



Water Operations Water Quality Reporting Manual

QP-M-134

This manual is designed to assist water operations staff with the completing of any Drinking Water Quality Incident and to assist with the completing of the quarterly and annual water quality reports, that are required under current state government legislation

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Document Authorisation

Authorisation: the issue of this Branch Common Water Quality Reporting Manual is approved by the Manager Water Operations, Toowoomba Regional Council.

Signed:

Dated:

Note:

This manual is under continuous review. This is to allow additional information to be added to the manual as changes in legislation and changes brought about by the Water Supply Regulator occur. This will mean that parts of this manual are complete, whilst other sections maybe under development

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Manual for reporting water quality

Water Quality Monitoring Objectives

Water Quality monitoring of water/wastewater treatment processes is necessary:

- To demonstrate that environmental releases comply with EPA license requirements
- To demonstrate that final product complies with Queensland Health and Australian Drinking Water Guidelines requirements
- To demonstrate that the final product complies with HACCP requirements
- To ensure that there is minimal pollution to the receiving watercourse
- To provide data for daily plant operations and decisions
- To provide data for the relevant wastewater plant operations
- To provide data for the relevant water operations
- To provide data required by legislation, e.g. QWSR, DEWS, DEHP, and the Council.
- To provide data and sampling requirements for approved DWQMP
- To provide data and sampling requirements for approved RWMP

Water Quality Monitoring Scheme

Toowoomba Regional Council reporting requires analysis to be performed at a NATA accredited laboratory

Toowoomba Regional Council uses its own laboratory located at Mt Kynoch or external laboratories holding the appropriate NATA accreditation.

Training

All officers who are required to collect water samples for quality monitoring shall receive training in the correct techniques and equipment for such sampling. Refer to Work Procedure QP-KYN-084
Doc# 3178296

Glossary of Terms

TRC

Toowoomba Regional Council

QWSR

The Queensland Water Supply Regulator

DEWS

Department of Energy and Water Supply

Incident

An incident is:

The failure to meet a water quality criterion

The detection of a parameter for which there is no guideline value in the ADWG

or

An event or a series of events likely to affect drinking water quality or cause difficulty in adequately treating drinking water.

Quarterly & Annual Report/s

Series of reports compiled by Toowoomba Regional Council Water Operations, detailing the water quality from all water supply schemes that are with the Toowoomba Regional Council. The report can detail all raw and treated water quality results from each individual water supply scheme

Event

An event is any sudden or extreme change in water quality, flow or Environmental conditions, for example, excessive rainfall or flood, or equipment failure. An event should raise Concerns that drinking water might be, or could become, contaminated. Disease outbreaks from drinking water may result when the treatment process fails to cope with major fluctuations in source water quality or flow.

WTP

Water Treatment Plant

WWTP

Wastewater Treatment Plant

AWTP

Advanced Water Treatment Plant

RO Plant

Reverse Osmosis Treatment Plant

THMs

Total Trihalomethanes – By-product of chlorination and chloramination

HACCP

Hazard Analysis Critical Control Point is a systematic preventive approach to Food Safety and Pharmaceutical Safety that address physical, chemical, and biological hazards as a means of prevention rather than finished product inspection

BRANCH COMMON LISTING

Document shared across all water and wastewater treatment plants in Toowoomba Regional Council e.g. DEPOLOX 4 Online Chlorine Meter. Branch common documents have restricted editing access. Branch Common Documents are reviewed every 12 months and changes if needed are made after review

GRAB SAMPLE

Single sample collected at a particular time and place that represents the composition of the water only at that time and place (National Health and Medical Research Council (2004) *Australian Drinking Water Guidelines 6*, National Health and Medical Research Council, accessed 15 March 2010 <http://www.nhmrc.gov.au/_files_nhmrc/file/publications/synopses/adwg_11_06.pdf>

LABORATORY TESTING

Laboratory Testing is testing and analysis of water and wastewater samples at Toowoomba Regional Council Laboratory Services or an external laboratory holding the appropriate NATA Accreditation

OPERATOR FIELD TESTING

Operator field testing is testing and analysis of water samples collected by water operators for the daily running of water and wastewater schemes

DAILY TESTING

Toowoomba Regional Council Water Operators conduct daily testing at different Water schemes across TRC. Due to current population growth and current legislation requirements some locations collect samples seven days a week where as other locations collect samples five days a week.

In this manual the difference between the two (samples collected 7 days a week compared to samples collected 5 days a week), are represented by the numerals 5 and 7 listed at the end of the daily frequency;

i.e.

| SAMPLING LOCATION | | SAMPLING TYPE | FREQUENCY |
|-------------------|---------------------|---------------|-----------|
| Scheme A | Low Level Reservoir | Chlorine | Daily (5) |

Scheme A low level reservoir has chlorine samples collected Monday to Friday.

Incident and Event Reporting

Incident Reporting

Toowoomba Regional Council Service Provider 499, must report any drinking water quality incident to the office of the water supply regulator, upon being made aware of a drinking water incident.

Drinking water incidents are described as *“an incident or event that will or is likely to adversely affect water quality”*. Drinking water incident can include the following;

- Detection of E.coli in a reticulation system.
- Detection of E.coli in treated bulk water transmission mains
- Detection of E.coli in water treatment processes and Clearwater storages
- Detection of a Pathogen in any treatment component of drinking water supply scheme
- Detection of Fluoride greater than 1.5mg/L¹
- Failure to meet Chemical Health related guideline values as specified in the Australian Drinking Water Guidelines
- Radiological in raw water or source water of drinking water
- Parameter for which there is no guideline value in the Australian Drinking Water Guidelines

Timeframes for reporting

Toowoomba Regional Council must report any drinking water incident to the office of the Queensland Water Supply Regulator (QWSR), within the following time frames;

- Report the QWSR by telephone within three hours of receipt of test result/s
- Written confirmation by fax or email within 24 hours of receipt of test result/s. Completed incident initial notification reporting form (part A), signed, with lab test results.
 - The incident reporting form WSR017 DM#[5775413](#), is an interactive PDF. Staff who compile this form are to save the PDF to their individual desktop. Once staff have completed compiling the initial incident notification form (part A), they must print a copy of the initial incident notification form, sign the form and then scan the signed form. Once signed and scanned the initial notification form along with any lab test results are to be saved into DM (under file code F-002292), and then emailed to QWSR and Manager Water Operations
- Written confirmation by fax or email upon resolution of the incident. Completed incident investigation reporting form (part B), signed, with lab test results.
 - Once the incident has been resolved, the investigation report (part B), is to be completed and as per the initial incident notification, must be printed, signed, scanned, saved in DM and emailed to QWSR and Manager Water Operations along with all lab test results and/or documentation to show that the incident has been resolved.
- Report to the QWSR by telephone immediately of any event or series of events that are likely to affect drinking water quality or inability to adequately treat drinking water

Reporting Contact Details

When staff, need to contact the office of the water supply regulator the following contact details are to be used;

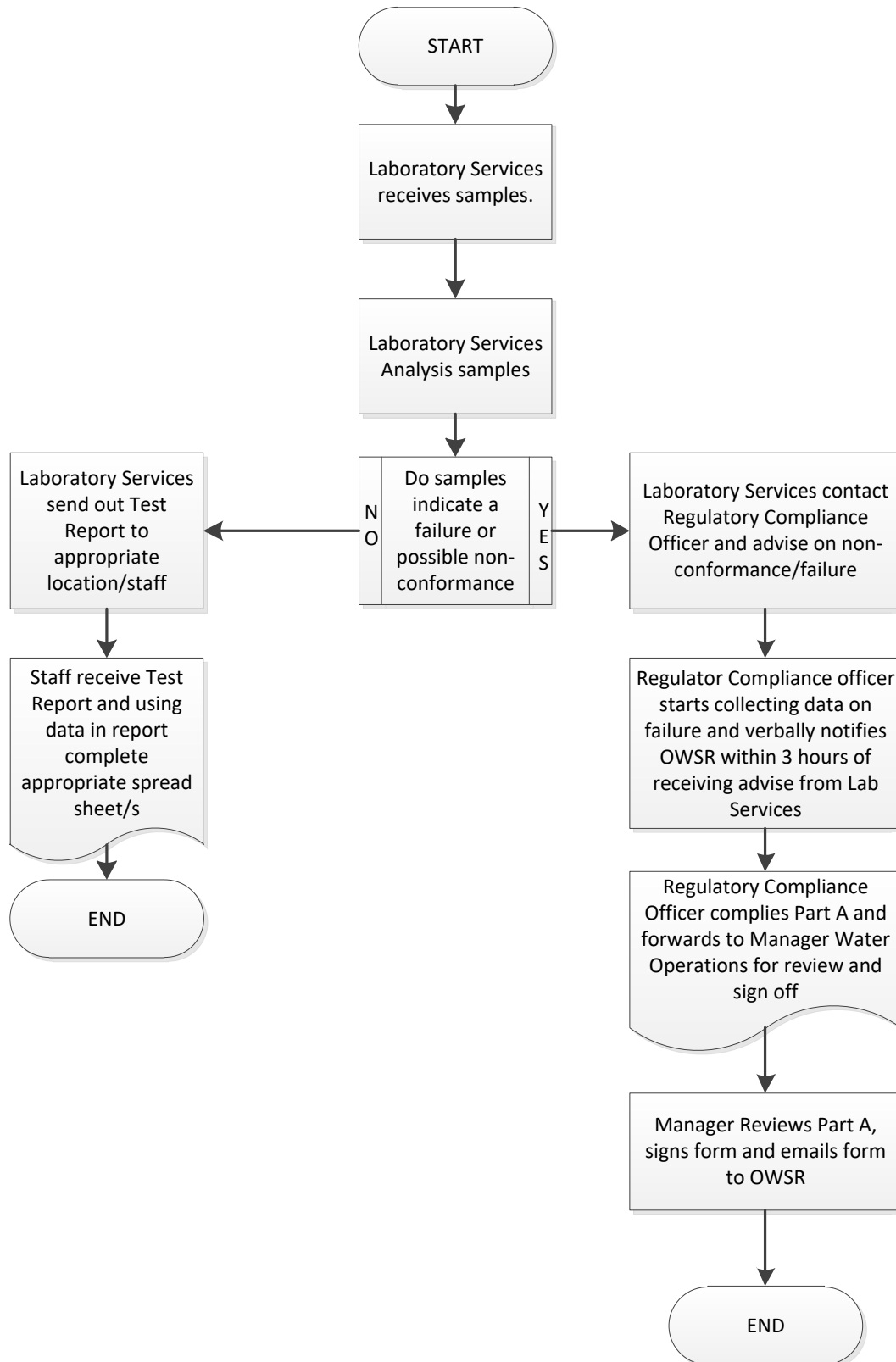
- Verbal notification phone number 1300 596 709
- Fax number 07 3405 3156
- Drinking water incident's email QWSRDrinkingWater.Reporting@dews.qld.gov.au

The QWSR 1300 (listed above), is manned 24 hours a day 7 days a week. All first point of contact with QWSR is to be verbal. If verbal contact cannot be made then email can be sent in the second instance to the above email address.

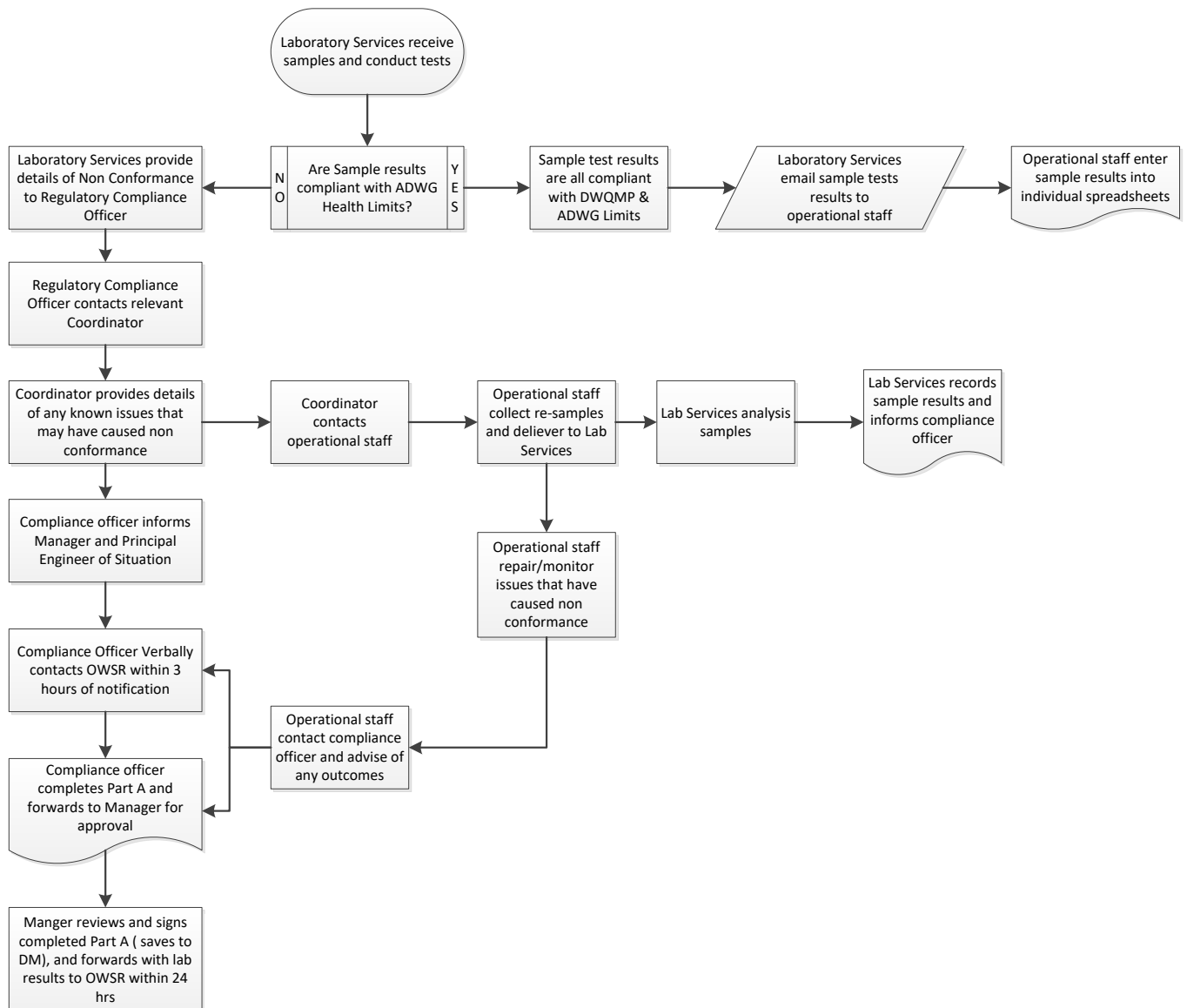
¹ Any fluoride test result that is greater than the ADWG Health limit that cannot be reduced by the means of treatment **MUST** be reported to QWSR. This includes raw water, if the fluoride concentrations in the raw water cannot be removed or reduced below the ADWG Health limit via water treatment processes.

Incident Reporting Flowcharts

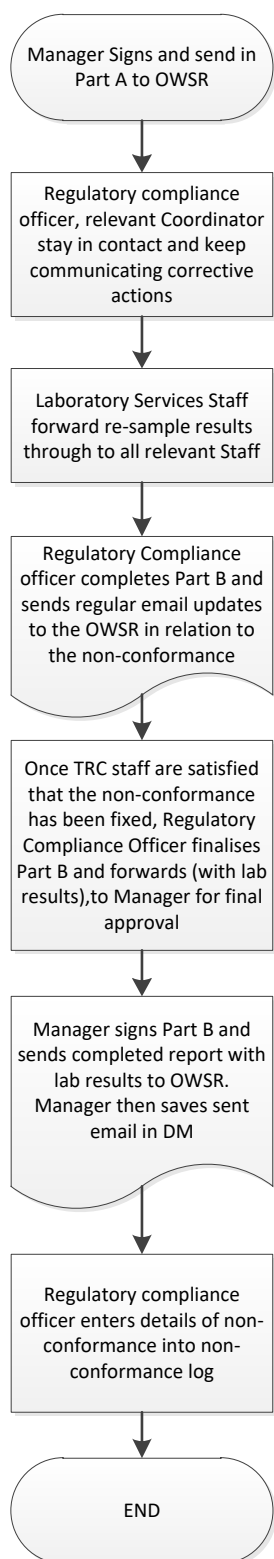
Water Operations Flowcharts

Incident overview flowchart

Incident Reporting flowchart –Completing Initial Notification (Part A)



Incident Reporting flowchart – Completing Investigation Report (Part B)



Whilst operational staff are collecting re-samples and optimising treatment plants, operational staff or coordinator are to maintain contact with regulatory compliance officer and advise of any corrective actions to fix non-conformance, which may include;

- Any extra sampling that staff are undertaking and the date on which samples have been collected
- Mains flushing
- Altering or stopping of chemical dosing at treatment plants
- Implementing or starting of chemical dosing at treatment plants

Regulatory Compliance Officer will continue to send regular updates the QWSR informing the regulator of any sample results and aforementioned corrective actions. Manager and Principal Engineer will also be informed by the Regulatory Compliance Officer of any results of corrective actions being undertaken by operational staff

Event Reporting

Toowoomba Regional Council Service Provider 499, must report any event or series of events likely to affect drinking water quality or will cause difficulty in ability to adequately treat or provide drinking water.

Drinking Water events can include the following;

- Sudden or extreme change in water quality
- Flood
- Bushfire
- Equipment Failure
- Deviation from an operational critical limit for a critical control point
- Contamination of Source Water
- Contamination of Treated Water
- Mains Break
- Terrorism
- Natural Disaster
- Disinfection Dosing Failure (Chlorine Dose Pump Failure, Chemical Supply Failure)
- Chemical Overdosing

Timeframes for reporting

Toowoomba Regional Council must report any drinking water incident to the Queensland Water Supply Regulator within the following time frames;

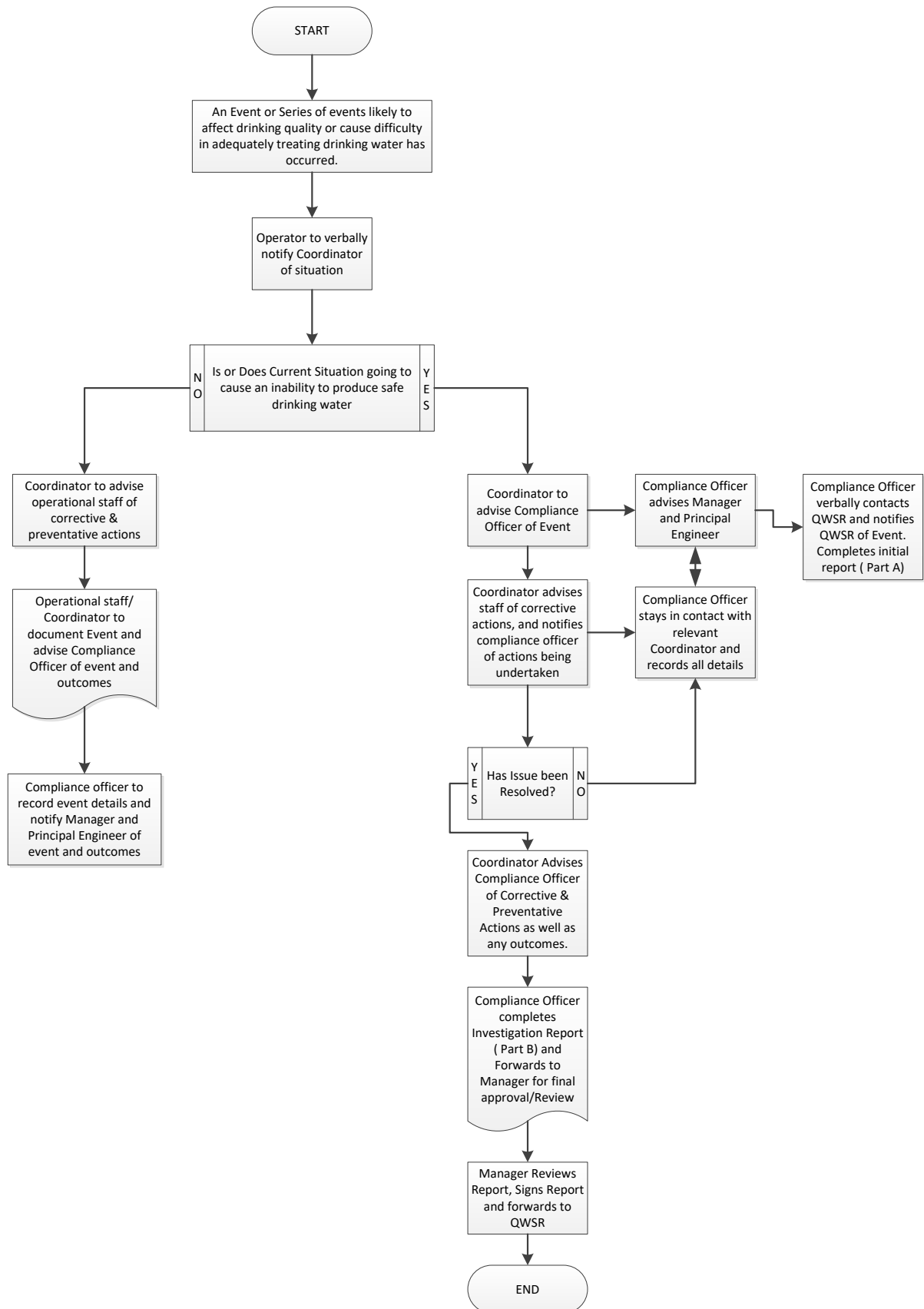
- Report the QWSR by telephone **IMMEDIATELY** on becoming aware of event
- Written confirmation by fax or email within 24 hours of receipt of test result/s. Completed incident initial notification reporting form (part A), signed, with lab test results.
- Written confirmation by fax or email upon resolution of the incident. Completed incident investigation reporting form (part B), signed, with lab test results.

Reporting Contact Details

When staff, need to contact the office of the water supply regulator the following contact details are to be used;

- Verbal notification phone number 1300 596 709
- Fax number 07 3405 3156
- Drinking water incident's email QWSRDrinkingWater.Reporting@dews.qld.gov.au

Event Reporting Flowchart

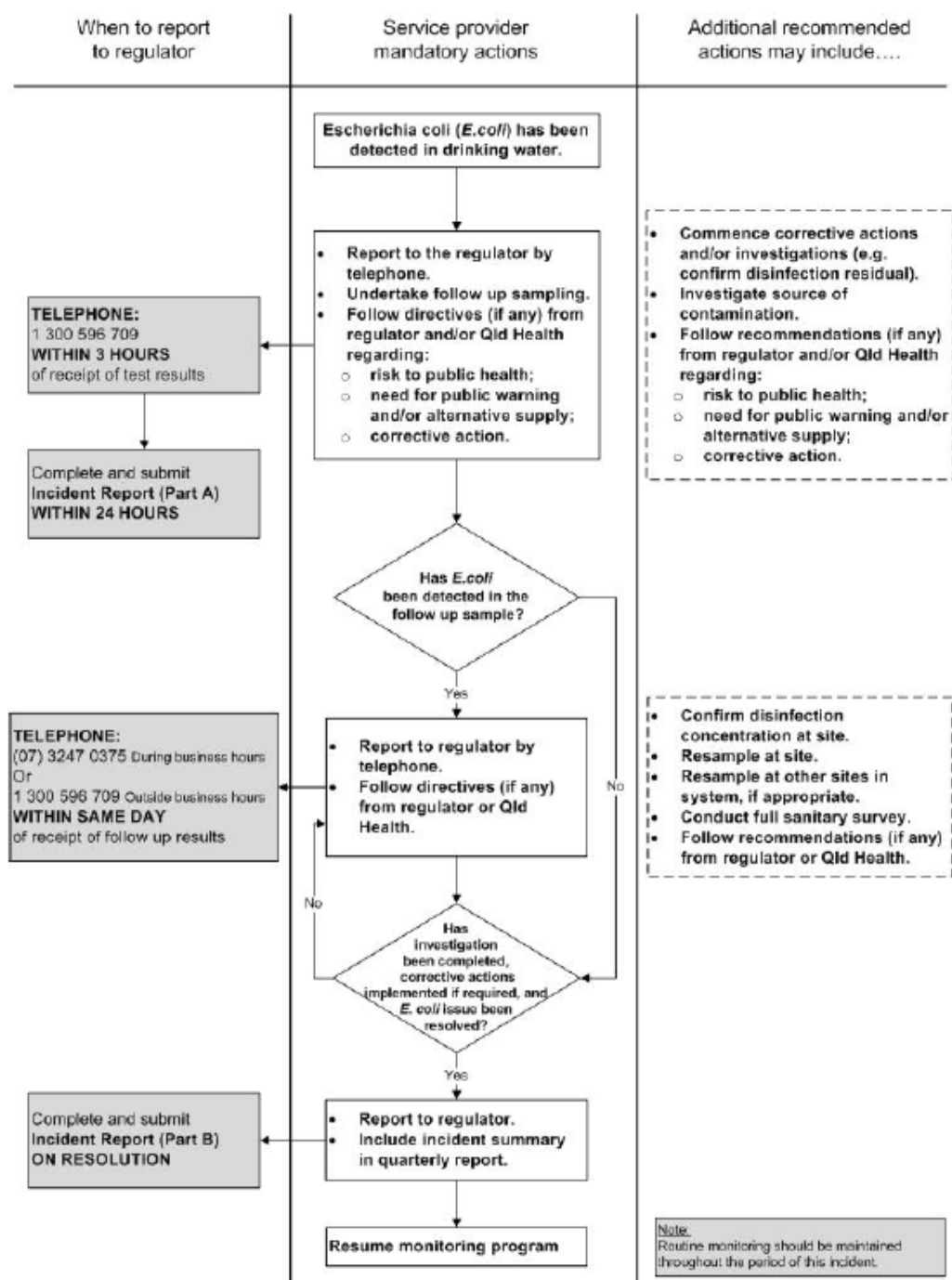


QWSR Flowcharts

Detection of *Escherichia coli* (*E.coli*)

Incident Reporting Flowchart

Department of Environment
and Resource Management

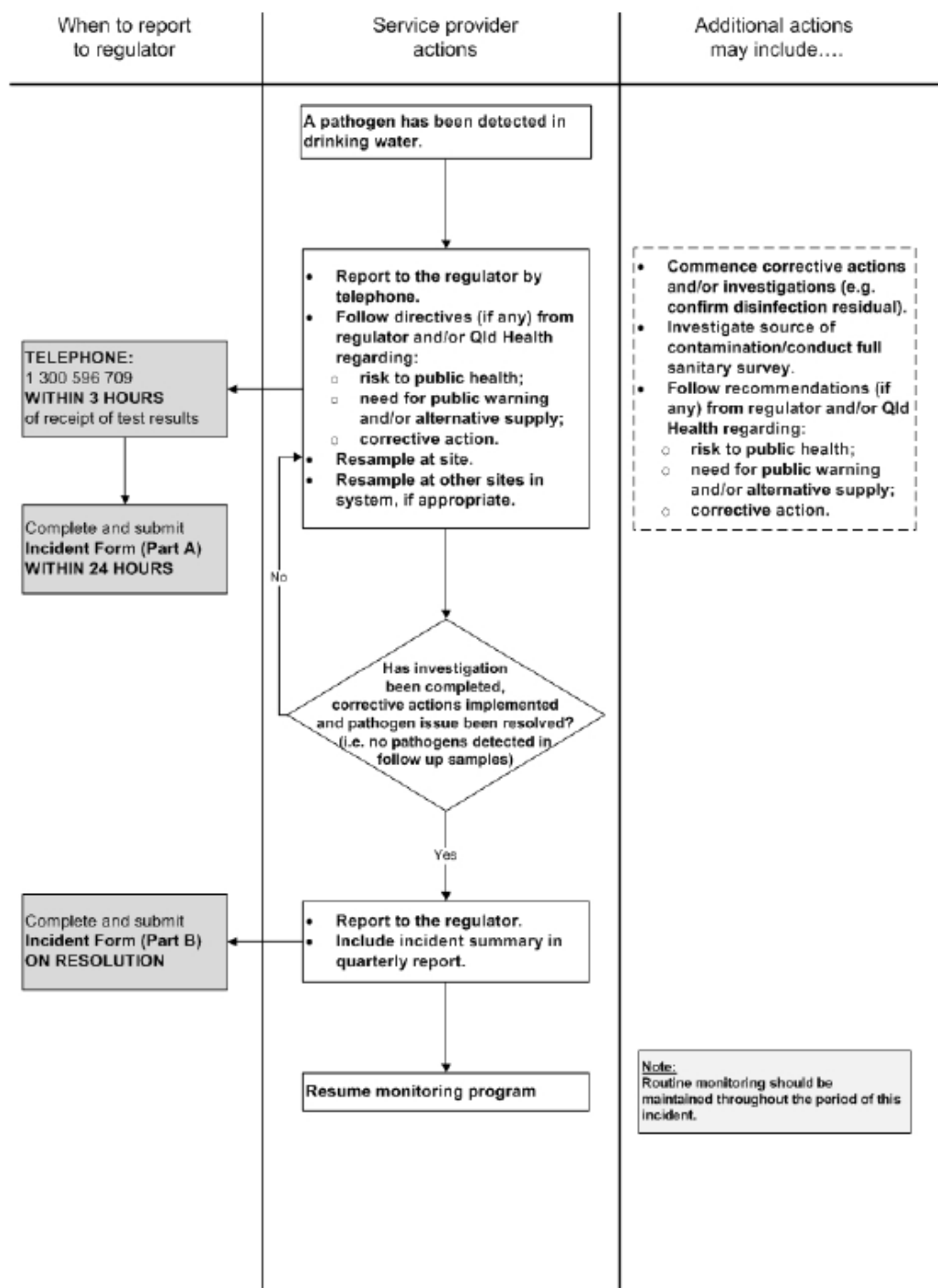
Detection of *Escherichia coli* (*E. coli*)

Detection of a Pathogen

Incident Reporting Flowchart

Department of Environment
and Resource Management

Detection of a pathogen

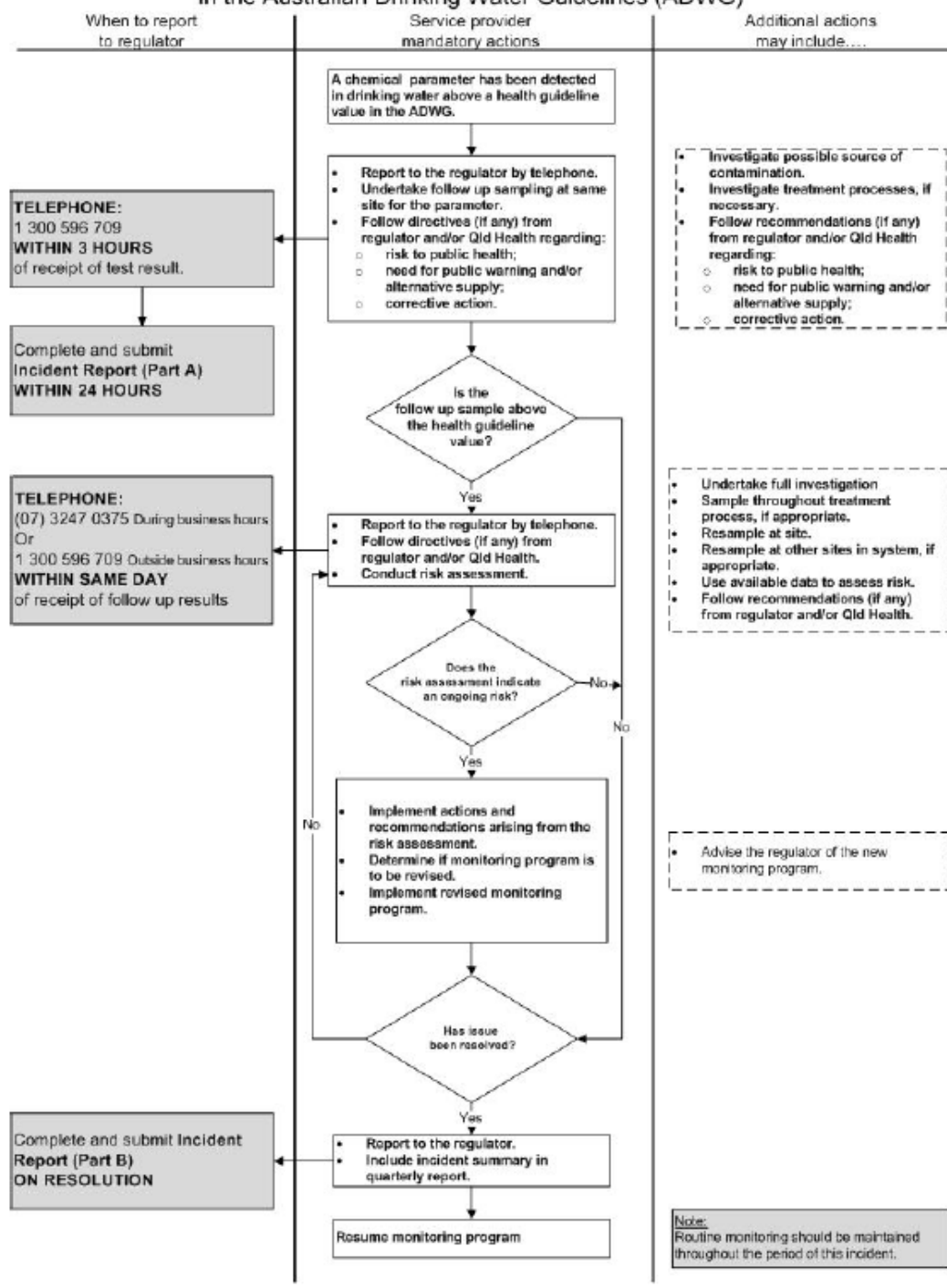


Detection of a chemical parameter above health guideline value in the Australian Drinking Water Guidelines (ADWG)

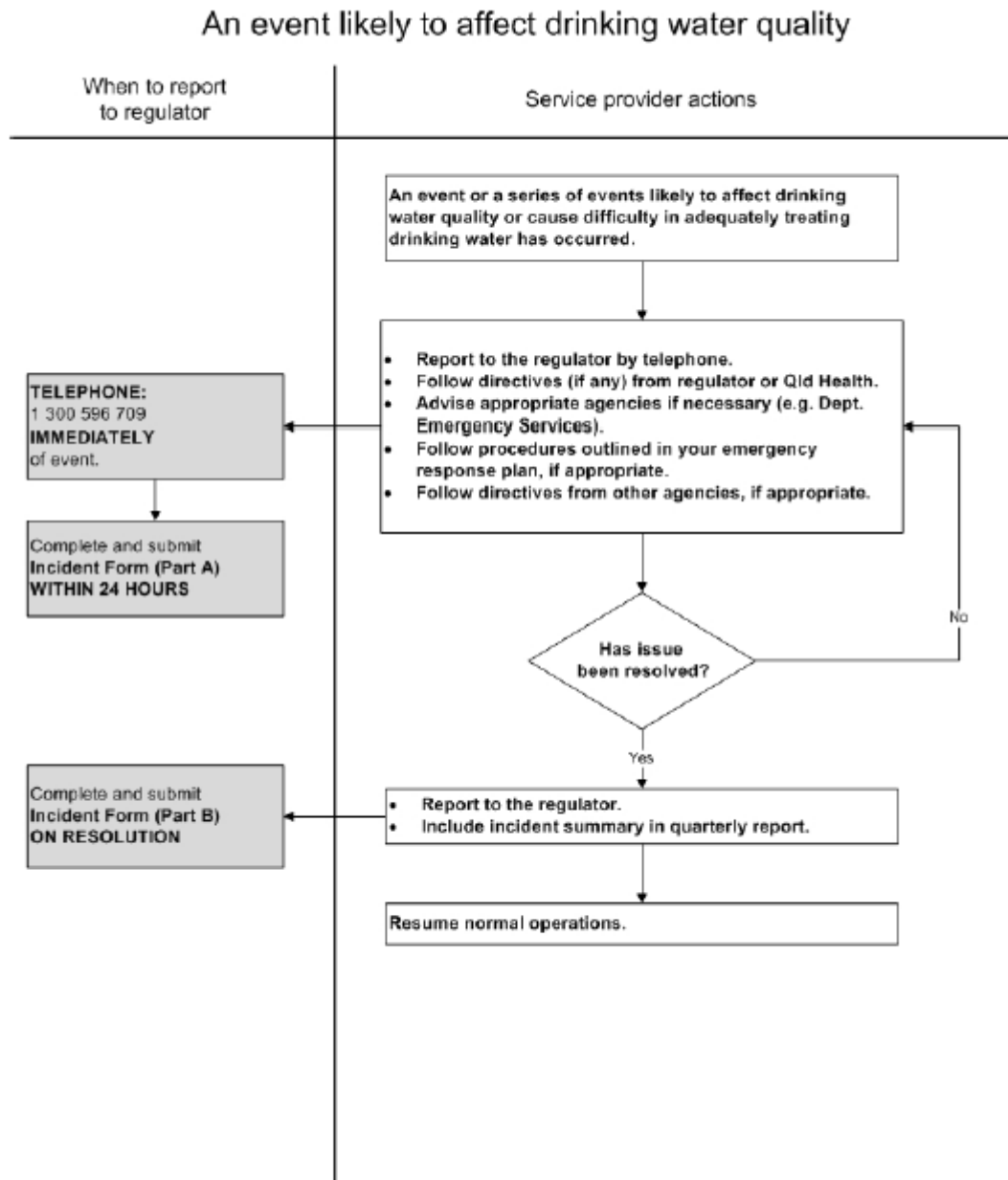
Incident Reporting Flowchart

Department of Environment
and Resource Management

Detection of chemical parameter above health guideline value in the Australian Drinking Water Guidelines (ADWG)



An Event likely to affect drinking water quality



Quarterly and Annual Reporting

Quarterly Water Quality Reporting

Under an approved DWQMP water service providers are not required to complete a quarterly water quality report, but instead must compile and submit an annual report to QWSR. In this instance Toowoomba Regional Council as an approved DWQMP and only compiles an annual report, with the exception of the quarterly fluoride report for the Mt Kynoch Water Treatment Plant.

The Quarterly Fluoride Report (as the name suggests is compiled and sent to Queensland Health every three months). The reporting time table for Queensland Health are as follows;

| Period | Due Date |
|--------------------------|------------------------------|
| 1 January to 31 March | 30 April (same year) |
| 1 April to 30 June | 31 July (same year) |
| 1 July to 30 September | 31 October (same year) |
| 1 October to 31 December | 31 January (following year) |






Lab Results

Lab Results for the quarterly fluoride report are provided from the Coordinator (or his/her delegate), Toowoomba Water every three months. Data from these sheets is to be COPIED (do not use cut and paste as the data is meant to be kept on these sheets for other parties if needed).

All free chlorine residuals that collected should be stored in individual reportdata spread sheets. When complying the annual report you will need to extract the free chlorine residuals from these spread sheets and then use them in the annual report. If you cannot access the individual spread sheets then you will need to contact the senior operator for that scheme and ask them to supply you with a copy of the chlorine results.

Once all data is obtained, now it is time to enter data onto report. Make sure all population details are correct and updated; these are located in the individual reportdata spread sheets.

For water quality parameters the following must be calculated and entered for the parameters that were tested in the previous 3 months;

-  Minimum results for parameter
-  Maximum result for parameter
-  Average result for parameter
-  How many tests for parameter were conducted during previous three months
-  How many samples met the LOR (Limit of Reporting)

Further information can be found under **Number Detected** on page 32 of this manual

Any water quality parameters that were reported to QWSR (as a DWQI), in the previous three months will need to be listed in the comments section of the report for the relevant service centre.

NOTE:

ONLY AUSTRALIAN DRINKING WATER GUIDELINES HEALTH PARAMETERS ARE TO BE REPORTED

Quarterly Fluoride Reporting







Toowoomba Regional Council is required for every drinking water supply scheme that doses fluoride, to report the fluoride results to Queensland Health every quarter. The quarterly fluoride report is completed using the approved quarterly fluoride form and is then sent via email to Queensland Health using the email address below.

The approved form can be found in DM# [6346249](#) and at the following location;

www.health.qld.gov.au/ph/documents/ehu/fluorid-codeprac-frm3.pdf

The data for Mt Kynoch WTP can be accessed from the coordinator Toowoomba.

Similar rules apply for completing this form as for completing the annual report. The following need to be calculated and entered in to the approved form;

-  Number of Fluoridated water samples analysed
-  Average measured fluoride concentration
-  Maximum measured fluoride concentration
-  Minimum measured fluoride concentration
-  Number of samples exceeding 1.5mg fluoride/L
-  Number of days in the quarter

This form gets changed on a regular basis. You will need to make sure that the form you are using is the latest form. An auto fill form has been created to assist with the completion of the Quarterly Fluoride Form. DM# [6346249](#) can be used to complete the report.

After the manager has signed off on the quarterly fluoride report, this report then needs to be scanned as a PDF and saved in DM. The signed PDF then needs to be emailed to the manager who will then email the report to Queensland Health.

The email address that the quarterly fluoride form is sent is;

fluoride@health.qld.gov.au

A completed example of the quarterly fluoride form can be found in Appendix B of this manual.

NOTE:

Under the *Prescribed concentration for local government* the result should be 0.80 mg/L (for Mt Kynoch)

Annual Reporting

Toowoomba Regional Council under the approved Drinking Water Quality Management Plans must submit an annual report. This annual report is to be submitted to QWSR no later than 120 Business days after the end of the financial year.

The annual report comprises of;

- Front Document
- Appendix A: Drinking Water Quality Management Plan Annual Report
- Appendix B: Progress Against Improvement Plan
- Appendix C: Drinking Water Incident Non Conformance Summary
- Appendix D: Water Quality Compliance Annual Report
- Appendix E: Water Quality Complaints Annual Report

The front document provides a word picture of the overall compliance and complaints that have been experienced in the last 12 months. The front document is compiled by the Principal Engineer and or the Manager Water Operations.

Appendices can be completed by any staff member using the following templates to assist with the compiling of the individual appendix.

Appendix A Template-----Still in DRAFT

Appendix B Template-----Still in DRAFT

Appendix C Template-----[5829063](#)

Appendix D Template -----[5853373](#)

Appendix E Template -----[5721661](#)

Interplan Reporting





Interplan reporting **MUST** be completed by the first week of the month that the quarterly report is due in. If the Regulatory Compliance Officer is absent to enter this data the report must be sent to the Manager Water Operations so that the data can be entered.

Interplan reporting reports compliance against ADWG, DWQMP's and RWMP's (with the exception of Wetalla. Wetalla data is entered by the Coordinator Wetalla). Interplan report shows the *Number of compliant samples as % total samples collected*

Separating the DATA

For the report there will be data double ups and also data that needs to be separated from other data.

Here are some examples;

-  Bulk water users (water collected every Tuesday by Kynoch staff) data from this will need to be entered in appropriate schemes such as Gowrie junction, Kingsthorpe, Oakey and Goombungee as the Toowoomba Feed Off takes
-  Raw water for all Crows nest water treatment plants for Mn, Fe, need to be entered. Sometimes there will only be one test completed sometimes there will be more.
-  For Perseverance WTP if the water is being trucked in then in the comments section you will need to explain:
 - 1. The water is being trucked in and the location that it is coming from.
 - 2. The reason why the water is being trucked in. if the water is being sourced from Toowoomba mains then comment in the comment section will be “ Raw Water supply from Cressbrook Dam Only”
-  If for some reason one of the dams (Perseverance or Cressbrook), is shut down and all users using this water will need to have a comment in the comment section stating that the raw water is coming from one dam, the name of the dam and the reason why. WTP's would be;
 - Crows Nest
 - Perseverance
 - Hampton
 - Mt Kynoch

There is also a need to separate in some schemes the difference between the reticulation system testing. That is the testing that Lab Services conduct and the testing that operators conduct in the field.

e.g.

Water Treatment Plant Reservoir - These are the tests that Lab services complete.
Mainly for Retic systems

Water Treatment Plant Reservoir - These are the tests that the Operators complete and on daily/weekly/monthly basis (depending on their scheme).

These two must be separated and cannot combine each other's data.

These two listed above could/can include the following parameters;

- Free chlorine
- Turbidity

Raw water for different schemes will have a similar problem. If a WTP draws water from Bores, Dams, or Weir then you will need to separate the different raw water sources. If any parameter for raw water be higher than the ADWG in the comments section you will need to make note that the value is over the ADWG health limit but the water is RAW WATER only and is treated before reticulation.

When Entering data for Reticulation, care must be taken for the Consumer test results. Where a scheme exists for reticulation and there are tests conducted for the reservoirs as well as consumers this data will have to be separated appropriately.

DOCS-#5527886-v7-QP-M-

134_Water_Operations_Branch_Common_Drinking_Water_Quality_Reporting_Manual

For the Raw surface water (Dams), for Toowoomba. QWSR have now requested that these three dams be separated and all results compiled individually, see appendix A

Should any high results for algal blooms be present in any of the three Toowoomba dam's water quality results, then a statement saying that the dam wasn't used during the period of high algal bloom, and a statement stating that the high results were due to regular sampling need to be added to the comments section. You will need to verify with Mt Kynoch Systems Control that the particular dam wasn't used at all during the high algal bloom period.

If the dam was used (during high algal bloom), then toxicity testing should have been conducted on the Mt Kynoch reservoirs and reticulation system. Comments showing the reduction in toxicity will need to be shown in the report.

If the dams were used during any high algal bloom notification to the manager water operations will have to be made detailing the level of the concentration of algal bloom, amount of water drawn from dam and if there was or wasn't any reservoir or reticulation testing conducted whilst that dam was being used.

Compiling Data

The following pages show examples on how you need to compile the data once it has been separated for each individual scheme.

Appendix A

Example:

| Parameter | Laboratory Name | Unit of Measure | Limit of Reporting | Total Number of Samples Taken | Number of samples in which parameter was detected | No of samples > ADWG value | Minimum Concentration | Maximum Concentration | Average Concentration | Comments |
|-----------|-----------------|-----------------|--------------------|-------------------------------|---|----------------------------|-----------------------|-----------------------|-----------------------|---|
| THM's | ALS | mg/L | 0.005 | 4 | 4 | 1 | 138 | 296 | 187.5 | Unit of measurement is mg/L. Refer to TRC Document #0000000 Scheme A THM Incident 23/12/2010 Reference 12-499-00100 |

Any Water Quality Incident that has occurred is filed in the DWQI Registry and can be found in DM, # [3307909](#). This information can be used to gather data and enter it in the Comments section should an incident have occurred.

Number Detected.

You will need to also include the Number of detected parameters. So for argument sake chlorine test results will need to have the number of sample in which chlorine was actually detected. The LOR (Limit of Reporting) can be found in the ADWG. For Chlorine any test that has an outcome that is 0.1mg/l or higher is a result that is detected.

Chlorine

| | | Free Chlorine | Free Chlorine |
|------------|------------------------------|--|---|
| 1.5 mg/L | Detected | 1.5 | 1.5 |
| 2.1 mg. /L | Detected | 2.1 | 2.1 |
| 0.11mg/L | Detected | 0.11 | 0.11 |
| 0.9 mg/L | Detected | 0.9 | 0.9 |
| 0.08 mg/L | less than 0.1 (Not Detected) | 0.08 | 0.08 |
| | | 5 Samples 4 Detected 0.08 Min 2.1 Max 0.938 Avg | 5 Samples 4 Detected <0.1 Min 2.1 Max 0.938 Avg |

The Results table on the far right is how the chlorine results are then reported in the Annual Report.

Working out Average Results

| Name of Scheme | | | | | |
|---|-------------------|-----------|-----------------|---------|-------------------|
| Toowoomba Regional Council 499 Quarter 1 | | | | | |
| Sample Number | Date Sample Taken | Parameter | Unit of Measure | Results | ADWG Health Value |
| 1 | 01-01-2009 | Chlorine | mg/L | <0.1 | 5.0mg/L |
| 2 | 08-01-2009 | Chlorine | mg/L | 0.2 | 5.0mg/L |
| 3 | 15-01-2009 | Chlorine | mg/L | 0.1 | 5.0mg/L |
| 4 | 22-01-2009 | Chlorine | mg/L | 0.5 | 5.0mg/L |
| 5 | 29-01-2009 | Chlorine | mg/L | 0.3 | 5.0mg/L |
| 6 | 05-02-2009 | Chlorine | mg/L | <0.1 | 5.0mg/L |
| 7 | 12-02-2009 | Chlorine | mg/L | <0.1 | 5.0mg/L |
| 8 | 19-02-2009 | Chlorine | mg/L | 0.25 | 5.0mg/L |
| 9 | 26-02-2009 | Chlorine | mg/L | .22 | 5.0mg/L |
| 10 | 05-03-2009 | Chlorine | mg/L | 0.22 | 5.0mg/L |
| 11 | 12-03-2009 | Chlorine | mg/L | <0.1 | 5.0mg/L |
| 12 | 19-03-2009 | Chlorine | mg/L | 0.33 | 5.0mg/L |
| 13 | 26-03-2009 | Chlorine | mg/L | 0.22 | 5.0mg/L |
| 14 | 2-04-2009 | Chlorine | mg/L | 0.22 | 5.0mg/L |
| 15 | 09-04-2009 | Chlorine | mg/L | 0.08 | 5.0mg/L |
| 16 | 16-04-2009 | Chlorine | mg/L | <0.1 | 5.0mg/L |

Total Number of Samples collected 16

Number Detected 11

Min <0.1

Max 0.50

Avg. 2.565

To work out the average

$$\text{Average} = (0 \times 5) + 0.2 + 0.1 + 0.5 + 0.3 + 0.25 + 0.22 + 0.22 + 0.33 + 0.22 + 0.22 + 0.08 / 16 = 2.565$$

NOTE: <0.1 or <0.01 to be treated as 0 for results. **NOTE:** If an average value is worked out to be 0.111111111111111111 then you must enter the value as it is. Do not round down any value e.g. 0.2111 must be entered as 0.2111 not 0.2

E.coli Reporting.

At the bottom of each sheet in the annual report is a section for completing the E.coli for the *Escherichia coli* public health compliance. All E.coli that has been tested for RETICULATION only. Any E.coli for Raw water or water that is not classified as Reticulation water is not added to this section.

Retic E.coli

Scheme A

| Month | Apr-10 | May-10 | Jun-10 | Comment: | |
|--|--------|--------|--------|---|--|
| Number of Samples Collected Each Month | 7 | 7 | 7 | Refer to TRC Document #0000000 Scheme A Reservoir 14/12/2010 Reference 12-499-101 | |
| Number of Samples Collected Each Month in which E.coli is detected | 0 | 1 | 0 | | |

Once again you will have to refer to the DWQI Registry [DM# 3307909](#) and see if there are any E.coli failures. You may have to search DM if a DWQI has happened and it hasn't been entered into the Registry. QWSR will send back notifications saying if a DWQI has been signed off or not.

NOTE: We only add any tests that were CONFIRMED as having E.coli present, in the original sample.

For some reason should no E.coli samples be collected for the Reticulation system then an explanation in the Comments section needs to be made as well as notification to the Manager, Principal Engineer and relevant Coordinator advising them of situation.

Any –re-sample results are **NOT** to be reported in the quarterly or annual report.

File Codes

When saving either of the reports you will need to save them in an appropriate file code in DM

F-002292 Reporting

Need to Know

The following are useful doc numbers

| | |
|---|--------------------------------|
| Quarterly Report Template ----- | <u>3524087</u> |
| Annual Report Template Water Quality ----- | <u>5853373</u> |
| Annual Report Template Water Quality Complaints ----- | <u>5829063</u> |
| Millmerran Lab Results ----- | <u>3617789</u> |
| Pittsworth Lab Results ----- | <u>3617796</u> |
| Greenmount Lab Results ----- | <u>3617785</u> |
| Toowoomba Lab Results ----- | <u>3617800</u> |
| Northern Districts Results ----- | <u>3617788</u> |
| Clifton Lab Results ----- | <u>3617783</u> |
| Water Quality Incident Reports Spread Sheet ----- | <u>3307909</u> |
| Explanatory Notes ----- | <u>5506324</u> |

E.coli Result Reporting Spread sheets

| | |
|----------------------------|--------------------------------|
| SP499 E.coli Results | <u>3873768</u> |
|----------------------------|--------------------------------|

AppendixA

| Scheme Component | Name Of Scheme Component | Parameter Grouping | Parameter | Laboratory Name | Unit of Measure | Limit of Reporting (LOR) for Chemical Parameters | Total Number of Samples Taken or OL | Number of Samples in which the parameter was detected or OL | No of samples > ADWG health guideline value in which the pathogen was detected | Is | Minimum concentration or count | Is | Maximum concentration count | Is |
|------------------|-------------------------------|--------------------|-----------|-----------------|-----------------|--|-------------------------------------|---|--|----|--------------------------------|----|-----------------------------|----|
| Source Water | Toowoomba Dams - Cressbrook | Turbidity | Turbidity | In House | NTU | 0.1 | 6 | 6 | 0 | | 2.3 | | 8.63 | |
| Source Water | Toowoomba Dams - Perseverance | Turbidity | Turbidity | In House | NTU | 0.1 | 6 | 6 | 0 | | 1.08 | | 61.1 | |
| Source Water | Toowoomba Dams - Cooby | Turbidity | Turbidity | In House | NTU | 0.1 | 6 | 6 | 0 | | 4.46 | | 34.4 | |


NOTE:

Under approved DWQMP's TRC is no longer required to report Aesthetic Results such as Turbidity.

Appendix B

Copy of previous quarterly fluoride report

EXAMPLE

| | |
|---|--|
| WATER FLUORIDATION REGULATION 2008 SECTION 11 Form 3 |  Queensland Government Queensland Health |
| FLUORIDATED WATER QUARTERLY REPORT | |

1. Water Supplier and Supply Details

| | |
|---------------------------------|-------------------------------------|
| Name of Water Supplier | |
| Toowoomba Regional Council | |
| Name of Treatment Plant | Location of Treatment Plant |
| Mt Kynoch Water Treatment Plant | Shuttlewood Court, Toowoomba Q 4350 |
| Service Provider ID | |
| 499 | |

2. Contact Details

| | | |
|---|--------------|--------------------------|
| Family Name | Given Name/s | Position |
| Alan | Kleinschmidt | Manager Water Operations |
| Phone | Fax | Mobile |
| 07 4688 6975 | 07 4688 6299 | 0417 604 712 |
| Email | | |
| alan.kleinschmidt@toowoombaRC.qld.gov.au | | |
| Signed | | Date |
|  | | 12/10/11 |

3. Results

Reporting Period

From.....01-July.....to30-September..... Year.....2011.....

Fluoridated Water Results for the above quarter

| | |
|--|----------|
| Number of days in the quarter | 92 Days |
| Number of fluoridated water samples analysed | 212 |
| Prescribed concentration for Local Government Area | 0.80mg/L |
| Average measured fluoride concentration | 0.67mg/L |
| Maximum measured fluoride concentration | 0.96mg/L |
| Minimum measured fluoride concentration | 0.00mg/L |
| Number of samples exceeding 1.5 mg fluoride/L | NIL |

This form must be retained by the water supplier for a period of at least 5 years. Completion of the table above ensures compliance with the reporting requirements of Section 11 of the *Water Fluoridation Regulation 2008*. This form must be forwarded to either the Office of the Water Supply Regulator or the Chief Executive of Queensland Health within 30 business days of the end of the quarter.

