116mg/l as Ca CO_3, putting it in Type 6.
- Standards for phosphorous are also determined on altitude and alkalinity, putting the Canal in Type 4n.

Table 4-5: De facto classes and class boundaries for sanitary determinands, site 3

Determinand	Water Body Type	Observed value	Assumed class
BOD	Type 6	8.04mg/l (90th percentile)	**Bad** (boundary for Poor is 7.5mg/l so current performance is Bad)

Determinand	Water Body Type	Observed value	Assumed class
Ammonia (Ammoniacal Nitrogen)	Type 6	0.274mg/l (90th percentile)	**Good** (boundary for Good is 0.3mg/l)
Phosphorous	Type 4n	0.316mg/l (Annual Average)	**Poor** (boundary for Poor is 1.0mg/l

4.9.3 Site 5- Grand Union Canal at Daventry

- For BOD and ammonia standards, the river type needs to be defined based on altitude and alkalinity. The GUC at Daventry is at c.115mAOD, and has a mean alkalinity of 149mg/l as Ca CO_3, putting it in Type 6.
- Standards for phosphorous are also determined on altitude and alkalinity, putting the Canal in Type 4n.

Table 4-6: De facto classes and class boundaries for sanitary determinands, site 5

Determinand	Water Body Type	Observed value	Assumed class
BOD	Type 6	5.28mg/l (90th percentile)	**Moderate** (boundary for Moderate is 6.0mg/l
Ammonia (Ammoniacal Nitrogen)	Type 6	0.428mg/l (90th percentile)	**Moderate** (boundary for Moderate is 0.75mg/l)
Phosphorous	Type 4n	0.431mg/l (Annual Average)	**Poor** (boundary for Poor is 1.0mg/l

4.9.4 Site 6- Grand Union Canal at Leighton Buzzard

- For BOD and ammonia standards, the river type needs to be defined based on altitude and alkalinity. The GUC at Leighton Buzzard is at c.85mAOD, and has a mean alkalinity of 177mg/l as Ca CO_3, putting it in Type 6.
- Standards for phosphorous are also determined on altitude and alkalinity, putting the Canal in Type 4n.

Table 4-7: De facto classes and class boundaries for sanitary determinands, site 6

Determinand	Water Body Type	Observed value	Assumed class
BOD	Type 6	11.84mg/l (90th percentile)	**Bad** (boundary for Poor is 7.5mg/l so current performance is Bad)
Ammonia (Ammoniacal Nitrogen)	Type 6	0.615mg/l (90th percentile)	**Moderate** (boundary for Moderate is 0.75mg/l)
Phosphorous	Type 4n	0.548mg/l (Annual Average)	**Poor** (boundary for Poor is 1.0mg/l

4.1 Data management

Raw and processed data for all determinands was collated into a single spreadsheet. This was set up to generate input files for Monte Carlo and MPer, enabling model values to be imported directly into the modelling software. The full input data to the screening and modelling is tabulated in Appendix A.

4.2 Notes on the modelling process

- For metals with a bioavailable EQS, the assessment should be undertaken on the dissolved metal, rather than the total. For completeness, the assessment was carried out on both dissolved and total. The outcome of the hazardous chemicals and WFD tests was the same for dissolved and total in all cases (copper, lead, manganese, nickel and zinc).
- For metals with a dissolved EQS, EA guidance is that both total and dissolved are assessed, with the risk to EQS assessed on the total concentrations.
- Within Monte Carlo, some smaller values such as standard deviation are sometimes too small and are automatically set to either small values, such as 0.001 or to a percentage of the mean (1% of mean for river quality and 0.1% of mean for discharge quality). The following determinands have a discharge quality too small to load in Monte Carlo and as such have had their mean upstream quality, discharge quality, and downstream target (where available), multiplied by 1,000 to input into the model. They are BDE-28, BDE-47, Cypermethrin, Hexabromocyclododecane (HDCCD), Mercury dissolved, Perfluorooctanoic Acid (PFOA), Permethrin, and Triphenyltin compounds (as Tryphenyltin Cation). Model output results for these determinands were then divided by 1,000 to return them to their original unit.

5 Results for Site 3, Coventry Canal at Atherstone

5.1 Screening

Five Part A screening tests were undertaken on the full suite of determinands.

- Test 1: Does the concentration of the substance in the discharge exceed 10% of the EQS?
- Test 2: Does the process contribution (PC) exceed 4% of the EQS?
- Test 3: Does the difference between upstream quality and the Predicted Environmental Concentration (PEC) exceed the 10% of the EQS?
- Test 4a: Is the long-term PEC greater than the annual average EQS?
- Test 4b: Is the short-term PEC greater than the maximum (MAC) EQS?

In addition, the Part B screening significant load test was applied for the six determinands where an annual Significant Load has been defined (mercury dissolved, mercury total, nonylphenols (4-nonylphenol technical mix), cadmium dissolved, cadmium total and tributyltin compounds (as tributyltin cation)).

Results of the screening for the 160 determinands sampled at both Minworth and the Coventry Canal at Atherstone were as follows:

- For 75 determinands, all tests are passed and the screening results indicate that the discharge is "not significant".
- 50 determinands do not have an AA EQS set and therefore the screening tests cannot be applied.
- 35 determinands are screened as "potentially significant" because, in accordance with the process shown in Figure 2-2, they fail on screening tests 1 and/or2 and then also fail on at least one of tests 3, 4a and 4b. These are listed in Table 5-1.
- No additional determinands were screened in by the Significant Load test, although this was failed for nonylphenols.

Where a determinand would normally be screened out following the tests, all determinands have been taken forward following guidance from the Environment Agency. The full screening results are presented in Appendix B.

Table 5-1: Determinands identified as "potentially significant" by the screening tests

Determinand	Screening Test 1 (<10% of EQS)	Screening Test 2 (PC <4% EQS	Screening Test 3 (PEC-upstream concentration>10% EQ	Screening Test 4a (Long-term PEC>AA EQS)	Screening Test 4b (Short-term PEC>MAC EQS)	Screening Test 5 (Is the Significant Load exceeded
3,4-dichloroaniline	Fail	Fail	Pass	Fail	Pass	Pass
abamectin	Fail	Fail	Pass	Fail	Fail	Pass
azinphos methyl, dissolved	Fail	Fail	Pass	Fail	Pass	Pass
benzo(a)pyrene	Fail	Fail	Pass	Fail	Pass	Pass
bromine - total residual oxidant	Fail	Fail	Pass	Fail	Fail	Pass
chlorothalonil	Fail	Fail	Fail	Fail	Pass	Pass
chromium (VI) dissolved	Fail	Fail	Pass	Fail	Pass	Pass
copper dissolved	Fail	Fail	Pass	Fail	Pass	Pass
copper total	Fail	Fail	Pass	Fail	Pass	Pass
cyanide total	Fail	Fail	Pass	Fail	Pass	Pass
cypermethrin	Fail	Fail	Fail	Fail	Pass	Pass
dichlorvos	Fail	Fail	Pass	Fail	Fail	Pass
doramectin	Fail	Fail	Pass	Fail	Fail	Pass
formaldehyde	Fail	Fail	Pass	Fail	Fail	Pass
hexabromocyclododecane (HBCDD)	Fail	Fail	Fail	Pass	Pass	Pass
ivermectin	Fail	Fail	Pass	Fail	Fail	Pass
malachite green	Fail	Fail	Pass	Fail	Pass	Pass
malathion	Fail	Fail	Pass	Fail	Pass	Pass
mancozeb	Fail	Fail	Fail	Pass	Pass	Pass
manganese dissolved	Fail	Fail	Pass	Fail	Pass	Pass
manganese total	Fail	Fail	Pass	Fail	Pass	Pass
methiocarb	Fail	Fail	Pass	Fail	Pass	Pass
nickel dissolved	Fail	Fail	Pass	Fail	Fail	Pass
nickel total	Fail	Fail	Pass	Fail	Fail	Pass
nonylphenols (4-nonylphenol technical mix)	Fail	Fail	Fail	Pass	Pass	Fail
perfluorooctane sulfonic acid (PFOS)	Fail	Fail	Fail	Fail	Pass	Pass
permethrin	Fail	Fail	Fail	Fail	Pass	Pass
polychloro chloromethyl sulphonamido diphenyl ethe	Fail	Fail	Fail	Fail	Pass	Pass
silver dissolved	Fail	Fail	Pass	Fail	Fail	Pass
sulphide or hydrogen sulphide	Fail	Fail	Pass	Fail	Fail	Pass
total phosphorus	Fail	Fail	Fail	Pass	Pass	Pass
triazophos	Fail	Fail	Pass	Fail	Pass	Pass
triclosan	Fail	Fail	Fail	Pass	Pass	Pass
zinc dissolved	Fail	Fail	Fail	Fail	Pass	Pass
zinc total	Fail	Fail	Fail	Fail	Pass	Pass

5.2 Modelling

Three scenarios have been tested on the determinands within Monte Carlo / MPer:

- Impact of input on discharge quality
- Required discharge quality to meet target/EQS
- Required discharge quality to prevent deterioration

The full suite of results are presented in Appendix C.

5.2.1 Impact of the discharge at existing concentrations

5.2.1.1 Hazardous chemicals modelling tests

Of the 162 determinands modelled:

- 88 pass all of the hazardous chemicals modelling tests.
- 42 determinands do not have either an AA or MAC EQS and therefore the hazardous chemicals modelling tests cannot be applied.
- 30 determinands fail one or more of the modelling tests. These are listed in Table 5-2. For 18 of these, the EQS is already exceeded in the Coventry Canal.

Table 5-2: Determinands which fail one or more of the hazardous chemicals modelling tests

Determinand	Fails AA EQS modelling tests	Does the water body pass AA EQS at present?	Fails MAC EQS modelling tests	Does the water body pass MAC EQS at present?
3,4-dichloroaniline **(Q)**	✓	Fail		Pass
Abamectin **(Q)**	✓	Fail	✓	Fail
azinphos methyl, dissolved **(Q)**	✓	Pass		No MAC EQS
benzo(a)pyrene	✓	Fail		Pass
bromine - total residual oxidant	✓	Fail	✓	Fail
chromium (VI) dissolved **(Q)**	✓	Fail		No MAC EQS
cyanide total **(Q)**	✓	Fail		No MAC EQS
cyfluthrin **(Q)**		No AA EQS	✓	Fail
cypermethrin **(Q)**	✓	Pass	✓	Pass
dichlorvos **(Q)**	✓	Pass		Pass
doramectin **(Q)**	✓	Fail	✓	Fail
formaldehyde **(Q)**	✓	Fail		Pass
ivermectin **(Q)**	✓	Fail	✓	Fail
malachite green **(Q)**	✓	Pass		Pass
malathion **(Q)**	✓	Pass		No MAC EQS
mancozeb **(Q)**	✓	Pass		Pass
manganese dissolved	✓	Fail		Fail
manganese total	✓	Fail		Fail
methiocarb **(Q)**	✓	Fail		Pass
nickel dissolved	✓	Fail		Fail
nickel total	✓	Fail	✓	Fail
nonylphenols (4-nonylphenol technical mix) **(Q)**	✓	Pass		Pass
perfluorooctane sulfonic acid (PFOS)	✓	Fail		Pass
permethrin **(Q)**	✓	Pass	✓	Pass

Determinand	Fails AA EQS modelling tests	Does the water body pass AA EQS at present?	Fails MAC EQS modelling tests	Does the water body pass MAC EQS at present?
polychloro chloromethyl sulphonamido diphenyl ethe **(Q)**	✓	Fail		No MAC EQS
silver dissolved **(Q)**	✓	Fail	✓	Fail
sulphide or hydrogen sulphide **(Q)**	✓	Fail	✓	Fail
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	✓	Fail		No MAC EQS
triazophos **(Q)**	✓	Fail		No MAC EQS
zinc dissolved	✓	Fail		Fail
zinc total	✓	Fail		Fail

Notes

- **(Q)** denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.
- For Test 1, risk to EQS, the upper confidence range results are used to assess whether a determinand passes or fails. For information, the results for this test state "Pass (face value)" where the test is failed using the upper confidence value but passes using the face value. However, the overall outcome of the modelling tests is considered to be a fail in these cases. Note that for MAC and 95-percentile EQSs, only the face value result is assessed in Test 1.

5.2.1.2 WFD modelling tests

Class deterioration

- 94 determinands would not result in a class deterioration following the proposed discharge,
- 42 determinands do not have either an AA or MAC EQS set and therefore the class deterioration modelling test cannot be applied,
- 22 determinands are currently failing their EQS in the canal and would continue to do so with the discharge, and
- A new class deterioration is predicted for two determinands, cypermethrin **(Q)** and permethrin **(Q)**.

Percentage deterioration

- 120 determinands are not predicted to lead to a deterioration of greater than 10%, or greater than 3% where the EQS is already exceeded.
- A percentage deterioration is predicted for the remaining 40 determinands. These are listed below:

Table 5-3: Determinands with a predicted percentage deterioration

Determinand	Percentage deterioration (annual average)	Does the water body pass AA EQS at present?	Percentage deterioration (95-percentile)	Does the water body pass MAC EQS at present?
4-methylphenol (p-cresol)	✓	Pass		No MAC EQS
ammoniacal nitrogen	✓	Pass		No MAC EQS
antimony dissolved	✓	Pass		No MAC EQS
antimony total	✓	Pass		No MAC EQS
bromide	✓	Pass		No MAC EQS
BTEX (benzene, toluene, ethylbenzene & o,p-xylene **(Q)**	✓	Pass		No MAC EQS
chemical oxygen demand (COD)	✓	Pass		No MAC EQS
chloride	✓	Pass		No MAC EQS
chromium dissolved	✓	Pass		No MAC EQS
chromium total	✓	Pass		No MAC EQS
cypermethrin **(Q)**	✓	Pass	✓	Pass
di(2-ethylhexyl)phthalate (DEHP) **(Q)**	✓	Pass		No MAC EQS
dibutyl phthalate **(Q)**	✓	Pass	✓	Pass
dissolved organic carbon	✓	Pass		No MAC EQS
EDTA **(Q)**	✓	Pass	✓	Pass
fluoride	✓	Pass	✓	Pass
glyphosate **(Q)**	✓	Pass	✓	Pass
hexabromocyclododecane (HBCDD) **(Q)**	✓	Pass	✓	Pass
iron dissolved	✓	Pass		No MAC EQS
linuron **(Q)**	✓	Pass	✓	Pass
mancozeb **(Q)**	✓	Pass	✓	Pass
maneb **(Q)**	✓	Pass	✓	Pass
mecoprop **(Q)**	✓	Pass	✓	Pass
Nitrate (mg/l NO3)	✓	Pass		No MAC EQS
Nitrate (mg/l N)	✓	Pass		No MAC EQS
Nitrite (mg/l NO_2)	✓	Pass		No MAC EQS
Nitrite (mg/l N)	✓	Pass		No MAC EQS
nonylphenols (4-nonylphenol technical mix) **(Q)**	✓	Pass	✓	Pass
orthophosphate as PO4	✓	Pass		No MAC EQS
perfluorooctanoic acid (PFOA)	✓	Pass		No MAC EQS
permethrin **(Q)**	✓	Pass	✓	Pass

Determinand	Percentage deterioration (annual average)	Does the water body pass AA EQS at present?	Percentage deterioration (95-percentile)	Does the water body pass MAC EQS at present?
polychloro chloromethyl sulphonamido diphenyl ethe	✓	Fail		No MAC EQS
propyzamide **(Q)**	✓	Pass	✓	Pass
soluble reactive phosphorus	✓	Pass		No MAC EQS
tetrachloroethane **(Q)**	✓	Pass	✓	Pass
total organic carbon	✓	Pass		No MAC EQS
total oxidised nitrogen	✓	Pass		No MAC EQS
total phosphorus	✓	Pass		No MAC EQS
triclosan **(Q)**	✓	Pass	✓	Pass
zinc dissolved	✓	Fail		Fail

(Q) denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.

5.2.1.3 Modelling test 3 - risk of effluent quality deteriorating significantly

The EA guidance for hazardous chemicals includes advice on protecting against future increases in the concentration of chemicals with treated effluent. Circumstances which could lead to this occurring include:

- Where trade effluent dischargers have only utilised a small percentage of their permitted discharge limits, but increase this due to a change in process or increased production.
- Where increased dosing of wastewater is required as part of the treatment process.

This issue has not been considered in this study, and it is recommended that this issue be reviewed by Severn Trent Water and discussed with the Environment Agency.

5.2.1.4 Local water body issues

EA guidance recommends that, once modelling tests have been complete, permitting officers consult with local water quality staff to take account of local water body issues. In this case, the Canal & River Trust should also be consulted.

5.2.2 Sensitivity testing

The draft results were reviewed in a meeting with the Environment Agency. The following sensitivity tests were identified to provide further understanding of the impact of uncertainties in the data:

- Sensitivity test 1 - Replacing outlier values removed from the observed data,
- Sensitivity test 2 - Test for the impact of the transfer running at maximum flow of 115Ml/d, and
- Sensitivity test 3 - Test model sensitivity to the correlation coefficients used for river flow and quality and for effluent flow and quality.

5.2.2.1 Sensitivity test 1 - outlier values

Test design

The aim of the test was to determine whether the removal of outlier values from the observed water quality data could have resulted in an over-optimistic assessment of the impacts of the transfer.

Selection of determinands

The results for determinands where outliers had been removed (as defined in Table 4-1 and Table 4-2) were reviewed. Where a determinand fails either the hazardous chemicals modelling tests, or records a WFD percentage or class deterioration, it was considered to have already been flagged as potentially significant and therefore was not remodelled. Seven determinands passed all of these tests with their outliers removed, so were selected for remodelling with the outlier values included. This selection exercise is summarised below in Table 5-4.

Table 5-4: Selection of determinands for remodelling with outliers included

Determinand	Sites where outliers removed	Haz. Chem. modelling test outcome	WFD % deterioration outcome	WFD class deterioration outcome	Remodel with outliers included?
4-methylphenol (p-cresol)	3	No EQS	Deterioration	No EQS defined	No
ammoniacal nitrogen	1	No EQS	Deterioration	No EQS defined	No
chlorine free	1	No EQS	No Deterioration	No EQS defined	Yes
chlorine total	1	No EQS	Deterioration	No EQS defined	No
chromium total	1 & 3	No EQS	Deterioration	No EQS defined	No
dibutyl phthalate	1 & 3	Pass	Deterioration	No Class deterioration	No
iron dissolved	3	Pass	Deterioration	No Class deterioration	No
lead dissolved	3	Pass	Deterioration	No Class deterioration	No
mancozeb	3	Fail	Deterioration	No Class deterioration	No
maneb	3	Pass	Deterioration	No Class deterioration	No
polychloro chloromethyl sulphonamido diphenyl ethe	3	Fail	Deterioration	Continues to exceed EQS	No
tetrachloroethane	3	Pass	Deterioration	No Class deterioration	No
triphenyltin compounds (as tryphenyltin cation)	3	No EQS	No Deterioration	No EQS defined	Yes

Determinand	Sites where outliers removed	Haz. Chem. modelling test outcome	WFD % deterioration outcome	WFD class deterioration outcome	Remodel with outliers included?
zinc dissolved	3	Fail	Deterioration	Continues to exceed EQS	No
zinc total	3	Fail	Deterioration	Continues to exceed EQS	No
aluminium dissolved	3	No EQS	No Deterioration	No EQS defined	Yes
cadmium dissolved	3	Pass	No Deterioration	No Class deterioration	Yes
cadmium total	1& 3	Pass	No Deterioration	No Class deterioration	Yes
chloronitrotoluenes	1	Pass	No Deterioration	No Class deterioration	Yes
tin dissolved	3	No EQS	No Deterioration	No EQS defined	Yes

Results

Comparing the results with the outlier retained against those where it was removed, only had a significant impact on the results for chloronitrotoluenes, where a percentage deterioration is predicted.

Table 5-5: Sensitivity test 3 - outliers - results

Determinand		Outliers removed			Outliers retained			Conclusion
	AA or MAC	Haz Chem Tests	Does canal pass EQS at present?	WFD tests	Haz Chem Tests	Does canal pass EQS at present?	WFD tests	
Chlorine free	AA	No EQS	No EQS	No Det.	No EQS	No EQS	No Det.	Inclusion of outlier has no impact
triphenyltin compounds	AA	No EQS	No EQS	No Det.	No EQS	No EQS	No Det.	Inclusion of outlier has no impact
aluminium dissolved	AA	No EQS	No EQS	No Det.	No EQS	No EQS	No Det.	Inclusion of outlier has no impact
Cadmium dissolved	AA	Pass	Pass	No Det.	Pass	Pass	No Det.	Inclusion of outlier has no impact
	MAC	Pass	Pass	No Det.	Pass	Pass	No Det.	Inclusion of outlier has no impact

Determinand		Outliers removed			Outliers retained			Conclusion
	AA or MAC	Haz Chem Tests	Does canal pass EQS at present?	WFD tests	Haz Chem Tests	Does canal pass EQS at present?	WFD tests	
Cadmium total	AA	Pass	Pass	No Det.	Pass	Pass	No Det.	Inclusion of outlier has no impact
	MAC	Pass	Pass	No Det.	Pass	Pass	No Det.	Inclusion of outlier has no impact
chloronitrotoluenes	AA	Pass	Pass	No Det.	Pass	Pass	% Det.	Inclusion of outlier changes outcome
Tin dissolved	AA	No EQS	No EQS	No Det.	No EQS	No EQS	No Det.	Inclusion of outlier has no impact

Conclusions

The inclusion of the discharge outlier value for chloronitrotoluenes does lead to a predicted WFD deterioration, although all of the hazardous chemicals tests are still passed. It was concluded that the with-outlier statistics should be used at the next stage for the calculation of treatment required to meet the target and no-deterioration.

The inclusion of the other outlier values previously used did not impact the hazardous chemical or WFD results, and so no further action is recommended.

5.2.2.2 Sensitivity test 2 - maximum transfer flow

Test design

This test was requested to understand the impacts of the transfer operation at its maximum flow rate of 115Ml/d. To model this, the follow flow statistics were used:

Mean upstream canal flow: 5.364 Ml/d (annual mean calculated from the Aquator model)

95-percentile canal flow: 0.307 Ml/d (calculated from the Aquator model)

Mean discharge flow: 115Ml/d

Standard deviation of discharge flow: 0.1Ml/d (nominal standard deviation resulting in effectively a constant 115Ml/d flow)

This effectively represents the scheme running at its maximum for 100% of the time. This is well beyond any predicted deployment of the scheme and therefore represents an extreme scenario.

Selection of determinands

The following filters were applied to identify determinands which might be sensitive to this test:

- Has an AA and MAC EQS specified.
- Passes all of the hazardous chemicals tests (so would not already have been identified as potentially significant) but exhibits some deterioration compared to the baseline.
- Has not had "less-than" values halved.

Just two determinands met these criteria, fluoride and propyzamide. Both were tested.

Results

Results indicated only very minor changes as a result of the higher discharge value. None of these changes would have resulted in failure of one of the modelling tests which had been passed using the default, demand-based flow scenario.

Table 5-6: Sensitivity test 3 - correlation coefficients - fluoride

Determinand	Flow scenario	Mean	Standard Deviation	95-percentile
Fluoride	Demand-based	0.55	0.11	0.76
	100% at 115Ml/d	0.56	0.12	0.77
Propyzamide	Demand-based	0.028	0.068	0.11
	100% at 115Ml/d	0.029	0.070	0.12

Conclusions

Results were not found to be sensitive to the transfer flow regime. This is probably because the transfer flow, even in the demand based-scenario, is an order of magnitude greater than flow in the receiving water, so already dominates the downstream, mixed results. There are no recommendations for further action on this aspect of the modelling.

5.2.2.3 Sensitivity test 3 - correlation coefficients

Test design

This test aims to identify whether the model outputs are sensitive to the selection of correlation coefficient values. The modelling presented had used the default RQP values for river flow and quality (-0.3) and discharge flow and quality (-0.2), both indicating a weak negative correlation. Initially it was decided to test the most extreme positive (1.0) and negative (-1.0) correlations, in all possible combinations.

Selection of determinands

The determinands selected in test 2 (fluoride and propyzamide) were appropriate in that they passed the hazardous chemicals tests but exhibited some deterioration, so might be expected to be sensitive.

Results

Initially fluoride water tested. Results indicated only very minor changes as a result of the various combinations of correlation coefficient. None of these changes would have resulted in failure of one of the modelling tests which had been passed using the default coefficients.

Table 5-7: Sensitivity test 3 - correlation coefficients - fluoride

Correlation: river flow and quality	Correlation: discharge flow and quality	Mean	Standard Deviation	95-percentile
-0.3	-0.2	0.55	0.11	0.76
-1.0	-0.2	0.55	0.11	0.76
1.0	-0.2	0.56	0.11	0.76
-0.3	-1.0	0.55	0.11	0.76
-0.3	1.0	0.55	0.12	0.77
-1.0	-1.0	0.55	0.11	0.74
-1.0	1.0	0.55	0.12	0.77
1.0	1.0	0.56	0.12	0.77

1.0	-1.0	0.55	0.11	0.74

Conclusions

Results were not found to be sensitive to flow and quality corelation coefficients. There are no recommendations for further action on this aspect of the modelling.

5.2.3 Treatment required to meet the target

This test identifies the treatment standard that would need to be met in order to meet the annual average (AA) EQS. In summary, results were:

- 50 determinands do not have an AA EQS.
- 93 determinands require no additional treatment to meet the AA EQS.
- For 7 determinands (abamectin, benzo(a)pyrene, bromine - total residual oxidant, cyanide total, doramectin, ivermectin and sulphide or hydrogen sulphide, the modelling failed to meet the target. In other words, even with 100% removal from the effluent, these would not meet target in the canal. In the case of abamectin, cyanide total, doramectin and ivermectin, this is due to the Limit of Detection (LOD) being many times greater than the EQS, so the actual values in the discharge and the Canal may be much lower than those detected and modelled. Note that the Minworth discharge would not cause a deterioration for any of these substances.
- In the case of benzo(a)pyrene and bromine, the concentrations in the Canal are orders of magnitude above the EQS, so even if the discharge effluent contained none of these chemicals, it still couldn't dilute the canal enough to achieve the EQS. Failure to meet EQS is therefore as a result of the background quality in the Canal and not the transfer.
- 10 determinands would require a percentage reduction of between 3% and 97% to meet the EQS targets in the canal. These are shown in Table 5-8.

Table 5-8: Treatment percentage reduction required to meet AA EQS

Determinand	WW treatment % reduction required to meet AA EQS
3,4-dichloroaniline **(Q)**	64%
chromium (VI) dissolved **(Q)**	3%
cypermethrin **(Q)**	58%
formaldehyde **(Q)**	85%
methiocarb **(Q)**	80%
perfluorooctane sulfonic acid (PFOS)	97%
permethrin **(Q)**	57%
polychloro chloromethyl sulphonamido diphenyl ethe **(Q)**	38%
silver dissolved **(Q)**	84%
triazophos **(Q)**	53%

Notes

- The treatment standards required to meet the EQSs for bioavailable metals are shown as the dissolved metal concentration in the effluent (as the bioavailable calculation is only applied by MPer to the watercourse upstream and downstream of the discharge.

5.2.4 Treatment required to prevent deterioration

This test identifies the treatment standard that would need to be met in order to prevent deterioration in the canal. Note that the test is applied to any determinands where a deterioration, however small, has been predicted. In summary, results were:

- No deterioration is predicted for 119 determinands would require no treatment improvements to meet no deterioration.
- 41 determinands would require a percentage reduction of between less than 1% (linuron) and 93% (nonylphenols) to prevent a deterioration to their annual average values in the Canal. These are shown in Table 5-9.

Table 5-9: Treatment percentage reduction required to prevent deterioration to the annual average concentration

Determinand	WW treatment % reduction required to prevent deterioration (Mean)
4-methylphenol (p-cresol) **(Q)**	43%
ammoniacal nitrogen	58%
antimony dissolved	58%
antimony total	57%
bromide	36%
BTEX (benzene, toluene, ethylbenzene & o,p-xylene **(Q)**	36%
chemical oxygen demand (COD)	44%
chloride	31%
chloronitrotoluenes **(Q)**	50%
chromium dissolved	73%
chromium total	69%
cypermethrin **(Q)**	74%
di(2-ethylhexyl)phthalate (DEHP) **(Q)**	32%
dibutyl phthalate **(Q)**	33%
dissolved organic carbon	48%
EDTA **(Q)**	28%
fluoride	46%
glyphosate **(Q)**	87%
hexabromocyclododecane (HBCDD) **(Q)**	90%
iron dissolved	53%
linuron **(Q)**	0%
mancozeb **(Q)**	91%
maneb **(Q)**	78%
mecoprop **(Q)**	72%
Nitrate (mg/l NO3)	83%
Nitrate (mg/l N)	83%
Nitrite (mg/l NO_2)	56%

Determinand	WW treatment % reduction required to prevent deterioration (Mean)
Nitrite (mg/l N)	56%
nonylphenols (4-nonylphenol technical mix) **(Q)**	93%
orthophosphate as PO4	71%
perfluorooctanoic acid (PFOA)	21%
permethrin **(Q)**	73%
polychloro chloromethyl sulphonamido diphenyl ethe **(Q)**	38%
propyzamide **(Q)**	67%
soluble reactive phosphorus	68%
tetrachloroethane **(Q)**	24%
total organic carbon	65%
total oxidised nitrogen	82%
total phosphorus	40%
triclosan **(Q)**	63%
zinc dissolved	29%

Notes

- (Q) denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.
- The treatment standards required to prevent deterioration for bioavailable metals are shown as the dissolved metal concentration in the effluent (as the bioavailable calculation is only applied by MPer to the watercourse upstream and downstream of the discharge.
- The differences between Table 5-8 and Table 5-9 are down to the target EQS set and how the canal currently performs in relation to these. So for Cypermethrin, a 58% reduction is required to meet the AA EQS, but a 74% reduction is needed to prevent all deterioration (because the canal is already performing better than the EQS). By contrast, for formaldehyde, the transfer would not cause a deterioration, but an 85% reduction would be required to meet the EQS, because the canal is currently failing the EQS for formaldehyde.
- Chloronitrotoluenes is not identified as deteriorating in Table 5-3, but sensitivity testing with an outlier value included did predict a deterioration (see 5.2.2), and therefore the percentage reduction required to prevent this has been calculated.
- For ammoniacal nitrogen, Minworth is permitted to discharge to 3mg/l (95th percentile) but is performing well beyond this at 0.27mg/l (or 0.69 with outlier included). This is considered to be already operating at Best Available Technology (BAT) for ammonia, normally considered to be 1mg/l at the 95th percentile. For this (and possibly other determinands) it may not, therefore, be technically feasible to achieve the reductions necessary to achieve zero deterioration. Note that the percentage reductions presented above are for the annual average, whereas the EQS for ammoniacal nitrogen is set at the 90th percentile. To achieve no deterioration at the 90th percentile, treatment would be required to meet 0.16mg/l (equivalent to a 41% reduction).

6 Results for Site 5, Grand Union Canal at Daventry

6.1 Screening

Five Part A screening tests were undertaken on the full suite of determinands.

- Test 1: Does the concentration of the substance in the discharge exceed 10% of the EQS?
- Test 2: Does the process contribution (PC) exceed 4% of the EQS?
- Test 3: Does the difference between upstream quality and the Predicted Environmental Concentration (PEC) exceed the 10% of the EQS?
- Test 4a: Is the long-term PEC greater than the annual average EQS?
- Test 4b: Is the short-term PEC greater than the maximum (MAC) EQS?

In addition, the Part B screening significant load test was applied for the six determinands where an annual Significant Load has been defined (mercury dissolved, mercury total, nonylphenols (4-nonylphenol technical mix), cadmium dissolved, cadmium total and tributyltin compounds (as tributyltin cation)).

Results of the screening for the 85 determinands sampled at both Minworth and the Grand Union Canal at Daventry were as follows:

- For 7 determinands, all tests are passed, and the screening results indicate that the discharge is "not significant".
- 36 determinands do not have an AA EQS set and therefore the screening tests cannot be applied.
- 21 determinands are screened as "potentially significant" because, in accordance with the process shown in Figure 2-2, they fail on screening tests 1 and/or 2 and then also fail on at least one of tests 3, 4a and 4b. These are listed in Table 6-1.
- No additional determinands were screened in by the Significant Load test, although this was failed for nonylphenols.
- 17 determinands without an EQS were screened in because their mean and/or 95-percentile concentrations were better than the corresponding concentrations modelled downstream of site 3.

In total, 38 determinands failed one or more screening test and so were passed on to the modelling stage. The full screening results are presented in Appendix B.

Table 6-1: Determinands identified as "potentially significant" by the screening tests

Determinand	Screening Test 1 (<10% of EQS)	Screening Test 2 (PC <4% EQS	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Screening Test 4b (Short-term PEC>MAC EQS)	Screening Test 5 (Is the Significant Load exceede
cypermethrin	Fail	Fail	Fail	Fail	Pass	Pass
hexabromocyclododecane (HBC	Fail	Fail	Fail	Pass	Pass	Pass
nickel dissolved	Fail	Fail	Fail	Fail	Fail	Pass
nickel total	Fail	Fail	Fail	Fail	Fail	Pass
nonylphenols (4-nonylphenol te	Fail	Fail	Fail	Pass	Pass	Fail
sulphide or hydrogen sulphide	Fail	Fail	Fail	Fail	Fail	Pass
triclosan	Fail	Fail	Fail	Pass	Pass	Pass
zinc dissolved	Fail	Fail	Fail	Fail	Pass	Pass
zinc total	Fail	Fail	Fail	Fail	Pass	Pass
benzo(a)pyrene	Fail	Fail	Pass	Fail	Pass	Pass
copper dissolved	Fail	Fail	Fail	Fail	Pass	Pass
copper total	Fail	Fail	Fail	Fail	Pass	Pass

6.2 Modelling

Three scenarios have been tested on the determinands within Monte Carlo / MPer:

- Impact of input on discharge quality
- Required discharge quality to meet target/EQS
- Required discharge quality to prevent deterioration

The full suite of results are presented in Appendix C.

6.2.1 Impact of the discharge at existing concentrations

6.2.1.1 Hazardous chemicals modelling tests

Of the 38 determinands modelled:

- 10 pass all of the hazardous chemicals modelling tests.
- 14 determinands do not have either an AA or MAC EQS and therefore the hazardous chemicals modelling tests cannot be applied.
- 14 determinands fail one or more of the modelling tests. These are listed in Table 6-2.

Table 6-2: Determinands which fail one or more of the hazardous chemicals modelling tests

Determinand	Fails AA EQS modelling tests	Does the water body pass AA EQS at present?	Fails MAC EQS modelling tests	Does the water body pass MAC EQS at present?
benzo(a)pyrene	✓	Fail		Pass
cadmium dissolved **(Q)**	✓	Pass		Pass
cadmium total **(Q)**	✓	Pass		Pass
copper dissolved	✓	Pass		No MAC EQS

Determinand	Fails AA EQS modelling tests	Does the water body pass AA EQS at present?	Fails MAC EQS modelling tests	Does the water body pass MAC EQS at present?
copper total	✓	Fail		No MAC EQS
cypermethrin **(Q)**	✓	Pass		Pass
nickel dissolved	✓	Pass	✓	Fail
nickel total	✓	Pass	✓	Fail
nonylphenols (4-nonylphenol technical mix) **(Q)**	✓	Pass		Pass
soluble reactive phosphorus	✓	Fail	✓	No MAC EQS
sulphide or hydrogen sulphide	✓	Fail		Fail
total phosphorus	✓	Pass		No MAC EQS
zinc dissolved	✓	Pass		No MAC EQS
zinc total	✓	Fail		No MAC EQS

Notes

- **(Q)** denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.
- For Test 1, risk to EQS, the upper confidence range results are used to assess whether a determinand passes or fails. For information, the result for this test state "Pass (face value)" where the test is failed using the upper confidence value but passes using the face value. However, the overall outcome of the modelling tests is considered to be a fail in these cases. Note that for MAC and 95-percentile EQSs, only the face value result is assessed in Test 1.

6.2.1.2 WFD modelling tests

Class deterioration

- 9 determinands would not result in a class deterioration following the proposed discharge,
- 15 determinands do not have either an AA or MAC EQS set and therefore the class deterioration modelling test cannot be applied,
- 6 determinands are currently failing their EQS in the canal and would continue to do so with the discharge, and
- A new class deterioration is predicted for 8 determinands (cypermethrin, nickel, dissolved, nickel total, total phosphorus, zinc dissolved, cadmium dissolved, cadmium total and copper dissolved).

Percentage deterioration

- 7 determinands are not predicted to lead to a deterioration of greater than 10%, or greater than 3% where the EQS is already exceeded.
- A percentage deterioration is predicted for the remaining 31 determinands. These are listed below:

Table 6-3: Determinands with a predicted percentage deterioration

Determinand	Percentage deterioration (annual average)	Does the water body pass AA EQS at present?	Percentage deterioration (95-percentile)	Does the water body pass MAC EQS at present?
ammoniacal nitrogen	✓	Pass		No AA EQS
antimony dissolved	✓	Pass		No AA EQS
antimony total	✓	Pass		No AA EQS
benzo(a)pyrene		Fail		
cadmium dissolved	✓	Pass		Pass
cadmium total	✓	Pass		Pass
chemical oxygen demand (COD)	✓	Pass		No AA EQS
chromium dissolved **(Q)**	✓	Pass		No AA EQS
chromium total	✓	Pass		No AA EQS
cypermethrin **(Q)**	✓	Pass	✓	Pass
di(2-ethylhexyl)phthalate (DEHP) **(Q)**	✓	Pass		No AA EQS
dissolved organic carbon	✓	Pass		No AA EQS
hexabromocyclododecane (HBCDD) **(Q)**	✓	Pass	✓	Pass
mercury dissolved	✓	Pass		No AA EQS
mercury total	✓	Pass		No AA EQS
nickel dissolved	✓	Pass	✓	Pass
nickel total	✓	Pass	✓	Pass
nitrate (mg/l as N)	✓	Pass		No AA EQS
Nitrate (mg/l as NO_3)	✓	Pass		No AA EQS
nitrite (mg/l as N)	✓	Pass		No AA EQS
nitrite (mg/l as NO_2)	✓	Pass		No AA EQS
nonylphenols (4-nonylphenol technical mix) **(Q)**	✓	Pass	✓	Pass
perfluorooctanoic acid (PFOA)	✓	Pass		No AA EQS
salinity @ 20°C	✓	Pass		No AA EQS
soluble reactive phosphorus	✓	Fail		No AA EQS
sulphide or hydrogen sulphide **(Q)**		Fail	✓	Fail
total organic carbon	✓	Pass		No AA EQS

Determinand	Percentage deterioration (annual average)	Does the water body pass AA EQS at present?	Percentage deterioration (95-percentile)	Does the water body pass MAC EQS at present?
total oxidised nitrogen	✓	Pass		No AA EQS
total phosphorus	✓	Pass		No AA EQS
tributyltin compounds (as tributyltin cation) **(Q)**	✓	Pass		Pass
triclosan **(Q)**	✓	Pass	✓	Pass
zinc dissolved	✓	Pass		No AA EQS
zinc total	✓	Fail		No AA EQS

(Q) denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.

6.2.1.3 Modelling test 3 - risk of effluent quality deteriorating significantly

The EA guidance for hazardous chemicals includes advice on protecting against future increases in the concentration of chemicals with treated effluent. Circumstances which could lead to this occurring include:

- Where trade effluent dischargers have only utilised a small percentage of their permitted discharge limits, but increase this due to a change in process or increased production.
- Where increased dosing of wastewater is required as part of the treatment process.

This issue has not been considered in this study, and it is recommended that this issue be reviewed by Severn Trent Water and discussed with the Environment Agency.

6.2.1.4 Local water body issues

EA guidance recommends that, once modelling tests have been complete, permitting officers consult with local water quality staff to take account of local water body issues. In this case, the Canal & River Trust should also be consulted.

6.2.2 Treatment required to meet the target

This test identifies the treatment standard that would need to be met in order to meet the annual average (AA) EQS. In summary, results were:

- 14 determinands do not have an AA EQS.
- 14 determinands require no additional treatment to meet the AA EQS.
- For 1 determinand (Sulphide or hydrogen sulphide) the modelling failed to meet the target. In other words, even with 100% removal from the effluent, this would not meet target in the canal.
- 7 determinands would require a percentage reduction of between 3% and 97% to meet the EQS targets in the canal. These are shown in Table 6-4.

Table 6-4 Treatment percentage reduction required to meet AA EQS

Determinand	WW treatment % reduction required to meet AA EQS
benzo(a)pyrene	96%

Determinand	WW treatment % reduction required to meet AA EQS
cypermethrin **(Q)**	47%
nickel dissolved	59%
nickel total	61%
soluble reactive phosphorus	19%
zinc dissolved	29%
zinc total	43%

Notes

- **(Q)** denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.
- The treatment standards required to meet the EQSs for bioavailable metals are shown as the dissolved metal concentration in the effluent (as the bioavailable calculation is only applied by MPer to the watercourse upstream and downstream of the discharge.

6.2.3 Treatment required to prevent deterioration

This test identifies the treatment standard that would need to be met in order to prevent deterioration in the canal. Note that the test is applied to any determinands where a deterioration, however small, has been predicted. In summary, results were:

- No deterioration is predicted for 7 determinands, which would require no treatment improvements to meet no deterioration.
- 29 determinands would require a percentage reduction of between less than 1% (cadmium dissolved/total) and 92% (nonylphenols/hexabromocyclododecane) to prevent a deterioration to their annual average values in the Canal.

Table 6-5 Treatment percentage reduction required to prevent deterioration

Determinand	WW treatment % reduction required to prevent deterioration (Mean)
ammoniacal nitrogen	16%
antimony dissolved	33%
antimony total	32%
cadmium dissolved **(Q)**	0%
chemical oxygen demand (COD)	41%
chromium dissolved **(Q)**	80%
chromium total	76%
cypermethrin **(Q)**	79%
di(2-ethylhexyl)phthalate (DEHP) **(Q)**	32%
dissolved organic carbon	54%
hexabromocyclododecane (HBCDD) **(Q)**	92%
mercury dissolved	30%
mercury total	40%

Determinand	WW treatment % reduction required to prevent deterioration (Mean)
nickel dissolved	83%
nickel total	76%
Nitrate (mg/l as NO_3)	91%
nitrate (mg/l as N)	91%
nitrite (mg/l as NO_2)	39%
nitrite (mg/l as N)	39%
nonylphenols (4-nonylphenol technical mix) **(Q)**	93%
perfluorooctanoic acid (PFOA)	21%
salinity @ 20°C	19%
soluble reactive phosphorus	19%
total organic carbon	72%
total oxidised nitrogen	90%
total phosphorus	22%
triclosan **(Q)**	77%
zinc dissolved	80%
zinc total	44%

Notes

- **(Q)** denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.
- As discussed with the site 3 results, for ammoniacal nitrogen, Minworth is permitted to discharge to 3mg/l (95th percentile) but is performing well beyond this at 0.27mg/l (or 0.69 with outlier included). This is considered to be already operating at Best Available Technology (BAT) for ammonia, normally considered to be 1mg/l at the 95th percentile. For this (and possibly other determinands) it may not, therefore, be technically feasible to achieve the reductions necessary to achieve zero deterioration. Note that the percentage reductions presented above are for the annual average, whereas the EQS for ammoniacal nitrogen is set at the 90th percentile. To achieve no deterioration at the 90th percentile, treatment would be required to meet 0.31mg/l (i.e. requiring no reduction of the 90th percentile value with the outlier value removed is applied).
- These results should be read in conjunction with section 8.1 which compares the reduction in concentration that would be required in the Minworth discharge in order to prevent deterioration at sites 3, 5 and 6.

7 Results for Site 6, Grand Union Canal at Leighton Buzzard

7.1 Screening

Five Part A screening tests were undertaken on the full suite of determinands.

- Test 1: Does the concentration of the substance in the discharge exceed 10% of the EQS?
- Test 2: Does the process contribution (PC) exceed 4% of the EQS?
- Test 3: Does the difference between upstream quality and the Predicted Environmental Concentration (PEC) exceed the 10% of the EQS?
- Test 4a: Is the long-term PEC greater than the annual average EQS?
- Test 4b: Is the short-term PEC greater than the maximum (MAC) EQS?

In addition, the Part B screening significant load test was applied for the six determinands where an annual Significant Load has been defined (mercury dissolved, mercury total, nonylphenols (4-nonylphenol technical mix), cadmium dissolved, cadmium total and tributyltin compounds (as tributyltin cation)).

Results of the screening for the 90 determinands sampled at both Minworth and the Grand Union Canal at Leighton Buzzard were as follows:

- For 1 determinand (octylphenols), all tests are passed and the screening results indicate that the discharge is "not significant".
- 16 determinands do not have an AA EQS set and therefore the screening tests cannot be applied.
- 12 determinands are screened as "potentially significant" because, in accordance with the process shown in Figure 2-2, they fail on screening tests 1 and/or 2 and then also fail on at least one of tests 3, 4a and 4b. These are listed in Table 7-1.
- 19 determinands without an EQS were screened in because their mean and/or 95-percentile concentrations were better than the corresponding concentrations modelled downstream of site 3.
- In total, 31 determinands failed one or more screening test and so were passed on to the modelling stage. The full screening results are presented in Appendix B.

Table 7-1: Determinands identified as "potentially significant" by the screening tests

Determinand	Site 6 Part A Screening - Freshwater					
	Screening Test 1 (<10% of EQS)	Screening Test 2 (PC <4% EQ	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Screening Test 4b (Short-term PEC>MAC EQS)	Screening Test 5 (Is the Significant Load exceede
cypermethrin	Fail	Fail	Fail	Fail	Pass	Pass
hexabromocyclododecane (HBCI	Fail	Fail	Fail	Pass	Pass	Pass
nickel dissolved	Fail	Fail	Fail	Fail	Pass	Pass
nickel total	Fail	Fail	Fail	Fail	Pass	Pass
nonylphenols (4-nonylphenol tecl	Fail	Fail	Fail	Pass	Pass	Pass
sulphide or hydrogen sulphide	Fail	Fail	Pass	Fail	Fail	Pass
zinc dissolved	Fail	Fail	Fail	Fail	Pass	Pass
zinc total	Fail	Fail	Fail	Fail	Pass	Pass
benzo(a)pyrene	Fail	Fail	Pass	Fail	Pass	Pass
copper dissolved	Fail	Fail	Pass	Fail	Pass	Pass
copper total	Fail	Fail	Pass	Fail	Pass	Pass
fluoranthene	Fail	Fail	Pass	Fail	Pass	Pass

7.2 Modelling

Three scenarios have been tested on the determinands within Monte Carlo / MPer:

- Impact of input on discharge quality
- Required discharge quality to meet target/EQS
- Required discharge quality to prevent deterioration

The full suite of results are presented in Appendix C.

7.2.1 Impact of the discharge at existing concentrations

7.2.1.1 Hazardous chemicals modelling tests

Of the 31 determinands modelled:

- 10 pass all of the hazardous chemicals modelling tests.
- 15 determinands do not have either an AA or MAC EQS and therefore the hazardous chemicals modelling tests cannot be applied.
- 6 determinands fail one or more of the modelling tests. These are listed in Table 7-2.

Table 7-2: Determinands which fail one or more of the hazardous chemicals modelling tests

Determinand	Fails AA EQS modelling tests	Does the water body pass AA EQS at present?	Fails MAC EQS modelling tests	Does the water body pass MAC EQS at present?
benzo(a)pyrene	✓	Fail		Pass
cypermethrin **(Q)**	✓	Pass	✓	Pass
nickel dissolved	✓	Pass		No MAC EQS
nickel total	✓	Pass		No MAC EQS
nonylphenols (4-nonylphenol technical mix) **(Q)**		Pass		Pass
sulphide or hydrogen sulphide **(Q)**	✓	Fail	✓	Fail

Notes

- **(Q)** denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.
- For Test 1, risk to EQS, the upper confidence range results are used to assess whether a determinand passes or fails. For information, the results for this test state "Pass (face value)" where the test is failed using the upper confidence value but passes using the face value. However, the overall outcome of the modelling tests is considered to be a fail in these cases. Note that for MAC and 95-percentile EQSs, only the face value result is assessed in Test 1.

7.2.1.2 WFD modelling tests

Class deterioration

- 12 determinands would not result in a class deterioration following the proposed discharge,
- 14 determinands do not have either an AA or MAC EQS set and therefore the class deterioration modelling test cannot be applied,
- 2 determinands are currently failing their EQS in the canal and would continue to do so with the discharge, and
- A new class deterioration is predicted for 3 determinands (cypermethrin, nickel dissolved and nickel total).

Percentage deterioration

- 11 determinands are not predicted to lead to a deterioration of greater than 10%, or greater than 3% where the EQS is already exceeded.
- A percentage deterioration is predicted for the remaining 20 determinands. These are listed below:

Table 7-3: Determinands with a predicted percentage deterioration

Determinand	Percentage deterioration (annual average)	Does the water body pass AA EQS at present?	Percentage deterioration (95-percentile)	Does the water body pass MAC EQS at present?
antimony dissolved	✓	Pass		No MAC EQS
antimony total	✓	Pass		No MAC EQS
chromium dissolved	✓	Pass		No MAC EQS
chromium total	✓	Pass		No MAC EQS
conductivity @ 20°C	✓	Pass		No MAC EQS
cypermethrin **(Q)**	✓	Pass	✓	Pass
di(2-ethylhexyl)phthalate (DEHP) **(Q)**	✓	Pass		No MAC EQS
dissolved organic carbon	✓	Pass		No MAC EQS
hexabromocyclododecane (HBCDD) **(Q)**	✓	Pass	✓	Pass
nickel dissolved	✓	Pass	✓	Pass
nickel total	✓	Pass	✓	Pass
Nitrate (mg/l N)	✓	Pass		No MAC EQS
Nitrate (mg/l NO_3)	✓	Pass		No MAC EQS
nonylphenols (4-nonylphenol technical mix) **(Q)**	✓	Pass	✓	Pass
perfluorooctanoic acid (PFOA)	✓	Pass		No MAC EQS
salinity @ 20°C	✓	Pass		No MAC EQS
total organic carbon	✓	Pass		No MAC EQS
total oxidised nitrogen	✓	Pass		No MAC EQS
triclosan **(Q)**	✓	Pass	✓	Pass
zinc dissolved	✓			No MAC EQS

(Q) denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.

7.2.1.3 Modelling test 3 - risk of effluent quality deteriorating significantly

The EA guidance for hazardous chemicals includes advice on protecting against future increases in the concentration of chemicals with treated effluent. Circumstances which could lead to this occurring include:

- Where trade effluent dischargers have only utilised a small percentage of their permitted discharge limits but increase this due to a change in process or increased production.
- Where increased dosing of wastewater is required as part of the treatment process.

This issue has not been considered in this study, and it is recommended that this issue be reviewed by Severn Trent Water and discussed with the Environment Agency.

7.2.1.4 Local water body issues

EA guidance recommends that, once modelling tests have been complete, permitting officers consult with local water quality staff to take account of local water body issues. In this case, the Canal & River Trust should also be consulted.

7.2.2 Treatment required to meet the target

This test identifies the treatment standard that would need to be met in order to meet the annual average (AA) EQS. In summary, results were:

- 12 determinands do not have an AA EQS.
- 14 determinands require no additional treatment to meet the AA EQS.
- 2 determinands (Sulphide or hydrogen sulphide and benzo (a)pyrene) the modelling failed to meet the target. In other words, even with 100% removal from the effluent, these would not meet target in the canal.
- 3 determinands would require a percentage reduction of between 58% and 60% to meet the EQS targets in the canal. These are shown in Table 7-4.

Table 7-4: Treatment percentage reduction required to meet AA EQS

Determinand	WW treatment % reduction required to meet AA EQS
cypermethrin **(Q)**	58%
nickel dissolved	58%
nickel total	60%

Notes

- **(Q)** denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.
- The treatment standards required to meet the EQSs for bioavailable metals are shown as the dissolved metal concentration in the effluent (as the bioavailable calculation is only applied by MPer to the watercourse upstream and downstream of the discharge.

7.2.3 Treatment required to prevent deterioration

This test identifies the treatment standard that would need to be met in order to prevent deterioration in the canal. Note that the test is applied to any determinands where a deterioration, however small, has been predicted. In summary, results were:

- No deterioration is predicted for 11 determinands and would require no treatment improvements to meet no deterioration.
- 20 determinands would require a percentage reduction of between 10% (conductivity @20°C) and 99% (nitrate) to prevent a deterioration to their annual average values in the Canal. These are shown in Table 7-5.

Table 7-5: Treatment percentage reduction required to prevent deterioration to the annual average concentration

Determinand	WW treatment % reduction required to prevent deterioration (Mean)
antimony dissolved	70%
antimony total	60%
chromium dissolved	61%
chromium total	41%
conductivity @ 20°C	10%
cypermethrin **(Q)**	74%
di(2-ethylhexyl)phthalate (DEHP) **(Q)**	32%
dissolved organic carbon	38%
hexabromocyclododecane (HBCDD) **(Q)**	86%
nickel dissolved	86%
nickel total	82%
Nitrate (mg/l N)	99%
Nitrate (mg/l NO_3)	99%
nonylphenols (4-nonylphenol technical mix) **(Q)**	91%
perfluorooctanoic acid (PFOA)	70%
salinity @ 20°C	11%
total organic carbon	56%
total oxidised nitrogen	52%
triclosan **(Q)**	82%
zinc dissolved	81%

Notes

- **(Q)** denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.
- The treatment standards required to prevent deterioration for bioavailable metals are shown as the dissolved metal concentration in the effluent (as the bioavailable calculation is only applied by MPer to the watercourse upstream and downstream of the discharge.
- These results should be read in conjunction with section 8.1 which compares the reduction in concentration that would be required in the Minworth discharge in order to prevent deterioration at sites 3, 5 and 6.

8 Conclusions and recommendations

8.1 Combining the results for sites 3, 5 and 6

When using the results of this assessment to scope future treatment standards which may be applied to the proposed discharge at Atherstone, it is important to consider whether any determinands may need a tighter standard to prevent deterioration downstream than to prevent deterioration at Atherstone. Table 8-1 compares the percentage treatment reduction required to prevent deterioration. For a number of determinands, the percentage reduction required to prevent deterioration at Daventry or Leighton Buzzard would be higher than to do so at Atherstone. It is acknowledged that the methodology for testing impact at Daventry and Atherstone is conservative, because it does not account for decay, dilution or deposition of chemicals along the canal route, however for initial planning purposes it is recommended that the highest percentage reduction values are considered in the process design.

A final side-by-side summary of the water quality impact at all three sites for all tests (screening, hazardous chemicals and WFD) is provided in Appendix C.4. The final column indicates whether the substance may require improved discharge quality. This is set to yes where any one of the modelling tests has been failed, at any of sites 3, 5 and 6. A total of 74 determinands fail one or more tests at one or more locations and might therefore require an increased level of treatment. This number is higher than the 47 reported in Table 8-1 as requiring additional treatment to prevent deterioration to the Annual Average, which was tested and reported in line with EA guidance (Environment Agency, 2019). Further advice is awaited from the Environment Agency on their approach to environmental permitting of SROs. Until this is available it is advised to consider treatment options which would prevent all deterioration (i.e. the 47 determinands listed in Table 8-1), but to be mindful that there are additional determinands which do fail one or more tests but which wouldn't cause a deterioration at any of the three assessment sites. Potentially the EA could ask for additional treatment of some of these other determinands.

Table 8-1: Comparison of treatment reductions required to prevent deterioration at sites 3, 5 and 6

Determinand	WW treatment % reduction required to prevent deterioration (Mean)		
	Site 3 (Atherstone)	Site 5 (Daventry)	Site 6 (Leighton Buzzard)
4-methylphenol (p-cresol) **(Q)**	**43%**		
ammoniacal nitrogen	**58%**	16%	
antimony dissolved	58%	33%	**70%**
antimony total	57%	32%	**60%**
Bromide	**36%**		
BTEX (benzene, toluene, ethylbenzene & o,p-xylene **(Q)**	**36%**		
chemical oxygen demand (COD)	**44%**	41%	
Chloride	**31%**		
chloronitrotoluenes **(Q)**	**50%**		
chromium dissolved	73%	**80%**	61%

Determinand	WW treatment % reduction required to prevent deterioration (Mean)		
	Site 3 (Atherstone)	Site 5 (Daventry)	Site 6 (Leighton Buzzard)
chromium total	69%	**76%**	41%
conductivity @ 20°C			**10%**
cypermethrin **(Q)**	74%	**79%**	74%
di(2-ethylhexyl)phthalate (DEHP) **(Q)**	**32%**	32%	32%
dibutyl phthalate **(Q)**	**33%**		
dissolved organic carbon	48%	**54%**	38%
EDTA **(Q)**	**28%**		
fluoride	**46%**		
glyphosate **(Q)**	**87%**		
hexabromocyclododecane (HBCDD) **(Q)**	90%	**92%**	86%
iron dissolved	**53%**		
mancozeb **(Q)**	**91%**		
maneb **(Q)**	**78%**		
mecoprop **(Q)**	**72%**		
mercury dissolved		**30%**	
mercury total		**40%**	
nickel dissolved		83%	**86%**
nickel total		76%	**82%**
Nitrate (mg/l NO_3)	83%	91%	**99%**
Nitrate (mg/l N)	83%	91%	**99%**
Nitrite (mg/l NO_2)	**56%**	39%	
nitrite (mg/l N)	**56%**	39%	
nonylphenols (4-nonylphenol technical mix) **(Q)**	**93%**	93%	91%
orthophosphate as PO4	**71%**		
perfluorooctanoic acid (PFOA)	21%	21%	**70%**
Permethrin **(Q)**	**73%**		
polychloro chloromethyl sulphonamido diphenyl ethe **(Q)**	**38%**		

Determinand	WW treatment % reduction required to prevent deterioration (Mean)		
	Site 3 (Atherstone)	Site 5 (Daventry)	Site 6 (Leighton Buzzard)
propyzamide **(Q)**	**67%**		
salinity @ 20°C		**19%**	11%
soluble reactive phosphorus	**68%**	19%	
tetrachloroethane **(Q)**	**24%**		
total organic carbon	65%	**72%**	56%
total oxidised nitrogen	82%	**90%**	52%
total phosphorus	**40%**	22%	
triclosan **(Q)**	63%	77%	**82%**
zinc dissolved	29%	80%	**81%**
zinc total		**44%**	

(Q) denotes that 50% or more of the discharge or canal samples are qualified as less-than the LOD. Results for these determinands should be treated with extra caution.

8.2 Conclusions

- This report has presented the results of a screening and modelling assessment of the impacts of 160 determinands present within Minworth effluent on the proposed discharge to the Coventry Canal at Atherstone.
- The screening assessment has been undertaken in line with EA operating instructions for hazardous chemicals. The screening is presented for interest only as, at the request of the Environment Agency, all substances have been modelled.
- In addition, modelled mixed concentrations downstream of the proposed discharge were used to test impact downstream at Daventry and Atherstone (subject to failing one or more screening tests).
- The modelling was undertaken using the River Quality Planning (RQP) suite of tools. Most determinands were assessed using the Monte Carlo tool, with bioavailable metals being assessed using the MPer tool.
- Three scenarios have been modelled for each determinand:
  - Impact of input on discharge quality
  - Required discharge quality to meet target/EQS
  - Required discharge quality to prevent deterioration
- Impacts were assessed using a combination of operational instructions for hazardous chemicals and for sanitary determinands. Results are summarised below:

Table 8-2: Summary of results

Test	Result	Number of determinands		
		Site 3 Atherstone	Site 5 Daventry	Site 6 Leighton Buzzard
Screening	Not significant	75	7	1
	No AA EQS	50	36	16
	Potentially significant (a)	35	21	12
	Mean or 95%ile < site 3 (b)	N/A	17	19
	Passed on to modelling (a+b)	160 (all, as requested by EA)	38	31
Hazardous chemicals modelling tests	Pass all	88	10	10
	No AA or MAC EQS	42	14	15
	Fail one or more tests	30	14	6
WFD class deterioration	No class deterioration	94	9	12
	No AA or MAC EQS	42	15	14
	Continue to fail EQS	22	6	2
	New class deterioration	2	8	3
WFD percentage deterioration	No deterioration	120	7	11
	Deterioration	40	31	20
Treatment required to meet AA EQS	No AA EQS	50	14	12
	No additional treatment required	93	14	14
	Not possible to meet EQS	7	1	2
	EQS could be met with treatment reductions	10	7	3
Treatment required to prevent deterioration (AA)	No deterioration predicted	119	7	11
	Deterioration could be prevented with treatment reductions	41	29	20

8.3 Recommendations for Gate 3 and beyond

- The Aquator model may under-estimate feeder flows into the Atherstone top lock. Further collaborative work with The Trust should be undertaken to review the control curves at this location.
- Full testing was not possible for those determinands where an EQS has not been set. The Environment Agency has advised that it may be preferable to use the Probable No-Effect Concentration (PNEC) as a de-facto EQS in these cases. If the EA confirm this approach and apply a list of PNEC values these should be tested at Gate 3.
- The effluent concentrations required to meet the target EQS or to prevent deterioration are presented to assist the outline process design process and are not intended to represent possible future environmental permit limits.

- Where the treatment reduction of a determinand required to meet no-deterioration downstream at Daventry or Leighton Buzzard is greater than that required to prevent deterioration at Atherstone, it is recommended that for initial process design, the higher reduction values are considered.
- Ongoing consultation with the Environment Agency is recommended. This should cover, amongst other issues:
  - The emerging national approach to water quality and permitting of SROs,
  - The approach to assessing determinands which do not have an EQS,
  - How to consider the risk of future deterioration of the effluent quality in permitting, and
  - Any local water body issues (in liaison with the Canal & River Trust).
- Further modelling work is planned to test the downstream impact of the proposed transfer scheme, where downstream water quality may be better than in the Coventry Canal at Atherstone.
- It is recommended that the water quality monitoring regime be continued at sites 1, 3, 5 and 6. Developing a longer time-series of water quality data at these sites will improve statistical confidence in the data and hence any further modelling, and will enable any trends or step-changes in the quality both of the Minworth effluent and of the Canal.

Appendices

A Appendix: Input data

A.1 Input data, sites 1 and 3

		Site 1 (raw)			Site 1 (cleaned)												
Determinand	**Units**	**Mean**	**Max**	**95%ile**	**Min**	**Mean**	**Max**	**95%ile**	**90%ile**	**10%ile**	**AA-EQS**	**MAC-EQS**	**MAC-EQS Type**	**PCV**	**LOD**	**Count**	**Standard Deviation**
1,1,1-trichloroethane	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	100	-		-	1	13	0
1,1,2-trichloroethane	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	400	-		-	1	13	0
2,4-dichlorophenol	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	4.2	140	95%ile	-	-	13	1.80556E-18
2,4-dichlorophenoxyacetic acid (2,4-D)	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.3	1.3	95%ile	30	-	13	1.80556E-18
2-chlorophenol	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	50	-		-	-	13	1.80556E-18
3,4-dichloroaniline	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.2	5.4	95%ile	-	1	13	0
3-methylphenol (m-cresol)	ug/l	0.016923077	0.03	0.024	0.01	0.011538462	0.03	0.018	0.01	0.01	-	-		-	-	13	0.005547002
4-chloro-3-methyl phenol	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	40	-		-	-	13	1.80556E-18
4-methylphenol (p-cresol)	ug/l	0.021538462	0.06	0.054	0.01	0.017692308	0.06	0.054	0.044	0.01	-	-		-	-	13	0.016908502
abamectin	ug/l	3.846153846	5	5	2.5	2.5	2.5	2.5	2.5	2.5	0.01	0.03	Maximum	-	5	13	0
acid neutralisation capacity (ANC, unfiltered)	mg/l	1876.923077	2300	2180	1500	1876.923077	2300	2180	2100	1560	-	-		-	5	13	224.1794153
alkalinity as CaCO3	mg/l	91.76923077	110	104	73	91.76923077	110	104	100	76.6	-	-		-	5	13	10.11726121
aluminium dissolved	ug/l	13.23076923	35	27.8	5	12.46153846	35	27.8	22.4	5	-	-		200	10	13	8.987170343
aluminium total	ug/l	34.07692308	93	69	13	34.07692308	93	69	51.2	15	-	-		200	10	13	21.21501645
ammonia	mg/l as NH3	0.039769231	0.1	0.1	0.0085	0.023615385	0.05	0.05	0.05	0.0085	-	-		-	-	13	0.019584845
ammonia	mg/l as N	0.039769231	0.1	0.1	0.0085	0.023615385	0.05	0.05	0.05	0.0085	-	-		-	0.1	13	0.019584845
ammoniacal nitrogen	mg/l as N	0.239307692	1.1	0.686	0.03	0.167583333	0.41	0.333	0.267	0.0519	-	0.3	90%ile	0.5	0.015	12	0.105481975
antimony dissolved	ug/l	0.939230769	1.2	1.14	0.77	0.939230769	1.2	1.14	1.08	0.792	-	-		5	0.17	13	0.123858894
antimony total	ug/l	0.952307692	1.3	1.18	0.77	0.952307692	1.3	1.18	1.08	0.792	-	-		-	0.17	13	0.141783511
arsenic dissolved	ug/l	0.898461538	1.6	1.6	0.56	0.898461538	1.6	1.6	1.5	0.602	50	-		10	0.16	13	0.3424628
arsenic total	ug/l	0.940769231	1.71	1.656	0.6	0.940769231	1.71	1.656	1.524	0.654	50	-		-	0.16	13	0.350034797
azinphos methyl, dissolved	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-		-	-	13	1.80556E-18
BDE-100	ug/l	0.000384615	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		-	0.0001	13	1.12847E-19
BDE-153	ug/l	0.000384615	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		-	0.0001	13	1.12847E-19
BDE-154	ug/l	0.000384615	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		-	0.0001	13	1.12847E-19
BDE-28	ug/l	0.000384615	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		-	0.0001	13	1.12847E-19
BDE-47	ug/l	0.000384615	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		-	0.0001	13	1.12847E-19
BDE-99	ug/l	0.000384615	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		-	0.0001	13	1.12847E-19
bentazone	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	500	-		-	-	13	1.80556E-18
benzene	ug/l	0.076923077	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	10	50	Maximum	-	-	13	0
benzo(a)pyrene	ug/l	0.001340769	0.0027	0.00264	0.0005	0.001340769	0.0027	0.00264	0.00252	0.000516	0.00017	0.27	Maximum	0.01	0.00017	13	0.000797208
benzyl butyl phthalate	ug/l	0.153846154	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	7.5	51	95%ile	-	-	13	0
biphenyl	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	25	-		-	-	13	1.80556E-18
BOD (5 day)	mg/l	3.015384615	8.1	6.3	0.5	2.976923077	8.1	6.3	4.96	0.72	-	7.5	90%ile	-	1	13	2.086925109
boron dissolved	ug/l	175.3846154	230	218	120	175.3846154	230	218	208	134	2000	-		1000	-	13	32.04564053
boron total	ug/l	182.3076923	240	240	120	182.3076923	240	240	232	144	2000	-		-	-	13	34.67800604
bromide	mg/l	0.294615385	0.61	0.574	0.05	0.294615385	0.61	0.574	0.548	0.05	-	-		-	-	13	0.194405735
bromine - total residual oxidant	mg/l	0.131538462	0.3	0.282	0.025	0.129615385	0.3	0.282	0.258	0.062	0.002	0.005	Maximum	-	-	13	0.085256025
bromoxynil	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	100	1000	Maximum	0.1	-	13	1.80556E-18
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	-	-		1	-	13	0
c (PFOS)	ug/l	0.017376923	0.034	0.0286	0.0101	0.017376923	0.034	0.0286	0.024	0.012	0.00065	36	Maximum	-	0.00065	13	0.00647896
cadmium dissolved	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.25	1.5	Maximum	5	0.02	13	1.80556E-18
cadmium total	ug/l	0.017692308	0.05	0.032	0.01	0.01	0.01	0.01	0.01	0.01	0.25	1.5		-	0.02	12	1.81186E-18
calcium total	mg/l	52.92307692	61	60.4	45	52.92307692	61	60.4	59.8	48.2	-	-		-	0.09	13	4.991017573
carbendazim	ug/l	0.076923077	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.15	0.7	Maximum	0.1	-	13	0
chemical oxygen demand (COD)	mg/l	28.23076923	40	38.2	5	28.23076923	40	38.2	36.8	21.2	-	-		-	5	13	9.328753455
chloride	mg/l	75.61538462	160	130	33	75.61538462	160	130	104.8	41	250	-		250	-	13	32.61272365
chlorine free	mg/l	0.130769231	0.5	0.26	0.1	0.1	0.1	0.1	0.1	0.1	-	-		-	-	12	1.44949E-17
chlorine total	mg/l	0.130769231	0.5	0.26	0.1	0.1	0.1	0.1	0.1	0.1	2	-	5	-	-	12	1.44949E-17
chloroform	ug/l	0.807692308	1	1	0.5	0.538461538	1	0.7	0.5	0.5	2.5	-		300	1	13	0.138675049
chloronitrotoluenes	ug/l	0.02	0.14	0.036	0.01	0.01	0.01	0.01	0.01	0.01	10	-		-	-	12	1.81186E-18
chlorophyll	ug/l	15.46153846	21	20.4	10	10.84615385	21	14.4	10	10	-	-		-	20	13	3.050851079
chlorothalonil	ug/l	0.051153846	0.35	0.161	0.0175	0.0175	0.0175	0.0175	0.0175	0.0175	0.035	1.2	Maximum	-	-	13	7.22223E-18
chlorotoluron	ug/l	0.038461538	0.05	0.05	0.025	0.025	0.025	0.025	0.025	0.025	2	20	Maximum	-	-	13	0
chlorpropham	ug/l	0.076923077	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	10	40	Maximum	-	-	13	0
chromium (VI) dissolved	ug/l	5.384615385	7	7	3.5	3.5	3.5	3.5	3.5	3.5	3.4	-		-	7	13	0
chromium dissolved	ug/l	2.076923077	4.3	4.18	1.1	2.076923077	4.3	4.18	3.88	1.14	-	-		-	0.25	13	1.09022463
chromium total	ug/l	13.70769231	140	63.2	1.3	3.183333333	12	7.82	4.37	1.33	-	-		50	0.25	12	2.955682765
cobalt dissolved	ug/l	1.7	2.8	2.44	0.5	1.7	2.8	2.44	2.2	1.24	3	100	Maximum	-	-	13	0.552268051
cobalt total	ug/l	1.961538462	3.1	2.62	1.3	1.961538462	3.1	2.62	2.3	1.5	-	-		-	-	13	0.485692738
conductivity @ 20øC	uS/cm	729.2307692	822	810.6	611	729.2307692	822	810.6	800.4	626.4	-	-		2500	-	13	68.12140369
copper dissolved	ug/l	1.184615385	3.2	2.84	0.5	1.184615385	3.2	2.84	2.36	0.54	1	-		2	0.4	13	0.816339547
copper total	ug/l	2.369230769	3.8	3.68	1.2	2.369230769	3.8	3.68	3.58	1.36	1	-		-	0.4	13	0.856723035
coumaphos	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.03	-		-	-	13	1.80556E-18
cyanide total	ug/l	30.76923077	40	40	20	20	20	20	20	20	1	-		50	40	13	0
cyanide, free (easily liberable)	ug/l	15.38461538	20	20	10	10	10	10	10	10	-	-		-	-	13	0
cyfluthrin	ug/l	0.076923077	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	-	0.001	95%ile	-	0.1	13	0
cypermethrin	ug/l	0.000193077	0.00042	0.000396	0.00004	0.00019	0.00042	0.000396	0.000376	0.00004	0.00008	0.0006	Maximum	-	0.00008	13	0.000127475
demeton	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.5	-		-	-	13	1.80556E-18
di(2-ethylhexyl)phthalate (DEHP)	ug/l	0.140769231	0.33	0.3	0.075	0.117692308	0.33	0.3	0.258	0.075	1.3	-		-	0.15	13	0.087740512
diazinon	ug/l	0.007692308	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.01	0.02	95%ile	-	-	13	9.02779E-19
dibutyl phthalate	ug/l	0.026153846	0.1	0.064	0.01	0.015	0.04	0.04	0.037	0.01	8	40	Maximum	-	-	12	0.011677484
dichlorobenzene, total isomers	ug/l	0.076923077	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	20	200	Maximum	-	-	13	0
dichlorvos	ug/l	0.000769231	0.001	0.001	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0006	0.0007	Maximum	-	-	13	2.25695E-19
diethyl phthalate	ug/l	0.016923077	0.04	0.028	0.01	0.012307692	0.04	0.022	0.01	0.01	200	1000	Maximum	-	-	13	0.008320503
diflubenzuron	ug/l	0.000769231	0.001	0.001	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.015	Maximum	-	-	13	2.25695E-19
dimethoate	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.48	4	95%ile	-	-	13	1.80556E-18
dimethyl phthalate	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	800	4000	Maximum	-	-	13	1.80556E-18
dioctyl phthalate	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	20	40	Maximum	-	-	13	1.80556E-18
dissolved organic carbon	mg/l	7.907692308	13	11.08	3.7	7.907692308	13	11.08	9.8	6.16	-	-		-	0.5	13	2.270264867
doramectin	ug/l	3.846153846	5	5	2.5	2.5	2.5	2.5	2.5	2.5	0.001	0.01	Maximum	-	5	13	0
EDTA	ug/l	89.15384615	143	123.2	50	69.92307692	143	123.2	109.2	50	400	4000	Maximum	-	-	13	32.56394105
fenchlorphos	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.1	Maximum	-	-	13	1.80556E-18
fenitrothion	ug/l	0.007692308	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.01	-		-	-	13	9.02779E-19
flucofuron	ug/l	0.038461538	0.05	0.05	0.025	0.025	0.025	0.025	0.025	0.025	-	1	95%ile	-	-	13	0
fluoranthene	ug/l	0.002011538	0.004	0.00346	0.00045	0.001976923	0.004	0.00346	0.003	0.00064	0.0063	0.12	Maximum	-	0.0009	13	0.000959951
fluoride	mg/l	0.573076923	0.76	0.712	0.38	0.573076923	0.76	0.712	0.676	0.404	5	15	Maximum	1.5	-	13	0.117571582
formaldehyde	ug/l	38.46153846	50	50	25	25	25	25	25	25	5	50	Maximum	-	50	13	0
glyphosate	ug/l	0.450769231	0.75	0.672	0.24	0.450769231	0.75	0.672	0.604	0.332	196	398	95%ile	-	-	13	0.134192743
hardness as CaCO3	mg/l	166.7692308	192	187.8	140	166.7692308	192	187.8	185	144.2	-	-		-	0.1	13	17.05947364
hexabromocyclododecane (HBCDD)	ug/l	0.000878462	0.0025	0.001714	0.00018	0.000878462	0.0025	0.001714	0.001186	0.000432	0.0016	0.5	Maximum	-	0.00014	13	0.000563158
ioxynil	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	10	100	Maximum	-	-	13	1.80556E-18
iron dissolved	ug/l	53.23076923	69	66.6	35	53.23076923	69	66.6	64.2	38.6	1000	-		200	5.5	13	10.57634031
iron total	ug/l	153.0769231	310	262	110	153.0769231	310	262	218	120	1000	-		200	5.5	13	57.3562864

	Site 3 (raw)			Site 3 (cleaned)										
Determinand	**Mean**	**Max**	**95%ile**	**Min**	**Mean**	**Max**	**95%ile**	**90%ile**	**10%ile**	**EQS**	**LOD**	**EQS assessment**	**Count**	**Standard Deviation**
1,1,1-trichloroethane	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	100	1		13	0
1,1,2-trichloroethane	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	400	1		13	0
2,4-dichlorophenol	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	4.2	-		13	1.80556E-18
2,4-dichlorophenoxyacetic acid (2,4-D)	0.027692308	0.07	0.064	0.01	0.023076923	0.07	0.064	0.056	0.01	0.3	-		13	0.021750332
2-chlorophenol	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	50	-		13	1.80556E-18
3,4-dichloroaniline	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.2	1	Fail	13	0
3-methylphenol (m-cresol)	0.04	0.32	0.14	0.01	0.033846154	0.32	0.134	0.01	0.01	40	-		13	0.08597853
4-chloro-3-methyl phenol	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	50	-		13	1.80556E-18
4-methylphenol (p-cresol)	0.025384615	0.1	0.07	0.01	0.013333333	0.05	0.028	0.01	0.01	-	-		12	0.011547005
abamectin	4.038461538	5	5	2.5	2.5	2.5	2.5	2.5	2.5	0.01	5	Fail	13	0
acid neutralisation capacity (ANC, unfiltered)	2330.769231	3500	3320	1500	2330.769231	3500	3320	3140	1720	-	5		13	593.55513
alkalinity as CaCO3	116.3076923	180	168	76	116.3076923	180	168	156	86	-	5		13	30.31057191
aluminium dissolved	40.38461538	280	144.4	5	19.16666667	54	48.5	42.6	5	-	10		12	16.31972222
aluminium total	349.4615385	770	692	83	349.4615385	770	692	614	134	-	10		13	201.0566319
ammonia	0.014942308	0.02	0.02	0.0085	0.00925	0.01	0.01	0.01	0.0085	-	-		13	0.000764853
ammonia	0.014942308	0.02	0.02	0.0085	0.00925	0.01	0.01	0.01	0.0085	-	-		13	0.000764853
ammoniacal nitrogen	0.117153846	0.35	0.32	0.02	0.117153846	0.35	0.32	0.274	0.0304	-	0.015		13	0.103050025
antimony dissolved	0.390769231	0.76	0.742	0.19	0.390769231	0.76	0.742	0.714	0.208	-	0.17		13	0.198933051
antimony total	0.412307692	0.76	0.742	0.19	0.412307692	0.76	0.742	0.714	0.256	-	0.17		13	0.18691147
arsenic dissolved	0.880769231	1.2	1.14	0.48	0.880769231	1.2	1.14	1.1	0.67	50	0.16		13	0.201761474
arsenic total	1.106153846	1.52	1.496	0.65	1.106153846	1.52	1.496	1.456	0.712	50	0.16		13	0.298064268
azinphos methyl, dissolved	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-		13	1.80556E-18
BDE-100	0.000421875	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	0.0001		16	1.11976E-19
BDE-153	0.000421875	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	0.0001		16	1.11976E-19
BDE-154	0.000421875	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	0.0001		16	1.11976E-19
BDE-28	0.00040625	0.0005	0.0005	0	0.000234375	0.00025	0.00025	0.00025	0.00025	-	0.0001		16	0.0000625
BDE-47	0.00040625	0.0005	0.0005	0	0.000234375	0.00025	0.00025	0.00025	0.00025	-	0.0001		16	0.0000625
BDE-99	0.000421875	0.0005	0.0005	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	0.0001		16	1.11976E-19
bentazone	0.057692308	0.32	0.284	0.01	0.053076923	0.32	0.284	0.21	0.01	500	-		13	0.105860334
benzene	0.080769231	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	-	-		13	0
benzo(a)pyrene	0.013182308	0.042	0.03726	0.0008	0.013182308	0.042	0.03726	0.0313	0.003632	0.00017	0.00017	Fail	13	0.01254842
benzyl butyl phthalate	0.161538462	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	7.5	-		13	0
biphenyl	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	25	-		13	1.80556E-18
BOD (5 day)	3.861538462	11	9.5	0.5	3.823076923	11	9.5	8.04	0.68	4	1		13	3.252218178
boron dissolved	217.6923077	350	338	120	217.6923077	350	338	322	122	2000	-		13	75.62559599
boron total	223.8461538	380	362	120	223.8461538	380	362	340	122	2000	-		13	83.42046727
bromide	0.39	2.5	1.3	0	0.193846154	0.5	0.44	0.4	0.05	-	-		13	0.155645883
bromine - total residual oxidant	2.696923077	11.5	11.08	0.025	2.695	11.5	11.08	10.06	0.066	0.002	-	Fail	13	4.191859174
bromoxynil	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	100	-		13	1.80556E-18
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	0.518181818	1	1	0.05	0.315909091	0.5	0.5	0.5	0.05	-	-		22	0.226456326
c (PFOS)	0.005266154	0.00961	0.009046	0.00219	0.005266154	0.00961	0.009046	0.008334	0.002336	-	0.00065		13	0.002374702
cadmium dissolved	0.160769231	0.92	0.518	0.01	0.094583333	0.25	0.2225	0.198	0.0105	-	0.02		12	0.084246886
cadmium total	0.276923077	1.14	0.714	0.05	0.205	0.43	0.3475	0.279	0.101	-	0.02		12	0.105010822
calcium total	115.9230769	170	164	81	115.9230769	170	164	156	83	-	0.09		13	29.75304337
carbendazim	0.080769231	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.15	-		13	0
chemical oxygen demand (COD)	34.5	240	112.8	0	15.65384615	28	26.2	24.6	5	-	5		13	8.663584264
chloride	52.07692308	72	67.8	35	52.07692308	72	67.8	64.8	39	250	-		13	11.1090169
chlorine free	0.2	0.6	0.48	0.05	0.180769231	0.6	0.48	0.38	0.05	-	-		13	0.172649044
chlorine total	0.180769231	0.6	0.48	0.05	0.169230769	0.6	0.48	0.4	0.05	-	-		13	0.177410143
chloroform	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	-	1		13	0
chloronitrotoluenes	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	10	-		13	1.80556E-18
chlorophyll	21.92307692	56	49.4	10	19.61538462	56	49.4	41.4	10	-	20		13	15.28909449
chlorothalonil	0.028269231	0.035	0.035	0.0175	0.0175	0.0175	0.0175	0.0175	0.0175	0.035	-		13	7.22223E-18
chlorotoluron	0.040384615	0.05	0.05	0.025	0.025	0.025	0.025	0.025	0.025	2	-		13	0
chlorpropham	0.080769231	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	10	-		13	0
chromium (VI) dissolved	5.653846154	7	7	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	Fail	13	0
chromium dissolved	0.578461538	1.2	1.08	0.125	0.549615385	1.2	1.08	0.988	0.125	-	0.25		13	0.360482671
chromium total	2.46	20	9.08	0.125	0.987916667	1.8	1.58	1.38	0.6	-	0.25		12	0.425288449
cobalt dissolved	13.43846154	43	29.8	0.7	13.43846154	43	29.8	20.6	2.7	3	-	Fail	13	10.54470945
cobalt total	15.84615385	45	32.4	1.1	15.84615385	45	32.4	23.6	5.22	-	-		13	10.83402167
conductivity @ 20øC	1135.538462	1570	1480	835	1135.538462	1570	1480	1402	907.8	-	-		13	226.0076014
copper dissolved	2.176923077	3.8	3.56	1.1	2.176923077	3.8	3.56	3.28	1.4	1	0.4	Fail	13	0.790731566
copper total	3.630769231	6.4	5.44	1.9	3.630769231	6.4	5.44	4.76	2.3	1	0.4	Fail	13	1.175006819
coumaphos	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.03	-		13	1.80556E-18
cyanide total	32.30769231	40	40	20	20	20	20	20	20	1	40	Fail	13	0
cyanide, free (easily liberable)	16.15384615	20	20	10	10	10	10	10	10	-	-		13	0
cyfluthrin	0.080769231	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.001	0.1	Fail	13	0
cypermethrin	0.00007	0.00012	9.6E-05	0.00004	4.92308E-05	0.00012	9.6E-05	0.000072	0.00004	0.00008	0.00008		13	2.39658E-05
demeton	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.5	-		13	1.80556E-18
di(2-ethylhexyl)phthalate (DEHP)	0.13	0.19	0.166	0.075	0.083846154	0.19	0.121	0.075	0.075	1.3	0.15		13	0.031895261
diazinon	0.008076923	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.01	-		13	9.02779E-19
dibutyl phthalate	0.023076923	0.1	0.058	0.01	0.011666667	0.03	0.019	0.01	0.01	8	-		12	0.005773503
dichlorobenzene, total isomers	0.080769231	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	20	-		13	0
dichlorvos	0.000807692	0.001	0.001	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	-		13	2.25695E-19
diethyl phthalate	0.016923077	0.03	0.024	0.01	0.012307692	0.03	0.024	0.018	0.01	200	-		13	0.005991447
diflubenzuron	0.000807692	0.001	0.001	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	-		13	2.25695E-19
dimethoate	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.48	-		13	1.80556E-18
dimethyl phthalate	0.018461538	0.04	0.034	0.01	0.013846154	0.04	0.034	0.026	0.01	800	-		13	0.009607689
dioctyl phthalate	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	20	-		13	1.80556E-18
dissolved organic carbon	4.169230769	5.7	5.64	1	4.092307692	5.7	5.64	5.5	2.68	-	0.5		13	1.289354838
doramectin	4.038461538	5	5	2.5	2.5	2.5	2.5	2.5	2.5	0.001	5	Fail	13	0
EDTA	80.76923077	100	100	50	50	50	50	50	50	400	-		13	0
fenchlorphos	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.03	-		13	1.80556E-18
fenitrothion	0.008076923	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.01	-		13	9.02779E-19
flucofuron	0.040384615	0.05	0.05	0.025	0.025	0.025	0.025	0.025	0.025	-	-		13	0
fluoranthene	0.012592308	0.0277	0.02452	0.0017	0.012592308	0.0277	0.02452	0.02134	0.00686	0.0063	0.0009	Fail	13	0.007210231
fluoride	0.314615385	0.39	0.378	0.2	0.314615385	0.39	0.378	0.368	0.246	1	-		13	0.054254859
formaldehyde	40.38461538	50	50	25	25	25	25	25	25	5	25	Fail	13	0
glyphosate	0.082307692	0.12	0.108	0.05	0.055384615	0.12	0.078	0.05	0.05	196	-		13	0.019414507
hardness as CaCO3	503.0769231	752	729.2	359	503.0769231	752	729.2	689.4	370.2	-	0.1		13	128.9427919
hexabromocyclododecane (HBCDD)	0.000130769	0.00024	0.000216	0.00007	9.30769E-05	0.00024	0.000216	0.000174	0.00007	-	0.00014		13	5.69187E-05
ioxynil	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	10	-		13	1.80556E-18
iron dissolved	51.4	370	177.4	2.75	24.62083333	49	46.25	43.8	8.03	1000	5.5		12	14.74519118
iron total	396.8461538	850	778	69	396.8461538	850	778	698	132	1000	5.5		13	240.5430821

		Site 1 (raw)			Site 1 (cleaned)												Site 3 (raw)			Site 3 (cleaned)								
Determinand	**Units**	**Mean**	**Max**	**95%ile**	**Min**	**Mean**	**Max**	**95%ile**	**90%ile**	**10%ile**	**AA-EQS**	**MAC-EQS**	**MAC-EQS Type**	**PCV**	**LOD**	**Count**	**Standard Deviation**	**Mean**	**Max**	**95%ile**	**Min**	**Mean**	**Max**	**95%ile**	**90%ile**	**10%ile**	**EQS**	**LOD**	**EQS assessment**	**Count**	**Standard Deviation**
ivermectin	ug/l	3.846153846	5	5	2.5	2.5	2.5	2.5	2.5	2.5	0.0001	0.001	Maximum	-	5	13	0	4.038461538	5	5	2.5	2.5	2.5	2.5	2.5	2.5	0.0001	5	Fail	13	0
lead dissolved	ug/l	0.166153846	0.37	0.364	0.045	0.166153846	0.37	0.364	0.336	0.056	1.2	14	Maximum	10	0.09	13	0.104266363	0.4	2.8	1.432	0.045	0.18875	0.52	0.465	0.405	0.045	1.2	0.09		12	0.151794194
lead total	ug/l	0.368461538	0.58	0.574	0.17	0.368461538	0.58	0.574	0.568	0.196	1.2	14	Maximum	-	0.09	13	0.146676864	2.263076923	6.6	5.52	0.5	2.263076923	6.6	5.52	4.44	0.626	1.2	0.09	Fail	13	1.763785629
linuron	ug/l	0.007692308	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.5	0.9	95%ile	-	-	13	9.02779E-19	0.008076923	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.5	-		13	9.02779E-19
malachite green	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	100	Maximum	-	-	13	0	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-		13	0
malathion	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-		-	-	13	1.80556E-18	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-		13	1.80556E-18
mancozeb	ug/l CS2	1.153846154	3.2	2.84	0.05	1.146153846	3.2	2.84	2.6	0.05	2	20	Maximum	-	-	13	1.114387264	0.207692308	1.3	0.7	0.05	0.095833333	0.3	0.245	0.19	0.05	2	-		12	0.078213964
maneb	ug/l CS2	0.546153846	3	2.52	0.05	0.507692308	3	2.52	1.82	0.05	3	30	Maximum	-	-	13	0.947990452	0.261538462	1.5	0.9	0.05	0.1125	0.25	0.25	0.25	0.05	3	-		12	0.093237234
manganese dissolved	ug/l	94.15384615	130	130	64	94.15384615	130	130	126	74.4	123	-		50	-	13	20.27250253	6937.692308	15000	14400	290	6937.692308	15000	14400	13600	1820	123	-	Fail	13	4469.187387
manganese total	ug/l	99.61538462	160	142	69	99.61538462	160	142	126	73.4	123	-		-	-	13	25.1181822	7284.615385	15000	14400	400	7284.615385	15000	14400	13800	2140	-	-		13	4479.926739
MCPA	ug/l	0.016153846	0.03	0.024	0.01	0.011538462	0.03	0.018	0.01	0.01	12	80	Maximum	-	-	13	0.005547002	0.021538462	0.05	0.044	0.01	0.015384615	0.05	0.044	0.034	0.01	12	-		13	0.013301243
mecoprop	ug/l	0.036153846	0.07	0.058	0.01	0.036153846	0.07	0.058	0.05	0.012	18	187	95%ile	10	-	13	0.017577666	0.016923077	0.03	0.024	0.01	0.011538462	0.03	0.018	0.01	0.01	18	-		13	0.005547002
mercury dissolved	ug/l	0.003884615	0.017	0.0152	0.0005	0.003884615	0.017	0.0152	0.0122	0.001	0.07	-		1	0.001	13	0.005323509	0.003615385	0.013	0.01	0.0005	0.003576923	0.013	0.01	0.0078	0.0005	0.07	0.001		13	0.003757471
mercury total	ug/l	0.007153846	0.037	0.028	0.0005	0.007153846	0.037	0.028	0.0194	0.0008	0.07	-		-	0.001	13	0.010626979	0.007269231	0.022	0.0178	0.0005	0.007269231	0.022	0.0178	0.0146	0.0012	0.07	0.001		13	0.006146189
methiocarb	ug/l	0.076923077	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.01	0.77	95%ile	-	1	13	0	0.080769231	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.01	0.1	Fail	13	0
mevinphos	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	-	0.02	Maximum	-	-	13	1.80556E-18	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	-		13	1.80556E-18
nickel dissolved	ug/l	18.83846154	61	45.4	8.9	18.83846154	61	45.4	31.4	11	4	34	Maximum	20	0.5	13	14.15883343	41.13846154	120	87.6	7.8	41.13846154	120	87.6	63	13.6	4	0.5	Fail	13	28.30634612
nickel total	ug/l	19.53846154	61	45.4	11	19.53846154	61	45.4	31.4	11	4	34		-	0.5	13	13.8901367	44.82307692	120	88.8	8.7	44.82307692	120	88.8	65	18.4	4	0.5	Fail	13	27.23552074
nitrate	mg/l NO3	37.15807692	120	90.25	4.29	37.15807692	120	90.25	77	9.395	-	-		-	0.1	13	30.67973625	6.228923077	34	18	0.294	6.228923077	34	18	16	0.712	-	0.1		13	7.72388829
nitrate	mg/l N	37.15807692	120	90.25	4.29	37.15807692	120	90.25	77	9.395	-	-		-	-	13	30.67973625	6.228923077	34	18	0.294	6.228923077	34	18	16	0.712	-	0.1		13	7.72388829
nitrilotriacetic acid (NTA)	ug/l	76.92307692	100	100	50	50	50	50	50	50	1000	10000	Maximum	-	-	13	0	80.76923077	100	100	50	50	50	50	50	50	1000	-		13	0
nitrite	mg/l NO2	0.775996154	2.5	2.075	0.0153	0.775996154	2.5	2.075	1.9	0.075	-	-		0.5	0.1	13	0.702590636	0.34225	2.5	1.125	0.0155	0.332173077	2.5	1.125	0.83	0.0155	-	0.1		13	0.535361167
nitrite	mg/l N	0.775996154	2.5	2.075	0.0153	0.775996154	2.5	2.075	1.9	0.075	-	-		-	-	13	0.702590636	0.34225	2.5	1.125	0.0155	0.332173077	2.5	1.125	0.83	0.0155	-	0.1		13	0.535361167
nonylphenols (4-nonylphenol technical mix)	ug/l	0.283076923	0.51	0.438	0.02	0.283076923	0.51	0.438	0.386	0.186	0.3	2	Maximum	-	0.04	13	0.115425634	0.033846154	0.06	0.048	0.02	0.023076923	0.06	0.036	0.02	0.02	0.3	0.04		13	0.011094004
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	ug/l	0.008076923	0.01	0.01	0.005	0.005384615	0.01	0.007	0.005	0.005	0.1	-		-	0.01	13	0.00138675	0.008076923	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.1	0.01		13	9.02779E-19
omethoate	ug/l	0.007692308	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.01	-		-	-	13	9.02779E-19	0.008076923	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.01	-		13	9.02779E-19
organic nitrogen	mg/l as N	3.846153846	5	5	2.5	2.5	2.5	2.5	2.5	2.5	-	-		-	-	13	0	4.038461538	5	5	2.5	2.5	2.5	2.5	2.5	2.5	-	-		13	0
orthophosphate as PO4	mg/l	0.376153846	1.01	0.956	0.015	0.375	1.01	0.956	0.852	0.096	-	-		-	-	13	0.312823166	0.118461538	0.4	0.286	0.015	0.113846154	0.4	0.286	0.21	0.015	-	-		13	0.112771041
pendimethalin	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.3	0.58	95%ile	20	-	13	1.80556E-18	0.022307692	0.06	0.048	0.01	0.016153846	0.06	0.034	0.01	0.01	0.3	-		13	0.015566236
perfluorooctanoic acid (PFOA)	ug/l	0.005461538	0.008	0.0074	0.0025	0.005461538	0.008	0.0074	0.007	0.00272	-	-		-	-	13	0.001899359	0.004283077	0.00551	0.005192	0.00286	0.004283077	0.00551	0.005192	0.004972	0.003274	-	-		13	0.00072726
permethrin	ug/l	0.002538462	0.009	0.0084	0.0005	0.002423077	0.009	0.0084	0.007	0.0005	0.001	0.01	95%ile	-	-	13	0.002827294	0.000884615	0.002	0.0014	0.0005	0.000653846	0.002	0.0014	0.0009	0.0005	0.001	-		13	0.000427425
pH	pH units	7.153846154	7.9	7.66	6.8	7.153846154	7.9	7.66	7.46	6.84	-	6 to 9	95%ile	-	0.1	13	0.29330128	7.530769231	8.2	8.02	6.6	7.530769231	8.2	8.02	7.88	7.22	6 to 9	0.1 pH unit		13	0.383806842
phenol	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	7.7	46	95%ile	-	-	13	0	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	7.7	-		13	0
pirimicarb	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	1	5	Maximum	-	-	13	0	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	1	-		13	0
pirimiphos-methyl	ug/l	0.007692308	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.015	0.05	Maximum	-	-	13	9.02779E-19	0.008076923	0.01	0.01	0.005	0.005	0.005	0.005	0.005	0.005	0.015	-		13	9.02779E-19
polychloro chloromethyl sulphonamido diphenyl ethe	ug/l	0.215384615	0.5	0.5	0.1	0.161538462	0.5	0.5	0.42	0.1	0.05	-		-	0.2	13	0.150213523	0.192307692	0.5	0.32	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.2	Fail	12	1.44949E-17
prochloraz	ug/l	0.076923077	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	4	40	Maximum	-	-	13	0	0.080769231	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	4	-		13	0
propetamphos	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.1	Maximum	0.1	-	13	1.80556E-18	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.03	-		13	1.80556E-18
propyzamide	ug/l	0.032307692	0.32	0.134	0.005	0.03	0.32	0.134	0.01	0.005	100	1000	Maximum	0.1	-	13	0.087154078	0.014230769	0.03	0.03	0.005	0.012692308	0.03	0.03	0.028	0.005	100	-		13	0.009919548
salinity @ 20øC	%	0.369230769	0.4	0.4	0.3	0.369230769	0.4	0.4	0.4	0.3	-	-		-	0.0493	13	0.048038446	0.592307692	0.8	0.74	0.4	0.592307692	0.8	0.74	0.7	0.5	-	0.0493		13	0.118754217
silver dissolved	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.05	0.1	Maximum	-	1	13	0	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.05	1	Fail	13	0
silver total	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	-	-		-	-	13	0	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	-	-		13	0
soluble reactive phosphorus	mg/l	0.123076923	0.33	0.312	0.01	0.123076923	0.33	0.312	0.278	0.032	-	-		-	-	13	0.101438373	0.039230769	0.13	0.094	0.005	0.038076923	0.13	0.094	0.07	0.005	-	-		13	0.036545546
sulcofuron	ug/l	0.038461538	0.05	0.05	0.025	0.025	0.025	0.025	0.025	0.025	-	25	95%ile	-	-	13	0	0.040384615	0.05	0.05	0.025	0.025	0.025	0.025	0.025	0.025	25	-		13	0
sulphate	mg/l SO4	79.30769231	180	138	40	79.30769231	180	138	105.6	54.4	400	-		250	-	13	34.91271167	369.2307692	590	530	170	369.2307692	590	530	486	198	400	-		13	121.8237483
sulphide or hydrogen sulphide	ug/l	12.38461538	28	24.4	5	10.07692308	28	24.4	20.2	5	0.25	1	Maximum	-	10	13	7.398891116	12.61538462	26	23.6	5	9.923076923	26	23.6	22	5	0.25	10	Fail	13	8.08766075
suspended solids @ 105øC	mg/l	9.5	41	26.6	2.5	9.307692308	41	26.6	16	2.5	-	-		-	2	13	10.42340807	41.46153846	120	98.4	7	41.46153846	120	98.4	80.6	8.8	-	2		13	33.07470177
tecnazene	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1	10	Maximum	-	-	13	1.80556E-18	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1	-		13	1.80556E-18
tetrachloroethane	ug/l	0.092307692	0.25	0.16	0.05	0.065384615	0.25	0.13	0.05	0.05	140	1848	95%ile	-	-	13	0.05547002	0.096153846	0.25	0.16	0.05	0.05	0.05	0.05	0.05	0.05	140	-		12	7.24744E-18
thiobendazole	ug/l	0.076923077	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	-	-		-	-	13	0	0.080769231	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	-	-		13	0
tin dissolved	ug/l	0.315384615	0.5	0.44	0.2	0.223076923	0.5	0.32	0.2	0.2	-	-		-	-	13	0.083205029	0.384615385	0.9	0.66	0.2	0.225	0.5	0.335	0.2	0.2	-	-		12	0.08660254
tin total	ug/l	0.369230769	0.6	0.54	0.2	0.292307692	0.6	0.54	0.5	0.2	25	-		-	-	13	0.149786172	0.384615385	0.9	0.66	0.2	0.276923077	0.9	0.66	0.44	0.2	25	-		13	0.204751256
toluene	ug/l	0.076923077	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	74	380	95%ile	700	-	13	0	0.080769231	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	74	-		13	0
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	mg/l	218	461	374	112	218	461	374	304.2	141.4	250	-		-	-	13	90.59341404	433.3846154	644	588.2	241	433.3846154	644	588.2	550.2	259.2	250	-	Fail	13	121.0740396
total organic carbon	mg/l	14.09230769	78	40.2	6.4	14.09230769	78	40.2	14.2	6.82	-	-		-	0.5	13	19.34388196	4.823076923	6.8	6.38	2.2	4.823076923	6.8	6.38	6.06	2.88	-	0.5		13	1.347314518
total oxidised nitrogen	mg/l as N	14.07307692	27.2	23.84	4.93	14.07307692	27.2	23.84	21.16	7.592	-	-		-	-	13	6.085977578	2.514	7.76	6.458	0.415	2.514	7.76	6.458	5.304	0.623	-	-		13	2.212922464
total phosphorus	mg/l	0.549230769	1.1	0.932	0.22	0.549230769	1.1	0.932	0.818	0.33	1	-		-	0.01	13	0.249281017	0.316153846	0.96	0.93	0.03	0.316153846	0.96	0.93	0.806	0.11	-	0.01		13	0.29352849
triallate	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.25	5	Maximum	-	-	13	1.80556E-18	0.03	0.09	0.072	0.01	0.023846154	0.09	0.072	0.058	0.01	0.25	-		13	0.025993096
triazophos	ug/l	0.015384615	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.005	-		-	-	13	1.80556E-18	0.016153846	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	-	-		13	1.80556E-18
tributyl phosphate	ug/l	0.016923077	0.02	0.02	0.01	0.011538462	0.02	0.02	0.018	0.01	50	500	Maximum	-	-	13	0.003755338	0.016153846	0.02	0.02	0.01	0.010769231	0.02	0.014	0.01	0.01	50	-		13	0.002773501
tributyltin compounds (as tributyltin cation)	ug/l	3.89286E-05	0.00006	0.00006	0.000015	3.14286E-05	0.00006	0.0000535	0.000047	0.000015	0.0002	0.0015	Maximum	-	0.00002	14	1.3788E-05	6.46154E-05	0.00012	0.000114	0.000015	6.46154E-05	0.00012	0.000114	0.00011	0.000018	0.0002	0.00002		13	3.61399E-05
trichloroethylene	ug/l	0.769230769	1	1	0.5	0.5	0.5	0.5	0.5	0.5	10	-		-	1	13	0	0.807692308	1	1	0.5	0.5	0.5	0.5	0.5	0.5	10	1		13	0
triclosan	ug/l	0.027307692	0.07	0.058	0.005	0.027307692	0.07	0.058	0.048	0.01	0.1	0.28	95%ile	-	0.01	13	0.01877669	0.008846154	0.02	0.014	0.005	0.006153846	0.02	0.011	0.005	0.005	0.1	0.01		13	0.004160251
triphenyltin compounds (as tryphenyltin cation)	ug/l TPT	0.001571429	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	-	0.02	Maximum	-	-	14	4.50052E-19	0.002015385	0.009	0.0048	0.0001	0.000925	0.001	0.001	0.001	0.001	-	-		12	0.000259808
vanadium dissolved	ug/l	7.692307692	10	10	5	5	5	5	5	5	20	-		-	-	13	0	8.076923077	10	10	5	5	5	5	5	5	-	-		13	0
vanadium total	ug/l	7.692307692	10	10	5	5	5	5	5	5	20	-		-	-	13	0	8.076923077	10	10	5	5	5	5	5	5	20	-		13	0
zinc dissolved	ug/l	49.07692308	100	81.4	21	49.07692308	100	81.4	68	26.2	10.9	-		5	0.5	13	22.15273323	23.33846154	63	60.6	2.2	25.28333333	63	60.8	57.6	3.34	10.9	0.5	Fail	12	21.18497896
zinc total	ug/l	59.30769231	110	110	30	59.30769231	110	110	102	32	10.9	-		5	0.5	13	26.6532819	40.76923077	77	74	12	44.16666667	77	74.25	71.3	22.6	-	-		12	19.45546585

A.2 Input data, sites 5 and 6

		Site 5 (raw)			Site 5 (cleaned)											Site 6 (raw)			Site 6 (cleaned)										
Determinand	**Units**	**Mean**	**Max**	**95%ile**	**Min**	**Mean**	**Max**	**95%ile**	**90%ile**	**10%ile**	**AA-EQS**	**MAC-EQS**	**MAC-EQS Type**	**LOD**	**EQS assessment**	**Count**	**Standard Deviation**	**Mean**	**Max**	**95%ile**	**Min**	**Mean**	**Max**	**95%ile**	**90%ile**	**10%ile**	**AA-EQS**	**MAC-EQS**	**MAC-EQS Type**	**LOD**	**EQS assessment**	**Count**	**Standard Deviation**
1,1,1-trichloroethane	ug/l	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	100	-		1		13	0	0.5	0.5	0.5	N/A	N/A	N/A	N/A	N/A	N/A	100	-		1			
1,1,2-trichloroethane	ug/l	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	400	-		1		13	0	0.5	0.5	0.5	N/A	N/A	N/A	N/A	N/A	N/A	400	-		1			
2,4-dichlorophenol	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.2	140	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.2	140	95%ile	-			
2,4-dichlorophenoxyacetic acid (2,4-D)	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.3	1.3	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.3	1.3	95%ile	-			
2-chlorophenol	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	50	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	50	-		-			
3,4-dichloroaniline	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.2	5.4	95%ile	1	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.2	5.4	95%ile	1	Fail		
3-methylphenol (m-cresol)	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
4-chloro-3-methyl phenol	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	40	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	40	-		-			
4-methylphenol (p-cresol)	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
abamectin	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.03	Maximum	5	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.03	Maximum	5	Fail		
acid neutralisation capacity (ANC, unfiltered)	mg/l	2992.307692	4000	3580	2200	2992.307692	4000	3580	3280	2560	-	-		5		13	425.1696494	3571.428571	4800	4410	N/A	N/A	N/A	N/A	N/A	N/A	-	-		5			
alkalinity as CaCO3	mg/l	149.2307692	200	182	110	149.2307692	200	182	168	124	-	-		5		13	22.15909838	176.8571429	240	220.5	N/A	N/A	N/A	N/A	N/A	N/A	-	-		5			
aluminium dissolved	ug/l	31.38461538	180	150	5	31.38461538	180	150	109.4	5	-	-		10		13	56.21171061	92.35714286	1000	393.55	N/A	N/A	N/A	N/A	N/A	N/A	-	-		10			
aluminium total	ug/l	195.5384615	550	430	72	195.5384615	550	430	344	76.2	-	-		10		13	138.5157123	256.6428571	1800	779.5	N/A	N/A	N/A	N/A	N/A	N/A	-	-		10			
ammonia	mg/l as NH3	0.018346154	0.14	0.08875	0	0.008538462	0.01	0.01	0.01	0.0085	0.3	-		-		12	0.002618866	0.011839286	0.05	0.03015	0.0085	0.011839286	0.05	0.03015	0.01	0.0085	0.3	-		-		14	0.009613892
ammonia	mg/l as N	0.018346154	0.14	0.08875	0	0.008538462	0.01	0.01	0.01	0.0085	0.3	-		0.1		12	0.002618866	0.011839286	0.05	0.03015	0.0085	0.011839286	0.05	0.03015	0.01	0.0085	0.3	-		0.1		14	0.009613892
ammoniacal nitrogen	mg/l as N	0.139653846	0.58	0.532	0.0075	0.139653846	0.58	0.532	0.428	0.022	0.3	0.3	90%ile	0.015		13	0.18218962	0.291428571	1.5	0.993	N/A	N/A	N/A	N/A	N/A	N/A	-	0.3	90%ile	0.015			
antimony dissolved	ug/l	0.62	2.1	1.5	0.23	0.62	2.1	1.5	0.994	0.36	-	-		0.17		13	0.487767021	0.284642857	0.51	0.419	0.085	0.284642857	0.51	0.419	0.358	0.223	-	-		0.17		14	0.093118293
antimony total	ug/l	0.64	2.1	1.5	0.35	0.64	2.1	1.5	0.994	0.404	-	-		0.17		13	0.476007703	0.376428571	0.87	0.6945	0.22	0.376428571	0.87	0.6945	0.573	0.233	-	-		0.17		14	0.180750876
arsenic dissolved	ug/l	1.129230769	2.2	2.08	0.57	1.129230769	2.2	2.08	1.96	0.612	50	-		0.16		13	0.568410965	1.232142857	2.3	2.235	N/A	N/A	N/A	N/A	N/A	N/A	50	-		0.16			
arsenic total	ug/l	1.288461538	2.3	2.21	0.67	1.288461538	2.3	2.21	2.138	0.722	50	-		0.16		13	0.600053416	1.5	2.9	2.64	N/A	N/A	N/A	N/A	N/A	N/A	50	-		0.16			
azinphos methyl, dissolved	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	-		-			
BDE-100	ug/l	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		0.0001		16	1.11976E-19	0.00025	0.00025	0.00025	N/A	N/A	N/A	N/A	N/A	N/A	-	-		0.0001			
BDE-153	ug/l	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		0.0001		16	1.11976E-19	0.00025	0.00025	0.00025	N/A	N/A	N/A	N/A	N/A	N/A	-	-		0.0001			
BDE-154	ug/l	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		0.0001		16	1.11976E-19	0.00025	0.00025	0.00025	N/A	N/A	N/A	N/A	N/A	N/A	-	-		0.0001			
BDE-28	ug/l	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		0.0001		16	1.11976E-19	0.00025	0.00025	0.00025	N/A	N/A	N/A	N/A	N/A	N/A	-	-		0.0001			
BDE-47	ug/l	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		0.0001		16	1.11976E-19	0.00025	0.00025	0.00025	N/A	N/A	N/A	N/A	N/A	N/A	-	-		0.0001			
BDE-99	ug/l	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	-	-		0.0001		16	1.11976E-19	0.00025	0.00025	0.00025	N/A	N/A	N/A	N/A	N/A	N/A	-	-		0.0001			
bentazone	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	500	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	500	-		-			
benzene	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	50	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	50	Maximum	-			
benzo(a)pyrene	ug/l	0.003821538	0.00741	0.007152	0.0002	0.003821538	0.00741	0.007152	0.006824	0.00076	0.00017	0.27	Maximum	0.00017	Fail	13	0.00258234	0.019752857	0.134	0.06458	0.00283	0.019752857	0.134	0.06458	0.02399	0.00663	0.00017	0.27	Maximum	0.00017	Fail	14	0.033421435
benzyl butyl phthalate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.5	51	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.5	51	95%ile	-			
biphenyl	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	25	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	25	-		-			
BOD (5 day)	mg/l	3.361538462	9.6	7.08	0.5	3.361538462	9.6	7.08	5.28	1.22	-	7.5	90%ile	1		13	2.343622005	5.464285714	25	17.85	N/A	N/A	N/A	N/A	N/A	N/A	-	7.5	90%ile	1			
boron dissolved	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2000	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2000	-		-			
boron total	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2000	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2000	-		-			
bromide	mg/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
bromine - total residual oxidant	mg/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.002	0.005	Maximum	-	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.002	0.005	Maximum	-	Fail		
bromoxynil	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	100	1000	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	100	1000	Maximum	-			
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
c (PFOS)	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00065	36	Maximum	0.00065		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00065	36	Maximum	0.00065			
cadmium dissolved	ug/l	0.011538462	0.03	0.018	0.01	0.011538462	0.03	0.018	0.01	0.01	0.25	1.5	Maximum	0.02		13	0.005547002	0.020714286	0.09	0.0835	N/A	N/A	N/A	N/A	N/A	N/A	0.25	1.5	Maximum	0.02			
cadmium total	ug/l	0.019230769	0.1	0.058	0.01	0.019230769	0.1	0.058	0.028	0.01	0.25	1.5		0.02		13	0.024987176	0.032857143	0.13	0.117	N/A	N/A	N/A	N/A	N/A	N/A	0.25	1.5		0.02			
calcium total	mg/l	78.30769231	100	91	65	78.30769231	100	91	84.8	65.4	-	-		0.09		13	9.43737795	97.92857143	120	120	N/A	N/A	N/A	N/A	N/A	N/A	-	-		0.09			
carbendazim	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.15	0.7	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.15	0.7	Maximum	-			
chemical oxygen demand (COD)	mg/l	16.57692308	24	23.4	5	16.57692308	24	23.4	22.8	8.4	-	-		5		13	5.999465788	67.96428571	640	277.95	N/A	N/A	N/A	N/A	N/A	N/A	-	-		5			
chloride	mg/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	250	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	250	-		-			
chlorine free	mg/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
chlorine total	mg/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	-	5	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	-	5	-			
chloroform	ug/l	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.5	-		1		13	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.5	-		1		14	0
chloronitrotoluenes	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	-		-			
chlorophyll	ug/l	20.46153846	57	51	10	20.46153846	57	51	44.8	10	-	-		20		13	16.27173103	26.57142857	98	70.05	N/A	N/A	N/A	N/A	N/A	N/A	-	-		20			
chlorothalonil	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.035	1.2	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.035	1.2	Maximum	-			
chlorotoluron	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	20	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	20	Maximum	-			
chlorpropham	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	40	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	40	Maximum	-			
chromium (VI) dissolved	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.4	-		7	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.4	-		7	Fail		
chromium dissolved	ug/l	0.411538462	1.7	1.52	0.125	0.411538462	1.7	1.52	1.22	0.125	-	-		0.25		13	0.529099469	0.811785714	3.7	2.53	0.125	0.811785714	3.7	2.53	1.87	0.125	-	-		0.25		14	1.013525088
chromium total	ug/l	0.756153846	2.2	1.78	0.125	0.756153846	2.2	1.78	1.44	0.15	-	-		0.25		13	0.612308316	1.8725	8.6	5.22	0.125	1.8725	8.6	5.22	3.28	0.286	-	-		0.25		14	2.233939905
cobalt dissolved	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	100	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	100	Maximum	-			
cobalt total	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
conductivity @ 20øC	uS/cm	597.1538462	650	646.4	530	597.1538462	650	646.4	641.8	548.2	-	-		-		13	36.32686369	657.3571429	773	762.6	570	657.3571429	773	762.6	746.2	581.5	-	-		-		14	65.62786362
copper dissolved	ug/l	0.915384615	2.2	2.02	0.2	0.915384615	2.2	2.02	1.78	0.24	1	-		0.4	Fail	13	0.608065449	2	7.7	5.75	0.5	2	7.7	5.75	4.55	0.63	1	-		0.4	Fail	14	2.082528049
copper total	ug/l	1.338461538	3.4	2.5	0.2	1.338461538	3.4	2.5	1.88	0.7	1	-		0.4	Fail	13	0.799519086	3.171428571	9.3	6.83	1.1	3.171428571	9.3	6.83	5.41	1.13	1	-		0.4	Fail	14	2.339437333
coumaphos	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	-		-			
cyanide total	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	-		40	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	-		40	Fail		
cyanide, free (easily liberable)	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
cyfluthrin	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.001	95%ile	0.1	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.001	95%ile	0.1	Fail		
cypermethrin	ug/l	4.38462E-05	0.00009	6E-05	0.00004	4.38462E-05	0.00009	6E-05	0.00004	0.00004	0.00008	0.0006	Maximum	0.00008	Fail	13	1.38675E-05	0.00005	0.00012	0.000107	0.00004	0.00005	0.00012	0.000107	8.2E-05	0.00004	0.00008	0.0006	Maximum	0.00008	Fail	14	2.57204E-05
demeton	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5	-		-			
di(2-ethylhexyl)phthalate (DEHP)	ug/l	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	1.3	-		0.15		13	1.44445E-17	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	1.3			0.15		14	1.44017E-17
diazinon	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.02	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.02	95%ile	-			
dibutyl phthalate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	40	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	40	Maximum	-			
dichlorobenzene, total isomers	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	200	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	200	Maximum	-			
dichlorvos	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0006	0.0007	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0006	0.0007	Maximum	-			
diethyl phthalate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	200	1000	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	200	1000	Maximum	-			
diflubenzuron	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.001	0.015	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.001	0.015	Maximum	-			
dimethoate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.48	4	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.48	4	95%ile	-			
dimethyl phthalate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	800	4000	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	800	4000	Maximum	-			
dioctyl phthalate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	40	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	40	Maximum	-			
dissolved organic carbon	mg/l	3.623076923	4.7	4.64	2.2	3.623076923	4.7	4.64	4.56	2.72	-	-		0.5		13	0.802240452	4.907142857	11	7.75	1	4.907142857	11	7.75	5.94	3.43	-	-		0.5		14	2.193860063
doramectin	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.001	0.01	Maximum	5	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.001	0.01	Maximum	5	Fail		
EDTA	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	400	4000	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	400	4000	Maximum	-			
fenchlorphos	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	0.1	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	0.1	Maximum	-			
fenitrothion	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	-		-			
flucofuron	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1	95%ile	-			
fluoranthene	ug/l	0.0053	0.0091	0.0085	0.0014	0.0053	0.0091	0.0085	0.00782	0.00314	0.0063	0.12	Maximum	0.0009		13	0.002046135	0.018607143	0.109	0.0531	0.0061	0.018607143	0.109	0.0531	0.02144	0.00646	0.0063	0.12	Maximum	0.0009		14	0.026420431
fluoride	mg/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	15	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	15	Maximum	-			
formaldehyde	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	50	Maximum	50	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	50	Maximum	50	Fail		
glyphosate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	196	398	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	196	398	95%ile	-			
hardness as CaCO3	mg/l	218.8461538	296	265.4	169	218.8461538	296	265.4	242.4	184.8	-	-		0.1		13	31.74073659	262.5857143	368	364.1	N/A	N/A	N/A	N/A	N/A	N/A	-	-		0.1			
hexabromocyclododecane (HBCDD)	ug/l	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.0016	0.5	Maximum	0.00014		13	1.41059E-20	0.000122143	0.00037	0.000253	0.00007	0.000122143	0.00037	0.000253	0.000178	0.00007	0.0016	0.5	Maximum	0.00014		14	8.34062E-05
ioxynil	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	100	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	100	Maximum	-			
iron dissolved	ug/l	69.46153846	380	290	13	69.46153846	380	290	194.2	13	1000	-		5.5		13	109.5099808	170.2857143	1700	725	N/A	N/A	N/A	N/A	N/A	N/A	1000	-		5.5			
iron total	ug/l	386.1538462	940	868	110	386.1538462	940	868	766	122	1000	-		5.5		13	269.6460168	412.6428571	2600	1189.5	N/A	N/A	N/A	N/A	N/A	N/A	1000	-		5.5			
ivermectin	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0001	0.001	Maximum	5	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0001	0.001	Maximum	5	Fail		
lead dissolved	ug/l	0.152307692	0.67	0.436	0.045	0.152307692	0.67	0.436	0.258	0.045	1.2	14	Maximum	0.09		13	0.168851702	0.545714286	4.5	2.29	N/A	N/A	N/A	N/A	N/A	N/A	1.2	14	Maximum	0.09			
lead total	ug/l	0.896153846	2.4	2.28	0.25	0.896153846	2.4	2.28	2.06	0.29	1.2	14	Maximum	0.09		13	0.701362228	1.490357143	6.1	3.695	N/A	N/A	N/A	N/A	N/A	N/A	1.2	14	Maximum	0.09			
linuron	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5	0.9	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5	0.9	95%ile	-			
malachite green	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5	100	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5	100	Maximum	-			
malathion	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	-		-			

		Site 5 (raw)			Site 5 (cleaned)											Site 6 (raw)			Site 6 (cleaned)										
Determinand	**Units**	**Mean**	**Max**	**95%ile**	**Min**	**Mean**	**Max**	**95%ile**	**90%ile**	**10%ile**	**AA-EQS**	**MAC-EQS**	**MAC-EQS Type**	**LOD**	**EQS assessment**	**Count**	**Standard Deviation**	**Mean**	**Max**	**95%ile**	**Min**	**Mean**	**Max**	**95%ile**	**90%ile**	**10%ile**	**AA-EQS**	**MAC-EQS**	**MAC-EQS Type**	**LOD**	**EQS assessment**	**Count**	**Standard Deviation**
mancozeb	ug/l CS2	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	20	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	20	Maximum	-			
maneb	ug/l CS2	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	30	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	30	Maximum	-			
manganese dissolved	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	123	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	123	-		-			
manganese total	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	123	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	123	-		-			
MCPA	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	80	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	80	Maximum	-			
mecoprop	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	18	187	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	18	187	95%ile	-			
mercury dissolved	ug/l	0.002653846	0.016	0.01	0.0005	0.002653846	0.016	0.01	0.0054	0.0005	0.07	-		0.001		13	0.004298181	0.004892857	0.027	0.01855	N/A	N/A	N/A	N/A	N/A	N/A	0.07	-		0.001			
mercury total	ug/l	0.004230769	0.016	0.0118	0.0005	0.004230769	0.016	0.0118	0.0084	0.0006	0.07	-		0.001		13	0.004279872	0.006392857	0.031	0.0219	0.0005	0.006392857	0.031	0.0219	0.0149	0.001	0.07	-		0.001		14	0.008371606
methiocarb	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.77	95%ile	1	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.77	95%ile	1	Fail		
mevinphos	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.02	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.02	Maximum	-			
nickel dissolved	ug/l	2.423076923	3.4	3.28	1.1	2.423076923	3.4	3.28	3.1	1.48	4	34	Maximum	0.5	Fail	13	0.654667659	2.014285714	7.1	3.915	0.5	2.014285714	7.1	3.915	2.17	0.99	4	34	Maximum	0.5	Fail	14	1.539159182
nickel total	ug/l	3.676923077	15	8.16	1.7	3.676923077	15	8.16	3.58	2	4	34		0.5	Fail	13	3.459324078	2.914285714	9.4	5.955	1.2	2.914285714	9.4	5.955	3.95	1.69	4	34		0.5	Fail	14	2.020608112
nitrate	mg/l NO3	3.206769231	13	8.275	0.384	3.206769231	13	8.275	6.75	0.6325	-	-		0.1		13	3.013350418	17.55571429	100	51.6	0.0155	0.480714286	2.5	1.3	1.23	0.0155	-	-		0.1		14	0.571552555
nitrate	mg/l N	3.206769231	13	8.275	0.384	3.206769231	13	8.275	6.75	0.6325	-	-		-		13	3.013350418	17.55571429	100	51.6	0.0155	0.480714286	2.5	1.3	1.23	0.0155	-	-		-		14	0.571552555
nitrilotriacetic acid (NTA)	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	1000	10000	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	1000	10000	Maximum	-			
nitrite	mg/l NO2	0.463596154	1.5	1.475	0.0155	0.463596154	1.5	1.475	1.35	0.0155	-	-		0.1		13	0.531678362	0.480714286	2.5	1.3	1.63	17.55571429	100	51.6	44.8	2.494	-	-		0.1		14	21.53003474
nitrite	mg/l N	0.463596154	1.5	1.475	0.0155	0.463596154	1.5	1.475	1.35	0.0155	-	-		-		13	0.531678362	0.480714286	2.5	1.3	1.63	17.55571429	100	51.6	44.8	2.494	-	-		-		14	21.53003474
nonylphenols (4-nonylphenol technical mix)	ug/l	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.3	2	Maximum	0.04		13	3.61111E-18	0.024285714	0.04	0.04	0.02	0.024285714	0.04	0.04	0.04	0.02	0.3	2	Maximum	0.04		14	0.008516306
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	ug/l	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.1	-		0.01		13	9.02779E-19	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.1	-		0.01		12	9.00104E-19
omethoate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	-		-			
organic nitrogen	mg/l as N	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	-	-		-		13	0	2.5	2.5	2.5	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
orthophosphate as PO4	mg/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
pendimethalin	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.3	0.58	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.3	0.58	95%ile	-			
perfluorooctanoic acid (PFOA)	ug/l	0.004265385	0.00954	0.00747	0.00269	0.004265385	0.00954	0.00747	0.005972	0.002792	-	-		-		13	0.001862667	0.001618571	0.00501	0.003099	0.00079	0.001618571	0.00501	0.003099	0.002004	0.000806	-	-		-		14	0.001064532
permethrin	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.001	0.01	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.001	0.01	95%ile	-			
pH	pH units	7.907692308	8.2	8.2	7.5	7.907692308	8.2	8.2	8.18	7.72	-	6 to 9	95%ile	0.1		13	0.201913919	8	8.5	8.435	N/A	N/A	N/A	N/A	N/A	N/A	-	6 to 9	95%ile	0.1			
phenol	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.7	46	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.7	46	95%ile	-			
pirimicarb	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	5	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	5	Maximum	-			
pirimiphos-methyl	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.015	0.05	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.015	0.05	Maximum	-			
polychloro chloromethyl sulphonamido diphenyl ethe	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.05	-		0.2	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.05	-		0.2	Fail		
prochloraz	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	4	40	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	4	40	Maximum	-			
propetamphos	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	0.1	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	0.1	Maximum	-			
propyzamide	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	100	1000	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	100	1000	Maximum	-			
salinity @ 20øC	%	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-	-		0.0493		13	5.77778E-17	0.328571429	0.4	0.4	0.3	0.328571429	0.4	0.4	0.4	0.3	-	-		0.0493		14	0.046880723
silver dissolved	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.05	0.1	Maximum	1	Fail	N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.05	0.1	Maximum	1	Fail		
silver total	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
soluble reactive phosphorus	mg/l	0.101538462	0.36	0.288	0.005	0.101538462	0.36	0.288	0.24	0.005	0.05	-		-		13	0.11742701	0.192857143	0.42	0.381	N/A	N/A	N/A	N/A	N/A	N/A	0.05	-		-			
sulcofuron	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	25	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	25	95%ile	-			
sulphate	mg/l SO4	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	400	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	400	-		-			
sulphide or hydrogen sulphide	ug/l	10.84615385	23	22.4	5	10.84615385	23	22.4	22	5	0.25	1	Maximum	10	Fail	13	7.3693753	27	210	91.7	5	12.92307692	28	26.2	23.4	5	0.25	1	Maximum	10	Fail	13	7.847096474
suspended solids @ 105øC	mg/l	3174.153846	41000	16444.4	2.5	3174.153846	41000	16444.4	68.2	3	-	-		2		13	11365.27004	39.42857143	260	131.3	N/A	N/A	N/A	N/A	N/A	N/A	-	-		2			
tecnazene	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	10	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	10	Maximum	-			
tetrachloroethane	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	140	1848	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	140	1848	95%ile	-			
thiobendazole	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
tin dissolved	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-		-			
tin total	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	25	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	25	-		-			
toluene	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	74	380	95%ile	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	74	380	95%ile	-			
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	mg/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	250	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	250	-		-			
total organic carbon	mg/l	3.961538462	5.6	5.3	1.9	3.961538462	5.6	5.3	5.04	2.94	-	-		0.5		13	1.0555713	6.114285714	13	10.725	1.9	6.114285714	13	10.725	9.41	4.2	-	-		0.5		14	2.830563179
total oxidised nitrogen	mg/l as N	1.403461538	2.97	2.64	0.618	1.403461538	2.97	2.64	2.274	0.7588	-	-		-		13	0.667479914	6.703571429	23.4	16.055	1.66	6.703571429	23.4	16.055	11.83	2.219	-	-		-		14	5.938021695
total phosphorus	mg/l	0.430769231	1.2	1.08	0.09	0.430769231	1.2	1.08	0.908	0.164	1	-		0.01		13	0.324305965	0.547857143	1.3	1.053	N/A	N/A	N/A	N/A	N/A	N/A	1	-		0.01			
triallate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.25	5	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.25	5	Maximum	-			
triazophos	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.005	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.005	-		-			
tributyl phosphate	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	50	500	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	50	500	Maximum	-			
tributyltin compounds (as tributyltin cation)	ug/l	2.26923E-05	0.00008	5.3E-05	0.000015	2.26923E-05	0.00008	5.3E-05	0.000034	0.000015	0.0002	0.0015	Maximum	0.00002		13	1.84408E-05	0.000159286	0.0014	0.000568	N/A	N/A	N/A	N/A	N/A	N/A	0.0002	0.0015	Maximum	0.00002			
trichloroethylene	ug/l	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	10	-		1		13	0	0.5	0.5	0.5	N/A	N/A	N/A	N/A	N/A	N/A	10	-		1			
triclosan	ug/l	0.006153846	0.02	0.011	0.005	0.006153846	0.02	0.011	0.005	0.005	0.1	0.28	95%ile	0.01		13	0.004160251	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.1	0.28	95%ile	0.01		14	9.00104E-19
triphenyltin compounds (as tryphenyltin cation)	ug/l TPT	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.02	Maximum	-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.02	Maximum	-			
vanadium dissolved	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	-		-			
vanadium total	ug/l	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	-		-		N/A	N/A	#N/A	#N/A	#N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	-		-			
zinc dissolved	ug/l	7.203846154	20	17	0.65	7.203846154	20	17	14	1.74	10.9	-		0.5	Fail	13	5.438001377	6.860714286	18	14.75	0.65	6.860714286	18	14.75	12.7	2.62	10.9	-		0.5	Fail	14	4.7562986
zinc total	ug/l	24.16923077	110	63.8	8.9	24.16923077	110	63.8	32	9.64	10.9	-		0.5	Fail	13	26.77020684	14.69285714	46	28.45	4.6	14.69285714	46	28.45	18.7	7.93	10.9	-		0.5	Fail	14	9.968215972

B Appendix: Screening results

B.1 Screening results, site 3

Determinand	Units	Quality multiplied for RQP calculations?	Site 3 Part A Screening - Freshwater (#VALUE! = No EQS)													Site 3 Part B Screening - Freshwater: Liable to cause pollution test		
			Screening Test 1 (<10% of EQS)	Effluent Flow Rate for AA (EFR)	River Flow Rate (RFR)	Process contribution (PC)	Screening Test 2 (PC <4% EQS)	Long-Term Predicted Environmental Concentration (PEC)	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Effluent Flow Rate for MAC (EFR)	Short-Term Predicted Environmental Concentration (PEC)	Screening Test 4b (Short-term PEC>MAC EQS)	Significant load (kg/yr)	Annual load (kg/yr)	Screening Test 5 (Is the Significant Load exceeded)	Screening outcome - is the potentially discharge significant and liable to cause pollution?	Minimum Reporting Value	Number of samples >MRV	Liable to cause pollution test
1,1,1-trichloroethane	ug/l	No	Pass	0.693	0.004	0.765311692	Pass	0.7694	Pass	Pass	1.331	0.9995	Pass	16.81690705		Pass	Not significant			
1,1,2-trichloroethane	ug/l	No	Pass	0.693	0.004	0.765311692	Pass	0.7694	Pass	Pass	1.331	0.9995	Pass	16.81690705		Pass	Not significant			
2,4-dichlorophenol	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
2,4-dichlorophenoxyacetic acid (2,4-D)	ug/l	No	Pass	0.693	0.004	0.015306234	Fail	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
2-chlorophenol	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
3,4-dichloroaniline	ug/l	No	Fail	0.693	0.004	0.765311692	Fail	0.7694	Pass	Fail	1.331	0.9995	Pass	16.81690705		Pass	Potentially significant	1	0	Pass
3-methylphenol (m-cresol)	ug/l	No	#VALUE!	0.693	0.004	0.016836857	#VALUE!	0.0170	#VALUE!	#VALUE!	1.331	0.0300	Pass	0.369971955		Pass	#VALUE!			
4-chloro-3-methyl phenol	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
4-methylphenol (p-cresol)	ug/l	No	#VALUE!	0.693	0.004	0.021428727	#VALUE!	0.0216	#VALUE!	#VALUE!	1.331	0.0599	Pass	0.470873397		Pass	#VALUE!			
abamectin	ug/l	No	Fail	0.693	0.004	3.82655846	Fail	3.8471	Pass	Fail	1.331	4.9974	Fail	84.08453526		Pass	Potentially significant	5	0	Pass
acid neutralisation capacity (ANC, unfiltered)	mg/l	No	#VALUE!	0.693	0.004	1867.360528	#VALUE!	1879.2353	#VALUE!	#VALUE!	1.331	2300.0818	Pass	41033253.21		Pass	#VALUE!			
alkalinity as CaCO3	mg/l	No	#VALUE!	0.693	0.004	91.30168484	#VALUE!	91.8942	#VALUE!	#VALUE!	1.331	110.0168	Pass	2006257.011		Pass	#VALUE!			
aluminium dissolved	ug/l	No	#VALUE!	0.693	0.004	13.1633611	#VALUE!	13.3691	#VALUE!	#VALUE!	1.331	35.0143	Pass	289.2508013		Pass	#VALUE!			
aluminium total	ug/l	No	#VALUE!	0.693	0.004	33.90330795	#VALUE!	35.6837	#VALUE!	#VALUE!	1.331	93.6822	Pass	744.9889824		Pass	#VALUE!			
ammonia	mg/l as NH3	No	#VALUE!	0.693	0.004	0.039566614	#VALUE!	0.0396	#VALUE!	#VALUE!	1.331	0.0998	Pass	869.4340946		Pass	#VALUE!			
ammonia	mg/l as N	No	#VALUE!	0.693	0.004	0.039566614	#VALUE!	0.0396	#VALUE!	#VALUE!	1.331	0.0998	Pass	869.4340946		Pass	#VALUE!			
ammoniacal nitrogen	mg/l as N	No	#VALUE!	0.693238812	0.00355	0.238088467	#VALUE!	0.238685343	#VALUE!	#VALUE!	1.331018519	1.097385594	Fail	5231.739784		Pass	#VALUE!			
antimony dissolved	ug/l	No	#VALUE!	0.693	0.004	0.934445576	#VALUE!	0.9364	#VALUE!	#VALUE!	1.331	1.1978	Pass	20.53344351		Pass	#VALUE!			
antimony total	ug/l	No	#VALUE!	0.693	0.004	0.947455875	#VALUE!	0.9496	#VALUE!	#VALUE!	1.331	1.2976	Pass	20.81933093		Pass	#VALUE!			
arsenic dissolved	ug/l	No	Pass	0.693	0.004	0.893884056	Pass	0.8984	Pass	Pass	1.331	1.5981	Pass	19.64214744		Pass	Not significant			
arsenic total	ug/l	No	Pass	0.693	0.004	0.935976199	Pass	0.9416	Pass	Pass	1.331	1.7084	Pass	20.56707732		Pass	Not significant			
azinphos methyl, dissolved	ug/l	No	Fail	0.693	0.004	0.015306234	Fail	0.0154	Pass	Fail	1.331	0.0200	Pass	0.336338141		Pass	Potentially significant			
BDE-100	ug/l	Yes	#VALUE!	0.693	0.004	0.000382656	#VALUE!	0.0004	#VALUE!	#VALUE!	1.331	0.0005	Pass	0.008408454		Pass	#VALUE!			
BDE-153	ug/l	Yes	#VALUE!	0.693	0.004	0.000382656	#VALUE!	0.0004	#VALUE!	#VALUE!	1.331	0.0005	Pass	0.008408454		Pass	#VALUE!			
BDE-154	ug/l	Yes	#VALUE!	0.693	0.004	0.000382656	#VALUE!	0.0004	#VALUE!	#VALUE!	1.331	0.0005	Pass	0.008408454		Pass	#VALUE!			
BDE-28	ug/l	Yes	#VALUE!	0.693	0.004	0.000382656	#VALUE!	0.0004	#VALUE!	#VALUE!	1.331	0.0005	Pass	0.008408454		Pass	#VALUE!			
BDE-47	ug/l	Yes	#VALUE!	0.693	0.004	0.000382656	#VALUE!	0.0004	#VALUE!	#VALUE!	1.331	0.0005	Pass	0.008408454		Pass	#VALUE!			
BDE-99	ug/l	Yes	#VALUE!	0.693	0.004	0.000382656	#VALUE!	0.0004	#VALUE!	#VALUE!	1.331	0.0005	Pass	0.008408454		Pass	#VALUE!			
bentazone	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0156	Pass	Pass	1.331	0.0201	Pass	0.336338141		Pass	Not significant			
benzene	ug/l	No	Pass	0.693	0.004	0.076531169	Pass	0.0769	Pass	Pass	1.331	0.0999	Pass	1.681690705		Pass	Not significant			
benzo(a)pyrene	ug/l	Yes	Fail	0.693	0.004	0.001333938	Fail	0.0014	Pass	Fail	1.331	0.0027	Pass	0.029311869		Pass	Potentially significant	0.00017	13	Fail
benzyl butyl phthalate	ug/l	No	Pass	0.693	0.004	0.153062338	Pass	0.1539	Pass	Pass	1.331	0.1999	Pass	3.36338141		Pass	Not significant			
biphenyl	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
BOD (5 day)	mg/l	No	#VALUE!	0.693	0.004	3.000021832	#VALUE!	3.0197	#VALUE!	#VALUE!	1.331	8.0887	Fail	65922.27564		Pass	#VALUE!			
boron dissolved	ug/l	No	Pass	0.693	0.004	174.4910658	Fail	175.6002	Pass	Pass	1.331	229.9673	Pass	3834.254808		Pass	Not significant			
boron total	ug/l	No	Pass	0.693	0.004	181.378871	Fail	182.5193	Pass	Pass	1.331	239.9570	Pass	3985.606971		Pass	Not significant			
bromide	mg/l	No	#VALUE!	0.693	0.004	0.293114378	#VALUE!	0.2951	#VALUE!	#VALUE!	1.331	0.6094	Pass	6440.875401		Pass	#VALUE!			
bromine - total residual oxidant	mg/l	Yes	Fail	0.693	0.004	0.130868299	Fail	0.1446	Pass	Fail	1.331	0.3064	Fail	2875.691106		Pass	Potentially significant	1	12	Fail
bromoxynil	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	ug/l	No	#VALUE!	0.693	0.004	0.765311692	#VALUE!	0.7680	#VALUE!	#VALUE!	1.331	0.9987	Pass	16.81690705		Pass	#VALUE!			
c (PFOS)	ug/l	Yes	Fail	0.693	0.004	0.017288391	Fail	0.0173	Fail	Fail	1.331	0.0339	Pass	0.37989393		Pass	Potentially significant	0.00065	13	Fail
cadmium dissolved	ug/l	No	Pass	0.693	0.004	0.015306234	Fail	0.0161	Pass	Pass	1.331	0.0204	Pass	0.336338141	5	Pass	Not significant			
cadmium total	ug/l	No	Pass	0.693	0.004	0.017602169	Fail	0.0190	Pass	Pass	1.331	0.0506	Pass	0.386788862	5	Pass	Not significant			
calcium total	mg/l	No	#VALUE!	0.693	0.004	52.6534444	#VALUE!	53.2440	#VALUE!	#VALUE!	1.331	61.1461	Pass	1157003.205		Pass	#VALUE!			
carbendazim	ug/l	No	Fail	0.693	0.004	0.076531169	Fail	0.0769	Pass	Pass	1.331	0.0999	Pass	1.681690705		Pass	Not significant			
chemical oxygen demand (COD)	mg/l	No	#VALUE!	0.693	0.004	28.08693909	#VALUE!	28.2627	#VALUE!	#VALUE!	1.331	39.9854	Pass	617180.4888		Pass	#VALUE!			
chloride	mg/l	No	Fail	0.693	0.004	75.23013931	Fail	75.4955	Pass	Pass	1.331	159.7129	Pass	1653101.963		Pass	Not significant			
chlorine free	mg/l	No	#VALUE!	0.693	0.004	0.130102988	#VALUE!	0.1311	#VALUE!	#VALUE!	1.331	0.4992	Pass	2858.874199		Pass	#VALUE!			
chlorine total	mg/l	No	Pass	0.693	0.004	0.130102988	Fail	0.1310	Pass	Pass	1.331	0.4992	Pass	2858.874199		Pass	Not significant			
chloroform	ug/l	No	Fail	0.693	0.004	0.803577277	Fail	0.8077	Pass	Pass	1.331	0.9995	Pass	17.6577524		Pass	Not significant			
chloronitrotoluenes	ug/l	No	Pass	0.693	0.004	0.019898104	Pass	0.0200	Pass	Pass	1.331	0.1397	Pass	0.437239583		Pass	Not significant			
chlorophyll	ug/l	No	#VALUE!	0.693	0.004	15.38276501	#VALUE!	15.4945	#VALUE!	#VALUE!	1.331	21.0025	Pass	338.0198317		Pass	#VALUE!			
chlorothalonil	ug/l	Yes	Fail	0.693	0.004	0.050893228	Fail	0.0510	Fail	Fail	1.331	0.3491	Pass	1.118324319		Pass	Potentially significant	0.035	0	Pass
chlorotoluron	ug/l	Yes	Pass	0.693	0.004	0.038265585	Pass	0.0385	Pass	Pass	1.331	0.0500	Pass	0.840845353		Pass	Not significant			
chlorpropham	ug/l	No	Pass	0.693	0.004	0.076531169	Pass	0.0769	Pass	Pass	1.331	0.0999	Pass	1.681690705		Pass	Not significant			
chromium (VI) dissolved	ug/l	No	Fail	0.693	0.004	5.357181843	Fail	5.3860	Pass	Fail	1.331	6.9964	Pass	117.7183494		Pass	Potentially significant			
chromium dissolved	ug/l	No	#VALUE!	0.693	0.004	2.066341568	#VALUE!	2.0693	#VALUE!	#VALUE!	1.331	4.2901	Pass	45.40564904		Pass	#VALUE!			
chromium total	ug/l	No	#VALUE!	0.693	0.004	13.63785435	#VALUE!	13.6504	#VALUE!	#VALUE!	1.331	139.6341	Pass	299.6772837		Pass	#VALUE!			
cobalt dissolved	ug/l	No	Fail	0.693	0.004	1.691338839	Fail	1.7598	Pass	Pass	1.331	2.8283	Pass	37.16536458		Pass	Not significant			
cobalt total	ug/l	No	#VALUE!	0.693	0.004	1.951544814	#VALUE!	2.0323	#VALUE!	#VALUE!	1.331	3.1339	Pass	42.88311298		Pass	#VALUE!			
conductivity @ 20øC	uS/cm	No	#VALUE!	0.693	0.004	725.5154839	#VALUE!	731.3008	#VALUE!	#VALUE!	1.331	822.8340	Pass	15942.42788		Pass	#VALUE!			
copper dissolved	ug/l	No	Fail	0.693	0.004	1.178580006	Fail	1.1897	Pass	Fail	1.331	3.1973	Pass	25.89803686		Pass	Potentially significant			
copper total	ug/l	No	Fail	0.693	0.004	2.357160011	Fail	2.3757	Pass	Fail	1.331	3.7995	Pass	51.79607372		Pass	Potentially significant			

Determinand	Units	Quality multiplied for RQP calculations?	Site 3 Part A Screening - Freshwater (#VALUE! = No EQS)												Site 3 Part B Screening - Freshwater: Liable to cause pollution test		
			Screening Test 1 (<10% of EQS)	Effluent Flow Rate for AA (EFR)	River Flow Rate (RFR)	Process contribution (PC)	Screening Test 2 (PC <4% EQS)	Long-Term Predicted Environmental Concentration (PEC)	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Effluent Flow Rate for MAC (EFR)	Short-Term Predicted Environmental Concentration (PEC)	Screening Test 4b (Short-term PEC>MAC EQS)	Significant load (kg/yr)	Annual load (kg/yr)	Screening Test 5 (Is the Significant Load exceeded)	Screening outcome - is the potentially discharge significant and liable to cause pollution?	Minimum Reporting Value	Number of samples >MRV	Liable to cause pollution test
coumaphos	ug/l	No	Fail	0.693	0.004	0.015306234	Fail	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
cyanide total	ug/l	No	Fail	0.693	0.004	30.61246768	Fail	30.7771	Pass	Fail	1.331	39.9795	Pass	672.6762821		Pass	Potentially significant			
cyanide, free (easily liberable)	ug/l	No	#VALUE!	0.693	0.004	15.30623384	#VALUE!	15.3885	#VALUE!	#VALUE!	1.331	19.9898	Pass	336.338141		Pass	#VALUE!			
cyfluthrin	ug/l	No	#VALUE!	0.693	0.004	0.076531169	#VALUE!	0.0769	#VALUE!	#VALUE!	1.331	0.0999	Fail	1.681690705		Pass	#VALUE!			
cypermethrin	ug/l	Yes	Fail	0.693	0.004	0.000192093	Fail	0.0002	Fail	Fail	1.331	0.0004	Pass	0.004221044		Pass	Potentially significant	0.00008	10	Fail
demeton	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
di(2-ethylhexyl)phthalate (DEHP)	ug/l	No	Fail	0.693	0.004	0.14005204	Fail	0.1407	Pass	Pass	1.331	0.3295	Pass	3.07749399		Pass	Not significant			
diazinon	ug/l	Yes	Fail	0.693	0.004	0.007653117	Fail	0.0077	Pass	Pass	1.331	0.0100	Pass	0.168169071		Pass	Not significant			
dibutyl phthalate	ug/l	No	Pass	0.693	0.004	0.026020598	Pass	0.0261	Pass	Pass	1.331	0.0998	Pass	0.57177484		Pass	Not significant			
dichlorobenzene, total isomers	ug/l	No	Pass	0.693	0.004	0.076531169	Pass	0.0769	Pass	Pass	1.331	0.0999	Pass	1.681690705		Pass	Not significant			
dichlorvos	ug/l	Yes	Fail	0.693	0.004	0.000765312	Fail	0.0008	Pass	Fail	1.331	0.0010	Fail	0.016816907		Pass	Potentially significant	0.001	0	Pass
diethyl phthalate	ug/l	No	Pass	0.693	0.004	0.016836857	Pass	0.0169	Pass	Pass	1.331	0.0399	Pass	0.369971955		Pass	Not significant			
diflubenzuron	ug/l	Yes	Fail	0.693	0.004	0.000765312	Fail	0.0008	Pass	Pass	1.331	0.0010	Pass	0.016816907		Pass	Not significant			
dimethoate	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
dimethyl phthalate	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
dioctyl phthalate	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
dissolved organic carbon	mg/l	No	#VALUE!	0.693	0.004	7.867404193	#VALUE!	7.8886	#VALUE!	#VALUE!	1.331	12.9765	Pass	172877.8045		Pass	#VALUE!			
doramectin	ug/l	Yes	Fail	0.693	0.004	3.82655846	Fail	3.8471	Pass	Fail	1.331	4.9974	Fail	84.08453526		Pass	Potentially significant	5	0	Pass
EDTA	ug/l	No	Fail	0.693	0.004	88.69962509	Fail	89.1111	Pass	Pass	1.331	142.8345	Pass	1949.079527		Pass	Not significant			
fenchlorphos	ug/l	No	Fail	0.693	0.004	0.015306234	Fail	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
fenitrothion	ug/l	Yes	Fail	0.693	0.004	0.007653117	Fail	0.0077	Pass	Pass	1.331	0.0100	Pass	0.168169071		Pass	Not significant			
flucofuron	ug/l	Yes	#VALUE!	0.693	0.004	0.038265585	#VALUE!	0.0385	#VALUE!	#VALUE!	1.331	0.0500	Pass	0.840845353		Pass	#VALUE!			
fluoranthene	ug/l	Yes	Fail	0.693	0.004	0.00200129	Fail	0.0021	Pass	Pass	1.331	0.0040	Pass	0.043976212		Pass	Not significant			
fluoride	mg/l	No	Fail	0.693	0.004	0.57015721	Fail	0.5718	Pass	Pass	1.331	0.7588	Pass	12528.59575		Pass	Not significant			
formaldehyde	ug/l	No	Fail	0.693	0.004	38.2655846	Fail	38.4713	Pass	Fail	1.331	49.9744	Pass	840.8453526		Pass	Potentially significant	5	0	Pass
glyphosate	ug/l	No	Pass	0.693	0.004	0.448472651	Pass	0.4489	Pass	Pass	1.331	0.7482	Pass	9.854707532		Pass	Not significant			
hardness as CaCO3	mg/l	No	#VALUE!	0.693	0.004	165.9195748	#VALUE!	168.4827	#VALUE!	#VALUE!	1.331	192.8275	Pass	3645905.449		Pass	#VALUE!			
hexabromocyclododecane (HBCDD)	ug/l	Yes	Fail	0.693	0.004	0.000873986	Fail	0.0009	Fail	Pass	1.331	0.0025	Pass	0.019204908		Pass	Potentially significant	0.00014	13	Fail
ioxynil	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
iron dissolved	ug/l	No	Pass	0.693	0.004	52.95956908	Fail	53.2214	Pass	Pass	1.331	68.9532	Pass	1163.729968		Pass	Not significant			
iron total	ug/l	No	Fail	0.693	0.004	152.2970267	Fail	154.3189	Pass	Pass	1.331	310.2310	Pass	3346.564503		Pass	Not significant			
ivermectin	ug/l	Yes	Fail	0.693	0.004	3.82655846	Fail	3.8471	Pass	Fail	1.331	4.9974	Fail	84.08453526		Pass	Potentially significant	1	0	Pass
lead dissolved	ug/l	No	Fail	0.693	0.004	0.165307325	Fail	0.1673	Pass	Pass	1.331	0.3701	Pass	3.632451923		Pass	Not significant			
lead total	ug/l	No	Fail	0.693	0.004	0.3665843	Fail	0.3781	Pass	Pass	1.331	0.5845	Pass	8.055298478		Pass	Not significant			
linuron	ug/l	Yes	Pass	0.693	0.004	0.007653117	Pass	0.0077	Pass	Pass	1.331	0.0100	Pass	0.168169071		Pass	Not significant			
malachite green	ug/l	No	Fail	0.693	0.004	0.765311692	Fail	0.7694	Pass	Fail	1.331	0.9995	Pass	16.81690705		Pass	Potentially significant	1	0	Pass
malathion	ug/l	No	Fail	0.693	0.004	0.015306234	Fail	0.0154	Pass	Fail	1.331	0.0200	Pass	0.336338141		Pass	Potentially significant			
mancozeb	ug/l CS2	No	Fail	0.693	0.004	1.147967538	Fail	1.1490	Fail	Pass	1.331	3.1920	Pass	25.22536058		Pass	Potentially significant	0.1	9	Fail
maneb	ug/l CS2	No	Fail	0.693	0.004	0.543371301	Fail	0.5447	Pass	Pass	1.331	2.9927	Pass	11.94000401		Pass	Not significant			
manganese dissolved	ug/l	No	Fail	0.693	0.004	93.67415109	Fail	129.0203	Pass	Fail	1.331	148.1087	Pass	2058.389423		Pass	Potentially significant			
manganese total	ug/l	No	Fail	0.693	0.004	99.1078641	Fail	136.2215	Pass	Fail	1.331	178.9517	Pass	2177.789463		Pass	Potentially significant			
MCPA	ug/l	No	Pass	0.693	0.004	0.016071546	Pass	0.0162	Pass	Pass	1.331	0.0300	Pass	0.353155048		Pass	Not significant			
mecoprop	ug/l	No	Pass	0.693	0.004	0.03596965	Pass	0.0361	Pass	Pass	1.331	0.0699	Pass	0.790394631		Pass	Not significant			
mercury dissolved	ug/l	Yes	Pass	0.693	0.004	0.003864824	Fail	0.0039	Pass	Pass	1.331	0.0170	Pass	0.084925381	1	Pass	Not significant			
mercury total	ug/l	Yes	Fail	0.693	0.004	0.007117399	Fail	0.0072	Pass	Pass	1.331	0.0369	Pass	0.156397236	1	Pass	Not significant			
methiocarb	ug/l	No	Fail	0.693	0.004	0.076531169	Fail	0.0769	Pass	Fail	1.331	0.0999	Pass	1.681690705		Pass	Potentially significant	0.1	0	Pass
mevinphos	ug/l	No	#VALUE!	0.693	0.004	0.015306234	#VALUE!	0.0154	#VALUE!	#VALUE!	1.331	0.0200	Pass	0.336338141		Pass	#VALUE!			
nickel dissolved	ug/l	No	Fail	0.693	0.004	18.74248333	Fail	18.9521	Pass	Fail	1.331	60.9472	Fail	411.8460537		Pass	Potentially significant	0.5	13	Fail
nickel total	ug/l	No	Fail	0.693	0.004	19.43891697	Fail	19.6673	Pass	Fail	1.331	60.9570	Fail	427.1494391		Pass	Potentially significant			
nitrate	mg/l NO3	No	#VALUE!	0.693	0.004	36.96876393	#VALUE!	37.0005	#VALUE!	#VALUE!	1.331	119.6974	Pass	812349.1036		Pass	#VALUE!			
nitrate	mg/l N	No	#VALUE!	0.693	0.004	36.96876393	#VALUE!	37.0005	#VALUE!	#VALUE!	1.331	119.6974	Pass	812349.1036		Pass	#VALUE!			
nitrilotriacetic acid (NTA)	ug/l	No	Pass	0.693	0.004	76.53116919	Fail	76.9427	Pass	Pass	1.331	99.9488	Pass	1681.690705		Pass	Not significant			
nitrite	mg/l NO2	No	#VALUE!	0.693	0.004	0.772042608	#VALUE!	0.7738	#VALUE!	#VALUE!	1.331	2.4943	Pass	16964.81175		Pass	#VALUE!			
nitrite	mg/l N	No	#VALUE!	0.693	0.004	0.772042608	#VALUE!	0.7738	#VALUE!	#VALUE!	1.331	2.4943	Pass	16964.81175		Pass	#VALUE!			
nonylphenols (4-nonylphenol technical mix)	ug/l	No	Fail	0.693	0.004	0.281634703	Fail	0.2818	Fail	Pass	1.331	0.5087	Pass	6.188621795	1	Fail	Potentially significant	0.04	12	Fail
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	ug/l	Yes	Pass	0.693	0.004	0.008035773	Fail	0.0081	Pass	Pass	1.331	0.0100	Pass	0.176577524		Pass	Not significant			
omethoate	ug/l	Yes	Fail	0.693	0.004	0.007653117	Fail	0.0077	Pass	Pass	1.331	0.0100	Pass	0.168169071		Pass	Not significant			
organic nitrogen	mg/l as N	No	#VALUE!	0.693	0.004	3.82655846	#VALUE!	3.8471	#VALUE!	#VALUE!	1.331	4.9974	Pass	84084.53526		Pass	#VALUE!			
orthophosphate as PO4	mg/l	No	#VALUE!	0.693	0.004	0.374237417	#VALUE!	0.3748	#VALUE!	#VALUE!	1.331	1.0076	Pass	8223.467548		Pass	#VALUE!			
pendimethalin	ug/l	No	Pass	0.693	0.004	0.015306234	Fail	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
perfluorooctanoic acid (PFOA)	ug/l	Yes	#VALUE!	0.693	0.004	0.005433713	#VALUE!	0.0055	#VALUE!	#VALUE!	1.331	0.0080	Pass	0.11940004		Pass	#VALUE!			
permethrin	ug/l	Yes	Fail	0.693	0.004	0.002525529	Fail	0.0025	Fail	Fail	1.331	0.0090	Pass	0.055495793		Pass	Potentially significant	0.001	8	Fail
pH	pH units	No	#VALUE!	0.693	0.004	7.117398735	#VALUE!	7.1558	#VALUE!	#VALUE!	1.331	7.8990	#VALUE!	156397.2356		Pass	#VALUE!			
phenol	ug/l	No	Pass	0.693	0.004	0.765311692	Fail	0.7694	Pass	Pass	1.331	0.9995	Pass	16.81690705		Pass	Not significant			

Determinand	Units	Quality multiplied for RQP calculations?	Site 3 Part A Screening - Freshwater (#VALUE! = No EQS)												Site 3 Part B Screening - Freshwater: Liable to cause pollution test		
			Screening Test 1 (<10% of EQS)	Effluent Flow Rate for AA (EFR)	River Flow Rate (RFR)	Process contribution (PC)	Screening Test 2 (PC <4% EQS)	Long-Term Predicted Environmental Concentration (PEC)	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Effluent Flow Rate for MAC (EFR)	Short-Term Predicted Environmental Concentration (PEC)	Screening Test 4b (Short-term PEC>MAC EQS)	Significant load (kg/yr)	Annual load (kg/yr)	Screening Test 5 (Is the Significant Load exceeded)	Screening outcome - is the potentially discharge significant and liable to cause pollution?	Minimum Reporting Value	Number of samples >MRV	Liable to cause pollution test
pirimicarb	ug/l	No	Fail	0.693	0.004	0.765311692	Fail	0.7694	Pass	Pass	1.331	0.9995	Pass	16.81690705		Pass	Not significant			
pirimiphos-methyl	ug/l	Yes	Fail	0.693	0.004	0.007653117	Fail	0.0077	Pass	Pass	1.331	0.0100	Pass	0.168169071		Pass	Not significant			
polychloro chloromethyl sulphonamido diphenyl ethe	ug/l	No	Fail	0.693	0.004	0.214287274	Fail	0.2153	Fail	Fail	1.331	0.4992	Pass	4.708733974		Pass	Potentially significant			
prochloraz	ug/l	No	Pass	0.693	0.004	0.076531169	Pass	0.0769	Pass	Pass	1.331	0.0999	Pass	1.681690705		Pass	Not significant			
propetamphos	ug/l	No	Fail	0.693	0.004	0.015306234	Fail	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
propyzamide	ug/l	No	Pass	0.693	0.004	0.032143091	Pass	0.0322	Pass	Pass	1.331	0.3192	Pass	0.706310096		Pass	Not significant			
salinity @ 20øC	%	No	#VALUE!	0.693	0.004	0.367349612	#VALUE!	0.3704	#VALUE!	#VALUE!	1.331	0.4005	Pass	8072.115385		Pass	#VALUE!			
silver dissolved	ug/l	No	Fail	0.693	0.004	0.765311692	Fail	0.7694	Pass	Fail	1.331	0.9995	Fail	16.81690705		Pass	Potentially significant	1	0	Pass
silver total	ug/l	No	#VALUE!	0.693	0.004	0.765311692	#VALUE!	0.7694	#VALUE!	#VALUE!	1.331	0.9995	Pass	16.81690705		Pass	#VALUE!			
soluble reactive phosphorus	mg/l	No	#VALUE!	0.693	0.004	0.122449871	#VALUE!	0.1226	#VALUE!	#VALUE!	1.331	0.3292	Pass	2690.705128		Pass	#VALUE!			
sulcofuron	ug/l	Yes	#VALUE!	0.693	0.004	0.038265585	#VALUE!	0.0385	#VALUE!	#VALUE!	1.331	0.0500	Pass	0.840845353		Pass	#VALUE!			
sulphate	mg/l SO4	No	Fail	0.693	0.004	78.90363544	Fail	80.7848	Pass	Pass	1.331	180.5034	Pass	1733823.117		Pass	Not significant			
sulphide or hydrogen sulphide	ug/l	No	Fail	0.693	0.004	12.32151824	Fail	12.3858	Pass	Fail	1.331	27.9591	Fail	270.7522035		Pass	Potentially significant	10	7	Fail
suspended solids @ 105øC	mg/l	No	#VALUE!	0.693	0.004	9.451599395	#VALUE!	9.6628	#VALUE!	#VALUE!	1.331	41.0012	Pass	207688.8021		Pass	#VALUE!			
tecnazene	ug/l	No	Pass	0.693	0.004	0.015306234	Pass	0.0154	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
tetrachloroethane	ug/l	No	Pass	0.693	0.004	0.091837403	Pass	0.0923	Pass	Pass	1.331	0.2496	Pass	2.018028846		Pass	Not significant			
thiobendazole	ug/l	No	#VALUE!	0.693	0.004	0.076531169	#VALUE!	0.0769	#VALUE!	#VALUE!	1.331	0.0999	Pass	1.681690705		Pass	#VALUE!			
tin dissolved	ug/l	No	#VALUE!	0.693	0.004	0.313777794	#VALUE!	0.3157	#VALUE!	#VALUE!	1.331	0.4997	Pass	6.894931891		Pass	#VALUE!			
tin total	ug/l	No	Pass	0.693	0.004	0.367349612	Pass	0.3693	Pass	Pass	1.331	0.5994	Pass	8.072115385		Pass	Not significant			
toluene	ug/l	No	Pass	0.693	0.004	0.076531169	Pass	0.0769	Pass	Pass	1.331	0.0999	Pass	1.681690705		Pass	Not significant			
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	mg/l	No	Fail	0.693	0.004	216.8893335	Fail	219.0973	Pass	Pass	1.331	460.9265	Pass	4765911.458		Pass	Not significant			
total organic carbon	mg/l	No	#VALUE!	0.693	0.004	14.0205102	#VALUE!	14.0451	#VALUE!	#VALUE!	1.331	77.8053	Pass	308085.7372		Pass	#VALUE!			
total oxidised nitrogen	mg/l as N	No	#VALUE!	0.693	0.004	14.0013774	#VALUE!	14.0142	#VALUE!	#VALUE!	1.331	27.1343	Pass	307665.3145		Pass	#VALUE!			
total phosphorus	mg/l	No	Fail	0.693	0.004	0.546432548	Fail	0.5480	Fail	Pass	1.331	1.0979	Pass	12007.27163		Pass	Potentially significant			
triallate	ug/l	No	Pass	0.693	0.004	0.015306234	Fail	0.0155	Pass	Pass	1.331	0.0200	Pass	0.336338141		Pass	Not significant			
triazophos	ug/l	Yes	Fail	0.693	0.004	0.015306234	Fail	0.0154	Pass	Fail	1.331	0.0200	Pass	0.336338141		Pass	Potentially significant			
tributyl phosphate	ug/l	No	Pass	0.693	0.004	0.016836857	Pass	0.0169	Pass	Pass	1.331	0.0200	Pass	0.369971955		Pass	Not significant			
tributyltin compounds (as tributyltin cation)	ug/l	Yes	Fail	0.693	0.004	3.87302E-05	Fail	0.0000	Pass	Pass	1.331	0.0001	Pass	0.000851056	1	Pass	Not significant			
trichloroethylene	ug/l	No	Pass	0.693	0.004	0.765311692	Fail	0.7694	Pass	Pass	1.331	0.9995	Pass	16.81690705		Pass	Not significant			
triclosan	ug/l	No	Fail	0.693	0.004	0.027168565	Fail	0.0272	Fail	Pass	1.331	0.0698	Pass	0.5970002		Pass	Potentially significant	0.01	12	Fail
triphenyltin compounds (as tryphenyltin cation)	ug/l TPT	Yes	#VALUE!	0.693	0.004	0.001563422	#VALUE!	0.0016	#VALUE!	#VALUE!	1.331	0.0020	Pass	0.034354539		Pass	#VALUE!			
vanadium dissolved	ug/l	No	Fail	0.693	0.004	7.653116919	Fail	7.6943	Pass	Pass	1.331	9.9949	Pass	168.1690705		Pass	Not significant			
vanadium total	ug/l	No	Fail	0.693	0.004	7.653116919	Fail	7.6943	Pass	Pass	1.331	9.9949	Pass	168.1690705		Pass	Not significant			
zinc dissolved	ug/l	No	Fail	0.693	0.004	48.82688594	Fail	48.9458	Fail	Fail	1.331	99.7961	Pass	1072.91867		Pass	Potentially significant			
zinc total	ug/l	No	Fail	0.693	0.004	59.00553145	Fail	59.2132	Fail	Fail	1.331	109.8158	Pass	1296.583534		Pass	Potentially significant			

B.2 Screening results, site 5

				Site 5 Part A Screening - Freshwater (#VALUE! = No EQS)														Site 5 Part B Screening - Freshwater: Liable to cause pollution test		
Determinand	Units	Determinand modelled at Site 5?	Quality to be multiplied by 1000 for RQP calculations?	Screening Test 1 (<10% of EQS)	Effluent Flow Rate for AA (EFR)	River Flow Rate (RFR)	Process contribution (PC)	Screening Test 2 (PC <4% EQS)	Long-Term Predicted Environmental Concentration (PEC)	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Effluent Flow Rate for MAC (EFR)	Short-Term Predicted Environmental Concentration (PEC)	Screening Test 4b (Short-term PEC>MAC EQS)	Significant load (kg/yr)	Annual load (kg/yr)	Screening Test 5 (Is the Significant Load exceeded)	Screening outcome - is the potentially discharge significant and liable to cause pollution?	Minimum Reporting Value	Number of samples >MRV	Liable to cause pollution test
1,1,1-trichloroethane	ug/l	No	No	Pass	0.69323881	0.42338549	0.47756494	Pass	0.66714773	Pass	Pass	1.33101852	0.87933638	Pass	16.8169071		Pass	Not significant			
1,1,2-trichloroethane	ug/l	No	No	Pass	0.69323881	0.42338549	0.47756494	Pass	0.66714773	Pass	Pass	1.33101852	0.87933638	Pass	16.8169071		Pass	Not significant			
2,4-dichlorophenol	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
2,4-dichlorophenoxyacetic acid (2,4-D)	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
2-chlorophenol	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.33633814		Pass	Not significant			
3,4-dichloroaniline	ug/l	No	No	Fail	0.69323881	0.42338549	0.47756494	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	16.8169071		Pass	#N/A	1	0	Pass
3-methylphenol (m-cresol)	ug/l	No	No	#VALUE!	0.69323881	0.42338549	0.01050643	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.36997196		Pass	#VALUE!			
4-chloro-3-methyl phenol	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.33633814		Pass	Not significant			
4-methylphenol (p-cresol)	ug/l	No	No	#VALUE!	0.69323881	0.42338549	0.01337182	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.4708734		Pass	#VALUE!			
abamectin	ug/l	No	No	Fail	0.69323881	0.42338549	2.38782472	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	84.0845353		Pass	#N/A	5	0	Pass
acid neutralisation capacity (ANC, unfiltered)	mg/l	No	No	#VALUE!	0.69323881	0.42338549	1165.25847	#VALUE!	2299.83852	#VALUE!	#VALUE!	1.33101852	2467.07271	Pass	41033253.2		Pass	#VALUE!			
alkalinity as CaCO3	mg/l	No	No	#VALUE!	0.69323881	0.42338549	56.9734979	#VALUE!	113.556668	#VALUE!	#VALUE!	1.33101852	119.467454	Pass	2006257.01		Pass	#VALUE!			
aluminium dissolved	ug/l	No	No	#VALUE!	0.69323881	0.42338549	8.21411705	#VALUE!	20.1140827	#VALUE!	#VALUE!	1.33101852	34.1275092	Pass	289.250801		Pass	#VALUE!			
aluminium total	ug/l	No	No	#VALUE!	0.69323881	0.42338549	21.1561271	#VALUE!	95.2975796	#VALUE!	#VALUE!	1.33101852	117.745325	Pass	744.988982		Pass	#VALUE!			
ammonia	mg/l as NH3	Yes	Yes	#VALUE!	0.693	0.423	0.02469011	#VALUE!	0.0316	#VALUE!	#VALUE!	1.331	0.0803	Pass	869.434095		Pass	#VALUE!			
ammonia	mg/l as N	Yes	Yes	#VALUE!	0.693	0.423	0.02469011	#VALUE!	0.0316	#VALUE!	#VALUE!	1.331	0.0803	Pass	869.434095		Pass	#VALUE!			
ammoniacal nitrogen	mg/l as N	Yes	No	#VALUE!	0.69323881	0.42338549	0.14857045	#VALUE!	0.20152238	#VALUE!	#VALUE!	1.33101852	0.86824231	Fail	5231.73978		Pass	#VALUE!			
antimony dissolved	ug/l	Yes	No	#VALUE!	0.69323881	0.42338549	0.5831068	#VALUE!	0.81818945	#VALUE!	#VALUE!	1.33101852	1.0600302	Pass	20.5334435		Pass	#VALUE!			
antimony total	ug/l	Yes	No	#VALUE!	0.69323881	0.42338549	0.5912254	#VALUE!	0.83389137	#VALUE!	#VALUE!	1.33101852	1.14072402	Pass	20.8193309		Pass	#VALUE!			
arsenic dissolved	ug/l	No	No	Pass	0.69323881	0.42338549	0.55779586	Pass	0.98596129	Pass	Pass	1.33101852	1.48639056	Pass	19.6421474		Pass	Not significant			
arsenic total	ug/l	No	No	Pass	0.69323881	0.42338549	0.58406193	Pass	1.07260218	Pass	Pass	1.33101852	1.60827128	Pass	20.5670773		Pass	Not significant			
azinphos methyl, dissolved	ug/l	No	No	Fail	0.69323881	0.42338549	0.0095513	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.33633814		Pass	#N/A			
BDE-100	ug/l	No	Yes	#VALUE!	0.69323881	0.42338549	0.00023878	#VALUE!	0.00033357	#VALUE!	#VALUE!	1.33101852	0.00043967	Pass	0.00840845		Pass	#VALUE!			
BDE-153	ug/l	No	Yes	#VALUE!	0.69323881	0.42338549	0.00023878	#VALUE!	0.00033357	#VALUE!	#VALUE!	1.33101852	0.00043967	Pass	0.00840845		Pass	#VALUE!			
BDE-154	ug/l	No	Yes	#VALUE!	0.69323881	0.42338549	0.00023878	#VALUE!	0.00033357	#VALUE!	#VALUE!	1.33101852	0.00043967	Pass	0.00840845		Pass	#VALUE!			
BDE-28	ug/l	No	Yes	#VALUE!	0.69323881	0.42338549	0.00023878	#VALUE!	0.00033357	#VALUE!	#VALUE!	1.33101852	0.00043967	Pass	0.00840845		Pass	#VALUE!			
BDE-47	ug/l	No	Yes	#VALUE!	0.69323881	0.42338549	0.00023878	#VALUE!	0.00033357	#VALUE!	#VALUE!	1.33101852	0.00043967	Pass	0.00840845		Pass	#VALUE!			
BDE-99	ug/l	No	Yes	#VALUE!	0.69323881	0.42338549	0.00023878	#VALUE!	0.00033357	#VALUE!	#VALUE!	1.33101852	0.00043967	Pass	0.00840845		Pass	#VALUE!			
bentazone	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.33633814		Pass	Not significant			
benzene	ug/l	No	No	Pass	0.69323881	0.42338549	0.04775649	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1.68169071		Pass	Not significant			
benzo(a)pyrene	ug/l	Yes	Yes	Fail	0.69323881	0.42338549	0.0008324	Fail	0.00228139	Pass	Fail	1.33101852	0.00297066	Pass	0.02931187		Pass	Potentially significant	0.00017	13	Fail
benzyl butyl phthalate	ug/l	No	No	Pass	0.69323881	0.42338549	0.09551299	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	3.36338141		Pass	Not significant			
biphenyl	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.33633814		Pass	Not significant			
BOD (5 day)	mg/l	No	No	#VALUE!	0.69323881	0.42338549	1.87205458	#VALUE!	3.14663424	#VALUE!	#VALUE!	1.33101852	6.95648012	Pass	65922.2756		Pass	#VALUE!			
boron dissolved	ug/l	No	No	Pass	0.69323881	0.42338549	108.884807	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	3834.25481		Pass	#N/A			
boron total	ug/l	No	No	Pass	0.69323881	0.42338549	113.182892	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	3985.60697		Pass	#N/A			
bromide	mg/l	No	No	#VALUE!	0.69323881	0.42338549	0.18290737	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	6440.8754		Pass	#VALUE!			
bromine - total residual oxidant	mg/l	No	Yes	Fail	0.69323881	0.42338549	0.08166361	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	2875.69111		Pass	#N/A	1	12	Fail
bromoxynil	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	ug/l	No	No	#VALUE!	0.69323881	0.42338549	0.47756494	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	16.8169071		Pass	#VALUE!			
c (PFOS)	ug/l	No	Yes	Fail	0.69323881	0.42338549	0.01078819	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.37989393		Pass	#N/A	0.00065	13	Fail
cadmium dissolved	ug/l	Yes	No	Pass	0.69323881	0.42338549	0.0095513	Pass	0.01392629	Pass	Pass	1.33101852	0.017958	Pass	0.33633814	5	Pass	Not significant			
cadmium total	ug/l	Yes	No	Pass	0.69323881	0.42338549	0.01098399	Fail	0.01827564	Pass	Pass	1.33101852	0.04257455	Pass	0.38678886	5	Pass	Not significant			
calcium total	mg/l	No	No	#VALUE!	0.69323881	0.42338549	32.8564682	#VALUE!	62.5480491	#VALUE!	#VALUE!	1.33101852	65.1768178	Pass	1157003.21		Pass	#VALUE!			
carbendazim	ug/l	No	No	Fail	0.69323881	0.42338549	0.04775649	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1.68169071		Pass	#N/A			
chemical oxygen demand (COD)	mg/l	Yes	No	#VALUE!	0.69323881	0.42338549	17.5266335	#VALUE!	23.812032	#VALUE!	#VALUE!	1.33101852	34.3473733	Pass	617180.489		Pass	#VALUE!			
chloride	mg/l	No	No	Fail	0.69323881	0.42338549	46.9446341	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	1653101.96		Pass	#N/A			
chlorine free	mg/l	No	No	#VALUE!	0.69323881	0.42338549	0.08118604	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	2858.8742		Pass	#VALUE!			
chlorine total	mg/l	No	No	Pass	0.69323881	0.42338549	0.08118604	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	2858.8742		Pass	#N/A			
chloroform	ug/l	Yes	No	Fail	0.69323881	0.42338549	0.50144319	Fail	0.69102598	Pass	Pass	1.33101852	0.87933638	Pass	17.6577524		Pass	Not significant			
chloronitrotoluenes	ug/l	No	No	Pass	0.69323881	0.42338549	0.01241669	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.43723958		Pass	Not significant			
chlorophyll	ug/l	No	No	#VALUE!	0.69323881	0.42338549	9.59905539	#VALUE!	17.3573663	#VALUE!	#VALUE!	1.33101852	20.8700546	Pass	338.019832		Pass	#VALUE!			
chlorothalonil	ug/l	No	No	Fail	0.69323881	0.42338549	0.03175807	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1.11832432		Pass	#N/A	0.035	0	Pass
chlorotoluron	ug/l	No	No	Pass	0.69323881	0.42338549	0.02387825	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.84084535		Pass	Not significant			
chlorpropham	ug/l	No	No	Pass	0.69323881	0.42338549	0.04775649	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1.68169071		Pass	Not significant			
chromium (VI) dissolved	ug/l	No	No	Fail	0.69323881	0.42338549	3.34295461	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	117.718349		Pass	#N/A			
chromium dissolved	ug/l	Yes	No	#VALUE!	0.69323881	0.42338549	1.28942535	#VALUE!	1.44546657	#VALUE!	#VALUE!	1.33101852	3.36160828	Pass	45.405649		Pass	#VALUE!			
chromium total	ug/l	Yes	No	#VALUE!	0.69323881	0.42338549	8.51020732	#VALUE!	8.79691482	#VALUE!	#VALUE!	1.33101852	106.396666	Pass	299.677284		Pass	#VALUE!			
cobalt dissolved	ug/l	No	No	Fail	0.69323881	0.42338549	1.05541853	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	37.1653646		Pass	#N/A			
cobalt total	ug/l	No	No	#VALUE!	0.69323881	0.42338549	1.21779061	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	42.883113		Pass	#VALUE!			
conductivity @ 20øC	uS/cm	Yes	No	#VALUE!	0.69323881	0.42338549	452.731568	#VALUE!	679.151747	#VALUE!	#VALUE!	1.33101852	767.738496	Pass	15942.4279		Pass	#VALUE!			
copper dissolved	ug/l	Yes	No	Fail	0.69323881	0.42338549	0.73545002	Fail	1.08253235	Fail	Fail	1.33101852	2.64866006	Pass	25.8980369		Pass	Potentially significant			
copper total	ug/l	Yes	No	Fail	0.69323881	0.42338549	1.47090003	Fail	1.97839856	Fail	Fail	1.33101852	3.2059637	Pass	51.7960737		Pass	Potentially significant			
coumaphos	ug/l	No	No	Fail	0.69323881	0.42338549	0.0095513	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.33633814		Pass	#N/A			
cyanide total	ug/l	No	No	Fail	0.69323881	0.42338549	19.1025978	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	672.676282		Pass	#N/A			
cyanide, free (easily liberable)	ug/l	No	No	#VALUE!	0.69323881	0.42338549	9.5512989	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	336.338141		Pass	#VALUE!			
cyfluthrin	ug/l	No	Yes	#VALUE!	0.69323881	0.42338549	0.04775649	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1.68169071		Pass	#VALUE!			

Determinand	Units	Determinand modelled at Site 5?	Quality to be multiplied by 1000 for RQP calculations?	Site 5 Part A Screening - Freshwater (#VALUE! = No EQS)													Site 5 Part B Screening - Freshwater: Liable to cause pollution test		
				Screening Test 1 (<10% of EQS)	Effluent Flow Rate for AA (EFR)	River Flow Rate (RFR)	Process contribution (PC)	Screening Test 2 (PC <4% EQS)	Long-Term Predicted Environmental Concentration (PEC)	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Effluent Flow Rate for MAC (EFR)	Short-Term Predicted Environmental Concentration (PEC)	Screening Test 4b (Short-term PEC>MAC EQS)	Significant load (kg/yr)	Annual load (kg/yr)	Screening Test 5 (Is the Significant Load exceeded)	Screening outcome - is the potentially discharge significant and liable to cause pollution?	Minimum Reporting Value	Number of samples >MRV	Liable to cause pollution test
cypermethrin	ug/l	Yes	Yes	Fail	0.69323881	0.42338549	0.00011987	Fail	0.00013649	Fail	Fail	1.33101852	0.00032922	Pass	0.00422104		Pass	Potentially significant	0.00008	10	Fail
demeton	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.33633814		Pass	Not significant			
di(2-ethylhexyl)phthalate (DEHP)	ug/l	Yes	No	Fail	0.69323881	0.42338549	0.08739438	Fail	0.1158318	Pass	Pass	1.33101852	0.26846155	Pass	3.07749399		Pass	Not significant			
diazinon	ug/l	No	No	Fail	0.69323881	0.42338549	0.00477565	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.16816907		Pass	#N/A			
dibutyl phthalate	ug/l	No	No	Pass	0.69323881	0.42338549	0.01623721	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.57177484		Pass	Not significant			
dichlorobenzene, total isomers	ug/l	No	No	Pass	0.69323881	0.42338549	0.04775649	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1.68169071		Pass	Not significant			
dichlorvos	ug/l	No	Yes	Fail	0.69323881	0.42338549	0.00047756	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.01681691		Pass	#N/A	0.001	0	Pass
diethyl phthalate	ug/l	No	No	Pass	0.69323881	0.42338549	0.01050643	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.36997196		Pass	Not significant			
diflubenzuron	ug/l	No	Yes	Fail	0.69323881	0.42338549	0.00047756	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.01681691		Pass	#N/A			
dimethoate	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
dimethyl phthalate	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
dioctyl phthalate	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
dissolved organic carbon	mg/l	Yes	No	#VALUE!	0.69323881	0.42338549	4.90936763	#VALUE!	6.28311367	#VALUE!	#VALUE!	1.33101852	10.737093	Pass	172877.804		Pass	#VALUE!			
doramectin	ug/l	No	Yes	Fail	0.69323881	0.42338549	2.38782472	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	84.0845353		Pass	#N/A	5	0	Pass
EDTA	ug/l	No	No	Fail	0.69323881	0.42338549	55.3497771	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1949.07953		Pass	#N/A			
fenchlorphos	ug/l	No	No	Fail	0.69323881	0.42338549	0.0095513	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	#N/A			
fenitrothion	ug/l	No	No	Fail	0.69323881	0.42338549	0.00477565	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.16816907		Pass	#N/A			
flucofuron	ug/l	No	No	#VALUE!	0.69323881	0.42338549	0.02387825	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.84084535		Pass	#VALUE!			
fluoranthene	ug/l	No	Yes	Fail	0.69323881	0.42338549	0.00124883	Fail	0.00325841	Pass	Pass	1.33101852	0.00431373	Pass	0.04397621		Pass	Not significant			
fluoride	mg/l	No	No	Fail	0.69323881	0.42338549	0.35578588	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	12528.5958		Pass	#N/A			
formaldehyde	ug/l	No	No	Fail	0.69323881	0.42338549	23.8782472	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	840.845353		Pass	#N/A	5	0	Pass
glyphosate	ug/l	No	No	Pass	0.69323881	0.42338549	0.27985306	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	9.85470753		Pass	Not significant			
hardness as CaCO3	mg/l	No	No	#VALUE!	0.69323881	0.42338549	103.53608	#VALUE!	186.515007	#VALUE!	#VALUE!	1.33101852	198.478708	Pass	3645905.45		Pass	#VALUE!			
hexabromocyclododecane (HBCDD)	ug/l	Yes	Yes	Fail	0.69323881	0.42338549	0.00054538	Fail	0.00057192	Fail	Pass	1.33101852	0.00191357	Pass	0.01920491		Pass	Potentially significant	0.00014	13	Fail
ioxynil	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
iron dissolved	ug/l	No	No	Pass	0.69323881	0.42338549	33.0474942	Pass	59.3849181	Pass	Pass	1.33101852	69.1113818	Pass	1163.72997		Pass	Not significant			
iron total	ug/l	No	No	Fail	0.69323881	0.42338549	95.035424	Fail	241.451668	Pass	Pass	1.33101852	328.377998	Pass	3346.5645		Pass	Not significant			
ivermectin	ug/l	No	Yes	Fail	0.69323881	0.42338549	2.38782472	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	84.0845353		Pass	#N/A	1	0	Pass
lead dissolved	ug/l	No	No	Fail	0.69323881	0.42338549	0.10315403	Fail	0.16090386	Pass	Pass	1.33101852	0.31746491	Pass	3.63245192		Pass	Not significant			
lead total	ug/l	No	No	Fail	0.69323881	0.42338549	0.22875361	Fail	0.56854429	Pass	Pass	1.33101852	0.65629654	Pass	8.05529848		Pass	Not significant			
linuron	ug/l	No	No	Pass	0.69323881	0.42338549	0.00477565	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.16816907		Pass	Not significant			
malachite green	ug/l	No	No	Fail	0.69323881	0.42338549	0.47756494	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	16.8169071		Pass	#N/A	1	0	Pass
malathion	ug/l	No	No	Fail	0.69323881	0.42338549	0.0095513	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.33633814		Pass	#N/A			
mancozeb	ug/l CS2	No	No	Fail	0.69323881	0.42338549	0.71634742	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	25.2253606		Pass	#N/A	0.1	9	Fail
maneb	ug/l CS2	No	No	Fail	0.69323881	0.42338549	0.33907111	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	11.940004		Pass	#N/A			
manganese dissolved	ug/l	No	No	Fail	0.69323881	0.42338549	58.4539493	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	2058.38942		Pass	#N/A			
manganese total	ug/l	No	No	Fail	0.69323881	0.42338549	61.8446604	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	2177.78946		Pass	#N/A			
MCPA	ug/l	No	No	Pass	0.69323881	0.42338549	0.01002886	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.35315505		Pass	Not significant			
mecoprop	ug/l	No	No	Pass	0.69323881	0.42338549	0.02244555	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.79039463		Pass	Not significant			
mercury dissolved	ug/l	Yes	Yes	Pass	0.69323881	0.42338549	0.0024117	Pass	0.00341795	Pass	Pass	1.33101852	0.01353788	Pass	0.08492538	1	Pass	Not significant			
mercury total	ug/l	Yes	Yes	Fail	0.69323881	0.42338549	0.00444135	Fail	0.00604552	Pass	Pass	1.33101852	0.02909189	Pass	0.15639724	1	Pass	Not significant			
methiocarb	ug/l	No	No	Fail	0.69323881	0.42338549	0.04775649	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1.68169071		Pass	#N/A	0.1	0	Pass
mevinphos	ug/l	No	No	#VALUE!	0.69323881	0.42338549	0.0095513	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	#VALUE!			
nickel dissolved	ug/l	Yes	No	Fail	0.69323881	0.42338549	11.6955655	Fail	12.6143128	Fail	Fail	1.33101852	46.8637923	Fail	411.846054		Pass	Potentially significant	0.5	13	Fail
nickel total	ug/l	Yes	No	Fail	0.69323881	0.42338549	12.1301496	Fail	13.5243122	Fail	Fail	1.33101852	47.1663796	Fail	427.149439		Pass	Potentially significant			
nitrate	mg/l NO3	Yes	No	#VALUE!	0.69323881	0.42338549	23.0690134	#VALUE!	24.2849099	#VALUE!	#VALUE!	1.33101852	91.814611	Pass	812349.104		Pass	#VALUE!			
nitrate	mg/l N	Yes	No	#VALUE!	0.69323881	0.42338549	23.0690134	#VALUE!	24.2849099	#VALUE!	#VALUE!	1.33101852	91.814611	Pass	812349.104		Pass	#VALUE!			
nitrilotriacetic acid (NTA)	ug/l	No	No	Pass	0.69323881	0.42338549	47.7564945	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1681.69071		Pass	#N/A			
nitrite	mg/l NO2	Yes	No	#VALUE!	0.69323881	0.42338549	0.48176513	#VALUE!	0.65754483	#VALUE!	#VALUE!	1.33101852	2.00856026	Pass	16964.8117		Pass	#VALUE!			
nitrite	mg/l N	Yes	No	#VALUE!	0.69323881	0.42338549	0.48176513	#VALUE!	0.65754483	#VALUE!	#VALUE!	1.33101852	2.00856026	Pass	16964.8117		Pass	#VALUE!			
nonylphenols (4-nonylphenol technical mix)	ug/l	Yes	No	Fail	0.69323881	0.42338549	0.1757439	Fail	0.18332721	Fail	Pass	1.33101852	0.39174965	Pass	6.18862179	1	Fail	Potentially significant	0.04	12	Fail
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	ug/l	Yes	Yes	Pass	0.69323881	0.42338549	0.00501443	Fail	0.00691026	Pass	Pass	1.33101852	0.00879336	Pass	0.17657752		Pass	Not significant			
omethoate	ug/l	No	No	Fail	0.69323881	0.42338549	0.00477565	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.16816907		Pass	#N/A			
organic nitrogen	mg/l as N	No	No	#VALUE!	0.69323881	0.42338549	2.38782472	#VALUE!	3.33573865	#VALUE!	#VALUE!	1.33101852	4.39668188	Pass	84084.5353		Pass	#VALUE!			
orthophosphate as PO4	mg/l	No	No	#VALUE!	0.69323881	0.42338549	0.23352926	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	8223.46755		Pass	#VALUE!			
pendimethalin	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
perfluorooctanoic acid (PFOA)	ug/l	Yes	Yes	#VALUE!	0.69323881	0.42338549	0.00339071	#VALUE!	0.005008	#VALUE!	#VALUE!	1.33101852	0.00709874	Pass	0.11940004		Pass	#VALUE!			
permethrin	ug/l	No	Yes	Fail	0.69323881	0.42338549	0.00157596	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.05549579		Pass	#N/A	0.001	8	Fail
pH	pH units	No	No	#VALUE!	0.69323881	0.42338549	4.44135399	#VALUE!	7.43967866	#VALUE!	#VALUE!	1.33101852	7.90185636	#VALUE!	156397.236		Pass	#VALUE!			
phenol	ug/l	No	No	Pass	0.69323881	0.42338549	0.47756494	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	16.8169071		Pass	#N/A			
pirimicarb	ug/l	No	No	Fail	0.69323881	0.42338549	0.47756494	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	16.8169071		Pass	#N/A			
pirimiphos-methyl	ug/l	No	Yes	Fail	0.69323881	0.42338549	0.00477565	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.16816907		Pass	#N/A			
polychloro chloromethyl sulphonamido diphenyl ethe	ug/l	No	No	Fail	0.69323881	0.42338549	0.13371818	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	4.70873397		Pass	#N/A			
prochloraz	ug/l	No	No	Pass	0.69323881	0.42338549	0.04775649	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1.68169071		Pass	Not significant			
propetamphos	ug/l	No	No	Fail	0.69323881	0.42338549	0.0095513	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	#N/A			
propyzamide	ug/l	No	No	Pass	0.69323881	0.42338549	0.02005773	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.7063101		Pass	Not significant			
salinity @ 20øC	%	Yes	No	#VALUE!	0.69323881	0.42338549	0.22923117	#VALUE!	0.34298085	#VALUE!	#VALUE!	1.33101852	0.37586728	Pass	8072.11538		Pass	#VALUE!			
silver dissolved	ug/l	No	No	Fail	0.69323881	0.42338549	0.47756494	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	16.8169071		Pass	#N/A	1	0	Pass

Determinand	Units	Determinand modelled at Site 5?	Quality to be multiplied by 1000 for RQP calculations?	Site 5 Part A Screening - Freshwater (#VALUE! = No EQS)													Site 5 Part B Screening - Freshwater: Liable to cause pollution test		
				Screening Test 1 (<10% of EQS)	Effluent Flow Rate for AA (EFR)	River Flow Rate (RFR)	Process contribution (PC)	Screening Test 2 (PC <4% EQS)	Long-Term Predicted Environmental Concentration (PEC)	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Effluent Flow Rate for MAC (EFR)	Short-Term Predicted Environmental Concentration (PEC)	Screening Test 4b (Short-term PEC>MAC EQS)	Significant load (kg/yr)	Annual load (kg/yr)	Screening Test 5 (Is the Significant Load exceeded)	Screening outcome - is the potentially discharge significant and liable to cause pollution?	Minimum Reporting Value	Number of samples >MRV	Liable to cause pollution test
silver total	ug/l	No	No	#VALUE!	0.69323881	0.42338549	0.47756494	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	16.8169071		Pass	#VALUE!			
soluble reactive phosphorus	mg/l	Yes	No	#VALUE!	0.69323881	0.42338549	0.07641039	#VALUE!	0.11491028	#VALUE!	#VALUE!	1.33101852	0.27486601	Pass	2690.70513		Pass	#VALUE!			
sulcofuron	ug/l	No	No	#VALUE!	0.69323881	0.42338549	0.02387825	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.84084535		Pass	#VALUE!			
sulphate	mg/l SO4	No	No	Fail	0.69323881	0.42338549	49.2369458	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	1733823.12		Pass	#N/A			
sulphide or hydrogen sulphide	ug/l	Yes	No	Fail	0.69323881	0.42338549	7.68879561	Fail	11.8012837	Fail	Fail	1.33101852	23.8603095	Fail	270.752204		Pass	Potentially significant	10	7	Fail
suspended solids @ 105øC	mg/l	No	No	#VALUE!	0.69323881	0.42338549	5.89792707	#VALUE!	1209.42778	#VALUE!	#VALUE!	1.33101852	797.115396	Pass	207688.802		Pass	#VALUE!			
tecnazene	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
tetrachloroethane	ug/l	No	No	Pass	0.69323881	0.42338549	0.05730779	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	2.01802885		Pass	Not significant			
thiobendazole	ug/l	No	No	#VALUE!	0.69323881	0.42338549	0.04775649	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	1.68169071		Pass	#VALUE!			
tin dissolved	ug/l	No	No	#VALUE!	0.69323881	0.42338549	0.19580163	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	6.89493189		Pass	#VALUE!			
tin total	ug/l	No	No	Pass	0.69323881	0.42338549	0.22923117	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	8.07211538		Pass	Not significant			
toluene	ug/l	No	No	Pass	0.69323881	0.42338549	0.04775649	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	1.68169071		Pass	Not significant			
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	mg/l	No	No	Fail	0.69323881	0.42338549	135.341905	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	4765911.46		Pass	#N/A			
total organic carbon	mg/l	Yes	No	#VALUE!	0.69323881	0.42338549	8.74898979	#VALUE!	10.2510688	#VALUE!	#VALUE!	1.33101852	60.1325018	Pass	308085.737		Pass	#VALUE!			
total oxidised nitrogen	mg/l as N	Yes	No	#VALUE!	0.69323881	0.42338549	8.73705067	#VALUE!	9.26919496	#VALUE!	#VALUE!	1.33101852	20.9745924	Pass	307665.315		Pass	#VALUE!			
total phosphorus	mg/l	Yes	No	Fail	0.69323881	0.42338549	0.34098137	Fail	0.50431423	Pass	Pass	1.33101852	0.93849638	Pass	12007.2716		Pass	Not significant			
triallate	ug/l	No	No	Pass	0.69323881	0.42338549	0.0095513	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.33633814		Pass	Not significant			
triazophos	ug/l	No	Yes	Fail	0.69323881	0.42338549	0.0095513	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	0.33633814		Pass	#N/A			
tributyl phosphate	ug/l	No	No	Pass	0.69323881	0.42338549	0.01050643	Pass	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.36997196		Pass	Not significant			
tributyltin compounds (as tributyltin cation)	ug/l	Yes	Yes	Fail	0.69323881	0.42338549	2.4168E-05	Fail	3.2772E-05	Pass	Pass	1.33101852	5.0997E-05	Pass	0.00085106	1	Pass	Not significant			
trichloroethylene	ug/l	No	No	Pass	0.69323881	0.42338549	0.47756494	Fail	0.66714773	Pass	Pass	1.33101852	0.87933638	Pass	16.8169071		Pass	Not significant			
triclosan	ug/l	Yes	Yes	Fail	0.69323881	0.42338549	0.01695356	Fail	0.01928688	Fail	Pass	1.33101852	0.05459218	Pass	0.5970002		Pass	Potentially significant	0.01	12	Fail
triphenyltin compounds (as tryphenyltin cation)	ug/l TPT	No	No	#VALUE!	0.69323881	0.42338549	0.0009756	#VALUE!	#N/A	#N/A	#N/A	1.33101852	#N/A	#N/A	0.03435454		Pass	#VALUE!			
vanadium dissolved	ug/l	No	No	Fail	0.69323881	0.42338549	4.77564945	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	168.169071		Pass	#N/A			
vanadium total	ug/l	No	No	Fail	0.69323881	0.42338549	4.77564945	Fail	#N/A	#N/A	#N/A	1.33101852	#N/A	Pass	168.169071		Pass	#N/A			
zinc dissolved	ug/l	Yes	No	Fail	0.69323881	0.42338549	30.4686435	Fail	33.2000939	Fail	Fail	1.33101852	77.6057595	Pass	1072.91867		Pass	Potentially significant			
zinc total	ug/l	Yes	No	Fail	0.69323881	0.42338549	36.8202573	Fail	45.9843975	Fail	Fail	1.33101852	89.2866966	Pass	1296.58353		Pass	Potentially significant			

B.3 Screening results, site 6

				Site 6 Part A Screening - Freshwater (#VALUE! = No EQS)													Site 6 Part B Screening - Freshwater: Liable to cause pollution test		
Determinand	Units	Determinand modelled at Site 3 and 6?	Quality to be multiplied by 1000 for RQP calculations?	Screening Test 1 (<10% of EQS)	Effluent Flow Rate for AA (EFR)	River Flow Rate (RFR)	Process contribution (PC)	Screening Test 2 (PC <4% EQS)	Long-Term Predicted Environmental Concentration (PEC)	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Effluent Flow Rate for MAC (EFR)	Short-Term Predicted Environmental Concentration (PEC)	Screening Test 4b (Short-term PEC>MAC EQS)	Significant load (kg/yr)	Annual load (kg/yr)	Screening Test 5 (Is the Significant Load exceeded)	Screening outcome - is the potentially discharge significant and liable to cause pollution?	Minimum Reporting Value	Number of samples >MRV	Liable to cause pollution test
1,1,1-trichloroethane	ug/l	No	N/A	Pass	0.693	1.530	0.239857554	Pass	0.5840	Pass	Pass	1.331	0.7326	Pass	16.81690705		Pass	Not significant			
1,1,2-trichloroethane	ug/l	No	N/A	Pass	0.693	1.530	0.239857554	Pass	0.5840	Pass	Pass	1.331	0.7326	Pass	16.81690705		Pass	Not significant			
2,4-dichlorophenol	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
2,4-dichlorophenoxyacetic acid (2,4-D)	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
2-chlorophenol	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.336338141		Pass	Not significant			
3,4-dichloroaniline	ug/l	No	N/A	Fail	0.693	1.530	0.239857554	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	16.81690705		Pass	#N/A			
3-methylphenol (m-cresol)	ug/l	No	N/A	#VALUE!	0.693	1.530	0.005276866	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.369971955		Pass	#VALUE!			
4-chloro-3-methyl phenol	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.336338141		Pass	Not significant			
4-methylphenol (p-cresol)	ug/l	No	N/A	#VALUE!	0.693	1.530	0.006716012	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.470873397		Pass	#VALUE!			
abamectin	ug/l	No	N/A	Fail	0.693	1.530	1.199287772	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	84.08453526		Pass	#N/A			
acid neutralisation capacity (ANC, unfiltered)	mg/l	No	N/A	#VALUE!	0.693	1.530	585.2524329	#VALUE!	3043.0566	#VALUE!	#VALUE!	1.331	2979.9277	Pass	41033253.21		Pass	#VALUE!			
alkalinity as CaCO3	mg/l	No	N/A	#VALUE!	0.693	1.530	28.61500625	#VALUE!	150.3255	#VALUE!	#VALUE!	1.331	145.7535	Pass	2006257.011		Pass	#VALUE!			
aluminium dissolved	ug/l	No	N/A	#VALUE!	0.693	1.530	4.125549937	#VALUE!	67.6844	#VALUE!	#VALUE!	1.331	65.6731	Pass	289.2508013		Pass	#VALUE!			
aluminium total	ug/l	No	N/A	#VALUE!	0.693	1.530	10.62568966	#VALUE!	187.2435	#VALUE!	#VALUE!	1.331	180.5120	Pass	744.9889824		Pass	#VALUE!			
ammonia	mg/l as NH3	Yes	Yes	#VALUE!	0.693	1.530	0.012400636	#VALUE!	0.0205	#VALUE!	#VALUE!	1.331	0.0529	Pass	869.4340946		Pass	#VALUE!			
ammonia	mg/l as N	Yes	Yes	#VALUE!	0.693	1.530	0.012400636	#VALUE!	0.0205	#VALUE!	#VALUE!	1.331	0.0529	Pass	869.4340946		Pass	#VALUE!			
ammoniacal nitrogen	mg/l as N	No	N/A	#VALUE!	0.693238812	1.53	0.074619685	#VALUE!	0.275176509	#VALUE!	#VALUE!	1.331018519	0.667596547	Fail	5231.739784		Pass	#VALUE!			
antimony dissolved	ug/l	Yes	No	#VALUE!	0.693	1.530	0.292866074	#VALUE!	0.4888	#VALUE!	#VALUE!	1.331	0.7105	Pass	20.53344351		Pass	#VALUE!			
antimony total	ug/l	Yes	No	#VALUE!	0.693	1.530	0.296943652	#VALUE!	0.5560	#VALUE!	#VALUE!	1.331	0.8061	Pass	20.81933093		Pass	#VALUE!			
arsenic dissolved	ug/l	No	N/A	Pass	0.693	1.530	0.280153624	Pass	1.1281	Pass	Pass	1.331	1.4033	Pass	19.64214744		Pass	Not significant			
arsenic total	ug/l	No	N/A	Pass	0.693	1.530	0.293345789	Pass	1.3256	Pass	Pass	1.331	1.5977	Pass	20.56707732		Pass	Not significant			
azinphos methyl, dissolved	ug/l	No	N/A	Fail	0.693	1.530	0.004797151	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.336338141		Pass	#N/A			
BDE-100	ug/l	No	N/A	#VALUE!	0.693	1.530	0.000119929	#VALUE!	0.0003	#VALUE!	#VALUE!	1.331	0.0004	Pass	0.008408454		Pass	#VALUE!			
BDE-153	ug/l	No	N/A	#VALUE!	0.693	1.530	0.000119929	#VALUE!	0.0003	#VALUE!	#VALUE!	1.331	0.0004	Pass	0.008408454		Pass	#VALUE!			
BDE-154	ug/l	No	N/A	#VALUE!	0.693	1.530	0.000119929	#VALUE!	0.0003	#VALUE!	#VALUE!	1.331	0.0004	Pass	0.008408454		Pass	#VALUE!			
BDE-28	ug/l	No	N/A	#VALUE!	0.693	1.530	0.000119929	#VALUE!	0.0003	#VALUE!	#VALUE!	1.331	0.0004	Pass	0.008408454		Pass	#VALUE!			
BDE-47	ug/l	No	N/A	#VALUE!	0.693	1.530	0.000119929	#VALUE!	0.0003	#VALUE!	#VALUE!	1.331	0.0004	Pass	0.008408454		Pass	#VALUE!			
BDE-99	ug/l	No	N/A	#VALUE!	0.693	1.530	0.000119929	#VALUE!	0.0003	#VALUE!	#VALUE!	1.331	0.0004	Pass	0.008408454		Pass	#VALUE!			
bentazone	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.336338141		Pass	Not significant			
benzene	ug/l	No	N/A	Pass	0.693	1.530	0.023985755	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1.681690705		Pass	Not significant			
benzo(a)pyrene	ug/l	Yes	Yes	Fail	0.693	1.530	0.000418072	Fail	0.0140	Pass	Fail	1.331	0.0118	Pass	0.029311869		Pass	'otentially significant			
benzyl butyl phthalate	ug/l	No	N/A	Pass	0.693	1.530	0.047971511	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	3.36338141		Pass	Not significant			
biphenyl	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.336338141		Pass	Not significant			
BOD (5 day)	mg/l	No	N/A	#VALUE!	0.693	1.530	0.940241614	#VALUE!	4.7007	#VALUE!	#VALUE!	1.331	6.6905	Pass	65922.27564		Pass	#VALUE!			
boron dissolved	ug/l	No	N/A	Pass	0.693	1.530	54.68752242	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	3834.254808		Pass	Not significant			
boron total	ug/l	No	N/A	Pass	0.693	1.530	56.84624041	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	3985.606971		Pass	Not significant			
bromide	mg/l	No	N/A	#VALUE!	0.693	1.530	0.091865443	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	6440.875401		Pass	#VALUE!			
bromine - total residual oxidant	mg/l	No	N/A	Fail	0.693	1.530	0.041015642	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	2875.691106		Pass	#N/A			
bromoxynil	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	ug/l	No	N/A	#VALUE!	0.693	1.530	0.239857554	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	16.81690705		Pass	#VALUE!			
c (PFOS)	ug/l	No	N/A	Fail	0.693	1.530	0.005418382	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.37989393		Pass	#N/A			
cadmium dissolved	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	0.0191	Pass	Pass	1.331	0.0204	Pass	0.336338141		Pass	Not significant			
cadmium total	ug/l	No	N/A	Pass	0.693	1.530	0.005516724	Pass	0.0281	Pass	Pass	1.331	0.0408	Pass	0.386788862		Pass	Not significant			
calcium total	mg/l	No	N/A	#VALUE!	0.693	1.530	16.50219975	#VALUE!	83.8952	#VALUE!	#VALUE!	1.331	80.7485	Pass	1157003.205		Pass	#VALUE!			
carbendazim	ug/l	No	N/A	Fail	0.693	1.530	0.023985755	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1.681690705		Pass	#N/A			
chemical oxygen demand (COD)	mg/l	No	N/A	#VALUE!	0.693	1.530	8.802772249	#VALUE!	55.5748	#VALUE!	#VALUE!	1.331	54.9546	Pass	617180.4888		Pass	#VALUE!			
chloride	mg/l	No	N/A	Fail	0.693	1.530	23.57799761	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	1653101.963		Pass	#N/A			
chlorine free	mg/l	No	N/A	#VALUE!	0.693	1.530	0.040775784	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	2858.874199		Pass	#VALUE!			
chlorine total	mg/l	No	N/A	Pass	0.693	1.530	0.040775784	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	2858.874199		Pass	Not significant			
chloroform	ug/l	Yes	No	Fail	0.693	1.530	0.251850432	Fail	0.5959	Pass	Pass	1.331	0.7326	Pass	17.6577524		Pass	Not significant			
chloronitrotoluenes	ug/l	No	N/A	Pass	0.693	1.530	0.006236296	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.437239583		Pass	Not significant			
chlorophyll	ug/l	No	N/A	#VALUE!	0.693	1.530	4.821136845	#VALUE!	23.1072	#VALUE!	#VALUE!	1.331	23.9795	Pass	338.0198317		Pass	#VALUE!			
chlorothalonil	ug/l	No	N/A	Fail	0.693	1.530	0.015950527	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1.118324319		Pass	#N/A			
chlorotoluron	ug/l	No	N/A	Pass	0.693	1.530	0.011992878	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.840845353		Pass	Not significant			
chlorpropham	ug/l	No	N/A	Pass	0.693	1.530	0.023985755	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1.681690705		Pass	Not significant			
chromium (VI) dissolved	ug/l	No	N/A	Fail	0.693	1.530	1.679002881	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	117.7183494		Pass	#N/A			
chromium dissolved	ug/l	Yes	No	#VALUE!	0.693	1.530	0.647615397	#VALUE!	1.2063	#VALUE!	#VALUE!	1.331	2.4346	Pass	45.40564904		Pass	#VALUE!			
chromium total	ug/l	Yes	No	#VALUE!	0.693	1.530	4.274261621	#VALUE!	5.5629	#VALUE!	#VALUE!	1.331	66.1329	Pass	299.6772837		Pass	#VALUE!			
cobalt dissolved	ug/l	No	N/A	Fail	0.693	1.530	0.530085195	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	37.16536458		Pass	#N/A			
cobalt total	ug/l	No	N/A	#VALUE!	0.693	1.530	0.611636764	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	42.88311298		Pass	#VALUE!			
conductivity @ 20øC	uS/cm	Yes	No	#VALUE!	0.693	1.530	227.3849616	#VALUE!	679.7684	#VALUE!	#VALUE!	1.331	733.9532	Pass	15942.42788		Pass	#VALUE!			
copper dissolved	ug/l	Yes	No	Fail	0.693	1.530	0.369380634	Fail	1.7458	Pass	Fail	1.331	2.5583	Pass	25.89803686		Pass	'otentially significant			
copper total	ug/l	Yes	No	Fail	0.693	1.530	0.738761268	Fail	2.9213	Pass	Fail	1.331	3.4639	Pass	51.79607372		Pass	'otentially significant			
coumaphos	ug/l	No	N/A	Fail	0.693	1.530	0.004797151	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.336338141		Pass	#N/A			
cyanide total	ug/l	No	N/A	Fail	0.693	1.530	9.594302179	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	672.6762821		Pass	#N/A			

Determinand	Units	Determinand modelled at Site 3 and 6?	Quality to be multiplied by 1000 for RQP calculations?	Site 6 Part A Screening - Freshwater (#VALUE! = No EQS)												Site 6 Part B Screening - Freshwater: Liable to cause pollution test		
				Screening Test 1 (<10% of EQS)	Effluent Flow Rate for AA (EFR)	River Flow Rate (RFR)	Process contribution (PC)	Screening Test 2 (PC <4% EQS)	Long-Term Predicted Environmental Concentration (PEC)	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Effluent Flow Rate for MAC (EFR)	Short-Term Predicted Environmental Concentration (PEC)	Screening Test 4b (Short-term PEC>MAC EQS)	Significant load (kg/yr)	Annual load (kg/yr)	Screening Test 5 (Is the Significant Load exceeded)	Screening outcome - is the potentially discharge significant and liable to cause pollution?	Minimum Reporting Value	Number of samples >MRV	Liable to cause pollution test
cyanide, free (easily liberable)	ug/l	No	N/A	#VALUE!	0.693	1.530	4.79715109	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	336.338141		Pass	#VALUE!			
cyfluthrin	ug/l	No	N/A	#VALUE!	0.693	1.530	0.023985755	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1.681690705		Pass	#VALUE!			
cypermethrin	ug/l	Yes	Yes	Fail	0.693	1.530	6.02042E-05	Fail	0.0001	Fail	Fail	1.331	0.0002	Pass	0.004221044		Pass	'otentially significant			
demeton	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.336338141		Pass	Not significant			
di(2-ethylhexyl)phthalate (DEHP)	ug/l	Yes	Yes	Fail	0.693	1.530	0.043893932	Pass	0.0955	Pass	Pass	1.331	0.1936	Pass	3.07749399		Pass	Not significant			
diazinon	ug/l	No	N/A	Fail	0.693	1.530	0.002398576	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.168169071		Pass	#N/A			
dibutyl phthalate	ug/l	No	N/A	Pass	0.693	1.530	0.008155157	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.57177484		Pass	Not significant			
dichlorobenzene, total isomers	ug/l	No	N/A	Pass	0.693	1.530	0.023985755	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1.681690705		Pass	Not significant			
dichlorvos	ug/l	No	N/A	Fail	0.693	1.530	0.000239858	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.016816907		Pass	#N/A			
diethyl phthalate	ug/l	No	N/A	Pass	0.693	1.530	0.005276866	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.369971955		Pass	Not significant			
diflubenzuron	ug/l	No	N/A	Fail	0.693	1.530	0.000239858	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.016816907		Pass	#N/A			
dimethoate	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
dimethyl phthalate	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
dioctyl phthalate	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
dissolved organic carbon	mg/l	Yes	No	#VALUE!	0.693	1.530	2.46573566	#VALUE!	5.8428	#VALUE!	#VALUE!	1.331	8.6721	Pass	172877.8045		Pass	#VALUE!			
doramectin	ug/l	No	N/A	Fail	0.693	1.530	1.199287772	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	84.08453526		Pass	#N/A			
EDTA	ug/l	No	N/A	Fail	0.693	1.530	27.79949056	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1949.079527		Pass	#N/A			
fenchlorphos	ug/l	No	N/A	Fail	0.693	1.530	0.004797151	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	#N/A			
fenitrothion	ug/l	No	N/A	Fail	0.693	1.530	0.002398576	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.168169071		Pass	#N/A			
flucofuron	ug/l	No	N/A	#VALUE!	0.693	1.530	0.011992878	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.840845353		Pass	#VALUE!			
fluoranthene	ug/l	Yes	Yes	Fail	0.693	1.530	0.000627228	Fail	0.0134	Pass	Fail	1.331	0.0118	Pass	0.043976212		Pass	'otentially significant			
fluoride	mg/l	No	N/A	Fail	0.693	1.530	0.178693878	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	12528.59575		Pass	#N/A			
formaldehyde	ug/l	No	N/A	Fail	0.693	1.530	11.99287772	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	840.8453526		Pass	#N/A			
glyphosate	ug/l	No	N/A	Pass	0.693	1.530	0.140556527	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	9.854707532		Pass	Not significant			
hardness as CaCO3	mg/l	No	N/A	#VALUE!	0.693	1.530	52.00111781	#VALUE!	232.7087	#VALUE!	#VALUE!	1.331	229.7474	Pass	3645905.449		Pass	#VALUE!			
hexabromocyclododecane (HBCDD)	ug/l	Yes	Yes	Fail	0.693	1.530	0.000273917	Fail	0.0004	Fail	Pass	1.331	0.0012	Pass	0.019204908		Pass	'otentially significant			
ioxynil	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
iron dissolved	ug/l	No	N/A	Pass	0.693	1.530	16.59814277	Pass	133.7862	Pass	Pass	1.331	123.1650	Pass	1163.729968		Pass	Not significant			
iron total	ug/l	No	N/A	Fail	0.693	1.530	47.73165334	Fail	331.7064	Pass	Pass	1.331	364.8908	Pass	3346.564503		Pass	Not significant			
ivermectin	ug/l	No	N/A	Fail	0.693	1.530	1.199287772	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	84.08453526		Pass	#N/A			
lead dissolved	ug/l	No	N/A	Fail	0.693	1.530	0.051809232	Fail	0.4274	Pass	Pass	1.331	0.4640	Pass	3.632451923		Pass	Not significant			
lead total	ug/l	No	N/A	Fail	0.693	1.530	0.114891769	Fail	1.1405	Pass	Pass	1.331	1.0668	Pass	8.055298478		Pass	Not significant			
linuron	ug/l	No	N/A	Pass	0.693	1.530	0.002398576	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.168169071		Pass	Not significant			
malachite green	ug/l	No	N/A	Fail	0.693	1.530	0.239857554	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	16.81690705		Pass	#N/A			
malathion	ug/l	No	N/A	Fail	0.693	1.530	0.004797151	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.336338141		Pass	#N/A			
mancozeb	ug/l CS2	No	N/A	Fail	0.693	1.530	0.359786332	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	25.22536058		Pass	#N/A			
maneb	ug/l CS2	No	N/A	Fail	0.693	1.530	0.170298864	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	11.94000401		Pass	#N/A			
manganese dissolved	ug/l	No	N/A	Fail	0.693	1.530	29.35856467	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	2058.389423		Pass	#N/A			
manganese total	ug/l	No	N/A	Fail	0.693	1.530	31.06155331	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	2177.789463		Pass	#N/A			
MCPA	ug/l	No	N/A	Pass	0.693	1.530	0.005037009	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.353155048		Pass	Not significant			
mecoprop	ug/l	No	N/A	Pass	0.693	1.530	0.011273305	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.790394631		Pass	Not significant			
mercury dissolved	ug/l	No	N/A	Pass	0.693	1.530	0.001211281	Pass	0.0046	Pass	Pass	1.331	0.0105	Pass	0.084925381		Pass	Not significant			
mercury total	ug/l	Yes	Yes	Fail	0.693	1.530	0.002230675	Pass	0.0066	Pass	Pass	1.331	0.0206	Pass	0.156397236		Pass	Not significant			
methiocarb	ug/l	No	N/A	Fail	0.693	1.530	0.023985755	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1.681690705		Pass	#N/A			
mevinphos	ug/l	No	N/A	#VALUE!	0.693	1.530	0.004797151	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	#VALUE!			
nickel dissolved	ug/l	Yes	No	Fail	0.693	1.530	5.874111509	Fail	7.2603	Fail	Fail	1.331	29.4559	Pass	411.8460537		Pass	'otentially significant			
nickel total	ug/l	Yes	No	Fail	0.693	1.530	6.092381884	Fail	8.0980	Fail	Fail	1.331	29.9372	Pass	427.1494391		Pass	'otentially significant			
nitrate	mg/l NO3	Yes	No	#VALUE!	0.693	1.530	11.5864391	#VALUE!	23.6680	#VALUE!	#VALUE!	1.331	65.2154	Pass	812349.1036		Pass	#VALUE!			
nitrate	mg/l N	Yes	No	#VALUE!	0.693	1.530	11.5864391	#VALUE!	23.6680	#VALUE!	#VALUE!	1.331	65.2154	Pass	812349.1036		Pass	#VALUE!			
nitrilotriacetic acid (NTA)	ug/l	No	N/A	Pass	0.693	1.530	23.98575545	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1681.690705		Pass	Not significant			
nitrite	mg/l NO2	Yes	No	#VALUE!	0.693	1.530	0.241967102	#VALUE!	0.5728	#VALUE!	#VALUE!	1.331	1.4201	Pass	16964.81175		Pass	#VALUE!			
nitrite	mg/l N	Yes	No	#VALUE!	0.693	1.530	0.241967102	#VALUE!	0.5728	#VALUE!	#VALUE!	1.331	1.4201	Pass	16964.81175		Pass	#VALUE!			
nonylphenols (4-nonylphenol technical mix)	ug/l	Yes	Yes	Fail	0.693	1.530	0.08826758	Fail	0.1050	Fail	Pass	1.331	0.2503	Pass	6.188621795		Pass	'otentially significant			
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	ug/l	Yes	Yes	Pass	0.693	1.530	0.002518504	Pass	0.0060	Pass	Pass	1.331	0.0073	Pass	0.176577524		Pass	Not significant			
omethoate	ug/l	No	N/A	Fail	0.693	1.530	0.002398576	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.168169071		Pass	#N/A			
organic nitrogen	mg/l as N	No	N/A	#VALUE!	0.693	1.530	1.199287772	#VALUE!	2.9198	#VALUE!	#VALUE!	1.331	3.6631	Pass	84084.53526		Pass	#VALUE!			
orthophosphate as PO4	mg/l	No	N/A	#VALUE!	0.693	1.530	0.117290344	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	8223.467548		Pass	#VALUE!			
pendimethalin	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
perfluorooctanoic acid (PFOA)	ug/l	Yes	Yes	#VALUE!	0.693	1.530	0.001702989	#VALUE!	0.0028	#VALUE!	#VALUE!	1.331	0.0046	Pass	0.11940004		Pass	#VALUE!			
permethrin	ug/l	No	N/A	Fail	0.693	1.530	0.00079153	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.055495793		Pass	#N/A			
pH	pH units	No	N/A	#VALUE!	0.693	1.530	2.230675257	#VALUE!	7.7362	#VALUE!	#VALUE!	1.331	7.9535	#VALUE!	156397.2356		Pass	#VALUE!			
phenol	ug/l	No	N/A	Pass	0.693	1.530	0.239857554	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	16.81690705		Pass	Not significant			
pirimicarb	ug/l	No	N/A	Fail	0.693	1.530	0.239857554	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	16.81690705		Pass	#N/A			
pirimiphos-methyl	ug/l	No	N/A	Fail	0.693	1.530	0.002398576	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.168169071		Pass	#N/A			
polychloro chloromethyl sulphonamido diphenyl ethe	ug/l	No	N/A	Fail	0.693	1.530	0.067160115	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	4.708733974		Pass	#N/A			
prochloraz	ug/l	No	N/A	Pass	0.693	1.530	0.023985755	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1.681690705		Pass	Not significant			
propetamphos	ug/l	No	N/A	Fail	0.693	1.530	0.004797151	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	#N/A			

Determinand	Units	Determinand modelled at Site 3 and 6?	Quality to be multiplied by 1000 for RQP calculations?	Site 6 Part A Screening - Freshwater (#VALUE! = No EQS)												Site 6 Part B Screening - Freshwater: Liable to cause pollution test		
				Screening Test 1 (<10% of EQS)	Effluent Flow Rate for AA (EFR)	River Flow Rate (RFR)	Process contribution (PC)	Screening Test 2 (PC <4% EQS)	Long-Term Predicted Environmental Concentration (PEC)	Screening Test 3 (PEC-upstream concentration>10% EQS)	Screening Test 4a (Long-term PEC>AA EQS)	Effluent Flow Rate for MAC (EFR)	Short-Term Predicted Environmental Concentration (PEC)	Screening Test 4b (Short-term PEC>MAC EQS)	Significant load (kg/yr)	Annual load (kg/yr)	Screening Test 5 (Is the Significant Load exceeded)	Screening outcome - is the potentially discharge significant and liable to cause pollution?	Minimum Reporting Value	Number of samples >MRV	Liable to cause pollution test
propyzamide	ug/l	No	N/A	Pass	0.693	1.530	0.010074017	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.706310096		Pass	Not significant			
salinity @ 20øC	%	Yes	No	#VALUE!	0.693	1.530	0.115131626	#VALUE!	0.3412	#VALUE!	#VALUE!	1.331	0.3618	Pass	8072.115385		Pass	#VALUE!			
silver dissolved	ug/l	No	N/A	Fail	0.693	1.530	0.239857554	Fail	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	16.81690705		Pass	#N/A			
silver total	ug/l	No	N/A	#VALUE!	0.693	1.530	0.239857554	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	16.81690705		Pass	#VALUE!			
soluble reactive phosphorus	mg/l	No	N/A	#VALUE!	0.693	1.530	0.038377209	#VALUE!	0.1711	#VALUE!	#VALUE!	1.331	0.2567	Pass	2690.705128		Pass	#VALUE!			
sulcofuron	ug/l	No	N/A	#VALUE!	0.693	1.530	0.011992878	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.840845353		Pass	#VALUE!			
sulphate	mg/l SO4	No	N/A	Fail	0.693	1.530	24.72931387	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	1733823.117		Pass	#N/A			
sulphide or hydrogen sulphide	ug/l	Yes	No	Fail	0.693	1.530	3.861706627	Fail	22.4427	Pass	Fail	1.331	27.4652	Fail	270.7522035		Pass	otentially significant			
suspended solids @ 105øC	mg/l	No	N/A	#VALUE!	0.693	1.530	2.962240798	#VALUE!	30.0964	#VALUE!	#VALUE!	1.331	40.1596	Pass	207688.8021		Pass	#VALUE!			
tecnazene	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
tetrachloroethane	ug/l	No	N/A	Pass	0.693	1.530	0.028782907	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	2.018028846		Pass	Not significant			
thiobendazole	ug/l	No	N/A	#VALUE!	0.693	1.530	0.023985755	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	1.681690705		Pass	#VALUE!			
tin dissolved	ug/l	No	N/A	#VALUE!	0.693	1.530	0.098341597	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	Pass	6.894931891		Pass	#VALUE!			
tin total	ug/l	No	N/A	Pass	0.693	1.530	0.115131626	Pass	#N/A	#N/A	#N/A	1.331	#N/A	Pass	8.072115385		Pass	Not significant			
toluene	ug/l	No	N/A	Pass	0.693	1.530	0.023985755	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	1.681690705		Pass	Not significant			
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	mg/l	No	N/A	Fail	0.693	1.530	67.97563094	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	4765911.458		Pass	#N/A			
total organic carbon	mg/l	Yes	No	#VALUE!	0.693	1.530	4.394190398	#VALUE!	8.6020	#VALUE!	#VALUE!	1.331	39.5573	Pass	308085.7372		Pass	#VALUE!			
total oxidised nitrogen	mg/l as N	Yes	No	#VALUE!	0.693	1.530	4.388193959	#VALUE!	9.0015	#VALUE!	#VALUE!	1.331	16.2390	Pass	307665.3145		Pass	#VALUE!			
total phosphorus	mg/l	No	N/A	Fail	0.693	1.530	0.171258294	Fail	0.5483	Pass	Pass	1.331	0.8047	Pass	12007.27163		Pass	Not significant			
triallate	ug/l	No	N/A	Pass	0.693	1.530	0.004797151	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.336338141		Pass	Not significant			
triazophos	ug/l	No	N/A	Fail	0.693	1.530	0.004797151	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	0.336338141		Pass	#N/A			
tributyl phosphate	ug/l	No	N/A	Pass	0.693	1.530	0.005276866	Pass	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.369971955		Pass	Not significant			
tributyltin compounds (as tributyltin cation)	ug/l	No	N/A	Fail	0.693	1.530	1.21385E-05	Fail	0.0001	Pass	Pass	1.331	0.0001	Pass	0.000851056		Pass	Not significant			
trichloroethylene	ug/l	No	N/A	Pass	0.693	1.530	0.239857554	Pass	0.5840	Pass	Pass	1.331	0.7326	Pass	16.81690705		Pass	Not significant			
triclosan	ug/l	Yes	Yes	Fail	0.693	1.530	0.008514943	Fail	0.0120	Pass	Pass	1.331	0.0352	Pass	0.5970002		Pass	Not significant			
triphenyltin compounds (as tryphenyltin cation)	ug/l TPT	No	N/A	#VALUE!	0.693	1.530	0.000489995	#VALUE!	#N/A	#N/A	#N/A	1.331	#N/A	#N/A	0.034354539		Pass	#VALUE!			
vanadium dissolved	ug/l	No	N/A	Fail	0.693	1.530	2.398575545	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	168.1690705		Pass	#N/A			
vanadium total	ug/l	No	N/A	Fail	0.693	1.530	2.398575545	Fail	#N/A	#N/A	#N/A	1.331	#N/A	Pass	168.1690705		Pass	#N/A			
zinc dissolved	ug/l	Yes	No	Fail	0.693	1.530	15.30291198	Fail	20.0244	Fail	Fail	1.331	50.1915	Pass	1072.91867		Pass	otentially significant			
zinc total	ug/l	Yes	No	Fail	0.693	1.530	18.49301745	Fail	28.6044	Fail	Fail	1.331	59.0322	Pass	1296.583534		Pass	otentially significant			

C Appendix: Modelling results

C.1 Modelling results, site 3

Site 3 Impact of input discharge quality using AA EQS (v1) (#VALUE!=No EQS)

Determinand	Model	Mean D/S River Quality / Bioavailable Quality			Standard Deviation			Mean U/S River Quality (Bioavailable only)	Hazardous Chemicals Tests: Modelling Test 1 (AA EQS): Risk to EQS	Modelling Test 2a (AA-EQS): Exceeds 80% of EQS	Modelling Test 2b (AA-EQS): Exceeds 80% of EQS	Outcome of modelling tests	WFD Tests: % Deterioration	Does the water body pass EQS at present?	Deterioration >10% (or >3% where the EQS is already being exceeded)?	WFD Class Deterioration?
		Face Value	lower	upper	Face Value	lower	upper									
1,1,1-trichloroethane	Monte Carlo	0.5	0.5	0.5	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
1,1,2-trichloroethane	Monte Carlo	0.5	0.5	0.5	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
2,4-dichlorophenol	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
2,4-dichlorophenoxyacetic acid (2,4-D)	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-56.67%	Pass	No Deterioration	No Class deterioration
2-chlorophenol	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
3,4-dichloroaniline	Monte Carlo	0.5	0.5	0.5	0	0	0		Fail	Fail	Fail	Fail	0.00%	Fail	No Deterioration	Continues to exceed EQS
3-methylphenol (m-cresol)	Monte Carlo	0.01	0.01	0.02	0.01	0.01	0.01		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-70.45%	Pass	No Deterioration	No EQS defined
4-chloro-3-methyl phenol	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
4-methylphenol (p-cresol)	Monte Carlo	0.02	0.01	0.03	0.02	0.01	0.02		#VALUE!	#VALUE!	#VALUE!	#VALUE!	50.00%	Pass	Deterioration	No EQS defined
abamectin	Monte Carlo	2.5	2.5	2.5	0	0	0.01		Fail	Fail	Fail	Fail	0.00%	Fail	No Deterioration	Continues to exceed EQS
acid neutralisation capacity (ANC, unfiltered)	Monte Carlo	1891.62	1784.6	1998.63	216.5	143.81	289.18		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-18.84%	Pass	No Deterioration	No EQS defined
alkalinity as CaCO3	Monte Carlo	92.61	87.77	97.46	9.81	6.51	13.1		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-20.38%	Pass	No Deterioration	No EQS defined
aluminium dissolved	Monte Carlo	12.61	8.43	16.79	8.42	5.58	11.26		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-34.21%	Pass	No Deterioration	No EQS defined
aluminium total	Monte Carlo	49.15	37.18	61.12	24.22	16.09	32.36		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-85.94%	Pass	No Deterioration	No EQS defined
ammonia	Monte Carlo	0.02	0.01	0.03	0.02	0.01	0.02		#VALUE!	#VALUE!	#VALUE!	#VALUE!	116.22%	Pass	Deterioration	No EQS defined
ammonia	Monte Carlo	0.02	0.01	0.03	0.02	0.01	0.02		#VALUE!	#VALUE!	#VALUE!	#VALUE!	116.22%	Pass	Deterioration	No EQS defined
ammoniacal nitrogen	Monte Carlo	0.17	0.11	0.22	0.1	0.07	0.14		#VALUE!	#VALUE!	#VALUE!	#VALUE!	45.11%	Pass	Deterioration	No EQS defined
antimony dissolved	Monte Carlo	0.9	0.85	0.96	0.12	0.08	0.16		#VALUE!	#VALUE!	#VALUE!	#VALUE!	130.31%	Pass	Deterioration	No EQS defined
antimony total	Monte Carlo	0.91	0.85	0.98	0.13	0.09	0.18		#VALUE!	#VALUE!	#VALUE!	#VALUE!	120.71%	Pass	Deterioration	No EQS defined
arsenic dissolved	Monte Carlo	0.89	0.74	1.05	0.32	0.21	0.43		Pass	Pass	Pass	Pass	1.05%	Pass	No Deterioration	No Class deterioration
arsenic total	Monte Carlo	0.94	0.78	1.11	0.33	0.22	0.44		Pass	Pass	Pass	Pass	-15.02%	Pass	No Deterioration	No Class deterioration
azinphos methyl, dissolved	Monte Carlo	0.01	0.01	0.01	0	0	0		Fail	Fail	Pass	Fail	0.00%	Pass	No Deterioration	No Class deterioration
BDE-100	Monte Carlo	0.00025	0.00025	0.00025	0	0	0		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
BDE-153	Monte Carlo	0.00025	0.00025	0.00025	0	0	0		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
BDE-154	Monte Carlo	0.00025	0.00025	0.00025	0	0	0		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
BDE-28	Monte Carlo	0.00025	0.00025	0.00025	0.00001	0	0.00001		#VALUE!	#VALUE!	#VALUE!	#VALUE!	6.67%	Pass	No Deterioration	No EQS defined
BDE-47	Monte Carlo	0.00025	0.00025	0.00025	0.00001	0	0.00001		#VALUE!	#VALUE!	#VALUE!	#VALUE!	6.67%	Pass	No Deterioration	No EQS defined
BDE-99	Monte Carlo	0.00025	0.00025	0.00025	0	0	0		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
bentazone	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-81.16%	Pass	No Deterioration	No Class deterioration
benzene	Monte Carlo	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
benzo(a)pyrene	Monte Carlo	0.00185	0.00138	0.00232	0.00096	0.00064	0.00128		Fail	Fail	Pass	Fail	-85.97%	Fail	No Deterioration	Continues to exceed EQS
benzyl butyl phthalate	Monte Carlo	0.1	0.1	0.1	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
biphenyl	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
BOD (5 day)	Monte Carlo	2.97	2	3.94	1.96	1.3	2.61		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-22.31%	Pass	No Deterioration	No EQS defined
boron dissolved	Monte Carlo	176.01	160.79	191.24	30.8	20.46	41.15		Pass	Pass	Pass	Pass	-19.15%	Pass	No Deterioration	No Class deterioration
boron total	Monte Carlo	182.81	166.36	199.27	33.29	22.11	44.47		Pass	Pass	Pass	Pass	-18.33%	Pass	No Deterioration	No Class deterioration
bromide	Monte Carlo	0.28	0.19	0.37	0.18	0.12	0.24		#VALUE!	#VALUE!	#VALUE!	#VALUE!	44.44%	Pass	Deterioration	No EQS defined
bromine - total residual oxidant	Monte Carlo	0.23078	0.14741	0.31415	0.16866	0.11203	0.22529		Fail	Fail	Pass	Fail	-91.44%	Fail	No Deterioration	Continues to exceed EQS
bromoxynil	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	Monte Carlo	0.49	0.48	0.5	0.02	0.01	0.03		#VALUE!	#VALUE!	#VALUE!	#VALUE!	55.11%	Pass	Deterioration	No EQS defined
c (PFOS)	Monte Carlo	0.00537	0.00449	0.00625	0.00178	0.00118	0.00238		Fail	Fail	Fail	Fail	1.97%	Fail	No Deterioration	Continues to exceed EQS
cadmium dissolved	Monte Carlo	0.01	0.01	0.02	0	0	0		Pass	Pass	Pass	Pass	-89.43%	Pass	No Deterioration	No Class deterioration
cadmium total	Monte Carlo	0.02	0.02	0.02	0.01	0	0.01		Pass	Pass	Pass	Pass	-90.24%	Pass	No Deterioration	No Class deterioration
calcium total	Monte Carlo	56.03	53.31	58.76	5.51	3.66	7.36		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-51.67%	Pass	No Deterioration	No EQS defined
carbendazim	Monte Carlo	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
chemical oxygen demand (COD)	Monte Carlo	27.28	22.92	31.63	8.81	5.85	11.76		#VALUE!	#VALUE!	#VALUE!	#VALUE!	74.27%	Pass	Deterioration	No EQS defined
chloride	Monte Carlo	73.87	58.73	89.01	30.63	20.34	40.91		Pass	Pass	Pass	Pass	41.85%	Pass	Deterioration	No Class deterioration
chlorine free	Monte Carlo	0.1	0.1	0.11	0.01	0	0.01		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-44.68%	Pass	No Deterioration	No EQS defined
chlorine total	Monte Carlo	0.1	0.1	0.11	0.01	0	0.01		Pass	Pass	Pass	Pass	-40.91%	Pass	No Deterioration	No Class deterioration
chloroform	Monte Carlo	0.54	0.47	0.6	0.13	0.09	0.18		Pass	Pass	Pass	Pass	8.00%	Pass	No Deterioration	No Class deterioration
chloronitrotoluenes	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
chlorophyll	Monte Carlo	11.16	9.68	12.64	2.99	1.98	3.99		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-43.11%	Pass	No Deterioration	No EQS defined
chlorothalonil	Monte Carlo	0.0175	0.01748	0.01751	0.00003	0.00002	0.00005		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
chlorotoluron	Monte Carlo	0.02499	0.02497	0.02502	0.00005	0.00003	0.00007		Pass	Pass	Pass	Pass	-0.04%	Pass	No Deterioration	No Class deterioration
chlorpropham	Monte Carlo	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
chromium (VI) dissolved	Monte Carlo	3.5	3.5	3.5	0	0	0		Fail	Fail	Fail	Fail	0.00%	Fail	No Deterioration	Continues to exceed EQS
chromium dissolved	Monte Carlo	1.98	1.48	2.48	1.02	0.68	1.36		#VALUE!	#VALUE!	#VALUE!	#VALUE!	260.25%	Pass	Deterioration	No EQS defined
chromium total	Monte Carlo	3.03	1.62	4.44	2.72	1.77	3.68		#VALUE!	#VALUE!	#VALUE!	#VALUE!	206.71%	Pass	Deterioration	No EQS defined
cobalt dissolved	Monte Carlo	2.22	1.85	2.59	0.75	0.5	1.01		Pass	Pass	Pass	Pass	-83.48%	Fail	No Deterioration	No Class deterioration
cobalt total	Monte Carlo	2.6	2.22	2.98	0.77	0.51	1.02		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-83.59%	Pass	No Deterioration	No EQS defined
conductivity @ 20øC	Monte Carlo	748.35	714.75	781.95	67.97	45.15	90.8		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-34.10%	Pass	No Deterioration	No EQS defined
copper dissolved	MPer	0.0442	0.0257	0.0628	0.0337	0.0211	0.0463	0.1621	Pass	Pass	Pass	Pass	-72.73%	Fail	No Deterioration	No Class deterioration
copper total	MPer	0.0876	0.0597	0.1154	0.0458	0.0269	0.0648	0.2699	Pass	Pass	Pass	Pass	-67.54%	Fail	No Deterioration	No Class deterioration
coumaphos	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
cyanide total	Monte Carlo	20	19.97	20.02	0.04	0.03	0.06		Fail	Fail	Fail	Fail	0.00%	Fail	No Deterioration	Continues to exceed EQS
cyanide, free (easily liberable)	Monte Carlo	10	9.99	10.01	0.02	0.01	0.03		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
cyfluthrin	Monte Carlo	0.05	0.05	0.05	0	0	0		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
cypermethrin	Monte Carlo	0.00018	0.00012	0.00024	0.00012	0.00008	0.00016		Fail	Fail	Fail	Fail	265.63%	Pass	Deterioration	Class deterioration
demeton	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
di(2-ethylhexyl)phthalate (DEHP)	Monte Carlo	0.12	0.08	0.16	0.08	0.06	0.11		Pass	Pass	Pass	Pass	43.12%	Pass	Deterioration	No Class deterioration
diazinon	Monte Carlo	0.005	0.00499	0.005	0.00001	0.00001	0.00001		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
dibutyl phthalate	Monte Carlo	0.02	0.01	0.02	0.01	0.01	0.01		Pass	Pass	Pass	Pass	71.43%	Pass	Deterioration	No Class deterioration
dichlorobenzene, total isomers	Monte Carlo	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
dichlorvos	Monte Carlo	0.0005	0.0005	0.0005	0	0	0		Pass	Fail	Pass	Fail	0.00%	Pass	No Deterioration	No Class deterioration
diethyl phthalate	Monte Carlo	0.01	0.01	0.01	0.01	0.01	0.01		Pass	Pass	Pass	Pass	-18.75%	Pass	No Deterioration	No Class deterioration
diflubenzuron	Monte Carlo	0.0005	0.0005	0.0005	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
dimethoate	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
dimethyl phthalate	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-27.78%	Pass	No Deterioration	No Class deterioration
dioctyl phthalate	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
dissolved organic carbon	Monte Carlo	7.65	6.59	8.71	2.14	1.42	2.86		#VALUE!	#VALUE!	#VALUE!	#VALUE!	86.94%	Pass	Deterioration	No EQS defined
doramectin	Monte Carlo	2.49949	2.49683	2.50216	0.00539	0.00358	0.0072		Fail	Fail	Fail	Fail	-0.02%	Fail	No Deterioration	Continues to exceed EQS
EDTA	Monte Carlo	68.58	53.46	83.7	30.58	20.32	40.85		Pass	Pass	Pass	Pass	37.16%	Pass	Deterioration	No Class deterioration
fenchlorphos	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
fenitrothion	Monte Carlo	0.005	0.00499	0.005	0.00001	0.00001	0.00001		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
flucofuron	Monte Carlo	0.02499	0.02497	0.02502	0.00005	0.00003	0.00007		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-0.04%	Pass	No Deterioration	No EQS defined
fluoranthene	Monte Carlo	0.00248	0.00197	0.00299	0.00103	0.00068	0.00137		Pass	Pass	Pass	Pass	-80.31%	Fail	No Deterioration	No Class deterioration
fluoride	Monte Carlo	0.55	0.5	0.61	0.11	0.08	0.15		Pass	Pass	Pass	Pass	74.82%	Pass	Deterioration	No Class deterioration
formaldehyde	Monte Carlo	24.99	24.97	25.02	0.05	0.03	0.07		Fail	Fail	Fail	Fail	-0.04%	Fail	No Deterioration	Continues to exceed EQS
glyphosate	Monte Carlo	0.43	0.37	0.49	0.12	0.08	0.16		Pass	Pass	Pass	Pass	676.39%	Pass	Deterioration	No Class deterioration
hardness as CaCO3	Monte Carlo	184.28	173.61	194.94	21.58	14.33	28.82		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-63.37%	Pass	No Deterioration	No EQS defined
hexabromocyclododecane (HBCDD)	Monte Carlo	0.00083	0.00057	0.00109	0.00052	0.00035	0.0007		Pass	Pass	Pass	Pass	791.74%	Pass	Deterioration	No Class deterioration
ioxynil	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
iron dissolved	Monte Carlo	51.22	46.22	56.23	10.12	6.72	13.52		Pass	Pass	Pass	Pass	108.04%	Pass	Deterioration	No Class deterioration
iron total	Monte Carlo	163.09	135.33	190.86	56.16	37.31	75.02		Pass	Pass	Pass	Pass	-58.90%	Pass	No Deterioration	No Class deterioration
ivermectin	Monte Carlo	2.49949	2.49683	2.50216	0.00539	0.00358	0.0072		Fail	Fail	Fail	Fail	-0.02%	Fail	No Deterioration	Continues to exceed EQS
lead dissolved	MPer	0.0239	0.0154	0.0324	0.0152	0.0095	0.021	0.0507	Pass	Pass	Pass	Pass	-52.86%	Pass	No Deterioration	No Class deterioration
lead total	MPer	0.0652	0.0464	0.084	0.0317	0.0189	0.0445	0.6036	Pass	Pass	Pass	Pass	-89.20%	Fail	No Deterioration	No Class deterioration
linuron	Monte Carlo	0.00753	0.00746	0.0076	0.00013	0.00009	0.00018		Pass	Pass	Pass	Pass	50.60%	Pass	Deterioration	No Class deterioration
malachite green	Monte Carlo	0.5	0.5	0.5	0	0	0		Fail	Fail	Pass	Fail	0.00%	Pass	No Deterioration	No Class deterioration
malathion	Monte Carlo	0.01	0.01	0.01	0	0	0		Fail	Fail	Pass	Fail	0.00%	Pass	No Deterioration	No Class deterioration
mancozeb	Monte Carlo	1.08	0.58	1.59	1.02	0.68	1.36		Pass	Pass	Fail	Fail	1026.96%	Pass	Deterioration	No Class deterioration
maneb	Monte Carlo	0.48	0.08	0.88	0.81	0.54	1.08		Pass	Pass	Pass	Pass	326.67%	Pass	Deterioration	No Class deterioration
manganese dissolved	MPer	132.9627	44.951	220.9744	149.7979	90.018	209.5777	2103.613	Fail	Fail	Pass	Fail	-93.68%	Fail	No Deterioration	Continues to exceed EQS
manganese total	MPer	140.3893	48.0647	232.7139	156.7108	94.0016	219.4201	2207.748	Fail	Fail	Pass	Fail	-93.64%	Fail	No Deterioration	Continues to exceed EQS
MCPA	Monte Carlo	0.01	0.01	0.01	0.01	0.01	0.01		Pass	Pass	Pass	Pass	-35.00%	Pass	No Deterioration	No Class deterioration
mecoprop	Monte Carlo	0.04	0.03	0.05	0.02	0.01	0.03		Pass	Pass	Pass	Pass	246.67%	Pass	Deterioration	No Class deterioration
mercury dissolved	Monte Carlo	0.00379	0.00145	0.00614	0.00474	0.00315	0.00634		Pass	Pass	Pass	Pass	5.96%	Pass	No Deterioration	No Class deterioration
mercury total	Monte Carlo	0.00703	0.0024	0.01166	0.00936	0.00622	0.0125		Pass	Pass	Pass	Pass	-3.29%	Pass	No Deterioration	No Class deterioration
methiocarb	Monte Carlo	0.05	0.05	0.05	0	0	0		Fail	Fail	Fail	Fail	0.00%	Fail	No Deterioration	Continues to exceed EQS
mevinphos	Monte Carlo	0.01	0.01	0.01	0	0	0		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
nickel dissolved	MPer	10.5926	4.2423	16.9429	11.069	6.7557	15.3823	28.0035	Fail	Fail	Fail	Fail	-62.17%	Fail	No Deterioration	Continues to exceed EQS
nickel total	MPer	11.0641	4.6084	17.5198	11.146	6.7612	15.5309	30.5348	Fail	Fail	Fail	Fail	-63.77%	Fail	No Deterioration	Continues to exceed EQS
nitrate	Monte Carlo	35.16	25.65	44.67	28.39	21.79	35		#VALUE!	#VALUE!	#VALUE!	#VALUE!	464.46%	Pass	Deterioration	No EQS defined
nitrate	Monte Carlo	35.16	25.65	44.67	28.39	21.79	35		#VALUE!	#VALUE!	#VALUE!	#VALUE!	464.46%	Pass	Deterioration	No EQS defined
nitrilotriacetic acid (NTA)	Monte Carlo	49.99	49.94	50.04	0.1	0.07	0.14		Pass	Pass	Pass	Pass	-0.02%	Pass	No Deterioration	No Class deterioration
nitrite	Monte Carlo	0.74	0.53	0.96	0.65	0.5	0.8		#VALUE!	#VALUE!	#VALUE!	#VALUE!	122.78%	Pass	Deterioration	No EQS defined
nitrite	Monte Carlo	0.74	0.53	0.96	0.65	0.5	0.8		#VALUE!	#VALUE!	#VALUE!	#VALUE!	122.78%	Pass	Deterioration	No EQS defined
nonylphenols (4-nonylphenol technical mix)	Monte Carlo	0.26	0.21	0.32	0.11	0.07	0.15		Fail	Fail	Fail	Fail	1026.67%	Pass	Deterioration	No Class deterioration
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	Monte Carlo	0.00535	0.0047	0.006	0.00131	0.00087	0.00175		Pass	Pass	Pass	Pass	7.00%	Pass	No Deterioration	No Class deterioration
omethoate	Monte Carlo	0.005	0.00499	0.005	0.00001	0.00001	0.00001		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
organic nitrogen	Monte Carlo	2.5	2.5	2.5	0	0	0.01		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
orthophosphate as PO4	Monte Carlo	0.36	0.22	0.5	0.29	0.19	0.38		#VALUE!	#VALUE!	#VALUE!	#VALUE!	216.22%	Pass	Deterioration	No EQS defined
pendimethalin	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-38.10%	Pass	No Deterioration	No Class deterioration
perfluorooctanoic acid (PFOA)	Monte Carlo	0.00537	0.00448	0.00625	0.00179	0.00119	0.00239		#VALUE!	#VALUE!	#VALUE!	#VALUE!	25.38%	Pass	Deterioration	No EQS defined
permethrin	Monte Carlo	0.0023	0.00103	0.00356	0.00256	0.0017	0.00342		Fail	Fail	Fail	Fail	251.76%	Pass	Deterioration	Class deterioration
pH	Monte Carlo	7.16	7.03	7.3	0.28	0.18	0.37		#VALUE!	N/A	#VALUE!	#VALUE!	-4.92%	Pass	No Deterioration	No EQS defined
phenol	Monte Carlo	0.5	0.5	0.5	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
pirimicarb	Monte Carlo	0.5	0.5	0.5	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
pirimiphos-methyl	Monte Carlo	0.005	0.00499	0.005	0.00001	0.00001	0.00001		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
polychloro chloromethyl sulphonamido diphenyl ethe	Monte Carlo	0.16	0.09	0.22	0.14	0.09	0.18		Fail	Fail	Fail	Fail	60.00%	Fail	Deterioration	Continues to exceed EQS
prochloraz	Monte Carlo	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
propetamphos	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
propyzamide	Monte Carlo	0.03	0	0.06	0.07	0.04	0.09		Pass	Pass	Pass	Pass	136.36%	Pass	Deterioration	No Class deterioration
salinity @ 20øC	Monte Carlo	0.38	0.36	0.4	0.05	0.03	0.07		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-35.84%	Pass	No Deterioration	No EQS defined
silver dissolved	Monte Carlo	0.5	0.5	0.5	0	0	0		Fail	Fail	Fail	Fail	0.00%	Fail	No Deterioration	Continues to exceed EQS
silver total	Monte Carlo	0.5	0.5	0.5	0	0	0		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
soluble reactive phosphorus	Monte Carlo	0.11	0.07	0.16	0.09	0.06	0.12		#VALUE!	#VALUE!	#VALUE!	#VALUE!	188.89%	Pass	Deterioration	No EQS defined
sulcofuron	Monte Carlo	0.02499	0.02497	0.02502	0.00005	0.00003	0.00007		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-0.04%	Pass	No Deterioration	No EQS defined
sulphate	Monte Carlo	93.96	76.37	111.55	35.59	23.64	47.53		Pass	Pass	Pass	Pass	-74.55%	Pass	No Deterioration	No Class deterioration
sulphide or hydrogen sulphide	Monte Carlo	9.93	6.52	13.34	6.9	4.58	9.22		Fail	Fail	Fail	Fail	0.07%	Fail	No Deterioration	Continues to exceed EQS
suspended solids @ 105øC	Monte Carlo	10.65	5.87	15.44	9.68	6.43	12.93		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-74.31%	Pass	No Deterioration	No EQS defined
tecnazene	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
tetrachloroethane	Monte Carlo	0.07	0.04	0.1	0.06	0.04	0.07		Pass	Pass	Pass	Pass	40.00%	Pass	Deterioration	No Class deterioration
thiobendazole	Monte Carlo	0.05	0.05	0.05	0	0	0		#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00%	Pass	No Deterioration	No EQS defined
tin dissolved	Monte Carlo	0.22	0.18	0.26	0.08	0.05	0.1		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-2.22%	Pass	No Deterioration	No EQS defined
tin total	Monte Carlo	0.29	0.22	0.36	0.14	0.09	0.19		Pass	Pass	Pass	Pass	4.72%	Pass	No Deterioration	No Class deterioration
toluene	Monte Carlo	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	Monte Carlo	228.02	185.28	270.75	86.46	57.43	115.48		Fail	Fail	Pass	Fail	-47.39%	Fail	No Deterioration	No Class deterioration
total organic carbon	Monte Carlo	13.46	4.97	21.96	17.19	11.42	22.96		#VALUE!	#VALUE!	#VALUE!	#VALUE!	179.07%	Pass	Deterioration	No EQS defined
total oxidised nitrogen	Monte Carlo	13.36	10.53	16.19	5.72	3.8	7.64		#VALUE!	#VALUE!	#VALUE!	#VALUE!	431.42%	Pass	Deterioration	No EQS defined
total phosphorus	Monte Carlo	0.53	0.41	0.65	0.24	0.16	0.31		Pass	Pass	Pass	Pass	67.64%	Pass	Deterioration	No Class deterioration
triallate	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-58.06%	Pass	No Deterioration	No Class deterioration
triazophos	Monte Carlo	0.01	0.01	0.01	0	0	0		Fail	Fail	Fail	Fail	0.00%	Fail	No Deterioration	Continues to exceed EQS
tributyl phosphate	Monte Carlo	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-7.14%	Pass	No Deterioration	No Class deterioration
tributyltin compounds (as tributyltin cation)	Monte Carlo	0.00003	0.00003	0.00004	0.00001	0.00001	0.00001		Pass	Pass	Pass	Pass	-53.57%	Pass	No Deterioration	No Class deterioration
trichloroethylene	Monte Carlo	0.5	0.5	0.5	0	0	0		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
triclosan	Monte Carlo	0.03	0.02	0.04	0.02	0.01	0.02		Pass	Pass	Pass	Pass	387.50%	Pass	Deterioration	No Class deterioration
triphenyltin compounds (as tryphenyltin cation)	Monte Carlo	0.00099	0.00098	0.001	0.00002	0.00001	0.00003		#VALUE!	#VALUE!	#VALUE!	#VALUE!	7.03%	Pass	No Deterioration	No EQS defined
vanadium dissolved	Monte Carlo	5	4.99	5	0.01	0.01	0.01		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
vanadium total	Monte Carlo	5	4.99	5	0.01	0.01	0.01		Pass	Pass	Pass	Pass	0.00%	Pass	No Deterioration	No Class deterioration
zinc dissolved	MPer	15.5969	11.5355	19.6583	7.5677	4.8094	10.326	11.1982	Fail	Fail	Fail	Fail	39.28%	Fail	Deterioration	Continues to exceed EQS
zinc total	MPer	19.1127	14.216	24.0093	9.0913	5.766	12.4167	19.5729	Fail	Fail	Fail	Fail	-2.35%	Fail	No Deterioration	Continues to exceed EQS

Site 3 Impact of input discharge quality using MAC EQS (v1) (#REF!=No EQS)

Determinand	95-percentile River Quality			Standard Deviation			95-percentile U/S River Quality (Bioavailable only)	Hazardous Chemicals Tests: Modelling Test 1 (MAC EQS): Risk to EQS	Modelling Test 2a (MAC EQS): Exceeds 80% of EQS	Modelling Test 2a (MAC EQS): Exceeds 80% of EQS	Outcome of modelling tests	WFD Tests: % Deterioration	Deterioration >10%?	WFD Class Deterioration?
	Face Value	lower	upper	Face Value	lower	upper								
1,1,1-trichloroethane	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
1,1,2-trichloroethane	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
2,4-dichlorophenol	0.01	0.01	1.03	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
2,4-dichlorophenoxyacetic acid (2,4-D)	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-84.38%	No Deterioration	No Class deterioration
2-chlorophenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
3,4-dichloroaniline	0.5	0.5	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
3-methylphenol (m-cresol)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
4-chloro-3-methyl phenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
4-methylphenol (p-cresol)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
abamectin	2.5	2.5	2.51	0	0	0.01		Fail	Fail	Fail	Fail	0.00%	No Deterioration	Continues to exceed EQS
acid neutralisation capacity (ANC, unfiltered)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
alkalinity as CaCO3	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammonia	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammonia	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammoniacal nitrogen	0.37	0.26	0.68	0.1	0.07	0.14		Fail	Fail	Fail	Fail	15.63%	Deterioration	Continues to exceed EQS
antimony dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
antimony total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
arsenic dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
arsenic total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
azinphos methyl, dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-100	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-153	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-154	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-28	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-47	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-99	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bentazone	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
benzene	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
benzo(a)pyrene	0.00369	0.00281	0.00606	0.96	0.64	1.28		Pass	Pass	Pass	Pass	-90.10%	No Deterioration	No Class deterioration
benzyl butyl phthalate	0.1	0.1	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
biphenyl	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BOD (5 day)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
boron dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
boron total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bromide	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bromine - total residual oxidant	0.51084	0.34234	1.03275	168.66	112.03	225.29		Fail	Fail	Pass	Fail	-95.39%	No Deterioration	Continues to exceed EQS
bromoxynil	0.01	0.01	1032.75	0	0	0		Pass (face valu	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
c (PFOS)	0.00874	0.0073	0.01214	0.00178	0.00118	0.00238		Pass	Pass	Pass	Pass	-3.38%	No Deterioration	No Class deterioration
cadmium dissolved	0.02	0.02	0.03	0	0	0		Pass	Pass	Pass	Pass	-91.01%	No Deterioration	No Class deterioration
cadmium total	0.03	0.03	0.05	0.01	0	0.01		Pass	Pass	Pass	Pass	-91.37%	No Deterioration	No Class deterioration
calcium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
carbendazim	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
chemical oxygen demand (COD)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloride	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorine free	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorine total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloroform	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloronitrotoluenes	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorophyll	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorothalonil	0.01753	0.01751	0.01756	0.03	0.02	0.05		Pass	Pass	Pass	Pass	0.17%	No Deterioration	No Class deterioration
chlorotoluron	0.02504	0.02501	0.0251	0.00005	0.00003	0.00007		Pass	Pass	Pass	Pass	0.16%	No Deterioration	No Class deterioration
chlorpropham	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
chromium (VI) dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chromium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chromium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cobalt dissolved	3.6	2.99	5.06	0.75	0.5	1.01		Pass	Pass	Pass	Pass	-87.92%	No Deterioration	No Class deterioration
cobalt total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
conductivity @ 20øC	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
copper dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	N/A	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
copper total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	N/A	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
coumaphos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyanide total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyanide, free (easily liberable)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyfluthrin	0.05008	0.05002	0.05019	0.1	0.07	0.14		Fail	Fail	Fail	Fail	0.16%	No Deterioration	Continues to exceed EQS
cypermethrin	0.00042	0.0003	0.00077	0.00012	0.00008	0.00016		Pass (face valu	Pass	Fail	Fail	337.50%	Deterioration	No Class deterioration
demeton	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
di(2-ethylhexyl)phthalate (DEHP)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
diazinon	0.00501	0.005	0.00502	0.00001	0.00001	0.00001		Pass	Pass	Pass	Pass	0.20%	No Deterioration	No Class deterioration
dibutyl phthalate	0.04	0.03	0.06	0.01	0.01	0.01		Pass	Pass	Pass	Pass	110.53%	Deterioration	No Class deterioration
dichlorobenzene, total isomers	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
dichlorvos	0.0005	0.0005	0.00005	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
diethyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
diflubenzuron	0.0005	0.0005	0.00005	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
dimethoate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dimethyl phthalate	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-70.59%	No Deterioration	No Class deterioration
dioctyl phthalate	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
dissolved organic carbon	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
doramectin	2.50415	2.5011	2.5097	5.39	3.58	7.2		Fail	Fail	Fail	Fail	0.17%	No Deterioration	Continues to exceed EQS
EDTA	128.26	101.33	197.32	30.58	20.32	40.85		Pass	Pass	Pass	Pass	156.52%	Deterioration	No Class deterioration
fenchlorphos	0.01	0.01	2509.7	0	0	0		Pass (face valu	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
fenitrothion	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
flucofuron	0.02504	0.02501	0.0251	0.00005	0.00003	0.00007		Pass	Pass	Pass	Pass	0.16%	No Deterioration	No Class deterioration
fluoranthene	0.00449	0.0036	0.00671	1.03	0.68	1.37		Pass	Pass	Pass	Pass	-81.69%	No Deterioration	No Class deterioration
fluoride	0.76	0.68	0.93	0.11	0.08	0.15		Pass	Pass	Pass	Pass	101.06%	Deterioration	No Class deterioration
formaldehyde	25.04	25.01	25.1	0.05	0.03	0.07		Pass	Pass	Pass	Pass	0.16%	No Deterioration	No Class deterioration
glyphosate	0.66	0.56	0.87	0.12	0.08	0.16		Pass	Pass	Pass	Pass	746.15%	Deterioration	No Class deterioration
hardness as CaCO3	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
hexabromocyclododecane (HBCDD)	0.00185	0.00135	0.00332	0.00052	0.00035	0.0007		Pass	Pass	Pass	Pass	756.48%	Deterioration	No Class deterioration
ioxynil	0.01	0.01	25.1	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
iron dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
iron total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ivermectin	2.50415	2.5011	2.5097	5.39	3.58	7.2		Fail	Fail	Fail	Fail	0.17%	No Deterioration	Continues to exceed EQS
lead dissolved	0.0536	0.0366	0.1058	0.0152	0.0095	0.021	0.1357	Pass	Pass	Pass	Pass	-60.50%	No Deterioration	No Class deterioration
lead total	0.1262	0.0901	0.2279	0.0317	0.0189	0.0445	1.609	Pass	Pass	Pass	Pass	-92.16%	No Deterioration	No Class deterioration
linuron	0.00766	0.00758	0.0078	0.00013	0.00009	0.00018		Pass	Pass	Pass	Pass	53.20%	Deterioration	No Class deterioration
malachite green	0.5	0.5	2509.7	0	0	0		Pass (face valu	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
malathion	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
mancozeb	3.03	1.98	6.72	1.02	0.68	1.36		Pass	Pass	Pass	Pass	1136.73%	Deterioration	No Class deterioration
maneb	1.77	0.98	5.53	0.81	0.54	1.08		Pass	Pass	Pass	Pass	608.00%	Deterioration	No Class deterioration
manganese dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	N/A	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
manganese total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	N/A	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
MCPA	0.03	0.02	0.06	0.01	0.01	0.01		Pass	Pass	Pass	Pass	-31.82%	No Deterioration	No Class deterioration
mecoprop	0.07	0.06	0.12	0.02	0.01	0.03		Pass	Pass	Pass	Pass	288.89%	Deterioration	No Class deterioration
mercury dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
mercury total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
methiocarb	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
mevinphos	0.01	0.01	0.05	0	0	0		Pass (face valu	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
nickel dissolved	10.5926	4.2423	16.9429	11.069	6.7557	15.3823	78.0701	Pass	Pass	Pass	Pass	-86.43%	No Deterioration	No Class deterioration
nickel total	31.3686	17.7611	84.7184	11.146	6.7612	15.5309	81.1207	'ass (face valu	Fail	Pass	Fail	-61.33%	No Deterioration	No Class deterioration
nitrate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nitrate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nitrilotriacetic acid (NTA)	50.08	50.02	50.19	0.1	0.07	0.14		Pass	Pass	Pass	Pass	0.16%	No Deterioration	No Class deterioration
nitrite	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nitrite	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nonylphenols (4-nonylphenol technical mix)	0.48	0.38	0.73	0.11	0.07	0.15		Pass	Pass	Pass	Pass	1233.33%	Deterioration	No Class deterioration
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
omethoate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
organic nitrogen	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
orthophosphate as PO4	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
pendimethalin	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-79.17%	No Deterioration	No Class deterioration
perfluorooctanoic acid (PFOA)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
permethrin	0.00703	0.00436	0.0172	2.56	1.7	3.42		Pass (face valu	Pass	Fail	Fail	402.14%	Deterioration	No Class deterioration
pH	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		Pass	N/A	#REF!	#REF!	#REF!	#REF!	#REF!
phenol	0.5	0.5	0.01	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
pirimicarb	0.5	0.5	0.02	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
pirimiphos-methyl	0.00501	0.005	0.00502	0.00001	0.00001	0.00001		Pass	Pass	Pass	Pass	0.20%	No Deterioration	No Class deterioration
polychloro chloromethyl sulphonamido diphenyl ethe	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
prochloraz	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
propetamphos	0.01	0.01	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
propyzamide	0.11	0.06	0.44	0.07	0.04	0.09		Pass	Pass	Pass	Pass	266.67%	Deterioration	No Class deterioration
salinity @ 20øC	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
silver dissolved	0.5	0.5	0.05	0	0	0		Pass	Fail	Fail	Fail	0.00%	No Deterioration	Continues to exceed EQS
silver total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
soluble reactive phosphorus	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
sulcofuron	0.02504	0.02501	0.0251	0.00005	0.00003	0.00007		Pass	Pass	Pass	Pass	0.16%	No Deterioration	No Class deterioration
sulphate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
sulphide or hydrogen sulphide	23.37	16.55	44.03	6.9	4.58	9.22		Fail	Fail	Fail	Fail	-0.97%	No Deterioration	Continues to exceed EQS
suspended solids @ 105øC	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tecnazene	0.01	0.01	0.03	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
tetrachloroethane	0.18	0.12	0.36	0.06	0.04	0.07		Pass	Pass	Pass	Pass	260.00%	Deterioration	No Class deterioration
thiobendazole	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
toluene	0.05	0.05	0.05	0	0	0		Pass	Pass	Pass	Pass	0.00%	No Deterioration	No Class deterioration
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
total organic carbon	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
total oxidised nitrogen	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
total phosphorus	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
triallate	0.01	0.01	0.01	0	0	0		Pass	Pass	Pass	Pass	-86.11%	No Deterioration	No Class deterioration
triazophos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tributyl phosphate	0.01	0.01	0.36	0	0	0		Pass	Pass	Pass	Pass	-28.57%	No Deterioration	No Class deterioration
tributyltin compounds (as tributyltin cation)	0.00005	0.00004	0.00007	0.01	0.01	0.01		Pass	Pass	Pass	Pass	-56.14%	No Deterioration	No Class deterioration
trichloroethylene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
triclosan	0.07	0.05	0.12	0.02	0.01	0.02		Pass	Pass	Pass	Pass	536.36%	Deterioration	No Class deterioration
triphenyltin compounds (as tryphenyltin cation)	0.00101	0.001	0.00103	0.02	0.01	0.03		Pass	Pass	Pass	Pass	1.00%	No Deterioration	No Class deterioration
vanadium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
vanadium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
zinc dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	N/A	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
zinc total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	N/A	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined

Site 3 Target quality required discharge (v1)

Determinand	Mean			Standard Deviation			95-percentile			99-percentile			99.5-percentile			WW treatment % reduction required to meet AA EQS
	Face Value	lower	upper	Face Value	lower	upper	Face Value	lower	upper	Face Value	lower	upper	Face Value	lower	upper	
1,1,1-trichloroethane	106.22	106.15	106.29	0.14	0.1	0.19	106.39	106.31	106.54	106.47	106.37	106.65	106.49	106.38	106.69	None
1,1,2-trichloroethane	424.97	424.64	425.29	0.66	0.44	0.88	425.66	425.29	426.34	425.95	425.5	426.83	426.04	425.55	427	None
2,4-dichlorophenol	4.46	4.46	4.46	0	0	0	4.46	4.46	0.5	4.46	4.46	0.5	4.46	4.46	0.5	None
2,4-dichlorophenoxyacetic acid (2,4-D)	0.32	0.32	0.32	0	0	0	0.32	0.32	0.5	0.32	0.32	0.5	0.32	0.32	0.5	None
2-chlorophenol	53.13	53.13	53.13	0	0	0	53.13	53.13	0.5	53.13	53.13	0.5	53.13	53.13	0.5	None
3,4-dichloroaniline	0.18	0.18	0.18	0	0	0	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	64.00%
3-methylphenol (m-cresol)	42.67	21.93	63.4	41.95	27.86	56.03	122.01	78.37	277.67	217.33	128.25	627.41	259.76	144.57	839.69	No EQS
4-chloro-3-methyl phenol	53.13	53.13	53.13	0	0	0	53.13	53.13	0.2	53.13	53.13	0.46	53.13	53.13	0.61	None
4-methylphenol (p-cresol)	42.67	21.93	63.4	41.95	27.86	56.03	122.02	78.37	277.67	217.33	128.26	627.42	259.76	144.57	839.71	No EQS
abamectin	Failed to meet target															Failed to meet target
acid neutralisation capacity (ANC, unfiltered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
alkalinity as CaCO3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
aluminium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
aluminium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
ammonia	0.15	0.1	0.21	0.15	0.12	0.19	0.44	0.32	0.73	0.79	0.53	1.5	0.94	0.61	1.91	No EQS
ammonia	0.15	0.1	0.21	0.15	0.12	0.19	0.44	0.32	0.73	0.79	0.53	1.5	0.94	0.61	1.91	No EQS
ammoniacal nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
antimony dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
antimony total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
arsenic dissolved	53.16	43.2	63.13	20.16	13.39	26.92	91.85	74.9	133.25	118.32	92.33	191.67	127.95	97.65	217.45	None
arsenic total	53.15	43.33	62.97	19.86	13.19	26.53	91.23	74.6	131.7	117.12	91.69	188.52	126.52	96.91	213.5	None
azinphos methyl, dissolved	0.01	0.01	0.01	0	0	0	0.01	0.01	0.36	0.01	0.01	0.66	0.01	0.01	0.82	0.00%
BDE-100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
bentazone	531.25	531.25	531.25	0	0	0	531.24	531.24	0.24	531.24	531.24	0.24	531.24	531.24	0.24	None
benzene	10.62	10.62	10.63	0.01	0.01	0.01	10.66	10.65	10.67	10.67	10.67	10.69	10.68	10.67	10.69	None
benzo(a)pyrene	Failed to meet target															Failed to meet target
benzyl butyl phthalate	7.96	7.95	7.97	0.02	0.01	0.02	7.98	7.97	7.99	7.98	7.97	8	7.98	7.97	8.01	None
biphenyl	26.56	26.56	26.56	0	0	0	26.56	26.56	0.1	26.56	26.56	0.1	26.56	26.56	0.1	None
BOD (5 day)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
boron dissolved	2114.63	1921.78	2307.48	390.14	259.15	521.13	2823.69	2548.44	3403.09	3203.29	2826.76	4081.39	3330.58	2909.51	4341.73	None
boron total	2114.45	1914.03	2314.88	405.46	269.32	541.59	2853.34	2565.07	3463.61	3252.77	2856.7	4183.21	3387.15	2943.51	4460.94	None
bromide	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
bromine - total residual oxidant	Failed to meet target															Failed to meet target
bromoxynil	106.25	106.25	106.25	0	0	0	106.25	106.25	12.17	106.25	106.25	22.59	106.25	106.25	28.12	None
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
c (PFOS)	0.00046	0.00037	0.00054	0.00017	0.00011	0.00023	0.00079	0.00064	0.00114	0.00101	0.00079	0.00163	0.00109	0.00084	0.00185	97.35%
cadmium dissolved	0.31	0.31	0.31	0	0	0	0.31	0.31	10.67	0.31	0.31	10.69	0.31	0.31	10.69	None
cadmium total	0.25	0.25	0.25	0	0	0	0.25	0.25	0.47	0.25	0.25	0.64	0.25	0.25	0.72	None
calcium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
carbendazim	0.21	0.21	0.21	0	0	0	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	None
chemical oxygen demand (COD)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chloride	263.1	206.86	319.33	113.76	75.57	151.96	483.35	384.07	735.5	643.6	486.76	1108.97	703.14	518.33	1279.61	None
chlorine free	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chlorine total	2.12	2.12	2.12	0	0	0	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12	None
chloroform	2.63	2.29	2.97	0.68	0.45	0.91	3.91	3.38	5.07	4.66	3.91	6.54	4.92	4.07	7.14	None
chloronitrotoluenes	10.69	1.14	20.25	19.33	12.84	25.82	19.33	12.84	25.82	97.17	49.09	436.18	127.51	59.62	672.18	None
chlorophyll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chlorothalonil	0.0361	0.0361	0.0361	0	0	0	0.03616	0.03616	0.01073	0.03618	0.03618	0.01077	0.03619	0.03619	0.01078	None
chlorotoluron	2.12342	2.12145	2.1254	0.004	0.00266	0.00534	2.12692	2.12465	2.13105	2.12836	2.12558	2.13374	2.1288	2.12582	2.13466	None
chlorpropham	10.62	10.62	10.63	0.01	0.01	0.01	10.66	10.65	10.67	10.67	10.67	10.69	10.68	10.67	10.69	None
chromium (VI) dissolved	3.39	3.39	3.4	0	0	0	3.4	3.4	3.4	3.4	3.4	3.41	3.4	3.4	3.41	3.14%
chromium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chromium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cobalt dissolved	2.53	2.12	2.93	0.82	0.55	1.1	4.09	3.42	5.64	5.09	4.1	7.72	5.44	4.31	8.61	None
cobalt total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
conductivity @ 20øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
copper dissolved	29.4	18.04	40.76	20.43	12.72	28.14	67.4	44.15	141.59	104.13	60.47	278.16	116.48	61.7	352.17	None
copper total	29.27	21.9	36.64	10.62	5.61	15.63	48.9	35.27	85.46	62.4	39.96	133.85	66.45	39.6	156.86	None
coumaphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cyanide total	Failed to meet target															Failed to meet target
cyanide, free (easily liberable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cyfluthrin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cypermethrin	0.00008	0.00005	0.00011	0.00006	0.00004	0.00008	0.00019	0.00014	0.00036	0.0003	0.0002	0.00066	0.00034	0.00022	0.00082	57.89%
demeton	0.53	0.53	0.53	0	0	0	0.53	0.53	0.05	0.53	0.53	0.05	0.53	0.53	0.05	None
di(2-ethylhexyl)phthalate (DEHP)	1.38	0.87	1.89	1.03	0.68	1.38	3.39	2.36	6.62	5.39	3.48	12.8	6.22	3.83	16.17	None
diazinon	0.01031	0.01031	0.01032	0.00002	0.00001	0.00002	0.01033	0.01032	0.01035	0.01034	0.01033	0.01036	0.01034	0.01033	0.01036	None
dibutyl phthalate	8.52	6.31	10.73	4.27	2.77	5.76	16.84	12.85	28.04	23.37	16.83	45.28	25.86	18.06	53.59	None
dichlorobenzene, total isomers	21.25	21.23	21.26	0.03	0.02	0.04	21.32	21.3	21.35	21.35	21.33	21.39	21.36	21.34	21.4	None
dichlorvos	0.00061	0.00061	0.00061	0	0	0	0.00061	0.00061	0.00061	0.00061	0.00061	0.00061	0.00061	0.00061	0.00061	None
diethyl phthalate	213.34	109.66	317.02	209.74	139.32	280.16	610.08	391.85	1388.37	1086.65	641.28	3137.11	1298.81	722.85	4198.55	None
diflubenzuron	0.00103	0.00103	0.00103	0	0	0	0.00103	0.00103	0.00104	0.00103	0.00103	0.00104	0.00103	0.00103	0.00104	None
dimethoate	0.53	0.53	0.53	0	0	0	0.53	0.53	0.5	0.53	0.53	0.5	0.53	0.53	0.5	None
dimethyl phthalate	850.01	850.01	850.01	0	0	0	850.03	850.03	0.52	850.03	850.03	0.52	850.03	850.03	0.52	None
dioctyl phthalate	21.25	21.25	21.25	0	0	0	21.25	21.25	0.52	21.25	21.25	0.52	21.25	21.25	0.52	None
dissolved organic carbon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
doramectin	Failed to meet target															Failed to meet target
EDTA	422.76	325.09	520.43	197.58	131.25	263.92	807	630.71	1266.05	1097.65	813.79	1967.4	1207.08	870.3	2295.04	None
fenchlorphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	None
fenitrothion	0.01031	0.01031	0.01032	0.00002	0.00001	0.00002	0.01033	0.01032	0.01035	0.01034	0.01033	0.01036	0.01034	0.01033	0.01036	None
flucofuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
fluoranthene	0.00605	0.0046	0.0075	0.00294	0.00195	0.00392	0.01177	0.00912	0.01876	0.01619	0.01188	0.02961	0.01786	0.01273	0.03474	None
fluoride	5.3	4.74	5.85	1.12	0.75	1.5	7.36	6.54	9.11	8.5	7.37	11.21	8.89	7.62	12.04	None
formaldehyde	3.76	3.75	3.76	0	0	0.01	3.76	3.76	3.77	3.76	3.76	3.77	3.77	3.76	3.77	84.96%
glyphosate	208.52	178.6	238.44	60.52	40.2	80.84	322.33	274.99	430.5	392.25	323.27	570.93	416.77	337.85	629.19	None
hardness as CaCO3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
hexabromocyclododecane (HBCDD)	0.0017	0.00117	0.00223	0.00108	0.00072	0.00144	0.00382	0.00277	0.00687	0.00572	0.00388	0.01223	0.00648	0.00423	0.015	None
ioxynil	10.62	10.62	10.62	0	0	0	10.62	10.62	663.61	10.62	10.62	735.01	10.62	10.62	760.74	None
iron dissolved	1062.2	956.99	1167.41	212.84	141.38	284.3	1451.28	1298.58	1776.73	1664.05	1453.16	2163.77	1735.89	1499.23	2314.12	None
iron total	1043.72	849.47	1237.97	392.96	261.02	524.9	1797.54	1467.75	2601.58	2311.81	1806.8	3733.55	2498.69	1910.35	4232.11	None
ivermectin	Failed to meet target															Failed to meet target
lead dissolved	9.04	6.06	12.02	5.32	3.29	7.34	19	13.09	36.58	27.72	17.19	66.06	30.55	17.59	81.09	None
lead total	8.93	6.66	11.21	3.62	2.08	5.17	15.67	11.45	27.05	20.54	13.56	42.87	22.02	13.66	50.32	None
linuron	0.53094	0.53058	0.53129	0.00072	0.00048	0.00096	0.53181	0.53141	0.53254	0.53217	0.53168	0.53312	0.53228	0.53175	0.53331	None
malachite green	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.00%
malathion	0.01	0.01	0.01	0	0	0	0.01	0.01	0.36	0.01	0.01	0.66	0.01	0.01	0.82	0.00%
mancozeb	2.13	1.13	3.13	2.02	1.34	2.7	5.98	3.88	13.34	10.49	6.26	29.56	12.48	7.03	39.27	None
maneb	3.2	0.5	5.9	5.46	3.63	7.3	11.83	6.5	37.37	27.64	14.1	119.23	35.92	16.97	181.28	None
manganese dissolved	59.14	0	186.86	12.74	0	99.5	81.91	0	1198.66	94.95	0	6802.78	98.63	0	13012.57	37.19%
manganese total	38.31	0	154.73	9.66	0	88.73	55.76	0	927.84	66.23	0	6262.3	69.23	0	12773.4	61.54%
MCPA	12.8	6.58	19.02	12.58	8.36	16.81	36.6	23.51	83.3	65.19	38.47	188.21	77.92	43.37	251.89	None
mecoprop	19.17	14.42	23.91	9.6	6.38	12.82	37.89	29.16	61.17	52.58	38.27	97.77	58.18	41.09	115.23	None
mercury dissolved	0.0001	0.00007	0.00014	0.00007	0.00005	0.00009	0.00024	0.00017	0.00045	0.00037	0.00025	0.00083	0.00043	0.00027	0.00104	None
mercury total	0.07441	0.02264	0.12618	0.10473	0.06957	0.1399	0.25432	0.14729	0.71559	0.53709	0.28569	2.01849	0.67664	0.33445	2.93244	None
methiocarb	0.01	0.01	0.01	0	0	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	80.00%
mevinphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nickel dissolved	5.74	2.37	9.1	4.33	2.05	6.62	13.74	6.65	41.63	21.89	6.32	103.26	24.68	4.01	144.22	69.53%
nickel total	5.5	2.27	8.74	3.91	1.72	6.11	12.77	5.96	39.58	19.89	4.93	98.16	22.3	2.43	137.32	71.85%
nitrate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nitrate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nitrilotriacetic acid (NTA)	1059.38	1058.56	1060.2	1.66	1.1	2.22	1061.12	1060.17	1062.84	1061.84	1060.68	1064.08	1062.06	1060.82	1064.5	None
nitrite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nitrite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nonylphenols (4-nonylphenol technical mix)	0.32	0.25	0.39	0.14	0.09	0.18	0.58	0.46	0.89	0.78	0.59	1.33	0.85	0.62	1.54	None
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	0.10606	0.09245	0.11968	0.02754	0.01829	0.03679	0.1574	0.13645	0.20416	0.18774	0.15776	0.2631	0.19825	0.16417	0.28702	None
omethoate	0.01031	0.01031	0.01032	0.00002	0.00001	0.00002	0.01033	0.01032	0.01035	0.01034	0.01033	0.01036	0.01034	0.01033	0.01036	None
organic nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
orthophosphate as PO4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
pendimethalin	0.32	0.32	0.32	0	0	0	0.32	0.32	2.51	0.32	0.32	2.52	0.32	0.32	2.52	None
perfluorooctanoic acid (PFOA)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
permethrin	0.00103	0.00045	0.00162	0.00118	0.00078	0.00157	0.00319	0.00196	0.00791	0.00608	0.00343	0.01953	0.00741	0.00392	N/A	57.49%
pH	5.9 to 9.12	5.78 to 8.93	6.02 to 9.3	0.24 to .37	0.16 to .25	0.32 to .5	6.31 to 9.76	6.17 to 10	6.58 to 10	6.48 to 10.01	6.3 to 10	6.84 to 11	6.54 to 10.11	6.35 to 10	6.94 to 11	No EQS
phenol	8.15	8.14	8.16	0.02	0.01	0.02	8.16	8.15	8.18	8.17	8.16	8.19	8.17	8.16	8.2	None
pirimicarb	1.03	1.03	1.03	0	0	0	1.03	1.03	1.04	1.03	1.03	1.04	1.03	1.03	1.04	None
pirimiphos-methyl	0.01563	0.01563	0.01563	0	0	0	0.01565	0.01565	0.00505	0.01566	0.01566	0.00506	0.01567	0.01567	0.00507	None
polychloro chloromethyl sulphonamido diphenyl ethe	0.1	0.05	0.15	0.09	0.06	0.12	0.28	0.18	0.61	0.48	0.29	1.33	0.57	0.32	1.76	38.10%
prochloraz	4.25	4.24	4.25	0.01	0.01	0.01	4.26	4.26	4.27	4.27	4.26	4.28	4.27	4.26	4.28	None
propetamphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	None
propyzamide	107.1	0	236.26	261.29	173.56	349.02	436.48	218.28	1707.07	1249.98	610.99	6835.28	1730.11	787.55	11295.39	None
salinity @ 20øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
silver dissolved	0.08	0.08	0.08	0	0	0	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	84.00%
silver total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
soluble reactive phosphorus	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
sulcofuron	26.56079	26.56079	26.56079	0	0	0	26.6044	26.6044	0.0687	26.62242	26.62242	0.08675	26.62801	26.62801	0.09234	No EQS
sulphate	405.1	316.75	493.46	178.74	118.73	238.76	751.59	594.69	1152.6	1006.21	757.14	1751.28	1101.12	807.13	2026.37	None
sulphide or hydrogen sulphide	Failed to meet target															Failed to meet target
suspended solids @ 105øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
tecnazene	1.06	1.06	1.06	0	0	0	1.06	1.06	308.36	1.06	1.06	741.61	1.06	1.06	1015.72	None
tetrachloroethane	149.27	86.64	211.9	126.7	84.16	169.24	393.85	263.98	824.76	658.89	407.79	1711.59	772.44	454.01	2219.82	None
thiobendazole	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
tin dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
tin total	26.61	19.8	33.42	13.78	9.15	18.41	53.53	40.88	87.66	75.02	54.1	142.12	83.27	58.2	168.37	None
toluene	78.62	78.55	78.7	0.15	0.1	0.2	78.89	78.8	79.04	79	78.89	79.2	79.03	78.92	79.25	None
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	241.4	191.66	291.14	100.62	66.84	134.41	435.77	348.86	654.02	574.72	438.59	972.8	626.02	466.13	1116.99	None
total organic carbon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
total oxidised nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
total phosphorus	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	None
triallate	0.32	0.32	0.32	0	0	0	0.32	0.32	1181.78	0.32	0.32	1757.79	0.32	0.32	2018.33	None
triazophos	0.00469	0.00469	0.00469	0.00001	0	0.00001	0.0047	0.00469	0.0047	0.0047	0.0047	0.00471	0.0047	0.0047	0.00471	53.10%
tributyl phosphate	53.13	53.13	53.13	0	0	0	53.13	53.13	1.67	53.13	53.13	2.57	53.13	53.13	2.98	None
tributyltin compounds (as tributyltin cation)	0.00021	0.00018	0.00024	0.00007	0.00005	0.00009	0.00034	0.00029	0.00047	0.00043	0.00035	0.00064	0.00046	0.00036	0.00072	None
trichloroethylene	10.59	10.59	10.6	0.02	0.01	0.02	10.61	10.6	10.63	10.62	10.61	10.64	10.62	10.61	10.64	None
triclosan	0.11	0.07	0.14	0.07	0.05	0.09	0.24	0.17	0.45	0.37	0.25	0.82	0.42	0.27	1.01	None
triphenyltin compounds (as tryphenyltin cation)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
vanadium dissolved	20.94	20.92	20.96	0.05	0.03	0.06	20.97	20.95	21.02	20.99	20.96	21.05	20.99	20.96	21.06	None
vanadium total	20.94	20.92	20.96	0.05	0.03	0.06	20.97	20.95	21.02	20.99	20.96	21.05	20.99	20.96	21.06	None
zinc dissolved	34.08	30.48	37.69	1.49	0	3.94	36.58	31.27	48.02	37.7	30.31	55.48	38	29.67	58.65	30.56%
zinc total	32.73	24.66	40.81	14.71	9.22	20.19	60.21	45.36	99.74	81.05	56.73	157.73	87.5	58.47	184.25	44.81%

Site 3 Required discharge quality to meet no deterioration (v1)

Determinand	Mean			Standard Deviation			95-percentile			99-percentile			99.5-percentile			WW treatment % reduction required to prevent deterioration (Mean)
	Face Value	lower	upper	Face Value	lower	upper	Face Value	lower	upper	Face Value	lower	upper	Face Value	lower	upper	
1,1,1-trichloroethane	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	No Deterioration
1,1,2-trichloroethane	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	No Deterioration
2,4-dichlorophenol	0.01	0.01	0.01	0	0	0	0.01	0.01	0.5	0.01	0.01	0.5	0.01	0.01	0.5	No Deterioration
2,4-dichlorophenoxyacetic acid (2,4-D)	0.02	0.02	0.02	0	0	0	0.02	0.02	0.5	0.02	0.02	0.5	0.02	0.02	0.5	No Deterioration
2-chlorophenol	0.01	0.01	0.01	0	0	0	0.01	0.01	0.5	0.01	0.01	0.5	0.01	0.01	0.5	No Deterioration
3,4-dichloroaniline	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	No Deterioration
3-methylphenol (m-cresol)	0.03	0.02	0.05	0.03	0.02	0.04	0.09	0.06	0.2	0.16	0.09	0.45	0.19	0.1	0.61	No Deterioration
4-chloro-3-methyl phenol	0.01	0.01	0.01	0	0	0	0.01	0.01	0.2	0.01	0.01	0.46	0.01	0.01	0.61	No Deterioration
4-methylphenol (p-cresol)	0.01	0.01	0.02	0.01	0.01	0.01	0.03	0.02	0.07	0.05	0.03	0.15	0.06	0.03	0.2	43.48%
abamectin	2.5	2.5	2.5	0	0	0	2.5	2.5	2.51	2.51	2.51	2.52	2.51	2.51	2.52	No Deterioration
acid neutralisation capacity (ANC, unfiltered)	2344.09	2204.9	2483.29	281.59	187.04	376.13	2842.62	2657.77	3212.44	3086.94	2843.82	3618.28	3166.59	2898.55	3766.47	No Deterioration
alkalinity as CaCO3	116.66	110.27	123.05	12.92	8.58	17.26	139.44	131.05	156.1	150.46	139.49	174.21	154.04	141.97	180.77	No Deterioration
aluminium dissolved	19.52	12.61	26.43	13.98	9.29	18.67	46.85	32.94	89.55	73.3	47.94	169.43	84.18	52.69	212.39	No Deterioration
aluminium total	353.54	245.04	462.05	219.5	145.81	293.2	783.87	572.47	1394.89	1165.15	796.73	2456.78	1316.94	867.08	2999.7	No Deterioration
ammonia	0.0049	0.0033	0.0065	0.0048	0	0.01	0.01	0.01	0.02	0.02	0.02	0.05	0.03	0.02	0.06	79.25%
ammonia	0.0049	0.0033	0.0065	0.0048	0	0.01	0.01	0.01	0.02	0.02	0.02	0.05	0.03	0.02	0.06	79.25%
ammoniacal nitrogen	0.07	0.05	0.09	0.04	0.03	0.06	0.15	0.11	0.29	0.23	0.15	0.53	0.26	0.17	0.65	58.23%
antimony dissolved	0.39	0.37	0.42	0.05	0.03	0.07	0.48	0.45	0.55	0.53	0.48	0.63	0.54	0.49	0.65	58.48%
antimony total	0.41	0.38	0.44	0.06	0.04	0.08	0.52	0.48	0.61	0.58	0.52	0.7	0.6	0.54	0.74	56.95%
arsenic dissolved	0.89	0.72	1.05	0.34	0.22	0.45	1.53	1.25	2.22	1.97	1.54	3.19	2.13	1.63	3.62	No Deterioration
arsenic total	1.12	0.91	1.32	0.42	0.28	0.56	1.92	1.57	2.77	2.46	1.93	3.96	2.66	2.04	4.49	No Deterioration
azinphos methyl, dissolved	0.01	0.01	0.01	0	0	0	0.01	0.01	1394.89	0.01	0.01	2456.78	0.01	0.01	2999.7	No Deterioration
BDE-100	0.00025	0.00025	0.00025	0	0	0	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	No Deterioration
BDE-153	0.00025	0.00025	0.00025	0	0	0	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	No Deterioration
BDE-154	0.00025	0.00025	0.00025	0	0	0	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	No Deterioration
BDE-28	0.00023	0.00023	0.00023	0	0	0	0.00023	0.00023	NaN	0.00023	0.00023	NaN	0.00023	0.00023	NaN	No Deterioration
BDE-47	0.00023	0.00023	0.00023	0	0	0	0.00023	0.00023	0.00025	0.00023	0.00023	0.00025	0.00023	0.00023	0.00025	No Deterioration
BDE-99	0.00025	0.00025	0.00025	0	0	0	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	No Deterioration
bentazone	0.05	0.05	0.05	0	0	0	0.05	0.05	0.24	0.05	0.05	0.24	0.05	0.05	0.24	No Deterioration
benzene	0.05	0.05	0.05	0	0	0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	No Deterioration
benzo(a)pyrene	0.01343	0.00947	0.01739	0.00801	0.00532	0.0107	0.02914	0.0215	0.05087	0.04273	0.02957	0.08791	0.04809	0.0321	0.1066	No Deterioration
benzyl butyl phthalate	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	No Deterioration
biphenyl	0.01	0.01	0.01	0	0	0	0.01	0.01	0.1	0.01	0.01	0.1	0.01	0.01	0.1	No Deterioration
BOD (5 day)	2.1	1.37	2.82	1.47	0.97	1.96	4.97	3.52	9.38	7.7	5.08	17.52	8.82	5.57	21.86	No Deterioration
boron dissolved	219.65	199.62	239.68	40.52	26.92	54.13	293.3	264.71	353.48	332.73	293.62	423.94	345.95	302.21	450.98	No Deterioration
boron total	225.8	204.39	247.2	43.3	28.76	57.84	304.7	273.92	369.87	347.36	305.06	446.72	361.71	314.33	476.38	No Deterioration
bromide	0.19	0.13	0.26	0.13	0.08	0.17	0.44	0.32	0.8	0.67	0.45	1.45	0.76	0.49	1.79	35.51%
bromine - total residual oxidant	2.75559	1.86388	3.6473	1.80392	1.19825	2.40959	6.29048	4.53091	11.48802	9.52509	6.4078	20.76537	10.82775	6.99856	25.59655	No Deterioration
bromoxynil	0.01	0.01	0.01	0	0	0	0.01	0.01	12.17	0.01	0.01	22.59	0.01	0.01	28.12	No Deterioration
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	0.32	0.32	0.32	0	0	0	0.32	0.32	0.8	0.32	0.32	1.45	0.32	0.32	1.79	36.00%
c (PFOS)	0.00532	0.00434	0.00631	0.00199	0.00132	0.00266	0.00914	0.00747	0.01319	0.01173	0.00918	0.01889	0.01267	0.00971	0.02139	No Deterioration
cadmium dissolved	0.09	0.09	0.09	0	0	0	0.09	0.09	12.17	0.09	0.09	22.59	0.09	0.09	28.12	No Deterioration
cadmium total	0.21	0.21	0.21	0	0	0	0.21	0.21	12.17	0.21	0.21	22.59	0.21	0.21	28.12	No Deterioration
calcium total	116.64	111.17	122.12	11.08	7.36	14.8	136.04	128.98	149.87	145.21	136.07	164.68	148.17	138.15	169.98	No Deterioration
carbendazim	0.05	0.05	0.05	0	0	0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	No Deterioration
chemical oxygen demand (COD)	15.88	13.27	18.49	5.28	3.5	7.05	25.91	21.63	36	32.39	26.01	49.63	34.71	27.34	55.45	43.75%
chloride	52.42	41.22	63.63	22.67	15.06	30.28	96.31	76.53	146.55	128.24	96.99	220.97	140.1	103.28	254.97	30.68%
chlorine free	0.18	0.18	0.18	0	0	0	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	No Deterioration
chlorine total	0.17	0.17	0.17	0	0	0	0.17	0.17	0.18	0.17	0.17	0.18	0.17	0.17	0.18	No Deterioration
chloroform	0.5	0.44	0.57	0.13	0.09	0.17	0.74	0.64	0.97	0.89	0.75	1.25	0.94	0.78	1.36	No Deterioration
chloronitrotoluenes	0.01	0	0.02	0.02	0.01	0.02	0.04	0.02	0.12	0.09	0.05	0.41	0.12	0.06	0.63	50.00%
chlorophyll	10.9	9.39	12.41	3.06	2.04	4.09	16.65	14.27	22.04	20.14	16.69	28.99	21.36	17.42	31.85	No Deterioration
chlorothalonil	0.0175	0.0175	0.0175	0	0	0	0.01753	0.01753	11.48804	0.01754	0.01754	20.76541	0.01755	0.01755	25.5966	No Deterioration
chlorotoluron	0.02501	0.02499	0.02502	0.00003	0.00002	0.00004	0.02505	0.02503	0.02507	0.02506	0.02504	0.0251	0.02507	0.02505	0.02511	No Deterioration
chlorpropham	0.05	0.05	0.05	0	0	0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	No Deterioration
chromium (VI) dissolved	3.5	3.5	3.5	0.01	0	0.01	3.51	3.5	3.51	3.51	3.5	3.52	3.51	3.5	3.52	No Deterioration
chromium dissolved	0.56	0.41	0.7	0.29	0.19	0.39	1.13	0.86	1.86	1.59	1.14	3.03	1.77	1.23	3.6	73.04%
chromium total	1	0.52	1.48	0.92	0.6	1.24	2.76	1.78	6.36	4.77	2.83	14.04	5.65	3.17	18.65	68.59%
cobalt dissolved	13.59	11.41	15.78	4.42	2.93	5.9	21.97	18.41	30.32	27.35	22.06	41.53	29.26	23.16	46.29	No Deterioration
cobalt total	16.1	14.1	18.11	4.05	2.69	5.41	23.63	20.58	30.4	28.03	23.68	38.87	29.55	24.61	42.29	No Deterioration
conductivity @ 20øC	1141.05	1088.01	1194.1	107.31	71.28	143.35	1328.85	1260.56	1462.66	1417.57	1329.19	1605.69	1446.16	1349.29	1656.85	No Deterioration
copper dissolved	4.66	2.85	6.47	3.24	2.01	4.47	10.68	6.98	22.53	16.5	9.54	44.36	18.46	9.71	56.22	No Deterioration
copper total	7.75	5.78	9.71	2.81	1.47	4.15	12.94	9.29	22.77	16.51	10.49	35.78	17.58	10.37	42	No Deterioration
coumaphos	0.01	0.01	0.01	0	0	0	0.01	0.01	8.89	0.01	0.01	12.61	0.01	0.01	14.24	No Deterioration
cyanide total	20	20	20	0	0	0	20.04	20.04	20.11	20.05	20.05	20.15	20.05	20.05	20.17	No Deterioration
cyanide, free (easily liberable)	10	10	10	0	0	0	10.02	10.02	10.07	10.03	10.03	10.1	10.03	10.03	10.11	No Deterioration
cyfluthrin	0.05	0.05	0.05	0	0	0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	No Deterioration
cypermethrin	0.00005	0.00003	0.00007	0.00003	0.00002	0.00005	0.00012	0.00008	0.00022	0.00018	0.00012	0.00041	0.00021	0.00013	0.0005	73.68%
demeton	0.01	0.01	0.01	0	0	0	0.01	0.01	0.05	0.01	0.01	0.05	0.01	0.01	0.05	No Deterioration
di(2-ethylhexyl)phthalate (DEHP)	0.08	0.05	0.11	0.06	0.04	0.08	0.2	0.14	0.39	0.32	0.2	0.75	0.36	0.22	0.95	32.03%
diazinon	0.005	0.005	0.005	0	0	0	0.00501	0.00501	0.01036	0.00501	0.00501	0.01037	0.00501	0.00501	0.01038	No Deterioration
dibutyl phthalate	0.01	0.01	0.01	0.01	0	0.01	0.02	0.02	0.03	0.03	0.02	0.05	0.03	0.02	0.06	33.33%
dichlorobenzene, total isomers	0.05	0.05	0.05	0	0	0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	No Deterioration
dichlorvos	0.0005	0.0005	0.0005	0	0	0	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	No Deterioration
diethyl phthalate	0.01	0.01	0.02	0.01	0.01	0.01	0.03	0.02	0.07	0.05	0.03	0.15	0.06	0.03	0.2	No Deterioration
diflubenzuron	0.0005	0.0005	0.0005	0	0	0	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	No Deterioration
dimethoate	0.01	0.01	0.01	0	0	0	0.01	0.01	0.5	0.01	0.01	0.5	0.01	0.01	0.5	No Deterioration
dimethyl phthalate	0.01	0.01	0.01	0	0	0	0.01	0.01	0.52	0.01	0.01	0.52	0.01	0.01	0.52	No Deterioration
dioctyl phthalate	0.01	0.01	0.01	0	0	0	0.01	0.01	0.52	0.01	0.01	0.52	0.01	0.01	0.52	No Deterioration
dissolved organic carbon	4.12	3.53	4.71	1.19	0.79	1.59	6.35	5.43	8.47	7.72	6.37	11.21	8.2	6.66	12.35	47.90%
doramectin	2.50054	2.49999	2.50109	0.00111	0.00074	0.00148	2.50465	2.50396	2.5059	2.50634	2.5055	2.50797	2.50687	2.50596	2.50864	No Deterioration
EDTA	50.11	38.54	61.69	23.42	15.56	31.29	95.66	74.76	150.08	130.12	96.47	233.22	143.09	103.17	272.06	28.34%
fenchlorphos	0.01	0.01	0.01	0	0	0	0.01	0.01	2505.9	0.01	0.01	2507.97	0.01	0.01	2508.64	No Deterioration
fenitrothion	0.005	0.005	0.005	0	0	0	0.00501	0.00501	0.01036	0.00501	0.00501	0.01037	0.00501	0.00501	0.01038	No Deterioration
flucofuron	0.02501	0.02499	0.02502	0.00003	0.00002	0.00004	0.02505	0.02503	0.02507	0.02506	0.02504	0.0251	0.02507	0.02505	0.02511	No Deterioration
fluoranthene	0.01276	0.00969	0.01582	0.0062	0.00412	0.00828	0.02483	0.01924	0.03957	0.03414	0.02506	0.06246	0.03768	0.02686	0.07327	No Deterioration
fluoride	0.31	0.28	0.34	0.07	0.04	0.09	0.43	0.38	0.54	0.5	0.43	0.66	0.52	0.45	0.71	45.91%
formaldehyde	25.01	24.99	25.02	0.03	0.02	0.04	25.05	25.03	25.07	25.06	25.04	25.1	25.07	25.05	25.11	No Deterioration
glyphosate	0.06	0.05	0.07	0.02	0.01	0.02	0.09	0.08	0.12	0.11	0.09	0.17	0.12	0.1	0.18	86.69%
hardness as CaCO3	505.8	480.03	531.57	52.13	34.63	69.63	597.42	563.88	663.61	641.26	597.61	735.01	655.44	607.5	760.74	No Deterioration
hexabromocyclododecane (HBCDD)	0.00009	0.00006	0.00012	0.00006	0.00004	0.00008	0.0002	0.00015	0.00037	0.00031	0.00021	0.00066	0.00035	0.00023	0.00081	89.75%
ioxynil	0.01	0.01	0.01	0	0	0	0.01	0.01	663.61	0.01	0.01	735.01	0.01	0.01	760.74	No Deterioration
iron dissolved	24.89	22.42	27.35	4.99	3.31	6.66	34	30.42	41.63	38.99	34.04	50.69	40.67	35.12	54.22	53.24%
iron total	401.94	327.14	476.75	151.33	100.52	202.15	692.25	565.24	1001.89	890.3	695.81	1437.83	962.27	735.69	1629.83	No Deterioration
ivermectin	2.50054	2.49999	2.50109	0.00111	0.00074	0.00148	2.50465	2.50396	2.5059	2.50634	2.5055	2.50797	2.50687	2.50596	2.50864	No Deterioration
lead dissolved	0.37	0.25	0.49	0.22	0.13	0.3	0.77	0.53	1.49	1.12	0.69	2.7	1.24	0.71	3.32	No Deterioration
lead total	4.43	3.3	5.57	1.8	1.03	2.57	7.78	5.67	13.47	10.19	6.7	21.39	10.92	6.74	25.12	No Deterioration
linuron	0.005	0.005	0.005	0	0	0	0.00501	0.00501	0.53255	0.00501	0.00501	0.53313	0.00501	0.00501	0.53333	0.00%
malachite green	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	No Deterioration
malathion	0.01	0.01	0.01	0	0	0	0.01	0.01	0.5	0.01	0.01	0.5	0.01	0.01	0.5	No Deterioration
mancozeb	0.1	0.05	0.15	0.1	0.06	0.13	0.29	0.19	0.64	0.5	0.3	1.41	0.6	0.34	1.88	91.28%
maneb	0.11	0.02	0.21	0.19	0.13	0.26	0.41	0.23	1.31	0.97	0.49	4.18	1.26	0.59	6.35	78.33%
manganese dissolved	7052	4223	9882	1520	0	3442	7052	4223	9882	11322	229	56573	11761	0	73467	No Deterioration
manganese total	7403	4392	31095	1866	0	3911	10772	4557	31095	12794	907	61681	13373	0	80205	No Deterioration
MCPA	0.02	0.01	0.03	0.02	0.01	0.03	0.06	0.04	0.13	0.1	0.06	0.3	0.12	0.07	0.4	No Deterioration
mecoprop	0.01	0.01	0.01	0.01	0	0.01	0.02	0.02	0.03	0.03	0.02	0.05	0.03	0.02	0.06	72.34%
mercury dissolved	0.00365	0.00128	0.00603	0.0048	0.00319	0.00641	0.01211	0.00715	0.03269	0.0247	0.01337	0.08827	0.03079	0.01552	0.12619	No Deterioration
mercury total	0.00741	0.00225	0.01256	0.01043	0.00693	0.01393	0.02532	0.01467	0.07125	0.05347	0.02844	0.20097	0.06737	0.0333	0.29196	No Deterioration
methiocarb	0.05	0.05	0.05	0	0	0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	No Deterioration
mevinphos	0.01	0.01	0.01	0	0	0	0.01	0.01	0.05	0.01	0.01	0.05	0.01	0.01	0.05	No Deterioration
nickel dissolved	53.32	26.32	80.31	40.27	21.93	58.61	127.66	70.72	335.02	203.37	85.33	761.72	229.29	75.78	1025.35	No Deterioration
nickel total	58.1	29.58	86.63	41.42	22.04	60.79	134.98	74.9	350.33	210.47	87.39	780.89	235.99	76.6	1044.29	No Deterioration
nitrate	6.36	4.62	8.1	5.2	3.99	6.42	16.44	12.29	25.55	27.1	19.05	47.55	31.63	21.41	58.89	82.88%
nitrate	6.36	4.62	8.1	5.2	3.99	6.42	16.44	12.29	25.55	27.1	19.05	47.55	31.63	21.41	58.89	82.88%
nitrilotriacetic acid (NTA)	50.01	49.98	50.04	0.05	0.04	0.07	50.09	50.06	50.15	50.13	50.09	50.2	50.14	50.1	50.22	No Deterioration
nitrite	0.34	0.24	0.44	0.3	0.23	0.37	0.91	0.67	1.46	1.56	1.07	2.83	1.84	1.21	3.55	56.19%
nitrite	0.34	0.24	0.44	0.3	0.23	0.37	0.91	0.67	1.46	1.56	1.07	2.83	1.84	1.21	3.55	56.19%
nonylphenols (4-nonylphenol technical mix)	0.02	0.02	0.02	0.01	0.01	0.01	0.04	0.03	0.06	0.05	0.04	0.08	0.05	0.04	0.1	92.93%
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	0.00501	0.00436	0.00565	0.0013	0.00086	0.00174	0.00743	0.00644	0.00964	0.00886	0.00745	0.01242	0.00936	0.00775	0.01355	No Deterioration
omethoate	0.005	0.005	0.005	0	0	0	0.00501	0.00501	0.01036	0.00501	0.00501	0.01037	0.00501	0.00501	0.01038	No Deterioration
organic nitrogen	2.5	2.5	2.5	0	0	0	2.5	2.5	2.51	2.51	2.51	2.52	2.51	2.51	2.52	No Deterioration
orthophosphate as PO4	0.11	0.07	0.16	0.09	0.06	0.12	0.29	0.2	0.59	0.47	0.3	1.19	0.55	0.33	1.52	70.67%
pendimethalin	0.02	0.02	0.02	0	0	0	0.02	0.02	2.51	0.02	0.02	2.52	0.02	0.02	2.52	No Deterioration
perfluorooctanoic acid (PFOA)	0.0043	0.00356	0.00504	0.0015	0.001	0.00201	0.00717	0.00593	0.01012	0.00906	0.0072	0.01417	0.00974	0.00759	0.01592	21.27%
permethrin	0.00066	0.00029	0.00103	0.00075	0.0005	0.001	0.00204	0.00125	0.00505	0.00388	0.00219	0.01247	0.00473	0.0025	0.01725	72.76%
pH	7.54	7.39	7.69	0.31	0.2	0.41	8.06	7.88	8.41	8.29	8.06	8.75	8.37	8.12	8.88	No Deterioration
phenol	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	No Deterioration
pirimicarb	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	No Deterioration
pirimiphos-methyl	0.005	0.005	0.005	0	0	0	0.00501	0.00501	0.00505	0.00501	0.00501	0.00507	0.00501	0.00501	0.00508	No Deterioration
polychloro chloromethyl sulphonamido diphenyl ethe	0.1	0.05	0.15	0.09	0.06	0.12	0.28	0.18	0.61	0.48	0.29	1.33	0.57	0.32	1.76	38.10%
prochloraz	0.05	0.05	0.05	0	0	0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	No Deterioration
propetamphos	0.01	0.01	0.01	0	0	0	0.01	0.01	0.05	0.01	0.01	0.05	0.01	0.01	0.05	No Deterioration
propyzamide	0.01	0	0.02	0.02	0.02	0.03	0.04	0.02	0.16	0.12	0.06	0.65	0.17	0.08	1.08	66.67%
salinity @ 20øC	0.59	0.55	0.63	0.08	0.05	0.11	0.74	0.68	0.85	0.81	0.74	0.97	0.83	0.75	1.01	No Deterioration
silver dissolved	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	No Deterioration
silver total	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	No Deterioration
soluble reactive phosphorus	0.04	0.02	0.06	0.03	0.02	0.04	0.11	0.07	0.22	0.18	0.11	0.45	0.2	0.12	0.58	67.50%
sulcofuron	0.02501	0.02499	0.02502	0.00003	0.00002	0.00004	0.02505	0.02503	0.02507	0.02506	0.02504	0.0251	0.02507	0.02505	0.02511	No Deterioration
sulphate	372.1	290.94	453.26	164.18	109.06	219.31	690.37	546.25	1058.7	924.24	695.47	1608.6	1011.42	741.39	1861.28	No Deterioration
sulphide or hydrogen sulphide	10.06	6.44	13.69	7.34	4.87	9.8	24.39	17.07	47.07	38.43	24.99	89.91	44.22	27.5	113.1	No Deterioration
suspended solids @ 105øC	42.23	19.47	64.99	46.05	30.59	61.51	127.56	79.49	308.36	238.08	136.01	741.61	288.71	154.79	1015.72	No Deterioration
tecnazene	0.01	0.01	0.01	0	0	0	0.01	0.01	308.36	0.01	0.01	741.61	0.01	0.01	1015.72	No Deterioration
tetrachloroethane	0.05	0.03	0.07	0.04	0.03	0.06	0.13	0.09	0.28	0.22	0.14	0.58	0.26	0.15	0.75	23.53%
thiobendazole	0.05	0.05	0.05	0	0	0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	No Deterioration
tin dissolved	0.23	0.19	0.27	0.08	0.06	0.11	0.39	0.32	0.56	0.5	0.4	0.8	0.54	0.42	0.91	No Deterioration
tin total	0.28	0.21	0.36	0.15	0.1	0.2	0.57	0.44	0.94	0.8	0.58	1.52	0.89	0.62	1.8	No Deterioration
toluene	0.05	0.05	0.05	0	0	0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	No Deterioration
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	436.2	346.32	526.08	181.82	120.77	242.87	787.42	630.37	1181.78	1038.49	792.52	1757.79	1131.19	842.28	2018.33	No Deterioration
total organic carbon	4.87	1.71	8.03	6.39	4.24	8.54	16.12	9.52	43.49	32.87	17.8	117.34	40.96	20.66	167.69	65.44%
total oxidised nitrogen	2.55	2	3.1	1.1	0.73	1.48	4.69	3.72	7.14	6.25	4.72	10.77	6.82	5.03	12.43	81.88%
total phosphorus	0.33	0.25	0.4	0.15	0.1	0.2	0.61	0.48	0.95	0.83	0.62	1.46	0.91	0.66	1.7	39.92%
triallate	0.02	0.02	0.02	0	0	0	0.02	0.02	1181.78	0.02	0.02	1757.79	0.02	0.02	2018.33	No Deterioration
triazophos	0.00001	0.00001	0.00001	0	0	0	0.00001	0.00001	1.18178	0.00001	0.00001	1.75779	0.00001	0.00001	2.01833	No Deterioration
tributyl phosphate	0.01	0.01	0.01	0	0	0	0.01	0.01	0.95	0.01	0.01	1.46	0.01	0.01	1.7	No Deterioration
tributyltin compounds (as tributyltin cation)	0.00006	0.00005	0.00007	0.00002	0.00001	0.00003	0.0001	0.00008	0.00014	0.00012	0.0001	0.00019	0.00013	0.00011	0.00021	No Deterioration
trichloroethylene	0.5	0.5	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	No Deterioration
triclosan	0.01	0.01	0.01	0.01	0	0.01	0.02	0.02	0.04	0.04	0.02	0.08	0.04	0.03	0.1	63.38%
triphenyltin compounds (as tryphenyltin cation)	0.00094	0.00093	0.00094	0	0	0	0.00094	0.00094	0.00094	0.00094	0.00094	0.00094	0.00094	0.00094	0.00094	No Deterioration
vanadium dissolved	5	5	5	0	0	0	5.01	5.01	5.03	5.01	5.01	5.04	5.01	5.01	5.04	No Deterioration
vanadium total	5	5	5	0	0	0	5.01	5.01	21.03	5.01	5.01	21.06	5.01	5.01	21.07	No Deterioration
zinc dissolved	34.87	26.28	43.46	15.77	9.93	21.6	64.33	48.54	106.35	86.74	60.89	168.2	93.68	62.83	196.45	28.95%
zinc total	60.79	45.86	75.72	27.37	17.23	37.51	111.92	84.5	184.82	150.74	105.89	291.9	162.76	109.24	340.77	No Deterioration

C.2 Modelling results, site 5

Site 5 Impact of input discharge quality using AA EQS (v1) (#VALUE!=No EQS)

Determinand	Model	Mean D/S River Quality: Face Value	lower	upper	Mean D/S Bioavailable Quality: Face Value	lower	upper	Standard Deviation (river quality): Face Value	lower	upper	Mean U/S River Quality (Bioavailable only)	Hazardous Chemicals Tests: Modelling Test 1 (AA EQS): Risk to EQS	Modelling Test 2a (AA-EQS): Exceeds 80% of EQS	Modelling Test 2b (AA-EQS): Exceeds 80% of EQS	Outcome of modelling tests	WFD Tests: % Deterioration	Does the water body pass EQS at present?	Deterioration >10% (or >3% where the EQS is already being exceeded)?	WFD Class Deterioration?
1,1,1-trichloroethane	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
1,1,2-trichloroethane	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2,4-dichlorophenol	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2,4-dichlorophenoxyacetic acid (2,4-D)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2-chlorophenol	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
3,4-dichloroaniline	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
3-methylphenol (m-cresol)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
4-chloro-3-methyl phenol	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
4-methylphenol (p-cresol)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
abamectin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
acid neutralisation capacity (ANC, unfiltered)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
alkalinity as $CaCO_3$	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammonia	Monte Carlo	0.01937	0.01017	0.02856	#REF!	#REF!	#REF!	0.01858	0.01233	0.02483		Pass	Pass	Pass	Pass	126.86%	Pass	Deterioration	No Class deterioration
ammonia	Monte Carlo	0.01937	0.01017	0.02856	#REF!	#REF!	#REF!	0.01858	0.01233	0.02483		Pass	Pass	Pass	Pass	126.86%	Pass	Deterioration	No Class deterioration
ammoniacal nitrogen	Monte Carlo	0.41	0.34	0.54	#REF!	#REF!	#REF!	0.1	0.06	0.13		Fail	Fail	Fail	Fail	193.58%	Pass	Deterioration	Class deterioration
antimony dissolved	Monte Carlo	0.88	0.82	0.94	#REF!	#REF!	#REF!	0.12	0.08	0.16		#VALUE!	#VALUE!	#VALUE!	#VALUE!	41.94%	Pass	Deterioration	No EQS defined
antimony total	Monte Carlo	0.89	0.83	0.95	#REF!	#REF!	#REF!	0.13	0.08	0.17		#VALUE!	#VALUE!	#VALUE!	#VALUE!	39.06%	Pass	Deterioration	No EQS defined
arsenic dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
arsenic total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
azinphos methyl, dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
BDE-100	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-153	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-154	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-28	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-47	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-99	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bentazone	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
benzene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
benzo(a)pyrene	Monte Carlo	0.00191	0.00145	0.00236	#REF!	#REF!	#REF!	0.00092	0.00061	0.00123		Fail	Fail	Pass	Fail	-50.02%	Fail	No Deterioration	Continues to exceed EQS
benzyl butyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
biphenyl	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
BOD (5 day)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
boron dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
boron total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
bromide	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bromine - total residual oxidant	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
bromoxynil	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
c (PFOS)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cadmium dissolved	Monte Carlo	5.11	4.23	5.99	#REF!	#REF!	#REF!	1.7	1.1	2.29		Fail	Fail	Fail	Fail	44186.67%	Pass	Deterioration	Class deterioration
cadmium total	Monte Carlo	5.11	4.23	5.99	#REF!	#REF!	#REF!	1.7	1.1	2.29		Fail	Fail	Fail	Fail	26472.00%	Pass	Deterioration	Class deterioration
calcium total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
carbendazim	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chemical oxygen demand (COD)	Monte Carlo	26.69	22.54	30.84	#REF!	#REF!	#REF!	8.39	5.57	11.21		#VALUE!	#VALUE!	#VALUE!	#VALUE!	61.01%	Pass	Deterioration	No EQS defined
chloride	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorine free	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorine total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chloroform	Monte Carlo	0.54	0.48	0.6	#REF!	#REF!	#REF!	0.12	0.08	0.17		Pass	Pass	Pass	Pass	8.00%	Pass	No Deterioration	No Class deterioration
chloronitrotoluenes	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorophyll	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorothalonil	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorotoluron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorpropham	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chromium (VI) dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chromium dissolved	Monte Carlo	1.9	1.42	2.38	#REF!	#REF!	#REF!	0.97	0.64	1.29		#VALUE!	#VALUE!	#VALUE!	#VALUE!	361.68%	Pass	Deterioration	No EQS defined
chromium total	Monte Carlo	2.91	1.59	4.22	#REF!	#REF!	#REF!	2.54	1.65	3.43		#VALUE!	#VALUE!	#VALUE!	#VALUE!	284.84%	Pass	Deterioration	No EQS defined
cobalt dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cobalt total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
conductivity @ 20øC	Monte Carlo	32.42	23.42	41.43	#REF!	#REF!	#REF!	18.22	12.11	24.34		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-94.57%	Pass	No Deterioration	No EQS defined
copper dissolved	MPer	1.23	0.86	1.6	0.0437	0.0256	0.0618	0.75	0.5	1	0.0683	Fail	Fail	Fail	Fail	-36.02%	Pass	No Deterioration	Class deterioration
copper total	MPer	2.4	2	2.79	0.0854	0.0582	0.1127	0.79	0.52	1.06	0.0996	Fail	Fail	Fail	Fail	-14.26%	Fail	No Deterioration	Continues to exceed EQS
coumaphos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cyanide total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cyanide, free (easily liberable)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyfluthrin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cypermethrin	Monte Carlo	0.00019	0.00015	0.00024	#REF!	#REF!	#REF!	0.00009	0.00006	0.00013		Fail	Fail	Fail	Fail	333.33%	Pass	Deterioration	Class deterioration
demeton	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
di(2-ethylhexyl)phthalate (DEHP)	Monte Carlo	0.12	0.08	0.16	#REF!	#REF!	#REF!	0.08	0.05	0.1		Pass	Pass	Pass	Pass	60.00%	Pass	Deterioration	No Class deterioration
diazinon	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dibutyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dichlorobenzene, total isomers	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dichlorvos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
diethyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
diflubenzuron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dimethoate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dimethyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dioctyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dissolved organic carbon	Monte Carlo	7.44	6.44	8.45	#REF!	#REF!	#REF!	2.04	1.35	2.72		#VALUE!	#VALUE!	#VALUE!	#VALUE!	105.35%	Pass	Deterioration	No EQS defined
doramectin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
EDTA	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fenchlorphos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fenitrothion	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
flucofuron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
fluoranthene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fluoride	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
formaldehyde	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
glyphosate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
hardness as $CaCO_3$	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
hexabromocyclododecane (HBCDD)	Monte Carlo	0.00079	0.00055	0.00104	#REF!	#REF!	#REF!	0.00049	0.00033	0.00066		Pass	Pass	Pass	Pass	1028.57%	Pass	Deterioration	No Class deterioration
ioxynil	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
iron dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
iron total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
ivermectin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
lead dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
lead total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
linuron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
malachite green	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
malathion	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mancozeb	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
maneb	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
manganese dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
manganese total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
MCPA	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mecoprop	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mercury dissolved	Monte Carlo	0.00369	0.00157	0.00582	#REF!	#REF!	#REF!	0.0043	0.00286	0.00574		Pass	Pass	Pass	Pass	39.04%	Pass	Deterioration	No Class deterioration
mercury total	Monte Carlo	0.00683	0.00262	0.01103	#REF!	#REF!	#REF!	0.0085	0.00565	0.01135		Pass	Pass	Pass	Pass	61.44%	Pass	Deterioration	No Class deterioration
methiocarb	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mevinphos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nickel dissolved	MPer	19.34	12.94	25.73	10.2322	4.1042	16.3602	12.94	8.59	17.28	1.6514	Fail	Fail	Fail	Fail	519.61%	Pass	Deterioration	Class deterioration
nickel total	MPer	20.24	13.98	26.5	10.7122	4.4702	16.9543	12.67	8.42	16.92	2.5038	Fail	Fail	Fail	Fail	327.84%	Pass	Deterioration	Class deterioration
nitrate	Monte Carlo	33.58	20.42	46.74	#REF!	#REF!	#REF!	26.62	17.68	35.56		#VALUE!	#VALUE!	#VALUE!	#VALUE!	947.16%	Pass	Deterioration	No EQS defined
nitrate	Monte Carlo	33.58	20.42	46.74	#REF!	#REF!	#REF!	26.62	17.68	35.56		#VALUE!	#VALUE!	#VALUE!	#VALUE!	947.16%	Pass	Deterioration	No EQS defined
nitrilotriacetic acid (NTA)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
nitrite	Monte Carlo	0.72	0.42	1.02	#REF!	#REF!	#REF!	0.61	0.4	0.81		#VALUE!	#VALUE!	#VALUE!	#VALUE!	55.31%	Pass	Deterioration	No EQS defined
nitrite	Monte Carlo	0.72	0.42	1.02	#REF!	#REF!	#REF!	0.61	0.4	0.81		#VALUE!	#VALUE!	#VALUE!	#VALUE!	55.31%	Pass	Deterioration	No EQS defined
nonylphenols (4-nonylphenol technical mix)	Monte Carlo	0.25	0.2	0.3	#REF!	#REF!	#REF!	0.1	0.07	0.14		Fail	Fail	Fail	Fail	1150.00%	Pass	Deterioration	No Class deterioration
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	Monte Carlo	0.00533	0.00471	0.00595	#REF!	#REF!	#REF!	0.00125	0.00083	0.00167		Pass	Pass	Pass	Pass	6.60%	Pass	No Deterioration	No Class deterioration
omethoate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
organic nitrogen	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
orthophosphate as PO_4	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
pendimethalin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
perfluorooctanoic acid (PFOA)	Monte Carlo	0.00529	0.00444	0.00613	#REF!	#REF!	#REF!	0.00171	0.00113	0.00228		#VALUE!	#VALUE!	#VALUE!	#VALUE!	24.02%	Pass	Deterioration	No EQS defined
permethrin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pH	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
phenol	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pirimicarb	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pirimiphos-methyl	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
polychloro chloromethyl sulphonamido diphenyl ethe	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
prochloraz	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
propetamphos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
propyzamide	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
salinity @ 20øC	Monte Carlo	5.13	4.29	5.97	N/A	N/A	N/A	1.7	1.13	2.27		#VALUE!	#VALUE!	#VALUE!	#VALUE!	1610.00%	Pass	Deterioration	No EQS defined
silver dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
silver total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
soluble reactive phosphorus	Monte Carlo	5.12	4.28	5.96	#REF!	#REF!	#REF!	1.7	1.13	2.27		Fail	Fail	Fail	Fail	4942.42%	Fail	Deterioration	Continues to exceed EQS
sulcofuron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
sulphate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
sulphide or hydrogen sulphide	Monte Carlo	5.53	4.67	6.39	#REF!	#REF!	#REF!	1.74	1.16	2.33		Fail	Fail	Pass	Fail	-49.01%	Fail	No Deterioration	Continues to exceed EQS
suspended solids @ 105øC	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tecnazene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tetrachloroethane	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
thiobendazole	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
toluene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
total anions (sum of Br, Cl, F, NO_2, NO_3, PO_4, SO_4	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
total organic carbon	Monte Carlo	5.28	4.44	6.13	#REF!	#REF!	#REF!	1.71	1.13	2.28		#VALUE!	#VALUE!	#VALUE!	#VALUE!	33.28%	Pass	Deterioration	No EQS defined
total oxidised nitrogen	Monte Carlo	5.17	4.33	6.01	#REF!	#REF!	#REF!	1.7	1.13	2.27		#VALUE!	#VALUE!	#VALUE!	#VALUE!	268.37%	Pass	Deterioration	No EQS defined
total phosphorus	Monte Carlo	5.13	4.29	5.97	#REF!	#REF!	#REF!	1.7	1.13	2.27		Fail	Fail	Fail	Fail	1090.89%	Pass	Deterioration	Class deterioration
triallate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
triazophos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tributyl phosphate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tributyltin compounds (as tributyltin cation)	Monte Carlo	0.00003	0.00003	0.00004	N/A	N/A	N/A	0.00001	0.00001	0.00001		Pass	Pass	Pass	Pass	32.20%	Pass	Deterioration	No Class deterioration
trichloroethylene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
triclosan	Monte Carlo	0.02877	0.01945	0.03809	#REF!	#REF!	#REF!	0.01886	0.01253	0.02519		Pass	Pass	Pass	Pass	367.51%	Pass	Deterioration	No Class deterioration
triphenyltin compounds (as tryphenyltin cation)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
vanadium dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
vanadium total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
zinc dissolved	MPer	33.21	25.68	40.74	10.7978	7.8914	13.7042	14.54	9.44	19.63	3.1876	Fail	Fail	Fail	Fail	238.74%	Pass	Deterioration	Class deterioration
zinc total	MPer	57.18	44.5	69.86	18.5933	13.6695	23.5171	24.48	15.91	33.06	10.695	Fail	Fail	Fail	Fail	73.85%	Fail	Deterioration	Continues to exceed EQS

Site 5 Impact of input discharge quality using MAC EQS (v1) (#VALUE!=No EQS)

Determinand	95-percentile River Quality: Face Value	lower	upper	95-percentile bioavailable quality: Face Value	lower	upper	Standard Deviation (river quality): Face Value	lower	upper	95-percentile U/S River Quality (Bioavailable only)	Hazardous Chemicals Tests: Modelling Test 1 (MAC EQS): Risk to EQS	Modelling Test 2a (MAC EQS): Exceeds 80% of EQS	Modelling Test 2a (MAC EQS): Exceeds 80% of EQS	Outcome of modelling tests	WFD Tests: % Deterioration	Does the water body pass EQS at present?	Deterioration >10%?	WFD Class Deterioration?
1,1,1-trichloroethane	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
1,1,2-trichloroethane	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
2,4-dichlorophenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2,4-dichlorophenoxyacetic acid (2,4-D)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2-chlorophenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
3,4-dichloroaniline	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
3-methylphenol (m-cresol)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
4-chloro-3-methyl phenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
4-methylphenol (p-cresol)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
abamectin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
acid neutralisation capacity (ANC, unfiltered)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
alkalinity as $CaCO_3$	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammonia	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammonia	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammoniacal nitrogen	0.35	0.26	0.6	#REF!	#REF!	#REF!	0.09	0.06	0.13		Fail	Fail	Pass	Fail	-34.21%	Fail	No Deterioration	Continues to exceed EQS
antimony dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
antimony total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
arsenic dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
arsenic total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
azinphos methyl, dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-100	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-153	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-154	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-28	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-47	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-99	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bentazone	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
benzene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
benzo(a)pyrene	0.00369	0.00286	0.00588	#REF!	#REF!	#REF!	0.00092	0.00061	0.00123		Pass	Pass	Pass	Pass	-48.41%	Pass	No Deterioration	No Class deterioration
benzyl butyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
biphenyl	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BOD (5 day)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
boron dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
boron total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bromide	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bromine - total residual oxidant	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
bromoxynil	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
c (PFOS)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cadmium dissolved	0.01	0.01	0.01	#REF!	#REF!	#REF!	0	0	0		Pass	Pass	Pass	Pass	-44.44%	Pass	No Deterioration	No Class deterioration
cadmium total	0.04	0.03	0.06	#REF!	#REF!	#REF!	0.01	0.01	0.01		Pass	Pass	Pass	Pass	-31.03%	Pass	No Deterioration	No Class deterioration
calcium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
carbendazim	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chemical oxygen demand (COD)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloride	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorine free	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorine total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloroform	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloronitrotoluenes	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorophyll	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorothalonil	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorotoluron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorpropham	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chromium (VI) dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chromium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chromium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cobalt dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cobalt total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
conductivity @ 20øC	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
copper dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
copper total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
coumaphos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyanide total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyanide, free (easily liberable)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyfluthrin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cypermethrin	0.0004	0.00029	0.00072	#REF!	#REF!	#REF!	0.00011	0.00008	0.00015		Pass (face valu	Pass	Fail	Fail	566.67%	Pass	Deterioration	No Class deterioration
demeton	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
di(2-ethylhexyl)phthalate (DEHP)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
diazinon	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dibutyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dichlorobenzene, total isomers	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dichlorvos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
diethyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
diflubenzuron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dimethoate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dimethyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dioctyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dissolved organic carbon	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
doramectin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
EDTA	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fenchlorphos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fenitrothion	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
flucofuron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fluoranthene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fluoride	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
formaldehyde	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
glyphosate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
hardness as $CaCO_3$	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
hexabromocyclododecane (HBCDD)	0.00176	0.00129	0.00312	#REF!	#REF!	#REF!	0.00049	0.00033	0.00066		Pass	Pass	Pass	Pass	2414.29%	Pass	Deterioration	No Class deterioration
ioxynil	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
iron dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
iron total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ivermectin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
lead dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
lead total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
linuron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
malachite green	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
malathion	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
mancozeb	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
maneb	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
manganese dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
manganese total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
MCPA	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mecoprop	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mercury dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
mercury total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
methiocarb	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mevinphos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
nickel dissolved	43.54	30.85	81.35	30.193	17.2959	81.4629	12.94	8.59	17.28	1.6514	Fail	Fail	Fail	Fail	1728.33%	Pass	Deterioration	Class deterioration
nickel total	43.93	31.7	79.38	31.0253	17.8672	82.5767	12.67	8.42	16.92	2.5038	Fail	Fail	Fail	Fail	1139.13%	Pass	Deterioration	Class deterioration
nitrate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nitrate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nitrilotriacetic acid (NTA)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
nitrite	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nitrite	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nonylphenols (4-nonylphenol technical mix)	0.45	0.36	0.68	#REF!	#REF!	#REF!	0.1	0.07	0.14		Pass	Pass	Pass	Pass	2150.00%	Pass	Deterioration	No Class deterioration
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
omethoate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
organic nitrogen	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
orthophosphate as PO_4	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
pendimethalin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
perfluorooctanoic acid (PFOA)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
permethrin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pH	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
phenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pirimicarb	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pirimiphos-methyl	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
polychloro chloromethyl sulphonamido diphenyl ethe	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
prochloraz	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
propetamphos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
propyzamide	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
salinity @ 20øC	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
silver dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
silver total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
soluble reactive phosphorus	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
sulcofuron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
sulphate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
sulphide or hydrogen sulphide	22.63	16.24	41.6	#REF!	#REF!	#REF!	6.53	4.34	8.72		Fail	Fail	Fail	Fail	1.03%	Fail	No Deterioration	Continues to exceed EQS
suspended solids @ 105øC	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tecnazene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tetrachloroethane	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
thiobendazole	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
toluene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
total anions (sum of Br, Cl, F, NO_2, NO_3, PO_4, SO_4	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
total organic carbon	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
total oxidised nitrogen	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
total phosphorus	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
triallate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
triazophos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tributyl phosphate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tributyltin compounds (as tributyltin cation)	0.00005	0.00004	0.00007	#REF!	#REF!	#REF!	0.00001	0.00001	0.00001		Pass	Pass	Pass	Pass	-5.66%	Pass	No Deterioration	No Class deterioration
trichloroethylene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
triclosan	0.06593	0.04753	0.12031	#REF!	#REF!	#REF!	0.01886	0.01253	0.02519		Pass	Pass	Pass	Pass	499.36%	Pass	Deterioration	No Class deterioration
triphenyltin compounds (as tryphenyltin cation)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
vanadium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
vanadium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
zinc dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
zinc total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined

Site 5 Target quality required discharge (v1)

Determinand	Mean: Face Value	lower	upper	Standard Deviation: Face Value	lower	upper	95-percentile: Face Value	lower	upper	99-percentile: Face Value	lower	upper	99.5-percentile: Face Value	lower	upper	WW treatment % reduction required to meet AA EQS
1,1,1-trichloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
1,1,2-trichloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2,4-dichlorophenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2,4-dichlorophenoxyacetic acid (2,4-D)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2-chlorophenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
3,4-dichloroaniline	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
3-methylphenol (m-cresol)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
4-chloro-3-methyl phenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
4-methylphenol (p-cresol)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
abamectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
acid neutralisation capacity (ANC, unfiltered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
alkalinity as $CaCO_3$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
aluminium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
aluminium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
ammonia	0.15377	0.07902	0.22852	0.15122	0.10045	0.20199	0.4405	0.28316	1.00174	0.75682	0.43567	2.23569	0.94001	0.52468	3.03154	None
ammonia	0.15377	0.07902	0.22852	0.15122	0.10045	0.20199	0.4405	0.28316	1.00174	0.75682	0.43567	2.23569	0.94001	0.52468	3.03154	None
ammoniacal nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#VALUE!
antimony dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
antimony total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
arsenic dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
arsenic total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
azinphos methyl, dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
bentazone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
benzo(a)pyrene	0.00006	0.00004	0.00007	0.00003	0.00002	0.00004	0.00011	0.00009	0.00018	0.00015	0.00011	0.0003	0.00017	0.00012	0.00035	95.52%
benzyl butyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
biphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BOD (5 day)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
boron dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
boron total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromide	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
bromine - total residual oxidant	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromoxynil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
c (PFOS)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cadmium dissolved	0.31	0.26	0.37	0.11	0.07	0.14	0.52	0.43	0.73	0.64	0.5	1.01	0.69	0.54	1.14	-3000.00%
cadmium total	0.31	0.26	0.37	0.11	0.07	0.14	0.51	0.43	0.73	0.64	0.5	1.01	0.69	0.54	1.14	-3000.00%
calcium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
carbendazim	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chemical oxygen demand (COD)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chloride	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorine free	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chlorine total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chloroform	2.6	2.29	2.91	0.63	0.42	0.84	3.77	3.3	4.8	4.4	3.73	6.04	4.68	3.92	6.61	None
chloronitrotoluenes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorophyll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chlorothalonil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorotoluron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorpropham	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chromium (VI) dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chromium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chromium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cobalt dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cobalt total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
conductivity @ 20øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
copper dissolved	29.25	18.79	39.7	18.4	11.29	25.5	63.8	42.7	128.83	95.29	56.69	242.39	105.72	57.75	302.26	-2369.16%
copper total	29.19	22.12	36.26	9.81	5.01	14.61	47.3	34.36	81.54	59.37	38.29	125.34	62.97	37.84	146.01	-1132.05%
coumaphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyanide total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyanide, free (easily liberable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cyfluthrin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cypermethrin	0.0001	0.00008	0.00013	0.00005	0.00003	0.00007	0.0002	0.00016	0.00033	0.00028	0.0002	0.00052	0.00031	0.00022	0.00062	47.37%
demeton	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
di(2-ethylhexyl)phthalate (DEHP)	1.36	0.92	1.81	0.91	0.6	1.21	3.14	2.26	5.78	4.66	3.08	10.4	5.46	3.51	13.02	None
diazinon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dibutyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dichlorobenzene, total isomers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dichlorvos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
diethyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
diflubenzuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dimethoate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dimethyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dioctyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dissolved organic carbon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
doramectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
EDTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fenchlorphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fenitrothion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
flucofuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
fluoranthene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fluoride	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
formaldehyde	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
glyphosate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
hardness as $CaCO_3$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
hexabromocyclododecane (HBCDD)	0.00168	0.00116	0.0022	0.00105	0.0007	0.0014	0.00374	0.00273	0.00668	0.00544	0.00367	0.01167	0.00632	0.00416	0.01444	None
ioxynil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
iron dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
iron total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
ivermectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
lead dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
lead total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
linuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
malachite green	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
malathion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mancozeb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
maneb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
manganese dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
manganese total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
MCPA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mecoprop	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mercury dissolved	0.07363	0.03001	0.11724	0.08823	0.05861	0.11786	0.23371	0.14185	0.59675	0.43718	0.23482	1.50214	0.56181	0.29273	2.12952	None
mercury total	0.07357	0.02698	0.12016	0.09425	0.06261	0.1259	0.24123	0.14365	0.64091	0.46509	0.24435	1.68213	0.60496	0.3086	2.42168	None
methiocarb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mevinphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nickel dissolved	7.75	4.09	11.41	5.23	2.75	7.72	17.54	9.86	44.54	26.85	11.35	96.89	29.98	10.01	128.46	58.86%
nickel total	7.71	4.18	11.24	4.87	2.47	7.27	16.85	9.45	42.46	25.2	10.44	90.6	27.97	9.03	119.4	60.54%
nitrate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nitrate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nitrilotriacetic acid (NTA)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
nitrite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nitrite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nonylphenols (4-nonylphenol technical mix)	0.31	0.25	0.38	0.13	0.09	0.18	0.57	0.46	0.86	0.75	0.56	1.28	0.83	0.61	1.49	None
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	0.10475	0.09201	0.11749	0.02577	0.01712	0.03442	0.15268	0.13333	0.19541	0.17861	0.15114	0.24672	0.19019	0.15906	0.2701	None
omethoate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
organic nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
orthophosphate as PO_4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
pendimethalin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
perfluorooctanoic acid (PFOA)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
permethrin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
phenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pirimicarb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pirimiphos-methyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
polychloro chloromethyl sulphonamido diphenyl ethe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
prochloraz	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
propetamphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
propyzamide	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
salinity @ 20øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
silver dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
silver total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
soluble reactive phosphorus	0.1	0.08	0.12	0.03	0.02	0.05	0.17	0.14	0.23	0.21	0.16	0.32	0.22	0.18	0.36	18.75%
sulcofuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
sulphate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
sulphide or hydrogen sulphide	Failed to meet target															Failed to meet target
suspended solids @ 105øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
tecnazene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tetrachloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
thiobendazole	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
tin dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
tin total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
total anions (sum of Br, Cl, F, NO_2, NO_3, PO_4, SO_4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
total organic carbon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
total oxidised nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
total phosphorus	1.03	0.86	1.2	0.35	0.23	0.46	1.69	1.41	2.36	2.09	1.67	3.22	2.27	1.79	3.64	-87.54%
triallate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triazophos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tributyl phosphate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tributyltin compounds (as tributyltin cation)	0.00021	0.00017	0.00024	0.00007	0.00005	0.00009	0.00034	0.00028	0.00047	0.00042	0.00033	0.00064	0.00045	0.00036	0.00073	None
trichloroethylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triclosan	0.1049	0.07043	0.13937	0.06974	0.04632	0.09315	0.24185	0.17358	0.4448	0.35871	0.23717	0.8006	0.42005	0.2705	1.00214	None
triphenyltin compounds (as tryphenyltin cation)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
vanadium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
vanadium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
zinc dissolved	34.63	25.97	43.29	15.24	9.39	21.1	63.19	47.71	106	84.65	59.57	167.3	91.31	61.48	195.4	29.44%
zinc total	33.94	25.53	42.35	14.71	9.02	20.4	61.48	46.49	102.8	82.03	57.79	161.52	88.39	59.59	188.37	42.77%

Site 5 Required discharge quality to meet no deterioration (v1)

Determinand	Mean: Face Value	lower	upper	Standard Deviation: Face Value	lower	upper	95-percentile: Face Value	lower	upper	99-percentile: Face Value	lower	upper	99.5-percentile: Face Value	lower	upper	WW treatment % reduction required to prevent deterioration (Mean)
1,1,1-trichloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
1,1,2-trichloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2,4-dichlorophenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2,4-dichlorophenoxyacetic acid (2,4-D)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2-chlorophenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
3,4-dichloroaniline	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
3-methylphenol (m-cresol)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
4-chloro-3-methyl phenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
4-methylphenol (p-cresol)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
abamectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
acid neutralisation capacity (ANC, unfiltered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
alkalinity as $CaCO_3$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
aluminium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
aluminium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
ammonia	0.00421	0.00216	0.00625	0.00414	0.00275	0.00553	0.01205	0.00775	0.02741	0.02071	0.01192	0.06117	0.02572	0.01436	0.08295	82.17%
ammonia	0.00421	0.00216	0.00625	0.00414	0.00275	0.00553	0.01205	0.00775	0.02741	0.02071	0.01192	0.06117	0.02572	0.01436	0.08295	82.17%
ammoniacal nitrogen	0.14	0.1	0.18	0.08	0.06	0.11	0.31	0.23	0.53	0.44	0.3	0.9	0.5	0.34	1.1	16.46%
antimony dissolved	0.63	0.58	0.67	0.08	0.06	0.11	0.78	0.72	0.89	0.85	0.77	1.01	0.88	0.79	1.06	32.92%
antimony total	0.65	0.6	0.69	0.09	0.06	0.12	0.81	0.75	0.94	0.89	0.81	1.08	0.92	0.83	1.14	31.74%
arsenic dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
arsenic total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
azinphos methyl, dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bentazone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
benzo(a)pyrene	0.00386	0.00287	0.00485	0.002	0.00133	0.00268	0.00779	0.00594	0.01276	0.01069	0.00765	0.02049	0.01214	0.00849	0.02457	No Deterioration
benzyl butyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
biphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BOD (5 day)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
boron dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
boron total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromide	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromine - total residual oxidant	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromoxynil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
c (PFOS)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cadmium dissolved	0.01	0.01	0.01	0	0	0	0.02	0.01	0.02	0.02	0.02	0.03	0.02	0.02	0.04	0.00%
cadmium total	0.02	0.02	0.02	0.01	0	0.01	0.03	0.03	0.05	0.04	0.03	0.07	0.04	0.03	0.07	-100.00%
calcium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
carbendazim	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chemical oxygen demand (COD)	16.71	14.03	19.38	5.41	3.59	7.23	26.99	22.63	37.21	33.12	26.64	50.45	35.95	28.49	56.76	40.81%
chloride	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorine free	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorine total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chloroform	0.5	0.44	0.56	0.12	0.08	0.16	0.73	0.64	0.92	0.85	0.72	1.16	0.9	0.76	1.27	No Deterioration
chloronitrotoluenes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorophyll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorothalonil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorotoluron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorpropham	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chromium (VI) dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chromium dissolved	0.42	0.31	0.52	0.21	0.14	0.29	0.84	0.64	1.37	1.15	0.82	2.19	1.3	0.91	2.62	79.78%
chromium total	0.77	0.42	1.12	0.68	0.44	0.92	2.08	1.36	4.7	3.44	2.02	10.05	4.2	2.39	13.41	75.81%
cobalt dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cobalt total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
conductivity @ 20øC	598.33	499.38	697.28	200.18	132.97	267.39	979.78	817.18	1363.99	1209.95	966.85	1867.39	1316.64	1035.88	2108.51	No Deterioration
copper dissolved	1.96	1.26	2.66	1.23	0.75	1.71	4.28	2.85	8.67	6.39	3.78	16.34	7.09	3.85	20.4	No Deterioration
copper total	2.85	2.16	3.55	0.96	0.48	1.43	4.63	3.34	8.03	5.81	3.71	12.38	6.16	3.66	14.44	No Deterioration
coumaphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyanide total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyanide, free (easily liberable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyfluthrin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cypermethrin	0.00004	0.00003	0.00006	0.00002	0.00001	0.00003	0.00009	0.00007	0.00014	0.00012	0.00009	0.00022	0.00013	0.0001	0.00027	78.95%
demeton	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
di(2-ethylhexyl)phthalate (DEHP)	0.08	0.05	0.11	0.05	0.04	0.07	0.18	0.13	0.34	0.27	0.18	0.61	0.32	0.21	0.77	32.03%
diazinon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dibutyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dichlorobenzene, total isomers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dichlorvos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
diethyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
diflubenzuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dimethoate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dimethyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dioctyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dissolved organic carbon	3.64	3.13	4.14	1.02	0.68	1.36	5.56	4.76	7.35	6.64	5.49	9.59	7.13	5.82	10.63	53.97%
doramectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
EDTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fenchlorphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fenitrothion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
flucofuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fluoranthene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fluoride	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
formaldehyde	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
glyphosate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
hardness as $CaCO_3$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
hexabromocyclododecane (HBCDD)	0.00007	0.00005	0.00009	0.00004	0.00003	0.00006	0.00016	0.00011	0.00028	0.00023	0.00015	0.00049	0.00026	0.00017	0.0006	92.03%
ioxynil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
iron dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
iron total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
ivermectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
lead dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
lead total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
linuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
malachite green	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
malathion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mancozeb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
maneb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
manganese dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
manganese total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
MCPA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mecoprop	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mercury dissolved	0.0027	0.0011	0.0043	0.00324	0.00215	0.00432	0.00857	0.0052	0.02188	0.01603	0.00861	0.05508	0.0206	0.01073	0.07808	30.50%
mercury total	0.0043	0.00158	0.00702	0.0055	0.00366	0.00735	0.01409	0.00839	0.03742	0.02716	0.01427	0.09822	0.03532	0.01802	0.1414	39.89%
methiocarb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mevinphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
nickel dissolved	3.13	1.64	4.63	2.12	1.1	3.13	7.09	3.95	18.19	10.86	4.5	39.8	12.13	3.92	52.89	83.39%
nickel total	4.77	2.57	6.97	3.01	1.52	4.5	10.42	5.82	26.42	15.59	6.37	56.58	17.3	5.47	74.68	75.59%
nitrate	3.25	1.97	4.54	2.61	1.73	3.48	8.32	5.68	16.87	13.19	8.17	33.47	15.86	9.55	43.45	91.25%
nitrate	3.25	1.97	4.54	2.61	1.73	3.48	8.32	5.68	16.87	13.19	8.17	33.47	15.86	9.55	43.45	91.25%
nitrilotriacetic acid (NTA)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
nitrite	0.47	0.27	0.67	0.41	0.27	0.54	1.25	0.83	2.65	2.04	1.23	5.51	2.49	1.45	7.27	39.43%
nitrite	0.47	0.27	0.67	0.41	0.27	0.54	1.25	0.83	2.65	2.04	1.23	5.51	2.49	1.45	7.27	39.43%
nonylphenols (4-nonylphenol technical mix)	0.02	0.02	0.02	0.01	0.01	0.01	0.04	0.03	0.06	0.05	0.04	0.08	0.05	0.04	0.1	92.93%
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	0.00501	0.0044	0.00561	0.00123	0.00082	0.00164	0.0073	0.00637	0.00934	0.00854	0.00722	0.01179	0.00909	0.0076	0.01291	No Deterioration
omethoate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
organic nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
orthophosphate as PO_4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pendimethalin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
perfluorooctanoic acid (PFOA)	0.0043	0.00359	0.00501	0.00144	0.00096	0.00192	0.00704	0.00587	0.00981	0.0087	0.00695	0.01342	0.00946	0.00745	0.01516	21.27%
permethrin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
phenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pirimicarb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pirimiphos-methyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
polychloro chloromethyl sulphonamido diphenyl ethe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
prochloraz	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
propetamphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
propyzamide	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
salinity @ 20øC	0.3	0.25	0.35	0.1	0.07	0.13	0.49	0.41	0.68	0.61	0.49	0.94	0.66	0.52	1.06	18.75%
silver dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
silver total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
soluble reactive phosphorus	0.1	0.08	0.12	0.03	0.02	0.05	0.17	0.14	0.23	0.21	0.16	0.32	0.22	0.18	0.36	18.75%
sulcofuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
sulphate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
sulphide or hydrogen sulphide	11.01	9.19	12.83	3.68	2.45	4.92	18.02	15.03	25.09	22.26	17.79	34.35	24.22	19.06	38.79	No Deterioration
suspended solids @ 105øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tecnazene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tetrachloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
thiobendazole	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tin dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tin total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
total anions (sum of Br, Cl, F, NO_2, NO_3, PO_4, SO_4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
total organic carbon	3.98	3.32	4.64	1.33	0.88	1.78	6.52	5.44	9.07	8.05	6.43	12.42	8.76	6.89	14.03	71.76%
total oxidised nitrogen	1.41	1.18	1.64	0.47	0.31	0.63	2.31	1.93	3.22	2.85	2.28	4.4	3.1	2.44	4.97	89.98%
total phosphorus	0.43	0.36	0.51	0.15	0.1	0.19	0.71	0.59	0.99	0.88	0.7	1.36	0.96	0.75	1.53	21.71%
triallate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triazophos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tributyl phosphate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tributyltin compounds (as tributyltin cation)	0.00008	0.00007	0.00009	0.00003	0.00002	0.00004	0.00013	0.00011	0.00018	0.00016	0.00013	0.00025	0.00018	0.00014	0.00028	-154.55%
trichloroethylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triclosan	0.00622	0.00417	0.00826	0.00413	0.00275	0.00552	0.01433	0.01029	0.02636	0.02126	0.01406	0.04745	0.0249	0.01603	0.0594	77.22%
triphenyltin compounds (as tryphenyltin cation)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
vanadium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
vanadium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
zinc dissolved	9.91	7.42	12.39	4.36	2.68	6.04	18.08	13.63	30.4	24.22	17	48.04	26.12	17.54	56.14	79.81%
zinc total	33.28	25.03	41.53	14.43	8.85	20	60.29	45.59	100.81	80.44	56.67	158.4	86.67	58.43	184.75	43.89%

C.3 Modelling results, site 6

Site 6 Impact of input discharge quality using AA EQS (v1) (#VALUE!=No EQS)

Determinand	Model	Mean D/S River Quality / Bioavailable Quality: Face Value	lower	upper	Standard Deviation: Face Value	lower	upper	Mean U/S River Quality (Bioavailable only)	Hazardous Chemicals Tests: Modelling Test 1 (AA EQS): Risk to EQS	Modelling Test 2a (AA-EQS): Exceeds 80% of EQS	Modelling Test 2b (AA-EQS): Exceeds 80% of EQS	Outcome of modelling tests	% Deterioration	WFD Tests: Does the water body pass EQS at present?	Deterioration >10% (or >3% where the EQS is already being exceeded)?	WFD Class Deterioration?
1,1,1-trichloroethane	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
1,1,2-trichloroethane	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2,4-dichlorophenol	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2,4-dichlorophenoxyacetic acid (2,4-D)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2-chlorophenol	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
3,4-dichloroaniline	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
3-methylphenol (m-cresol)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
4-chloro-3-methyl phenol	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
4-methylphenol (p-cresol)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
abamectin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
acid neutralisation capacity (ANC, unfiltered)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
alkalinity as CaCO3	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammonia	Monte Carlo	0.00122	0.00091	0.00199	0.00044	0.0003	0.00058		Pass	Pass	Pass	Pass	-89.70%	Pass	No Deterioration	No Class deterioration
ammonia	Monte Carlo	0.00122	0.00091	0.00199	0.00044	0.0003	0.00058		Pass	Pass	Pass	Pass	-89.70%	Pass	No Deterioration	No Class deterioration
ammoniacal nitrogen	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
antimony dissolved	Monte Carlo	0.86	0.81	0.91	0.11	0.07	0.15		#VALUE!	#VALUE!	#VALUE!	#VALUE!	202.13%	Pass	Deterioration	No EQS defined
antimony total	Monte Carlo	0.88	0.82	0.93	0.12	0.08	0.16		#VALUE!	#VALUE!	#VALUE!	#VALUE!	133.78%	Pass	Deterioration	No EQS defined
arsenic dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
arsenic total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
azinphos methyl, dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
BDE-100	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-153	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-154	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-28	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-47	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-99	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bentazone	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
benzene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
benzo(a)pyrene	Monte Carlo	0.00278	0.00191	0.00364	0.00178	0.00119	0.00237		Fail	Fail	Pass	Fail	-85.93%	Fail	No Deterioration	Continues to exceed EQS
benzyl butyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
biphenyl	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
BOD (5 day)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
boron dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
boron total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
bromide	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bromine - total residual oxidant	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
bromoxynil	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
c (PFOS)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cadmium dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cadmium total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
calcium total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
carbendazim	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chemical oxygen demand (COD)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloride	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorine free	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorine total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chloroform	Monte Carlo	0.54	0.48	0.6	0.12	0.08	0.16		Pass	Pass	Pass	Pass	8.00%	Pass	No Deterioration	No Class deterioration
chloronitrotoluenes	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorophyll	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorothalonil	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorotoluron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorpropham	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chromium (VI) dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chromium dissolved	Monte Carlo	1.9	1.43	2.36	0.95	0.63	1.26		#VALUE!	#VALUE!	#VALUE!	#VALUE!	134.05%	Pass	Deterioration	No EQS defined
chromium total	Monte Carlo	2.93	1.64	4.22	2.5	1.62	3.37		#VALUE!	#VALUE!	#VALUE!	#VALUE!	56.48%	Pass	Deterioration	No EQS defined
cobalt dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cobalt total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
conductivity @ 20øC	Monte Carlo	741.52	710.15	772.89	63.61	42.3	84.91		#VALUE!	#VALUE!	#VALUE!	#VALUE!	12.80%	Pass	Deterioration	No EQS defined
copper dissolved	MPer	0.0057	0.003	0.0084	0.0053	0.0034	0.0071	.15	Pass	Pass	Pass	Pass	-96.16%	Fail	No Deterioration	No Class deterioration
copper total	MPer	0.0099	0.0061	0.0138	0.007	0.0044	0.0096	.24	Pass	Pass	Pass	Pass	-95.79%	Fail	No Deterioration	No Class deterioration
coumaphos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cyanide total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cyanide, free (easily liberable)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyfluthrin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cypermethrin	Monte Carlo	0.00017	0.00012	0.00023	0.00011	0.00007	0.00015		Fail	Fail	Fail	Fail	240.00%	Pass	Deterioration	Class deterioration
demeton	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
di(2-ethylhexyl)phthalate (DEHP)	Monte Carlo	0.11708	0.08059	0.15356	0.07399	0.04921	0.09878		Pass	Pass	Pass	Pass	56.11%	Pass	Deterioration	No Class deterioration
diazinon	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dibutyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dichlorobenzene, total isomers	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dichlorvos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
diethyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
diflubenzuron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dimethoate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dimethyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dioctyl phthalate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dissolved organic carbon	Monte Carlo	7.45	6.47	8.44	2	1.33	2.66		#VALUE!	#VALUE!	#VALUE!	#VALUE!	51.82%	Pass	Deterioration	No EQS defined
doramectin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
EDTA	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fenchlorphos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fenitrothion	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
flucofuron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
fluoranthene	Monte Carlo	0.00332	0.00254	0.00409	0.00159	0.00106	0.00212		Pass	Pass	Pass	Pass	-82.16%	Fail	No Deterioration	No Class deterioration
fluoride	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
formaldehyde	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
glyphosate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
hardness as CaCO3	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
hexabromocyclododecane (HBCDD)	Monte Carlo	0.00078	0.00055	0.00102	0.00048	0.00032	0.00064		Pass	Pass	Pass	Pass	538.60%	Pass	Deterioration	No Class deterioration
ioxynil	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
iron dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
iron total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
ivermectin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
lead dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
lead total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
linuron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
malachite green	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
malathion	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mancozeb	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
maneb	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
manganese dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
manganese total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
MCPA	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mecoprop	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mercury dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mercury total	Monte Carlo	0.0069	0.00277	0.01102	0.00838	0.00558	0.01119		Pass	Pass	Pass	Pass	7.93%	Pass	No Deterioration	No Class deterioration
methiocarb	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mevinphos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nickel dissolved	MPer	5.3669	1.3845	9.3493	7.3531	4.6479	10.0583	1.37	Fail	Fail	Pass	Fail	292.03%	Pass	Deterioration	Class deterioration
nickel total	MPer	5.648	1.5591	9.7368	7.5135	4.736	10.2911	1.98	Fail	Fail	Pass	Fail	184.86%	Pass	Deterioration	Class deterioration
nitrate	Monte Carlo	32.91	20.06	45.77	26.01	17.28	34.74		#VALUE!	#VALUE!	#VALUE!	#VALUE!	6746.06%	Pass	Deterioration	No EQS defined
nitrate	Monte Carlo	32.91	20.06	45.77	26.01	17.28	34.74		#VALUE!	#VALUE!	#VALUE!	#VALUE!	6746.06%	Pass	Deterioration	No EQS defined
nitrilotriacetic acid (NTA)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
nitrite	Monte Carlo	1.65	1.07	2.22	1.19	0.8	1.58		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-90.60%	Pass	No Deterioration	No EQS defined
nitrite	Monte Carlo	1.65	1.07	2.22	1.19	0.8	1.58		#VALUE!	#VALUE!	#VALUE!	#VALUE!	-90.60%	Pass	No Deterioration	No EQS defined
nonylphenols (4-nonylphenol technical mix)	Monte Carlo	0.24486	0.19475	0.29497	0.10141	0.06737	0.13545		Pass	Fail	Fail	Fail	908.25%	Pass	Deterioration	No Class deterioration
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	Monte Carlo	0.00532	0.00471	0.00593	0.00123	0.00081	0.00164		Pass	Pass	Pass	Pass	6.40%	Pass	No Deterioration	No Class deterioration
omethoate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
organic nitrogen	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
orthophosphate as PO4	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
pendimethalin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
perfluorooctanoic acid (PFOA)	Monte Carlo	0.00512	0.0043	0.00594	0.00166	0.0011	0.00221		#VALUE!	#VALUE!	#VALUE!	#VALUE!	216.33%	Pass	Deterioration	No EQS defined
permethrin	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pH	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
phenol	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pirimicarb	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pirimiphos-methyl	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
polychloro chloromethyl sulphonamido diphenyl ethe	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
prochloraz	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
propetamphos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
propyzamide	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
salinity @ 20øC	Monte Carlo	0.38	0.35	0.4	0.05	0.03	0.06		#VALUE!	#VALUE!	#VALUE!	#VALUE!	15.65%	Pass	Deterioration	No EQS defined
silver dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
silver total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
soluble reactive phosphorus	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
sulcofuron	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
sulphate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
sulphide or hydrogen sulphide	Monte Carlo	9.99	6.81	13.17	6.43	4.27	8.59		Fail	Fail	Fail	Fail	-22.70%	Fail	No Deterioration	Continues to exceed EQS
suspended solids @ 105øC	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tecnazene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tetrachloroethane	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
thiobendazole	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
toluene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
total organic carbon	Monte Carlo	12.94	5.34	20.54	15.41	10.25	20.58		#VALUE!	#VALUE!	#VALUE!	#VALUE!	111.64%	Pass	Deterioration	No EQS defined
total oxidised nitrogen	Monte Carlo	12.92	10.29	15.54	5.32	3.54	7.1		#VALUE!	#VALUE!	#VALUE!	#VALUE!	92.73%	Pass	Deterioration	No EQS defined
total phosphorus	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
triallate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
triazophos	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tributyl phosphate	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tributyltin compounds (as tributyltin cation)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
trichloroethylene	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
triclosan	Monte Carlo	0.02835	0.01926	0.03745	0.01841	0.01223	0.02459		Pass	Pass	Pass	Pass	467.00%	Pass	Deterioration	No Class deterioration
triphenyltin compounds (as triphenyltin cation)	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
vanadium dissolved	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
vanadium total	Screened-out	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
zinc dissolved	MPer	4.9414	3.546	6.3369	2.5222	1.578	3.4664	3.04	Pass	Pass	Pass	Pass	62.68%	Pass	Deterioration	No Class deterioration
zinc total	MPer	6.1751	4.4808	7.8693	3.0555	1.909	4.2021	6.51	Pass	Pass	Pass	Pass	-5.13%	Fail	No Deterioration	No Class deterioration

Site 6 Impact of input discharge quality using MAC EQS (v1) (#VALUE!=No EQS)

Determinand	95-percentile River Quality: Face Value	lower	upper	Standard Deviation: Face Value	lower	upper	95-percentile U/S River Quality (Bioavailable only)	Hazardous Chemicals Tests: Modelling Test 1 (MAC EQS): Risk to EQS	Modelling Test 2a (MAC EQS): Exceeds 80% of EQS	Modelling Test 2a (MAC EQS): Exceeds 80% of EQS	Outcome of modelling tests	WFD Tests: % Deterioration	Does the water body pass EQS at present?	Deterioration >10%?	WFD Class Deterioration?
1,1,1-trichloroethane	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
1,1,2-trichloroethane	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
2,4-dichlorophenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2,4-dichlorophenoxyacetic acid (2,4-D)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
2-chlorophenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
3,4-dichloroaniline	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
3-methylphenol (m-cresol)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
4-chloro-3-methyl phenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
4-methylphenol (p-cresol)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
abamectin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
acid neutralisation capacity (ANC, unfiltered)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
alkalinity as CaCO3	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
aluminium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammonia	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammonia	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ammoniacal nitrogen	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
antimony dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
antimony total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
arsenic dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
arsenic total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
azinphos methyl, dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-100	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-153	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-154	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-28	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-47	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BDE-99	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bentazone	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
benzene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
benzo(a)pyrene	0.00579	0.00408	0.01072	0.00178	0.00119	0.00237		Pass	Pass	Pass	Pass	-91.03%	Pass	No Deterioration	No Class deterioration
benzyl butyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
biphenyl	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
BOD (5 day)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
boron dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
boron total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bromide	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
bromine - total residual oxidant	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
bromoxynil	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
c (PFOS)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cadmium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cadmium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
calcium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
carbendazim	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chemical oxygen demand (COD)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloride	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorine free	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorine total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloroform	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chloronitrotoluenes	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorophyll	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chlorothalonil	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorotoluron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chlorpropham	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
chromium (VI) dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chromium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
chromium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cobalt dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
cobalt total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
conductivity @ 20øC	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
copper dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
copper total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
coumaphos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyanide total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyanide, free (easily liberable)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cyfluthrin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
cypermethrin	0.00038	0.00027	0.0007	0.00011	0.00007	0.00015		Pass (face value)	Pass	Fail	Fail	255.14%	Pass	Deterioration	No Class deterioration
demeton	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
di(2-ethylhexyl)phthalate (DEHP)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
diazinon	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dibutyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dichlorobenzene, total isomers	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dichlorvos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
diethyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
diflubenzuron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dimethoate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dimethyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dioctyl phthalate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
dissolved organic carbon	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
doramectin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
EDTA	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fenchlorphos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
fenitrothion	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
flucofuron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
fluoranthene	0.00614	0.00472	0.00982	0.00159	0.00106	0.00212		Pass	Pass	Pass	Pass	-88.44%	Pass	No Deterioration	No Class deterioration
fluoride	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
formaldehyde	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
glyphosate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
hardness as CaCO3	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
hexabromocyclododecane (HBCDD)	0.0017	0.00124	0.00302	0.00048	0.00032	0.00064		#REF!	#REF!	Pass	#REF!	571.94%	Pass	Deterioration	#REF!
ioxynil	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
iron dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
iron total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
ivermectin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
lead dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
lead total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
linuron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
malachite green	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
malathion	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
mancozeb	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
maneb	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
manganese dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
manganese total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
MCPA	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mecoprop	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mercury dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
mercury total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
methiocarb	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
mevinphos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
nickel dissolved	17.5919	9.4687	53.6841	7.3531	4.6479	10.0583	3.9703	#REF!	#REF!	Pass	#REF!	343.09%	Pass	Deterioration	#REF!
nickel total	18.141	9.759	54.8404	7.5135	4.736	10.2911	5.5442	#REF!	#REF!	Pass	#REF!	227.21%	Pass	Deterioration	#REF!
nitrate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nitrate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nitrilotriacetic acid (NTA)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
nitrite	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nitrite	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
nonylphenols (4-nonylphenol technical mix)	0.4352	0.34778	0.6542	0.10141	0.06737	0.13545		Pass	Pass	Pass	Pass	988.00%	Pass	Deterioration	No Class deterioration
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
omethoate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
organic nitrogen	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
orthophosphate as PO4	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
pendimethalin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
perfluorooctanoic acid (PFOA)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
permethrin	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pH	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
phenol	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pirimicarb	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
pirimiphos-methyl	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
polychloro chloromethyl sulphonamido diphenyl ethe	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
prochloraz	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
propetamphos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
propyzamide	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
salinity @ 20øC	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
silver dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
silver total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
soluble reactive phosphorus	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
sulcofuron	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
sulphate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
sulphide or hydrogen sulphide	22.21	15.97	40.53	6.43	4.27	8.59		Fail	Fail	Fail	Fail	-15.23%	Fail	No Deterioration	Continues to exceed EQS
suspended solids @ 105øC	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tecnazene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tetrachloroethane	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
thiobendazole	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tin total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
toluene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
total organic carbon	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
total oxidised nitrogen	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
total phosphorus	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
triallate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
triazophos	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
tributyl phosphate	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
tributyltin compounds (as tributyltin cation)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
trichloroethylene	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
triclosan	0.06308	0.04516	0.11579	0.01841	0.01223	0.02459		Pass	Pass	Pass	Pass	1161.60%	Pass	Deterioration	No Class deterioration
triphenyltin compounds (as triphenyltin cation)	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
vanadium dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
vanadium total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
zinc dissolved	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined
zinc total	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	No EQS defined

Site 6 Target quality required discharge (v1)

Determinand	Mean: Face Value	lower	upper	Standard Deviation: Face Value	lower	upper	95-percentile: Face Value	lower	upper	99-percentile: Face Value	lower	upper	99.5-percentile: Face Value	lower	upper	WW treatment % reduction required to meet AA EQS
1,1,1-trichloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
1,1,2-trichloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2,4-dichlorophenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2,4-dichlorophenoxyacetic acid (2,4-D)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2-chlorophenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
3,4-dichloroaniline	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
3-methylphenol (m-cresol)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
4-chloro-3-methyl phenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
4-methylphenol (p-cresol)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
abamectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
acid neutralisation capacity (ANC, unfiltered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
alkalinity as CaCO3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
aluminium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
aluminium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
ammonia	0.15696	0.08059	0.23334	0.1545	0.10263	0.20638	0.43628	0.27551	1.00998	0.75069	0.42244	2.26312	0.97962	0.55505	3.119	None
ammonia	0.15696	0.08059	0.23334	0.1545	0.10263	0.20638	0.43628	0.27551	1.00998	0.75069	0.42244	2.26312	0.97962	0.55505	3.119	None
ammoniacal nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
antimony dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
antimony total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
arsenic dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
arsenic total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
azinphos methyl, dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
BDE-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
bentazone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
benzo(a)pyrene	Failed to meet target															Failed to meet target
benzyl butyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
biphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BOD (5 day)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
boron dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
boron total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromide	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
bromine - total residual oxidant	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromoxynil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
c (PFOS)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cadmium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cadmium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
calcium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
carbendazim	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chemical oxygen demand (COD)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chloride	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorine free	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chlorine total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chloroform	2.63	2.32	2.95	0.64	0.42	0.85	3.78	3.31	4.83	4.42	3.74	6.08	4.77	4	6.71	None
chloronitrotoluenes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorophyll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chlorothalonil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorotoluron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorpropham	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chromium (VI) dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chromium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
chromium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cobalt dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cobalt total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
conductivity @ 20øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
copper dissolved	29.56	17.43	41.69	22.17	13.93	30.41	70.7	45.63	153.02	112.32	64.22	311.21	128.19	67.38	400.53	None
copper total	29.43	19.83	39.04	16.35	9.83	22.87	60.21	41.22	116.5	86.24	52.51	208.42	95.57	54.1	256.31	None
coumaphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyanide total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyanide, free (easily liberable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cyfluthrin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
cypermethrin	0.00008	0.00006	0.00011	0.00005	0.00004	0.00007	0.00019	0.00013	0.00035	0.00028	0.00018	0.00062	0.00034	0.00022	0.00079	58%
demeton	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
di(2-ethylhexyl)phthalate (DEHP)	1.38519	0.93029	1.84009	0.92025	0.61128	1.22923	3.12358	2.22288	5.8006	4.63797	3.03482	10.46489	5.63021	3.65762	13.30474	None
diazinon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dibutyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dichlorobenzene, total isomers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dichlorvos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
diethyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
diflubenzuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dimethoate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dimethyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dioctyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dissolved organic carbon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
doramectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
EDTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fenchlorphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fenitrothion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
flucofuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
fluoranthene	0.00566	0.0045	0.00683	0.00236	0.00156	0.00315	0.01008	0.00805	0.01518	0.01308	0.00989	0.02238	0.01485	0.01112	0.02632	None
fluoride	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
formaldehyde	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
glyphosate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
hardness as CaCO3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
hexabromocyclododecane (HBCDD)	0.0017	0.00118	0.00223	0.00106	0.00071	0.00142	0.00372	0.00269	0.00669	0.00541	0.00362	0.01172	0.0065	0.00431	0.01473	None
ioxynil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
iron dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
iron total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
ivermectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
lead dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
lead total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
linuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
malachite green	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
malathion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mancozeb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
maneb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
manganese dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
manganese total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
MCPA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mecoprop	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mercury dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mercury total	0.07471	0.02725	0.12218	0.09602	0.06378	0.12826	0.23617	0.13679	0.64392	0.45617	0.23108	1.70001	0.63	0.32766	2.48799	None
methiocarb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mevinphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nickel dissolved	7.87	3.02	12.72	8.24	4.94	11.53	22.27	12.08	63.4	40.42	17.62	163.81	47.92	17.42	231.1	58%
nickel total	7.81	3.11	12.51	7.88	4.68	11.07	21.71	11.82	61.13	38.79	16.87	155.47	45.79	16.57	218.13	60%
nitrate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nitrate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nitrilotriacetic acid (NTA)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
nitrite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nitrite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
nonylphenols (4-nonylphenol technical mix)	0.31889	0.25212	0.38567	0.13508	0.08973	0.18044	0.57241	0.4552	0.86819	0.74573	0.56147	1.28802	0.84904	0.6323	1.51913	None
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	0.10636	0.09344	0.11927	0.02613	0.01735	0.0349	0.15365	0.13403	0.19694	0.17982	0.15199	0.24881	0.19424	0.1627	0.27517	None
omethoate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
organic nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
orthophosphate as PO4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
pendimethalin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
perfluorooctanoic acid (PFOA)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
permethrin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
phenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pirimicarb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pirimiphos-methyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
polychloro chloromethyl sulphonamido diphenyl ethe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
prochloraz	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
propetamphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
propyzamide	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
salinity @ 20øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
silver dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
silver total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
soluble reactive phosphorus	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
sulcofuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
sulphate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
sulphide or hydrogen sulphide	ed to meet target															Failed to meet target
suspended solids @ 105øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
tecnazene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tetrachloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
thiobendazole	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
tin dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
tin total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
total organic carbon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
total oxidised nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
total phosphorus	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triallate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triazophos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tributyl phosphate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tributyltin compounds (as tributyltin cation)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
trichloroethylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triclosan	0.11	0.07	0.14165	0.07084	0.04705	0.09462	0.24045	0.17111	0.44652	0.35702	0.23361	0.80557	0.4334	0.28155	1.02418	None
triphenyltin compounds (as triphenyltin cation)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No EQS
vanadium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
vanadium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
zinc dissolved	34.94	25.47	44.42	16.96	10.55	23.37	66.81	49.49	116.19	91.88	63.2	190.13	100.64	66.25	225.77	None
zinc total	34.44	25.23	43.65	16.39	10.16	22.62	65.23	48.47	112.74	89.21	61.56	183.22	97.55	64.46	217.05	None

Site 6 Required discharge quality to meet no deterioration (v1)

Determinand	Mean: Face Value	lower	upper	Standard Deviation: Face Value	lower	upper	95-percentile: Face Value	lower	upper	99-percentile: Face Value	lower	upper	99.5-percentile: Face Value	lower	upper	WW treatment % reduction required to prevent deterioration (Mean)
1,1,1-trichloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
1,1,2-trichloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2,4-dichlorophenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2,4-dichlorophenoxyacetic acid (2,4-D)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
2-chlorophenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
3,4-dichloroaniline	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
3-methylphenol (m-cresol)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
4-chloro-3-methyl phenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
4-methylphenol (p-cresol)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
abamectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
acid neutralisation capacity (ANC, unfiltered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
alkalinity as CaCO3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
aluminium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
aluminium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
ammonia	0.00585	0.003	0.00869	0.00576	0.00382	0.00769	0.01625	0.01026	0.03762	0.02796	0.01574	0.0843	0.03649	0.02067	0.11618	No Deterioration
ammonia	0.00585	0.003	0.00869	0.00576	0.00382	0.00769	0.01625	0.01026	0.03762	0.02796	0.01574	0.0843	0.03649	0.02067	0.11618	No Deterioration
ammoniacal nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
antimony dissolved	0.28	0.26	0.3	0.04	0.02	0.05	0.35	0.32	0.4	0.38	0.34	0.45	0.39	0.36	0.48	70%
antimony total	0.38	0.35	0.41	0.05	0.04	0.07	0.48	0.44	0.55	0.52	0.47	0.63	0.55	0.49	0.67	60%
arsenic dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
arsenic total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
azinphos methyl, dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BDE-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bentazone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
benzo(a)pyrene	0.02004	0.0149	0.02518	0.0104	0.00691	0.01389	0.03971	0.03016	0.06549	0.05459	0.03879	0.10532	0.06382	0.04488	0.12817	No Deterioration
benzyl butyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
biphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BOD (5 day)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
boron dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
boron total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromide	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromine - total residual oxidant	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
bromoxynil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
c (PFOS)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cadmium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cadmium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
calcium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
carbendazim	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chemical oxygen demand (COD)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chloride	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorine free	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorine total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chloroform	0.5	0.44	0.56	0.12	0.08	0.16	0.72	0.63	0.92	0.84	0.71	1.16	0.91	0.76	1.28	No Deterioration
chloronitrotoluenes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorophyll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorothalonil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorotoluron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chlorpropham	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chromium (VI) dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
chromium dissolved	0.82	0.61	1.03	0.42	0.28	0.56	1.62	1.23	2.66	2.22	1.58	4.26	2.59	1.82	5.18	61%
chromium total	1.89	1.02	2.76	1.68	1.09	2.27	4.99	3.21	11.42	8.23	4.74	24.51	10.53	6.08	33.19	41%
cobalt dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cobalt total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
conductivity @ 20øC	657.92	628.22	687.62	60.08	39.91	80.25	760.73	722.62	835.23	807.07	757.84	911.58	830.82	776.89	947.77	10%
copper dissolved	4.27	2.51	6.04	3.21	2.01	4.4	10.22	6.58	22.22	16.24	9.23	45.28	18.53	9.67	58.34	No Deterioration
copper total	6.77	4.55	9	3.76	2.25	5.27	13.85	9.45	26.95	19.84	12	48.35	21.99	12.34	59.54	No Deterioration
coumaphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyanide total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyanide, free (easily liberable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cyfluthrin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
cypermethrin	0.00005	0.00003	0.00007	0.00003	0.00002	0.00004	0.00011	0.00008	0.00021	0.00017	0.00011	0.00038	0.0002	0.00013	0.00048	74%
demeton	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
di(2-ethylhexyl)phthalate (DEHP)	0.08034	0.05396	0.10673	0.05338	0.03546	0.0713	0.18117	0.12893	0.33645	0.26901	0.17602	0.60699	0.32656	0.21215	0.7717	32%
diazinon	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dibutyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dichlorobenzene, total isomers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dichlorvos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
diethyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
diflubenzuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dimethoate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dimethyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dioctyl phthalate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
dissolved organic carbon	4.94	4.25	5.62	1.38	0.92	1.85	7.47	6.39	9.9	8.93	7.37	12.92	9.75	7.97	14.48	38%
doramectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
EDTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fenchlorphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fenitrothion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
flucofuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
fluoranthene	0.0188	0.01494	0.02267	0.00782	0.00519	0.01044	0.03346	0.02671	0.0504	0.0434	0.03283	0.07427	0.0493	0.03689	0.08736	No Deterioration
fluoride	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
formaldehyde	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
glyphosate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
hardness as CaCO3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
hexabromocyclododecane (HBCDD)	0.00012	0.00008	0.00016	0.00008	0.00005	0.0001	0.00026	0.00019	0.00048	0.00038	0.00026	0.00083	0.00046	0.00031	0.00105	86%
ioxynil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
iron dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
iron total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
ivermectin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
lead dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
lead total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
linuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
malachite green	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
malathion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mancozeb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
maneb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
manganese dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
manganese total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
MCPA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mecoprop	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mercury dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mercury total	0.00648	0.00236	0.0106	0.00833	0.00554	0.01113	0.0205	0.01187	0.05589	0.03959	0.02006	0.14754	0.05468	0.02844	0.21593	No Deterioration
methiocarb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
mevinphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
nickel dissolved	2.61	0.98	4.23	2.73	1.63	3.83	7.38	3.98	21.2	13.4	5.74	55.08	15.88	5.64	77.88	86%
nickel total	3.48	1.48	6.07	3.81	2.25	5.37	10.5	5.68	29.78	18.76	8.05	76.08	22.14	7.85	N/A	82%
nitrate	0.49	0.29	0.68	0.39	0.26	0.52	1.21	0.82	2.49	1.92	1.17	4.95	2.41	1.47	6.53	99%
nitrate	0.49	0.29	0.68	0.39	0.26	0.52	1.21	0.82	2.49	1.92	1.17	4.95	2.41	1.47	6.53	99%
nitrilotriacetic acid (NTA)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
nitrite	17.82	10.16	25.48	15.49	10.29	20.69	46.42	30.49	99.89	76	44.93	208.18	96.78	57.27	279.34	No Deterioration
nitrite	17.82	10.16	25.48	15.49	10.29	20.69	46.42	30.49	99.89	76	44.93	208.18	96.78	57.27	279.34	No Deterioration
nonylphenols (4-nonylphenol technical mix)	0.02443	0.01932	0.02955	0.01035	0.00687	0.01383	0.04386	0.03488	0.06652	0.05714	0.04302	0.09869	0.06505	0.04845	0.11639	91%
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	0.00501	0.0044	0.00562	0.00123	0.00082	0.00164	0.00724	0.00631	0.00927	0.00847	0.00716	0.01172	0.00915	0.00766	0.01296	No Deterioration
omethoate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
organic nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
orthophosphate as PO4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pendimethalin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
perfluorooctanoic acid (PFOA)	0.00163	0.00136	0.0019	0.00054	0.00036	0.00073	0.00264	0.0022	0.00368	0.00326	0.0026	0.00505	0.00362	0.00285	0.00577	70%
permethrin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
phenol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pirimicarb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
pirimiphos-methyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
polychloro chloromethyl sulphonamido diphenyl ethe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
prochloraz	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
propetamphos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
propyzamide	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
salinity @ 20øC	0.33	0.31	0.35	0.04	0.03	0.06	0.41	0.38	0.47	0.44	0.4	0.53	0.46	0.42	0.56	11%
silver dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
silver total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
soluble reactive phosphorus	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
sulcofuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
sulphate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
sulphide or hydrogen sulphide	13.01	8.55	17.48	9.03	6	12.06	30.04	21.11	57.06	45.27	29.16	105.25	55.36	35.43	134.94	No Deterioration
suspended solids @ 105øC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tecnazene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tetrachloroethane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
thiobendazole	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tin dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tin total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
total organic carbon	6.17	2.41	9.94	7.62	5.06	10.18	19.16	11.25	50.96	36.35	18.7	131.17	49.76	26.19	190.21	56%
total oxidised nitrogen	6.76	5.33	8.19	2.89	1.92	3.86	12.18	9.67	18.54	15.9	11.95	27.59	18.13	13.47	32.59	52%
total phosphorus	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triallate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triazophos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tributyl phosphate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
tributyltin compounds (as tributyltin cation)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
trichloroethylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
triclosan	0.00502	0.00337	0.00667	0.00334	0.00222	0.00446	0.01132	0.00806	0.02103	0.01681	0.011	0.03794	0.02041	0.01326	0.04823	82%
triphenyltin compounds (as triphenyltin cation)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
vanadium dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
vanadium total	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	#REF!
zinc dissolved	9.43	6.86	12	4.57	2.82	6.31	18.02	13.32	31.45	24.79	16.99	51.55	27.15	17.8	61.28	81%
zinc total	20.19	14.78	25.6	9.61	5.95	13.27	38.24	28.37	66.21	52.29	36.01	107.71	57.18	37.69	127.65	No Deterioration

C.4 Combined water quality impact results for all sites

This table summarises the water quality impact (screening, hazardous chemicals tests and WFD tests) for all determinands and all sites. Note the final column indicates whether the substance may require improved discharge quality. This is set to yes where any one of the modelling tests has been failed, at any of sites 3, 5 and 6.

Determinand	Site 3, Atherstone							Site 5, Daventry							Site 6, Leighton Buzzard							May require improved discharge quality?
		Modelling results, AA EQS			Modelling results, MAC EQS				Modelling results, AA EQS			Modelling results, MAC EQS				Modelling results, AA EQS			Modelling results, MAC EQS			
	Screening outcome	Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?	Screening outcome	Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?	Screening outcome	Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?	
Key	Potentially significant	Fail	Deterioration	Deterioration	Fail	Deterioration	Deterioration	Potentially significant	Fail	Fail	Deterioration	Fail	Fail	Deterioration	Potentially significant	Fail	Deterioration	Deterioration	Fail	Deterioration	Deterioration	
	Not significant	Pass	No Deterioration	Continues to exceed EQS	Pass	No Deterioration	Continues to exceed EQS	Not significant	Pass	Pass	Continues to exceed EQS	Pass	Pass	Continues to exceed EQS	Not significant	Pass	No deterioration	Continues to exceed EQS	Pass	No deterioration	Continues to exceed EQS	
	No EQS	No EQS		No Class deterioration	No EQS		No Class deterioration	No EQS / not sampled	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	Not sampled	No Class deterioration	
				No EQS			No EQS		Screened out	Screened out	No EQS / not sampled	Screened out	Screened out	No EQS / not sampled		Screened out	Screened out	No EQS / not sampled	Screened out	Screened out	No EQS / not sampled	
											Screened out			Screened out				Screened out			Screened out	
1,1,1-trichloroethane	🟩	🟩	🟩	🟩	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
1,1,2-trichloroethane	🟩	🟩	🟩	🟩	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
2,4-dichlorophenol	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
2,4-dichlorophenoxyacetic acid (2,4-D)	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
2-chlorophenol	🟩	🟩	🟩	🟩	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
3,4-dichloroaniline	🟥	🟥	🟩	🟨	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
3-methylphenol (m-cresol)	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
4-chloro-3-methyl phenol	🟩	🟩	🟩	🟩	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
4-methylphenol (p-cresol)	▒	▒	🟥	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
abamectin	🟥	🟥	🟩	🟨	🟥	🟩	🟨	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
acid neutralisation capacity (ANC, unfiltered)	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
alkalinity as CaCO3	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
aluminium dissolved	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
aluminium total	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
ammoniacal nitrogen	▒	▒	🟥	▒	🟥	🟥	🟨	▒	🟥	🟥	🟥	🟥	🟩	🟨	▒	▒	▒	▒	▒	▒	▒	Yes
antimony dissolved	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	Yes
antimony total	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	Yes
arsenic dissolved	🟩	🟩	🟩	🟩	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
arsenic total	🟩	🟩	🟩	🟩	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
azinphos methyl, dissolved	🟥	🟥	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
BDE-100	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
BDE-153	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
BDE-154	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
BDE-28	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
BDE-47	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
BDE-99	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
bentazone	🟩	🟩	🟩	🟩	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
benzene	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
benzo(a)pyrene	🟥	🟥	🟩	🟨	🟩	🟩	🟩	🟥	🟥	🟩	🟨	🟩	🟩	🟩	🟥	🟥	🟩	🟨	🟩	🟩	🟩	Yes
benzyl butyl phthalate	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
biphenyl	🟩	🟩	🟩	🟩	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
BOD (5 day)	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
boron dissolved	🟩	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
boron total	🟩	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
bromide	▒	▒	🟥	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes

Determinand	Site 3, Atherstone							Site 5, Daventry							Site 6, Leighton Buzzard							May require improved discharge quality?
	Screening outcome	Modelling results, AA EQS			Modelling results, MAC EQS			Screening outcome	Modelling results, AA EQS			Modelling results, MAC EQS			Screening outcome	Modelling results, AA EQS			Modelling results, MAC EQS			
		Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?		Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?		Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?	
Key	Potentially significant	Fail	Deterioration	Deterioration	Fail	Deterioration	Deterioration	Potentially significant	Fail	Fail	Deterioration	Fail	Fail	Deterioration	Potentially significant	Fail	Deterioration	Deterioration	Fail	Deterioration	Deterioration	
	Not significant	Pass	No Deterioration	Continues to exceed EQS	Pass	No Deterioration	Continues to exceed EQS	Not significant	Pass	Pass	Continues to exceed EQS	Pass	Pass	Continues to exceed EQS	Not significant	Pass	No deterioration	Continues to exceed EQS	Pass	No deterioration	Continues to exceed EQS	
	No EQS	No EQS		No Class deterioration	No EQS		No Class deterioration	No EQS / not sampled	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	Not sampled	No Class deterioration	
				No EQS			No EQS		Screened out	Screened out	No EQS / not sampled	Screened out	Screened out	No EQS / not sampled		Screened out	Screened out	No EQS / not sampled	Screened out	Screened out	No EQS / not sampled	
											Screened out			Screened out				Screened out			Screened out	
bromine - total residual oxidant																						Yes
bromoxynil																						No
BTEX (benzene, toluene, ethylbenzene & o,p-xylene																						Yes
c (PFOS)																						Yes
cadmium dissolved																						Yes
cadmium total																						Yes
calcium total																						No
carbendazim																						No
chemical oxygen demand (COD)																						Yes
chloride																						Yes
chlorine free																						No
chlorine total																						No
chloroform																						No
chloronitrotoluenes																						No
chlorophyll																						No
chlorothalonil																						No
chlorotoluron																						No
chlorpropham																						No
chromium (VI) dissolved																						Yes
chromium dissolved																						Yes
chromium total																						Yes
cobalt dissolved																						No
cobalt total																						No
conductivity @ 20øC																						Yes
copper dissolved																						Yes
copper total																						Yes
coumaphos																						No
cyanide total																						Yes
cyanide, free (easily liberable)																						No
cyfluthrin																						Yes
cypermethrin																						Yes
demeton																						No
di(2-ethylhexyl)phthalate (DEHP)																						Yes
diazinon																						No
dibutyl phthalate																						Yes

Determinand	Site 3, Atherstone							Site 5, Daventry							Site 6, Leighton Buzzard							May require improved discharge quality?
	Screening outcome	Modelling results, AA EQS			Modelling results, MAC EQS			Screening outcome	Modelling results, AA EQS			Modelling results, MAC EQS			Screening outcome	Modelling results, AA EQS			Modelling results, MAC EQS			
		Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?		Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?		Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?	
Key	Potentially significant	Fail	Deterioration	Deterioration	Fail	Deterioration	Deterioration	Potentially significant	Fail	Fail	Deterioration	Fail	Fail	Deterioration	Potentially significant	Fail	Deterioration	Deterioration	Fail	Deterioration	Deterioration	
	Not significant	Pass	No Deterioration	Continues to exceed EQS	Pass	No Deterioration	Continues to exceed EQS	Not significant	Pass	Pass	Continues to exceed EQS	Pass	Pass	Continues to exceed EQS	Not significant	Pass	No deterioration	Continues to exceed EQS	Pass	No deterioration	Continues to exceed EQS	
	No EQS	No EQS		No Class deterioration	No EQS		No Class deterioration	No EQS / not sampled	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	Not sampled	No Class deterioration	
				No EQS			No EQS		Screened out	Screened out	No EQS / not sampled	Screened out	Screened out	No EQS / not sampled		Screened out	Screened out	No EQS / not sampled	Screened out	Screened out	No EQS / not sampled	
											Screened out			Screened out				Screened out			Screened out	
dichlorobenzene, total isomers																						No
dichlorvos																						Yes
diethyl phthalate																						No
diflubenzuron																						No
dimethoate																						No
dimethyl phthalate																						No
dioctyl phthalate																						No
dissolved organic carbon																						Yes
doramectin																						Yes
EDTA																						Yes
fenchlorphos																						No
fenitrothion																						No
flucofuron																						No
fluoranthene																						No
fluoride																						Yes
formaldehyde																						Yes
glyphosate																						Yes
hardness as CaCO3																						No
hexabromocyclododecane (HBCDD)																						Yes
ioxynil																						No
iron dissolved																						Yes
iron total																						No
ivermectin																						Yes
lead dissolved																						No
lead total																						No
linuron																						Yes
malachite green																						Yes
malathion																						Yes
mancozeb																						Yes
maneb																						Yes
manganese dissolved																						Yes
manganese total																						Yes
MCPA																						No
mecoprop																						Yes
mercury dissolved																						Yes
mercury total																						Yes

Determinand	Site 3, Atherstone							Site 5, Daventry							Site 6, Leighton Buzzard							May require improved discharge quality?
		Modelling results, AA EQS			Modelling results, MAC EQS				Modelling results, AA EQS			Modelling results, MAC EQS				Modelling results, AA EQS			Modelling results, MAC EQS			
	Screening outcome	Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?	Screening outcome	Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?	Screening outcome	Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?	
Key	🟥 Potentially significant	🟥 Fail	🟥 Deterioration	🟥 Deterioration	🟥 Fail	🟥 Deterioration	🟥 Deterioration	🟥 Potentially significant	🟥 Fail	🟥 Fail	🟥 Deterioration	🟥 Fail	🟥 Fail	🟥 Deterioration	🟥 Potentially significant	🟥 Fail	🟥 Deterioration	🟥 Deterioration	🟥 Fail	🟥 Deterioration	🟥 Deterioration	
	🟩 Not significant	🟩 Pass	🟩 No Deterioration	🟨 Continues to exceed EQS	🟩 Pass	🟩 No Deterioration	🟨 Continues to exceed EQS	🟩 Not significant	🟩 Pass	🟩 Pass	🟨 Continues to exceed EQS	🟩 Pass	🟩 Pass	🟨 Continues to exceed EQS	🟩 Not significant	🟩 Pass	🟩 No deterioration	🟨 Continues to exceed EQS	🟩 Pass	🟩 No deterioration	🟨 Continues to exceed EQS	
	▒ No EQS	▒ No EQS		🟩 No Class deterioration	▒ No EQS		🟩 No Class deterioration	▒ No EQS / not sampled	▒ No EQS / not sampled	▒ Not sampled	🟩 No Class deterioration	▒ No EQS / not sampled	▒ Not sampled	🟩 No Class deterioration	▒ No EQS / not sampled	▒ No EQS / not sampled	▒ Not sampled	🟩 No Class deterioration	▒ No EQS / not sampled	▒ Not sampled	🟩 No Class deterioration	
				▒ No EQS			▒ No EQS		⬛ Screened out	⬛ Screened out	▒ No EQS / not sampled	⬛ Screened out	⬛ Screened out	▒ No EQS / not sampled		⬛ Screened out	⬛ Screened out	▒ No EQS / not sampled	⬛ Screened out	⬛ Screened out	▒ No EQS / not sampled	
											⬛ Screened out			⬛ Screened out				⬛ Screened out			⬛ Screened out	
methiocarb	🟥	🟥	🟩	🟨	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
mevinphos	▒	▒	🟩	▒	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
nickel dissolved	🟥	🟥	🟩	🟨	🟩	🟩	🟩	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	▒	🟥	▒	Yes
nickel total	🟥	🟥	🟩	🟨	🟥	🟩	🟩	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	🟥	▒	🟥	▒	Yes
nitrate	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	Yes
nitrate	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	Yes
nitrilotriacetic acid (NTA)	🟩	🟩	🟩	🟩	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
nitrite	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟩	▒	▒	▒	▒	Yes
nitrite	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟩	▒	▒	▒	▒	Yes
nonylphenols (4-nonylphenol technical mix)	🟥	🟥	🟥	🟩	🟩	🟥	🟩	🟥	🟥	🟥	🟩	🟩	🟥	🟩	🟥	🟥	🟥	🟩	🟩	🟥	🟩	Yes
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	🟩	🟩	🟩	🟩	▒	▒	▒	🟩	🟩	🟩	🟩	⬛	⬛	⬛	🟩	🟩	🟩	🟩	⬛	⬛	⬛	No
omethoate	🟩	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
organic nitrogen	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
orthophosphate as PO4	▒	▒	🟥	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
pendimethalin	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
perfluorooctanoic acid (PFOA)	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	Yes
permethrin	🟥	🟥	🟥	🟥	🟥	🟥	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
pH	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
phenol	🟩	🟩	🟩	🟩	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
pirimicarb	🟩	🟩	🟩	🟩	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
pirimiphos-methyl	🟩	🟩	🟩	🟩	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
polychloro chloromethyl sulphonamido diphenyl ethe	🟥	🟥	🟥	🟨	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
prochloraz	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
propetamphos	🟩	🟩	🟩	🟩	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
propyzamide	🟩	🟩	🟥	🟩	🟩	🟥	🟩	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	Yes
salinity @ 20øC	▒	▒	🟩	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	▒	▒	🟥	▒	▒	▒	▒	Yes
silver dissolved	🟥	🟥	🟩	🟨	🟥	🟩	🟨	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
silver total	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
soluble reactive phosphorus	▒	▒	🟥	▒	▒	▒	▒	▒	🟥	🟥	🟨	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	Yes
sulcofuron	▒	▒	🟩	▒	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
sulphate	🟩	🟩	🟩	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
sulphide or hydrogen sulphide	🟥	🟥	🟩	🟨	🟥	🟩	🟨	🟥	🟥	🟩	🟨	🟥	🟩	🟨	🟥	🟥	🟩	🟨	🟥	🟩	🟨	Yes
suspended solids @ 105øC	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No
tecnazene	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	No
tetrachloroethane	🟩	🟩	🟥	🟩	🟩	🟥	🟩	🟩	⬛	⬛	⬛	⬛	⬛	⬛	🟩	⬛	⬛	⬛	⬛	⬛	⬛	Yes
thiobendazole	▒	▒	🟩	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	No

Determinand	Site 3, Atherstone							Site 5, Daventry							Site 6, Leighton Buzzard							May require improved discharge quality?
	Screening outcome	Modelling results, AA EQS			Modelling results, MAC EQS			Screening outcome	Modelling results, AA EQS			Modelling results, MAC EQS			Screening outcome	Modelling results, AA EQS			Modelling results, MAC EQS			
		Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?		Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?		Outcome of hazardous chemicals modelling tests	Deterioration >10% (or >3% where the EQS already exceeded)?	WFD Class Deterioration?	Outcome of hazardous chemicals modelling tests	Deterioration >10%?	WFD Class Deterioration?	
Key	Potentially significant	Fail	Deterioration	Deterioration	Fail	Deterioration	Deterioration	Potentially significant	Fail	Fail	Deterioration	Fail	Fail	Deterioration	Potentially significant	Fail	Deterioration	Deterioration	Fail	Deterioration	Deterioration	
	Not significant	Pass	No Deterioration	Continues to exceed EQS	Pass	No Deterioration	Continues to exceed EQS	Not significant	Pass	Pass	Continues to exceed EQS	Pass	Pass	Continues to exceed EQS	Not significant	Pass	No deterioration	Continues to exceed EQS	Pass	No deterioration	Continues to exceed EQS	
	No EQS	No EQS		No Class deterioration	No EQS		No Class deterioration	No EQS / not sampled	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	No EQS / not sampled	Not sampled	No Class deterioration	No EQS / not sampled	Not sampled	No Class deterioration	
				No EQS			No EQS		Screened out	Screened out	No EQS / not sampled	Screened out	Screened out	No EQS / not sampled		Screened out	Screened out	No EQS / not sampled	Screened out	Screened out	No EQS / not sampled	
											Screened out			Screened out				Screened out			Screened out	
tin dissolved																						No
tin total																						No
toluene																						No
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4																						Yes
total organic carbon																						Yes
total oxidised nitrogen																						Yes
total phosphorus																						Yes
triallate																						No
triazophos																						Yes
tributyl phosphate																						No
tributyltin compounds (as tributyltin cation)																						Yes
trichloroethylene																						No
triclosan																						Yes
triphenyltin compounds (as tryphenyltin cation)																						No
vanadium dissolved																						No
vanadium total																						No
zinc dissolved																						Yes
zinc total																						Yes

D Appendix: Summary of qualified values

Determinand	Site 1 samples	Site 1 unqualified samples	Site 1 percentage of qualified samples	Site 3 samples	Site 3 unqualified samples	Site 3 percentage of qualified samples	Site 5 samples	Site 5 unqualified samples	Site 5 percentage of qualified samples	Site 6 samples	Site 6 unqualified samples	Site 6 percentage of qualified samples
1,1,1-trichloroethane	13	0	100%	13	0	100%	13	0	100%	14	0	100%
1,1,2-trichloroethane	13	0	100%	13	0	100%	13	0	100%	14	0	100%
2,4-dichlorophenol	13	0	100%	13	0	100%	-	-	-	6	0	100%
2,4-dichlorophenoxyacetic acid (2,4-D)	13	0	100%	13	4	69%	-	-	-	6	0	100%
2-chlorophenol	13	0	100%	13	0	100%	-	-	-	6	0	100%
3,4-dichloroaniline	13	0	100%	13	0	100%	-	-	-	-	-	-
3-methylphenol (m-cresol)	13	1	92%	13	1	92%	-	-	-	6	0	100%
4-chloro-3-methyl phenol	13	0	100%	13	0	100%	-	-	-	6	0	100%
4-methylphenol (p-cresol)	13	3	77%	13	2	85%	-	-	-	6	0	100%
abamectin	13	0	100%	13	0	100%	-	-	-	-	-	-
acid neutralisation capacity (ANC, unfiltered)	13	13	0%	13	13	0%	13	13	0%	14	14	0%
alkalinity as CaCO3	13	13	0%	13	13	0%	13	13	0%	14	14	0%
aluminium dissolved	13	8	38%	13	9	31%	13	5	62%	14	11	21%
aluminium total	13	13	0%	13	13	0%	13	13	0%	14	14	0%
ammonia	26	0	100%	26	0	100%	26	2	92%	28	2	93%
ammoniacal nitrogen	13	13	0%	13	13	0%	13	12	8%	14	11	21%
antimony dissolved	13	13	0%	13	13	0%	13	13	0%	14	13	7%
antimony total	13	13	0%	13	13	0%	13	13	0%	14	14	0%
arsenic dissolved	13	13	0%	13	13	0%	13	13	0%	14	14	0%
arsenic total	13	13	0%	13	13	0%	13	13	0%	14	14	0%
azinphos methyl, dissolved	13	0	100%	13	0	100%	-	-	-	-	-	-
BDE-100	13	0	100%	16	0	100%	16	0	100%	17	0	100%
BDE-153	13	0	100%	16	0	100%	16	0	100%	17	0	100%
BDE-154	13	0	100%	16	0	100%	16	0	100%	17	0	100%
BDE-28	13	0	100%	16	0	100%	16	0	100%	17	0	100%
BDE-47	13	0	100%	16	0	100%	16	0	100%	17	0	100%
BDE-99	13	0	100%	16	0	100%	16	0	100%	17	0	100%
bentazone	13	0	100%	13	2	85%	-	-	-	6	0	100%
benzene	13	0	100%	13	0	100%	-	-	-	6	0	100%
benzo(a)pyrene	13	13	0%	13	13	0%	13	13	0%	14	14	0%
benzyl butyl phthalate	13	0	100%	13	0	100%	-	-	-	-	-	-
biphenyl	13	0	100%	13	0	100%	-	-	-	-	-	-
BOD (5 day)	13	11	15%	13	11	15%	13	12	8%	14	12	14%
boron dissolved	13	13	0%	13	13	0%	-	-	-	6	6	0%
boron total	13	13	0%	13	13	0%	-	-	-	6	6	0%
bromide	13	10	23%	13	10	23%	-	-	-	6	2	67%
bromine - total residual oxidant	13	12	8%	13	12	8%	-	-	-	-	-	-
bromoxynil	13	0	100%	13	0	100%	-	-	-	6	0	100%
BTEX (benzene, toluene, ethylbenzene & o,p-xylene	13	0	100%	22	0	100%	-	-	-	6	0	100%
cadmium dissolved	13	0	100%	13	10	23%	13	1	92%	14	2	86%
cadmium total	13	1	92%	13	13	0%	13	3	77%	14	4	71%
calcium total	13	13	0%	13	13	0%	13	13	0%	14	14	0%
carbendazim	13	0	100%	13	0	100%	-	-	-	6	0	100%
chemical oxygen demand (COD)	13	12	8%	13	10	23%	13	11	15%	14	13	7%

Determinand	Site 1 samples	Site 1 unqualified samples	Site 1 percentage of qualified samples	Site 3 samples	Site 3 unqualified samples	Site 3 percentage of qualified samples	Site 5 samples	Site 5 unqualified samples	Site 5 percentage of qualified samples	Site 6 samples	Site 6 unqualified samples	Site 6 percentage of qualified samples
chloride	13	13	0%	13	13	0%	-	-	-	6	6	0%
chlorine free	13	13	0%	13	8	38%	-	-	-	-	-	-
chlorine total	13	13	0%	13	9	31%	-	-	-	-	-	-
chloroform	13	1	92%	13	0	100%	13	0	100%	14	0	100%
chloronitrotoluenes	13	1	92%	13	0	100%	-	-	-	-	-	-
chlorophyll	13	1	92%	13	5	62%	13	5	62%	14	8	43%
chlorothalonil	13	0	100%	13	0	100%	-	-	-	-	-	-
chlorotoluron	13	0	100%	13	0	100%	-	-	-	6	0	100%
chlorpropham	13	0	100%	13	0	100%	-	-	-	-	-	-
chromium (VI) dissolved	13	0	100%	13	0	100%	-	-	-	6	0	100%
chromium dissolved	13	13	0%	13	10	23%	13	5	62%	14	11	21%
chromium total	13	13	0%	13	12	8%	13	11	15%	14	13	7%
cobalt dissolved	13	13	0%	13	13	0%	-	-	-	6	4	33%
cobalt total	13	13	0%	13	13	0%	-	-	-	6	5	17%
conductivity @ 20øC	13	13	0%	13	13	0%	13	13	0%	14	14	0%
copper dissolved	13	13	0%	13	13	0%	13	11	15%	14	14	0%
copper total	13	13	0%	13	13	0%	13	12	8%	14	14	0%
coumaphos	13	0	100%	13	0	100%	-	-	-	-	-	-
cyanide total	13	0	100%	13	0	100%	-	-	-	6	0	100%
cyanide, free (easily liberable)	13	0	100%	13	0	100%	-	-	-	6	0	100%
cyfluthrin	13	0	100%	13	0	100%	-	-	-	-	-	-
cypermethrin	13	10	23%	13	2	85%	13	1	92%	14	2	86%
demeton	13	0	100%	13	0	100%	-	-	-	-	-	-
di(2-ethylhexyl)phthalate (DEHP)	13	3	77%	13	1	92%	13	0	100%	14	0	100%
diazinon	13	0	100%	13	0	100%	-	-	-	6	0	100%
dibutyl phthalate	13	3	77%	13	2	85%	-	-	-	-	-	-
dichlorobenzene, total isomers	13	0	100%	13	0	100%	-	-	-	-	-	-
dichlorvos	13	0	100%	13	0	100%	-	-	-	-	-	-
diethyl phthalate	13	1	92%	13	2	85%	-	-	-	-	-	-
diflubenzuron	13	0	100%	13	0	100%	-	-	-	-	-	-
dimethoate	13	0	100%	13	0	100%	-	-	-	-	-	-
dimethyl phthalate	13	0	100%	13	2	85%	-	-	-	-	-	-
dioctyl phthalate	13	0	100%	13	0	100%	-	-	-	-	-	-
dissolved organic carbon	13	13	0%	13	12	8%	13	13	0%	14	13	7%
doramectin	13	0	100%	13	0	100%	-	-	-	-	-	-
EDTA	13	4	69%	13	0	100%	-	-	-	-	-	-
ethylbenzene	13	0	100%	10	0	100%	-	-	-	6	0	100%
fenchlorphos	13	0	100%	13	0	100%	-	-	-	-	-	-
fenitrothion	13	0	100%	13	0	100%	-	-	-	-	-	-
flucofuron	13	0	100%	13	0	100%	-	-	-	-	-	-
fluoranthene	13	11	15%	13	13	0%	13	13	0%	14	14	0%
fluoride	13	13	0%	13	13	0%	-	-	-	6	6	0%
formaldehyde	13	0	100%	13	0	100%	-	-	-	-	-	-
glyphosate	13	13	0%	13	1	92%	-	-	-	6	3	50%
hardness as CaCO3	13	13	0%	13	13	0%	13	13	0%	14	14	0%
hexabromocyclododecane (HBCDD)	13	13	0%	13	2	85%	13	0	100%	14	6	57%

Determinand	Site 1 samples	Site 1 unqualified samples	Site 1 percentage of qualified samples	Site 3 samples	Site 3 unqualified samples	Site 3 percentage of qualified samples	Site 5 samples	Site 5 unqualified samples	Site 5 percentage of qualified samples	Site 6 samples	Site 6 unqualified samples	Site 6 percentage of qualified samples
ioxynil	13	0	100%	13	0	100%	-	-	-	6	0	100%
iron dissolved	13	13	0%	13	12	8%	13	13	0%	14	14	0%
iron total	13	13	0%	13	13	0%	13	13	0%	14	14	0%
ivermectin	13	0	100%	13	0	100%	-	-	-	-	-	-
lead dissolved	13	11	15%	13	10	23%	13	9	31%	14	10	29%
lead total	13	13	0%	13	13	0%	13	13	0%	14	13	7%
linuron	13	0	100%	13	0	100%	-	-	-	6	0	100%
m- & p-xylene	13	0	100%	10	0	100%	-	-	-	6	0	100%
malachite green	13	0	100%	13	0	100%	-	-	-	-	-	-
malathion	13	0	100%	13	0	100%	-	-	-	6	0	100%
mancozeb	13	9	31%	13	6	54%	-	-	-	-	-	-
maneb	13	3	77%	13	2	85%	-	-	-	-	-	-
manganese dissolved	13	13	0%	13	13	0%	-	-	-	6	6	0%
manganese total	13	13	0%	13	13	0%	-	-	-	6	6	0%
MCPA	13	1	92%	13	2	85%	-	-	-	6	0	100%
mecoprop	13	11	15%	13	1	92%	-	-	-	6	0	100%
mercury dissolved	13	12	8%	13	10	23%	13	8	38%	14	11	21%
mercury total	13	11	15%	13	12	8%	13	11	15%	14	13	7%
methiocarb	13	0	100%	13	0	100%	-	-	-	-	-	-
mevinphos	13	0	100%	13	0	100%	-	-	-	-	-	-
nickel dissolved	13	13	0%	13	13	0%	13	13	0%	14	14	0%
nickel total	13	13	0%	13	13	0%	13	13	0%	14	14	0%
nitrate	26	26	0%	26	26	0%	26	26	0%	28	28	0%
nitrilotriacetic acid (NTA)	13	0	100%	13	0	100%	-	-	-	-	-	-
nitrite	26	24	8%	26	14	46%	26	16	38%	28	21	25%
nonylphenols (4-nonylphenol technical mix)	13	12	8%	13	1	92%	13	0	100%	14	3	79%
octylphenols ((4-(1,1',3,3'-tetramethylbutyl)pheno	13	1	92%	13	0	100%	13	0	100%	14	0	100%
omethoate	13	0	100%	13	0	100%	-	-	-	-	-	-
organic nitrogen	13	0	100%	13	0	100%	13	0	100%	14	0	100%
orthophosphate as PO4	13	12	8%	13	9	31%	-	-	-	-	-	-
o-xylene	13	0	100%	10	0	100%	-	-	-	6	0	100%
pendimethalin	13	0	100%	13	2	85%	-	-	-	6	0	100%
perfluorooctane sulfonic acid (PFOS)	13	13	0%	13	13	0%	13	13	0%	14	9	36%
perfluorooctanoic acid (PFOA)	13	11	15%	13	13	0%	13	13	0%	14	14	0%
permethrin	13	8	38%	13	2	85%	-	-	-	-	-	-
pH	13	13	0%	13	13	0%	13	13	0%	14	14	0%
phenol	13	0	100%	13	0	100%	-	-	-	6	0	100%
pirimicarb	13	0	100%	13	0	100%	-	-	-	-	-	-
pirimiphos-methyl	13	0	100%	13	0	100%	-	-	-	-	-	-
polychloro chloromethyl sulphonamido diphenyl ethe	13	0	100%	13	0	100%	-	-	-	-	-	-
prochloraz	13	0	100%	13	0	100%	-	-	-	-	-	-
propetamphos	13	0	100%	13	0	100%	-	-	-	6	0	100%
propyzamide	13	3	77%	13	6	54%	-	-	-	6	4	33%
salinity @ 20øC	13	13	0%	13	13	0%	13	13	0%	14	14	0%

Determinand	Site 1 samples	Site 1 unqualified samples	Site 1 percentage of qualified samples	Site 3 samples	Site 3 unqualified samples	Site 3 percentage of qualified samples	Site 5 samples	Site 5 unqualified samples	Site 5 percentage of qualified samples	Site 6 samples	Site 6 unqualified samples	Site 6 percentage of qualified samples
silver dissolved	13	0	100%	13	0	100%	-	-	-	6	0	100%
silver total	13	0	100%	13	0	100%	-	-	-	6	0	100%
soluble reactive phosphorus	13	13	0%	13	10	23%	13	9	31%	14	14	0%
sulcofuron	13	0	100%	13	0	100%	-	-	-	-	-	-
sulphate	13	13	0%	13	13	0%	-	-	-	6	6	0%
sulphide or hydrogen sulphide	13	6	54%	13	4	69%	13	6	54%	13	8	38%
suspended solids @ 105øC	13	9	31%	13	13	0%	13	11	15%	14	14	0%
tecnazene	13	0	100%	13	0	100%	-	-	-	6	0	100%
tetrachloroethane	13	0	100%	13	0	100%	-	-	-	6	0	100%
thiobendazole	13	0	100%	13	0	100%	-	-	-	-	-	-
tin dissolved	13	1	92%	13	2	85%	-	-	-	6	1	83%
tin total	13	4	69%	13	2	85%	-	-	-	6	3	50%
toluene	13	0	100%	13	0	100%	-	-	-	6	0	100%
total anions (sum of Br, Cl, F, NO2, NO3, PO4, SO4	13	13	0%	13	13	0%	-	-	-	6	6	0%
total organic carbon	13	13	0%	13	13	0%	13	13	0%	14	14	0%
total oxidised nitrogen	13	13	0%	13	13	0%	13	13	0%	14	14	0%
total phosphorus	13	13	0%	13	13	0%	13	13	0%	14	14	0%
triallate	13	0	100%	13	4	69%	-	-	-	6	1	83%
triazophos	13	0	100%	13	0	100%	-	-	-	-	-	-
tributyl phosphate	13	2	85%	13	1	92%	-	-	-	-	-	-
tributyltin compounds (as tributyltin cation)	14	5	64%	13	11	15%	13	2	85%	14	10	29%
trichloroethylene	13	0	100%	13	0	100%	13	0	100%	14	0	100%
triclosan	13	12	8%	13	1	92%	13	1	92%	14	0	100%
triphenyltin compounds (as tryphenyltin cation)	14	0	100%	13	1	92%	-	-	-	-	-	-
vanadium dissolved	13	0	100%	13	0	100%	-	-	-	6	0	100%
vanadium total	13	0	100%	13	0	100%	-	-	-	6	0	100%
zinc dissolved	13	13	0%	13	13	0%	13	12	8%	14	13	7%
zinc total	13	13	0%	13	13	0%	13	13	0%	14	14	0%

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