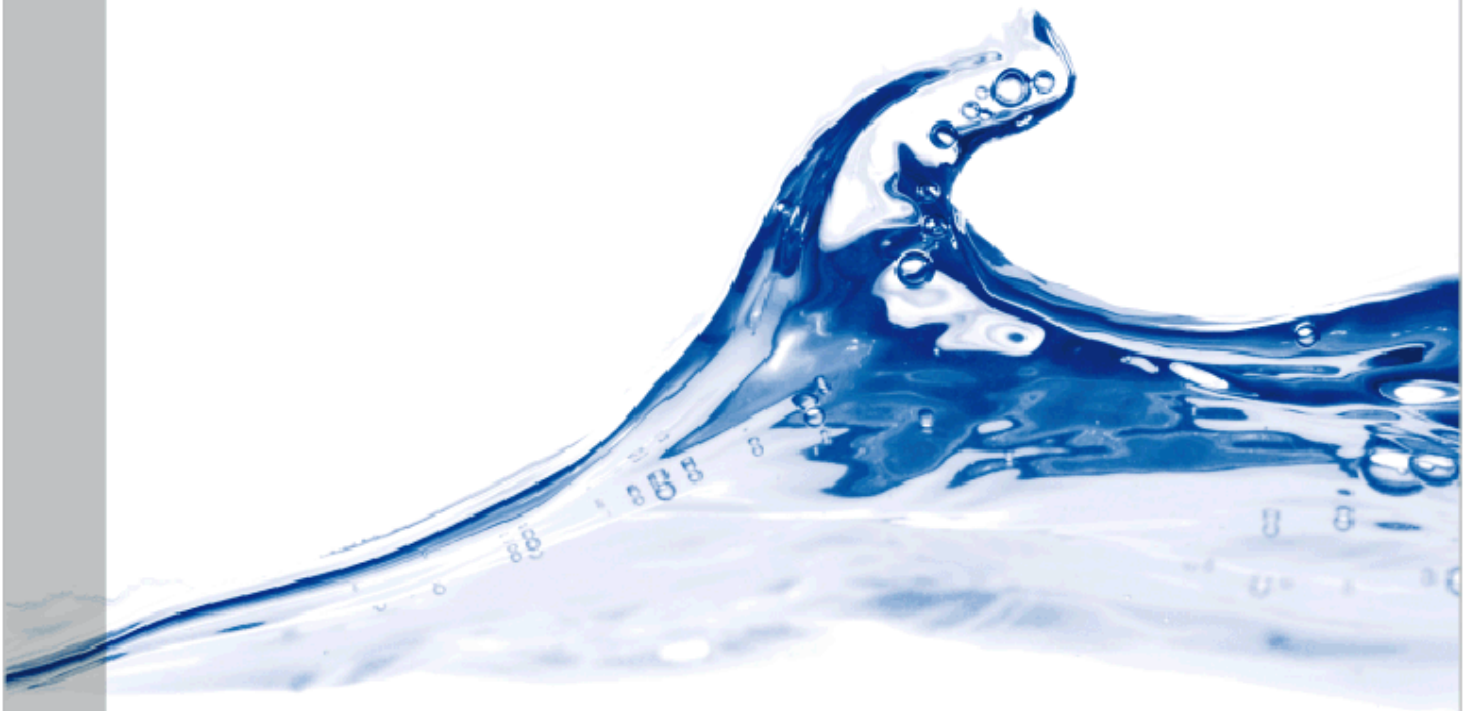
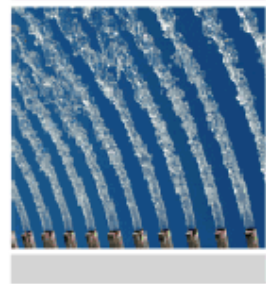


Martinborough Wastewater Treatment Plant - Operation & Maintenance Manual

South Wairarapa District Council

March 2014 – Working Draft



QUALITY RECORD SHEET

Document Martinborough Wastewater Treatment Plant - Operation & Maintenance Manual - Working Draft

Reference R:\Projects\1250_Combined_Scheme_Review\500_Deliverables\510_Reports\Martinborough Resource Consent Application\Martinborough WWTP Operations and Maintenance Manual.docx

Date March 2014

DOCUMENT CONTROL

The following organisation(s) shall receive a electronic copy of this report on release:

South Wairarapa District Council

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REVISION HISTORY

Version	Prepared by	Description	Date
Working Draft	AWT	Operations and Maintenance Manual for the Treatment Plant	5/3/2014

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Any indication of costs is made on the basis of AWT Water Ltd's experience and professional qualifications and represents its best judgment but we cannot and do not guarantee that actual costs will not vary from cost indications given. This report/study is not to be construed as providing an opinion on the commercial feasibility of the project.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	IV
1 INTRODUCTION	1
1.1 Purpose of the Manual	1
1.2 Consent Requirements	1
2 PLANT OVERVIEW	1
2.1 Plant Description	1
2.2 Influent and Effluent quality	1
2.3 Plant Drawings and Photos	1
2.4 Plant Process Items.....	1
3 PLANT OPERATING PROCEDURES	1
3.1 Process Units	1
3.1.1 Screens	1
3.1.2 <i>Facultative pond</i>	1
3.1.3 <i>Maturation cells</i>	1
3.1.4 <i>UV treatment</i>	1
3.1.5 <i>Monitoring Equipment</i>	2
3.2 Key Performance Indicators	2
3.3 Alarm Conditions	2
3.4 Emergency Operation Procedures	2
3.5 Pond Desludging Procedures.....	2
4 OPERATIONAL AND COMPLIANCE MONITORING	2
4.1 Process Monitoring.....	2
4.1.1 <i>Sampling Schedule</i>	2
4.1.2 <i>Data Collection and Testing</i>	2
4.1.3 <i>Reporting</i>	2
4.2 Effluent monitoring.....	2
4.3 Complaints Register	2
5 PLANT CONDITION INSPECTIONS AND MAINTENANCE	2
5.1 Inspection and Maintenance Procedures	3
5.1.1 <i>Maintenance and repair of mechanical equipment</i>	3
5.1.2 <i>Maintenance and Repair of Pond Structures and Grounds</i>	3
5.2 Recording and Reporting of Inspection and Maintenance.....	3
6 TROUBLESHOOTING GUIDE	3
7 ROLES AND RESPONSIBILITIES	3
8 OPERATION AND MAINTENANCE MANUAL REVIEW PROCEDURE	3

APPENDICES

APPENDIX 1 – RESOURCE CONSENT

APPENDIX 2 – DRAWINGS AND P&ID'S

APPENDIX 3 – INSPECTION AND MAINTENANCE SCHEDULE

APPENDIX 4 – INSPECTION AND MAINTENANCE LOG

LIST OF FIGURES

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LIST OF TABLES

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EXECUTIVE SUMMARY

Working Draft

1 INTRODUCTION

Quick description of catchment, plant location...

1.1 Purpose of the Manual

1.2 Consent Requirements

2 PLANT OVERVIEW

2.1 Plant Description

Overall description of process and any design criteria information.

2.2 Influent and Effluent quality

Influent data, effluent consent limits and effluent data

2.3 Plant Drawings and Photos

2.4 Plant Process Items

List of plant items and mechanical equipment

3 PLANT OPERATING PROCEDURES

3.1 Process Units

3.1.1 Screens

How to operate new inlet screen, setpoints, procedures for collection, storage, transportation and deposition of material captured by the WWTP primary screen.

3.1.2 Facultative pond

What the facultative pond does and surface aerators operation, operating levels, procedures to manage peak flows and prevent unauthorised discharges.

3.1.3 Maturation cells

What to check in maturation ponds to guarantee good performance, operating levels, procedures to manage peak flows and prevent unauthorised discharges.

3.1.4 UV treatment

What the UV treatment does and how it is controlled, and operated.

3.1.5 Monitoring Equipment

Influent and outlet flow meters; pH and DO probes.

3.2 Key Performance Indicators

3.3 Alarm Conditions

If any alarms can be triggered

3.4 Emergency Operation Procedures

Contingency measures in the event of system malfunctions or breakdowns (including power outage)

3.5 Pond Desludging Procedures

When and how to remove sludge settled in ponds and how to treat this sludge

4 OPERATIONAL AND COMPLIANCE MONITORING

4.1 Process Monitoring

Mostly influent testing and sludge level in ponds.

4.1.1 Sampling Schedule

When and where to test, type of sample (grab, composite)

4.1.2 Data Collection and Testing

What to do with the sample. Parameters to be analysed.

4.1.3 Reporting

District Council reporting requirements (data, frequency...)

4.2 Effluent monitoring

Refer to Effluent Discharge Management Plan for details and procedures for effluent quality monitoring and reporting.

4.3 Complaints Register

This will likely refer to a centralised complaints register that will be used for all aspects of the scheme operation including odour complaints and complaints regarding the effluent discharge. Procedures for recording of and responding to complaints

5 PLANT CONDITION INSPECTIONS AND MAINTENANCE

5.1 Inspection and Maintenance Procedures

Operation checks and preventive maintenance checklist

5.1.1 Maintenance and repair of mechanical equipment

UV, pumps, aerators, screening system

5.1.2 Maintenance and Repair of Pond Structures and Grounds

5.2 Recording and Reporting of Inspection and Maintenance

6 TROUBLESHOOTING GUIDE

What to do if aerator out of service or UV doesn't work for instance.

7 ROLES AND RESPONSIBILITIES

8 OPERATION AND MAINTENANCE MANUAL REVIEW PROCEDURE




APPENDIX 1
RESOURCE CONSENT




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APPENDIX 2
DRAWINGS AND P&ID'S



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APPENDIX 3
INSPECTION AND MAINTENANCE SCHEDULE

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APPENDIX 4
INSPECTION AND MAINTENANCE LOG



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