Utility Name

Date: October 2015

Version: 3.1

Drinking Water Management System

Annual Report Template {Year}

Document control

|  |  |  |
| --- | --- | --- |
| Date | Change made | Person |
|  |  |  |

Guidance

*This report template is designed to address the reporting (Element 10), evaluation (Element 11) and review and continual improvement (Element 12) requirements of [Utility’s Name] Drinking Water Management System (DWMS).*

*The NSW Guidelines for Drinking Water Management Systems (2013) recommends review of the following areas:*

* *Performance of critical control points*
* *Water quality review (raw, treated and distribution water quality including verification monitoring in the NSW Health Drinking Water Database)*
* *Levels of Service (including consumer complaints)*
* *Incident and emergencies (including follow up)*
* *Drinking Water Management System implementation*
* *Continuous improvement plan implementation*

*Review of system performance should be against ADWG, levels of service, NSW Water Supply and Sewerage Performance Monitoring Reports and other regulatory requirements (Element 1).*

*Shortcomings should be captured in the Improvement Plan (Element 12).*

Executive Summary

*Include a summary of the annual report findings for the reporting period here.*

*Include a summary of CCP exceedances for the reporting period here.*

Critical Control Points

|  |  |  |  |
| --- | --- | --- | --- |
|  | CCP1 | CCP2 | CCP3 |
| Number of CCP exceedances |  |  |  |

Water quality

*Include a summary of water quality issues for the reporting period here.*

Continuous improvement plan

*Include a summary of progress towards implementing continuous improvement plan actions here.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Completed | In progress | Items added | Total |
| Number of actions |  |  |  |  |

DWMS Reviews

*Include a summary of internal and external DWMS reviews here.*

| Review | Scope  | Findings | Actions taken |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

Reservoir inspections

*Include a summary of reservoir inspections here.*

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Reservoirs inspected | Findings | Corrective actions  |
|  |  |  |  |
|  |  |  |  |

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# Report purpose

*Include the utility name, reporting period and purpose of the report here.*

# Scheme summary

*Include a summary of the scheme here including:*

* *Supply system name*
* *Source water*
* *Treatment unit processes*
* *Type and numbers of connections at the beginning and end of the year*
* *Upgrade or system improvements details*

|  |  |
| --- | --- |
| Checklist |  |
| Have there been any system upgrades within the reporting period? |[ ]
| Upgrade or system improvements details have been provided |[ ]

# DWMS document control

*Include a summary of updates to DWMS documentation here.*

*Major changes should be submitted to NSW Health Public Health Unit.*

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Version | Updates | Submitted to NSW Health and date submitted?  |
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# Critical control points

*Include a summary of CCPs here* *and provide details of any changes to critical control points or critical limits. CCPs should be reviewed each year to confirm their validity.*

Table ‑. Summary of critical control points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CCP number | Monitoring Parameter | Target criterion | Adjustment limit | Critical limit |
| 1 |  |  |  |  |
| 2 |  |  |  |  |

## Critical limit exceedance

*Include a summary of the performance of the critical control points* *here. Report any exceedances over the reporting period including:*

* *the reason for the exceedance*
* *immediate action taken*
* *preventive action undertaken to prevent a recurrence of the exceedance*

*A monitoring template is available that can be used to record and plot monitoring data.*

Table ‑. Critical limit exceedances

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date | CCP1 | CCP2 | CCP3 | CCP4 | CCP5 | CCP6 | Water quality issue | Reason | Immediate correction  | Preventive Action |
| *e.g. XX/XX/XX* |  | *e.g. 20 NTU* |  |  |  |  |  | *e.g. Equipment failure*  | *e.g. Plant shut down, PHU notification* | *e.g. Maintenance schedule review* |
|  |  |  |  |  |  |  |  |  |  |  |
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*Include CCP graphs if desired.*

Figure ‑. Critical control point

## Fluoride Critical limit exceedance

# Water Quality

*Include a review of water quality data from the previous year and an analysis of longer term trends here.*

## Data collection

*Include a summary of monitoring undertaken, details of any reviews of the monitoring schedules that were undertaken and any outcomes of these reviews.*

## Non-compliant data

*Include a summary of any non-compliant data or water quality issues in addition to critical limit exceedances here. Include details of the corrections and preventive actions that were implemented.*

Table ‑. Summary of non-compliant water quality data

| Date | Location | Parameter | Exceedance | Correction | Preventive action | Notes |
| --- | --- | --- | --- | --- | --- | --- |
| *e.g. Xx/xx/xx* | *e.g. Reservoir* | *e.g. E. coli* | *e.g. 10 cfu* | *e.g. Retest,* *PHU notified,* *Pipe break fix, flushing, retest* | *e.g. Review of maintenance schedule* | *Pipe break*  |
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## Water quality discussion

*Include a discussion of the water quality results including any positive microbiological results and what actions were taken and any trends in the chemical results.*

# Consumer complaints

*Include details of any water quality complaints and any lessons learnt here.*

# Water quality incidents

*Include details of any water quality incidents/emergencies that have occurred over the reporting period here. Include details of investigation recommendations and any corrective actions undertaken as a result of the incident/emergency.*

Table ‑. Summary of incident and emergencies, recommendations and preventive actions

| Details of incident/emergency | Investigation recommendations | Preventive action undertaken |
| --- | --- | --- |
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# Staff Development and Training

Include staff development and training courses completed here

# Continuous improvement plan

*Include a summary of continuous improvement plan activities that have progressed, been completed or been added during the reporting period here. Include the full continuous improvement plan in Appendix B.*

Table ‑. Continuous improvement plan activities that have progressed, been completed or been added during the period XX/XX

| Action no. | Item | Progress | Date for completion | Who is responsible |
| --- | --- | --- | --- | --- |
| *e.g. 5.2* | *e.g. Review verification monitoring sites after first year to ensure sampling sites are representative* | *e.g. Sites have been reviewed. Three sample sites have been reallocated due to the expansion of the supply area.* | *Xx/xx* | *e.g. J. Smith* |
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# Review of DWMS implementation

*Include a summary of any internal or external reviews of the DWMS and implementation here. Include details of relevant findings and any actions taken or identified.*

Table ‑. Summary of internal reviews

| Date | Reviewer | Scope  | Findings | Actions |
| --- | --- | --- | --- | --- |
| *Xx/xx/xx* | *e.g. J. Smith, A. John* | *e.g. Drinking Water Policy* | *e.g. Fully Compliant – Council reviewed and endorsed the water policy on XX/XX/XX.* | *-* |
|  |  | *e.g. Verification Monitoring* | *e.g. Council has undertaken all required verification monitoring* | *-* |
|  |  |  |  |  |

Table ‑. Summary of external reviews

| Date | Reviewer | Scope  | Findings | Actions |
| --- | --- | --- | --- | --- |
| *XX/XX/XX* | *XXX* | *e.g. Peer review of critical control points and monitoring program* | *e.g. Critical control procedures are not documented* | *e.g. Protocols documented and reviewed by operational staff* |
|  |  |  |  |  |
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# Reservoir inspections

*Include a summary of any reservoir inspections undertaken during the reporting period here. Include details of any corrective actions undertaken and any planned future work.*

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Reservoirs inspected | Findings | Corrective actions  |
| *XX/XX/XX* | *e.g. Reservoir 1* | *Entry hatch is not sealed* | *Hatch has been sealed.*  |
|  |  |  |  |
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###### Water quality data

Water quality graphs

*Include summary water quality graphs here:*

Water quality data summary

*Include a summary of available water quality data over the reporting period here:*

* *Raw water*
* *Treated water*
* *Reticulation*
* *Verification*

*This data can be generated using the monitoring template spreadsheet.*

Raw Water

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Parameter | Minimum | Average | Maximum | Lower critical limit | Upper critical limit | No. samples |
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Treated Water

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| --- | --- | --- | --- | --- | --- | --- |
| Parameter | Minimum | Average | Maximum | Lower critical limit | Upper critical limit | No. samples |
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Reticulation

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| --- | --- | --- | --- | --- | --- | --- |
| Parameter | Minimum | Average | Maximum | Lower critical limit | Upper critical limit | No. samples |
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Verification monitoring

*Include a summary of NSW Health’s Drinking Water Monitoring Program data here.*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Parameter | Location | Minimum | Average | Maximum | ADWG Limit | No. exceed-ances | No. samples |
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###### Continuous improvement plan

*Include the full continuous improvement plan here. Include details of:*

* *progress*
* *who is responsible*
* *the date for completion.*

| Action no. | Item | Progress | Date for completion | Who is responsible |
| --- | --- | --- | --- | --- |
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