Appendix B BROWN AND CALDWELL CONDITION ASSESSMENT 2019







City of Wilsonville Triennial Inspection Report

Wilsonville WWTP and Wastewater Lift Stations:

Canyon Creek Charbonneau Corral Creek Grande Pointe Memorial Park Morey's Landing River Village Town Center

June 24, 2019











Technical Memorandum

6500 SW Macadam Avenue, Suite 200 Portland, OR 97239

T: 503-244-7005

Prepared for: City of Wilsonville

Project Title: On-Call Civil Engineering and Related Services,

Triennial Inspection of the Wilsonville WWTP and Nine Lift Stations

Project No.: 153390

Technical Memorandum

Subject: 2019 Triennial Inspection of the Wilsonville WWTP

and Sewage Lift Stations

Date: June 24, 2019

To: Delora Kerber, P.E., Director of Public Works/Emergency Management Coordinator

From: Simon Watson, CMRP, ENV SP, Brown and Caldwell

Art Molseed, P.E., Brown and Caldwell

Limitations:

This document was prepared solely for City of Wilsonville, Oregon, (City) in accordance with professional standards at the time the services were performed and in accordance with the contract between the City and Brown and Caldwell dated November 9, 2018. This document is governed by the specific scope of work authorized by the City; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by the City and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

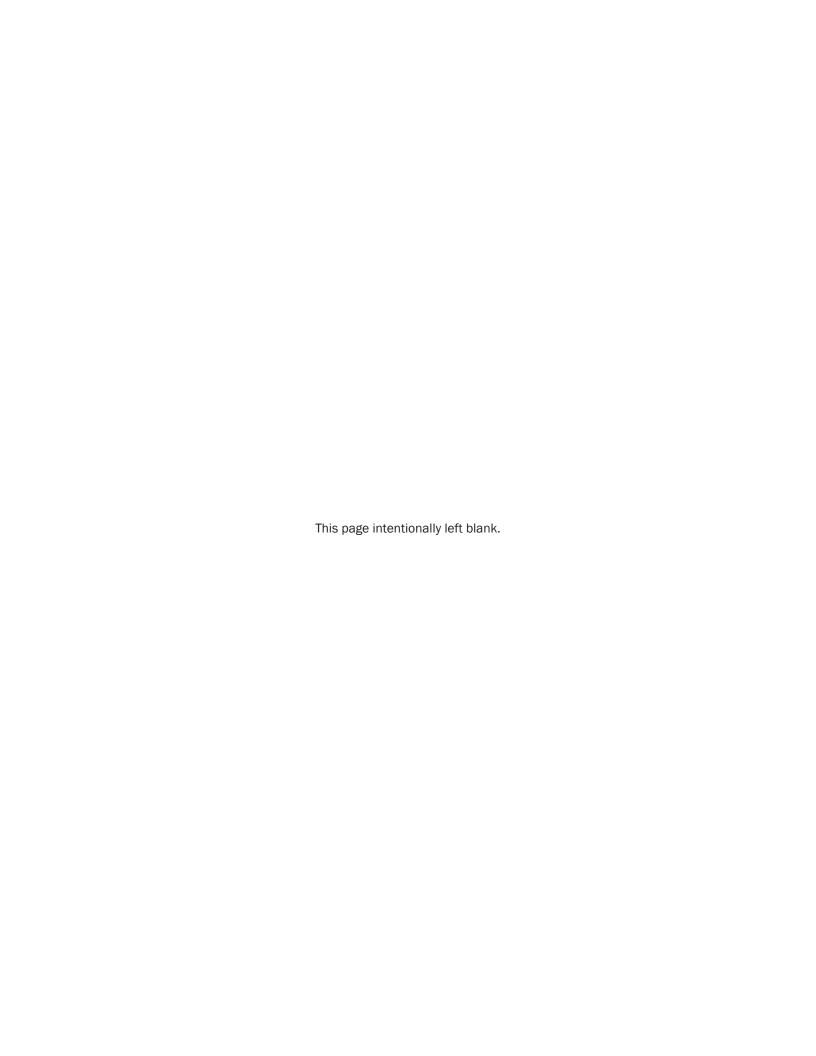


Table of Contents

Section	on 1:	Introduction	1
Section	on 2:	Inspection Approach and Scoring System	1
Section	on 3:	WWTP Inspection Report Summaries	2
	3.1	Area 10 Preliminary Treatment	2
	3.2	Area 40 Aeration and Stabilization Basins	4
	3.3	Area 40 Process Gallery	5
	3.4	Area 50 Secondary Clarifiers	5
	3.5	Area 53 Secondary Effluent Pumps	7
	3.6	Area 55 Secondary Effluent Cooling Towers	7
	3.7	Area 60 Secondary Effluent Filters	8
	3.8	Area 70 UV Disinfection	9
	3.9	Area 78 Solids Dewatering and Drying	. 10
	3.10	Area 80 and 81 Thickening	. 12
		. Areas 82 Biosolids	
	3.12	Area 90 W3 Reuse System	. 14
	3.13	Area 91 Odor Control	. 15
	3.14	Areas 95 Operations Building	. 16
	3.15	Areas 99 and 100 Backup Power Systems	. 17
Section	on 4:	Lift Station Inspection Report Summaries	. 17
	4.1	Canyon Creek Lift Station	. 18
	4.2	Charbonneau Lift Station	. 19
	4.3	Corral Creek Lift Station	. 20
	4.4	Grande Pointe Lift Station	. 21
	4.5	Memorial Park Lift Station	. 22
	4.6	Morey's Landing Lift Station	.23
	4.7	Rivergreen Lift Station	.24
	4.8	River Village Lift Station	.24
	4.9	Town Center Lift Station	.25
Section	on 5:	Summary and Conclusions	.26
	5.1	Conclusions of Review	.26
	5.2	Acknowledgements	.27
Attach	nmen	t A: WWTP Inspection Forms	A-1
Attack	nmen	t R. Lift Station Inspection Forms	R-1



List of Figures

Figure 3-1. Area 10 Preliminary Treatment	3
Figure 3-2. Area 40 Aeration Blowers	5
Figure 3-3. Area 50 Secondary Clarifiers	6
Figure 3-4. Area 60 Secondary Effluent Filters	8
Figure 3-5. Area 78 Dewatering Equipment	11
Figure 3-6. Area 78 Dryer Equipment	11
Figure 3-7. Area 78 Load-Out Area	11
Figure 3-8. Areas 80 and 81 Equipment in Process Gallery	12
Figure 3-9. Area 82 Biosolids Equipment	13
Figure 3-10. Area 90 W3 Reuse System	14
Figure 3-11. Area 91 Odor Control Equipment	15
Figure 3-12. Area 95 Operations Building	16
Figure 3-13. Areas 99 and 100 Backup Power Systems	17
Figure 4-1. Canyon Creek Lift Station	18
Figure 4-2. Charbonneau Lift Station	19
Figure 4-3. Corral Creek Lift Station	20
Figure 4-4. Grande Pointe Lift Station	21
Figure 4-5. Memorial Park Lift Station	22
Figure 4-6. Morey's Landing Lift Station	23
Figure 4-7. Rivergreen Lift Station	24
Figure 4-8. Town Center Lift Station	25
Figure 5-1. Burnt Biosolids and Oily Residue	26
Figure 5-2. Dried Product Loadout	27
Figure 5-3. General Housekeeping	27

List of Tables

Table 1-1. Asset Scoring System	1
Table 3-1. Area 10 Headworks Equipment and Facilities	2
Table 3-2. Area 40 Aeration and Stabilization Basins Equipment and Facilities	4
Table 3-3. Area 40 Process Gallery Equipment and Facilities	5
Table 3-4. Area 50 Secondary Clarifiers Equipment and Facilities	6
Table 3-5. Area 53 Secondary Effluent Pumps	7
Table 3-6. Area 55 Secondary Effluent Cooling Towers Equipment	7
Table 3-7. Area 60 Secondary Effluent Filters Equipment	8
Table 3-8. Area 70 UV Disinfection Equipment	9
Table 3-9. Area 78 Dewatering and Drying Equipment	10
Table 3-10. Areas 80 and 81 Thickening Equipment	12
Table 3-11. Area 82 Biosolids Equipment	13
Table 3-12. Area 90 W3 Reuse System Equipment	14
Table 3-13. Area 91 Odor Control Equipment	15
Table 3-14. Areas 95 Operations Building	16
Table 3-15. Areas 99 and 100 Backup Power Systems Equipment	17
Table 4-1. Canyon Creek Lift Station	18
Table 4-2. Charbonneau Lift Station	19
Table 4-3. Corral Creek Lift Station	20
Table 4-4. Grande Pointe Lift Station	21
Table 4-5. Memorial Park Lift Station	22
Table 4-6. Morey's Landing Lift Station	23
Table 4-7. Rivergreen Lift Station	24
Table 4-8. River Village Lift Station	24
Table 4-9. Towne Center Lift Station	25



List of Abbreviations

BC Brown and Caldwell
City City of Wilsonville

CM corrective maintenance

CMMS computerized maintenance management system

DBO Design-Build-Operate
GBT gravity belt thickener
LED light-emitting diode
MCC motor control center
PM preventive maintenance
RAS return activated sludge

TWAS thickened waste activated sludge

UV ultraviolet

WWTP wastewater treatment plant

Section 1: Introduction

Brown and Caldwell (BC) was contracted by the City Wilsonville (City) to complete the triennial inspection of the Wilsonville Wastewater Treatment Plant (WWTP). In accordance with Section 8.4 of the City's Design-Build-Operate (DBO) Agreement with Jacobs Engineering (formerly CH2M Hill), a triennial inspection of the WWTP is required. This inspection requires a review of the state of repair, working condition, and performance of equipment and facilities at the Wilsonville WWTP and nine sewage lift stations. This report was developed to provide the City with a review of the findings and record of the inspection reports for equipment and facilities.

Section 2: Inspection Approach and Scoring System

To meet the requirements in Section 8.4 of the DBO agreement between the City and CH2M Hill, the inspection conducted by BC included the following activities associated with the equipment:

- Review of equipment maintenance records
- Visual condition inspection of the equipment
- Visual observation of the equipment in service and recording the performance to ensure that it is meeting the functional design requirements

The inspections were performed during a site visit completed on March 27-29, 2019, and a supplemental visit on May 31, 2019, to inspect the new Grande Pointe Lift Station. The visual inspection was conducted and documented by process area and lift station. The inspector used a phone and tablet application called Fulcrum. Fulcrum is a user interface application that allowed the inspector to effectively document observations on individual assets, and access and update the database while in the field. The goal of performing the work in this manner was to have a single repository and consistent methodology for collecting and managing the condition assessment data.

The inspector assigned a condition and performance score to each asset and supplemented the rating with field observations, notes from interviews with Operations staff, and photographs. The Fulcrum application was used to generate report documentation that is included with this report. WWTP inspection reports are included in Attachment A and lift station inspection reports are included in Attachment B. Photographs were taken of most of the assets and are included in the respective reports in Attachments A and B. Table 1-1 defines the asset scoring system used for condition and performance ratings.

In some cases, as described below, some units were not operational or had been taken out of service for maintenance and could not be operated. In general, equipment that was not operational during the inspection is noted in the reports. The maintenance records from 2016 through early 2019 were reviewed and included preventive maintenance (PM) and corrective maintenance (CM) activities, and an open work order report.

Table 1-1. Asset Scoring System					
Score Condition Score Performance Score					
1	Excellent	Component functioning as intended			
2	Slight visible degradation	In service, but higher than expected O&M			
3	Visible degradation	In service, but function is impaired			
4	Integrity of component moderately compromised	In service, but function is highly impaired			
5	Integrity of component is compromised	Component is not functioning as intended			



Section 3: WWTP Inspection Report Summaries

This section presents summaries of the inspection reports for the following areas of the Wilsonville WWTP:

- Area 10 Preliminary Treatment
- Area 40
 - Aeration and Stabilization Basins
 - Process Gallery
- Area 50 Secondary Clarifiers
- Area 53 Secondary Effluent Pumps
- Area 55 Secondary Effluent Cooling Towers
- Area 60 Secondary Effluent Filters
- Area 70 UV Disinfection
- Area 78 Solids Dewatering and Drying
- Area 80 and 81 Thickening
- Area 82 Biosolids
- Area 90 W3 Reuse System
- Area 91 Odor Control
- Area 95 Operations Building
- Areas 99 and 100 Backup Power Systems

These areas, along with detailed inspection reports on the City's nine sewage lift stations, are documented on the complete inspection forms, included as Attachments A and B, respectively, to the 2019 Triennial Inspection Report.

3.1 Area 10 Preliminary Treatment

The Area 10 assets inspected during the 2019 Triennial Review, and their respective condition and performance scores, are listed in Table 3-1. The comments column identifies key inspection findings, and/or includes suggested corrective actions. Inspection reports for this equipment are located behind the Area 10 tab in Attachment A.

Table 3-1. Area 10 Headworks Equipment and Facilities						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
10BLD-01	Headworks Structure	2	2	Water leakage		
FV10-20101	Flow Valve 10-20101	1	1	No immediate action required		
FV10-20102	Flow Valve 10-20102	1	1	No leaks observed		
GCL10-31500	Grit Classifier 31500	2	1	Leakage from top cover		
GTE10-12500	Influent Channel Gate #1	1	1	No immediate action required		
GTE10-12501	Influent Channel Gate #2	1	1	Confirm asset number		
GTE10-12502	Influent Channel Gate 12502	1	1	Confirm asset number		
GTE10-12601	Screen Channel Inf Gate #1	1	1	No immediate action required		
GTE10-12602	Screen Channel Inf Gate #2	1	1	No immediate action required		



Table 3-1. Area 10 Headworks Equipment and Facilities						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
GTE10-12603	Screen Channel Inf Gate #3	1	1	No immediate action required		
GTE10-12701	Screen Channel Eff Gate #1	1	1	No immediate action required		
GTE10-12702	Screen Channel Eff Gate #2	2	1	Channel seal collapsed		
GTE10-12703	Screen Channel Eff Gate #3	2	1	Channel seal collapsed		
GTE10-32101	Grit Basin Influent Gate	1	1	No immediate action required		
GTE10-32102	Grit Basin Effluent Gate	2	1	Drive chain rusted and lacking lube		
GTE10-32103	Grit Basin Bypass Gate	1	1	No immediate action required		
GV10-19301	Influent Channel 1 Valve	1	1	No immediate action required		
GV10-19302	Influent Channel 2 Valve	1	1	No immediate action required		
GYC10-31100	Grit Cyclone 31100	2	1	Duct tape of effluent hose		
MXR10-30100	Grit Basin Mixer	2	1	Some external coating missing, cover next to mixer missing		
PMP10-10500	Vactor Sump Pump	4	5	Schedule corrective work action		
PMP10-30500	Grit Pump 30500	1	1	No visible leaks, oil level good		
SAM10-11000	Composite Sampler #1	2	1	Part of door seal is missing, cooling fan vents partially plugged		
SCR10-13001	Manual Bar Screen	2	1	Unable to see		
SCR10-13002	Influent Screen #2	2	1	Discharge chute boot cracking, appears to be leaking, channel seals collapsed		
SCR10-13003	Influent Screen #3	2	1	Discharge chute boot cracking, no leakage observed, channel seals collapsed		
SWC10-20501	Screenings Washer Compactor #1	2	1	Leaking oil between gearbox and auger		
SWC10-20502	Screenings Washer Compactor #2	2	1	Leaking water from bottom inspection doors		

In general, the Area 10 headworks equipment appeared to be in good working order. The items noted below do not currently impact the reliable operation for the facilities but, if left un-corrected, may result in a reduced equipment life expectancy and impact efficient operation of systems.

The photos shown in Figure 3-1 illustrate various condition issues described in Table 3-1.







Headworks Structure



Screening Washer Compactor #2

Figure 3-1. Area 10 Preliminary Treatment



3.2 Area 40 Aeration and Stabilization Basins

The Area 40 Aeration and Stabilization Basin assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-2. The comments column identifies key findings during the inspection, and includes some recommendations for corrective actions. Inspection reports for this equipment are behind the Area 40 tab in Attachment A.

Table 3-2. Area 40 Aeration and Stabilization Basins Equipment and Facilities						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
BLW40-50004	Aeration Blower #4	2	1	Some coating has come off		
BLW40-50005	Aeration Blower #5	2	1	Rear filter louvers and media are dirty		
BLW40-50006	Aeration Blower #6	2	1	Rear filter louvers and media are dirty		
FCV40-12001	Flow Control Valve 40-12001	2	1	No immediate action required		
FCV40-12002	Flow Control Valve 40-12002	2	1	No immediate action required		
FCV40-30001	Flow Control Valve 40-30001	2	1	No immediate action required		
FCV40-30002	Flow Control Valve 40-30002	2	1	No immediate action required		
FCV40-30003	Flow Control Valve 40-30003	2	1	No immediate action required		
FCV40-30101	Flow Control Valve 40-30101	2	1	No immediate action required		
FCV40-30102	Flow Control Valve 40-30102	2	1	No immediate action required		
FCV40-30103	Flow Control Valve 40-30103	2	1	No immediate action required		
GTE40-21003	Aeration Basin Effluent Weir Gate	2	1	Missing cap on valve stem cover		
MXR40-20001	Anaerobic Mixer #1	N/A	N/A	Understand this will be replaced		
MXR40-20002	Anaerobic Mixer #2	N/A	N/A	Understand this will be replaced		
MXR40-20003	Anaerobic Mixer #3	N/A	N/A	Understand this will be replaced		
MXR40-20004	Anaerobic Mixer #4	2	1	Understand this will be replaced		
MXR40-20003	Anaerobic Mixer #5	N/A	N/A	Understand this will be replaced		
MXR40-20006	Anaerobic Mixer #6	2	1	Understand this will be replaced		

In general, the Area 40 aeration and stabilization basins equipment appeared to be in good working order.



3.3 Area 40 Process Gallery

The Area 40 Process Gallery assets associated with secondary treatment that were inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-3. The comments column provides some observations made during the inspections. Inspection reports for this equipment are behind the Area 40 tab in Attachment A.

Table 3-3. Area 40 Process Gallery Equipment and Facilities						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
PGB-M-40-5-1	Aeration Basin Blower #1	2	1	Excessive grease on outboard bearing or seal is leaking		
PGB-M-40-5-1-M	Aeration Basin Blower Motor #1	2	1	No immediate action required		
PGB-M-40-5-2	Aeration Basin Blower #2	2	1	Both bearings have excessive grease or seals are leaking		
PGB-M-40-5-2-M	Aeration Basin Blower Motor #2	2	1	No immediate action required		
PGB-M-40-5-3	Aeration Basin Blower #3	2	1	Outboard bearing seal appears to be starting to fail, grease leaking from discharge valve stem		
PGB-M-40-5-3-M	Aeration Basin Blower Motor #3	2	1	Part of base has no coating		

The photos shown in Figure 3-2 supplement the comments listed in Table 3-3.







Blower 2



Blower 3 motor

Figure 3-2. Area 40 Aeration Blowers

Additional equipment in the Process Gallery associated with the solids thickening process is summarized in Section 3.10 Area 80 and 81 Thickening.

3.4 Area 50 Secondary Clarifiers

The Area 50 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-4. The comments column identifies key inspection findings and includes some recommendations for corrective actions. Inspection reports for this equipment are located behind the Area 50 tab in Attachment A.



Table 3-4. Area 50 Secondary Clarifiers Equipment and Facilities						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
CLR50-00103	Secondary Clarifier #3	2	1	Slight oil leak between motor and gearbox		
LCP50-10103	Sec Clarifier #3 Control Panel	2	1	See report for CLR50-10103		
PMP50-03001	RAS Pump #1	2	1	No immediate action required		
PMP50-03002	RAS Pump #2	2	1	No immediate action required		
PMP50-03003	RAS Pump #3	2	1	Slight oil leak on check valve packing		
PMP50-03004	RAS Pump #4	2	1	No immediate action required		
PMP50-20100	Scum Pump	2	1	No immediate action required		
SC-50-1-1	Secondary Clarifier #1	2	2	See weir washer and mechanism below		
SC-50-1-2	Secondary Clarifier #2	3	1	Spalling on upper wall by UV facilities		
SC-50-1-3	Sec Clarifier #1 Weir Washer	3	4	Weir washers not working		
SC-50-1-4	Sec Clarifier #2 Weir Washer	3	3	One of the weir washers is not working		
SC-M-50-1-1	Secondary Clarifier, #1 Mechanism	3	1	Motor/upper gearbox noise, slight oil leak from torque meter, torque meter at 5		
SC-M-50-1-2	Secondary Clarifier, #2 Mechanism	2	1	Middle gearbox appears to be leaking oil into the process, torque meter at 40		

The photos shown in Figure 3-3 supplement the comments listed in Table 3-4.



Secondary clarifier ${\bf 1}$ weir washer



Secondary clarifier ${\bf 1}$



Secondary clarifier 2



Secondary clarifier 2 weir washer



Secondary clarifier 2



Secondary clarifier 2 torque meter

Figure 3-3. Area 50 Secondary Clarifiers



3.5 Area 53 Secondary Effluent Pumps

The Area 53 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-5. These pumps are in good condition and no immediate actions have been identified. Inspection reports for this equipment are located behind the Area 53 tab in Attachment A.

Table 3-5. Area 53 Secondary Effluent Pumps							
Asset No. Asset Name Condition Score Performance Score Comments							
PMP53-10001	Secondary Effluent Pump #1	2	1	No immediate action required			
PMP53-10002	Secondary Effluent Pump #2	2	1	No immediate action required			
PMP53-10003	Secondary Effluent Pump #3	2	1	No immediate action required			

3.6 Area 55 Secondary Effluent Cooling Towers

The Area 55 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-6. As indicated in the comments column, the secondary effluent cooling tower equipment had been taken out of service at the time of the inspection. Inspection reports for this equipment are located behind the Area 55 tab in Attachment A.

	Table 3-6. Area 55 Secondary Effluent Cooling Towers Equipment							
Asset No.	Asset Name	Condition Score	Comments					
CTW55-11001	Cooling Tower Fan #1	N/A	N/A	Not in service and not inspected—nets over the top				
CTW55-11002	Cooling Tower Fan #2	N/A	N/A	Not in service and not inspected—nets over the top				
PMP55-10501	Cooling Tower Pump #1	2	1	Pump drained for winter				
PMP55-10502	Cooling Tower Pump #2	2	1	Pump drained for winter				



3.7 Area 60 Secondary Effluent Filters

The Area 60 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-7. As indicated in the comments column, some issues were identified with this equipment. Inspection reports for this equipment are located behind the Area 60 tab in Attachment A. BC understands that the cloth disks will be replaced with steel disks.

Table 3-7. Area 60 Secondary Effluent Filters Equipment							
Asset No.	Asset Name	Condition Score	Performance Score	Comments			
DF60-10001	Disk Filter #1	2	1	Housekeeping needs, backwash pump ran at a pressure of 40 psi ^a			
DF60-10002	Disk Filter #2	2	1	Housekeeping needs, backwash pump ran at a pressure of 110 psi, confirm appropriate setting ^a			
PMP60-11001	Disk Filter Backwash Pump #1	2	1	Inspected with filters, see report for DF60-10001			
PMP60-11002	Disk Filter Backwash Pump #2	2	1	Inspected with filters, see report for DF60-10001			

a. BC understands that the existing filter equipment will be modified with replacement disks.

The photos shown in Figure 3-4 supplement the comments listed in Table 3-7.





Filter #1

Filter #2

Figure 3-4. Area 60 Secondary Effluent Filters

3.8 Area 70 UV Disinfection

The Area 70 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-8. In general, the UV disinfection equipment appears to be in good condition. However, it appears that the Trojan equipment associated with UV channel 1 has been out of service for some time and would require significant maintenance to place back in service. Inspection reports for this equipment are located behind the Area 70 tab in Attachment A.

	Table 3-8. Area 70 UV Disinfection Equipment						
Asset No.	Asset Name	Condition Score	Performance Score	Comments			
GTE70-10001	UV Channel 1 Influent Gate	2	1	No immediate action required			
GTE70-10002	UV Channel 2 Influent Gate	2	1	No immediate action required			
LCP70-12	UV Main Control Panel	2	1	No immediate action required			
PMP70-21500	Effluent Turbidity Sample Pump	2	1	No immediate action required			
UV-LCP-70-1	UV Control Panel	N/A	N/A	Did not inspect			
UV-70-S-1-2	Effluent Composite Sampler #1	N/A	N/A	Did not inspect			
UV-70-S-1-2	Effluent Composite Sampler #2	2	1	No immediate action required			
UV-70-S-1-3	Effluent Composite Sampler #2	2	1	Vent fans not plugged in			
UV-M-70	Trojan UV 4000 UV System	3	2	Appears to have been out of service for an extended time			
UV-M-70-5	UV Module Winch Motor	1	1	No immediate action required			
UVM70-20001	UV Module #1 Ozonia	1	1	No immediate action required			
UVM70-20002	UV Module #2 Ozonia	2	1	No immediate action required			
UVM70-20003	UV Module #3 Ozonia	2	1	No immediate action required			



3.9 Area 78 Solids Dewatering and Drying

The Area 78 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-9. As shown in the last column with comments, some issues were identified with this equipment. Inspection reports for this equipment are located behind the Area 78 tab in Attachment A.

Table 3-9. Area 78 Dewatering and Drying Equipment						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
Dewatering Eq	uipment					
CEN78-10301	Centrifuge #1	2	1	Oil dripping from lubrication system		
CEN78-10302	Centrifuge #2	2	1	No immediate action required		
CNV78-30201	Cent #1 Discharge Conveyor	2	1	No immediate action required		
CNV78-30202	Cent #2 Discharge Conveyor	2	1	No immediate action required		
LCP78-11	Centrifuge #1 Control Panel	2	1	No immediate action required		
LCP78-12	Centrifuge #2 Control Panel	2	1	No immediate action required		
PLB78-31001	Centrifuge #1 Polyblend Unit	2	2	Polymer leaking from packing		
PLB78-31002	Centrifuge #2 Polyblend Unit	2	2	Polymer leaking from packing		
Drying Equipment						
CNV78-10100	Load Out Distribution Conveyor	2	1	A lot of dried product in the load-out room		
CNV78-20200	Cake Bin Discharge Conveyor	2	1	See report for CNV78-20700		
CNV78-20300	Dryer Feed Conveyor	2	1	See report for CNV78-20700		
CNV78-20700	Bio Solids Dryer	2	1	Since inspection, dryer has been taken out of service and may be out of operation for a few months		
CNV78-20800	Dryer Discharge Conveyor	2	2	There is evidence of fires		
CNV78-20900	Dry Product Cooling Conveyor	2	1	Grease on drive shaft		
CTE78-10201	Retractable Loadout Chute #1	2	1	Recommend more detailed inspection		
CTE78-10202	Retractable Loadout Chute #2	2	1	Recommend more detailed inspection		
CTE78-10203	Retractable Loadout Chute #3	2	1	Recommend more detailed inspection		
CTW78-40500	Dryer Condensate Cooling Tower	2	1	Water reservoir autofill valve appears to be running constantly		
HTR78-20400	Thermal Heater System	2	1	No visible leaks		
LCP78-13	Bio Solids Dryer Control Panel	N/A	N/A	Not inspected		
LCP78-20400	Thermal Heater Control Panel	N/A	N/A	Not inspected		
PMP-20200	Thermal Heater System	2	1	Sludge leaking from packing		
PMP78-40100	Dryer Condenser Sump Pump	2	1	No immediate action required		
PMP78-41000	Dryer Cooling Tower Spray Pump	N/A	N/A	Not inspected, not in operation		
SCB78-20600	Vent Scrubber/Condenser	3	2	Scrubber fan has excessive oil leakage		
TNK78-20100	Dryer Cake Bin	2	1	No immediate action required		



The photos shown in Figure 3-5 depict some of the concerns associated with the dewatering equipment noted in Table 3-9.







Centrifuge #1

Polymer blending unit 1

Polymer blending unit 2

Figure 3-5. Area 78 Dewatering Equipment

The photos in Figure 3-6 supplement the comments associated with the biosolids drying equipment in Table 3-9



Dryer



Dryer drive shaft



Vent scrubber/condenser

Figure 3-6. Area 78 Dryer Equipment

The photos shown in Figure 3-7 illustrate of the issues associated with the dried product loadout area noted in Table 3-9.



Load-out distribution conveyor



Dryer discharge conveyor



Load-out chute

Figure 3-7. Area 78 Load-Out Area

The biosolids dryer was in service during the March 2019 inspections. However, we understand that the equipment is currently out of service and may not be back in operation for another couple of months.



As noted in Table 3-9, there is quite a bit of dried product in the load-out room, and that a significant amount of housekeeping is required for clean-up. BC recommends using the retractable chutes to reduce the amount of dust in the room

As described in Section 3.13, there is oily residue from the dryer that is apparently passing through the foul air duct and collects at the odor control fans. This is a potential source of odors from the solids handling area.

3.10 Area 80 and 81 Thickening

Equipment in the Process Gallery associated with Areas 80 and 81, and their respective condition scores, are listed in Table 3-10. As shown in the last column with comments, some issues were identified with this equipment. Inspection reports for this equipment are behind the Areas 80 and 81 tab in Attachment A. We understand that the thickening process is not currently used.

	Table 3-10. Areas 80 and 81 Thickening Equipment						
Asset No.	Asset Name	Condition Score	Performance Score	Comments			
PGB-P-80-6	Thickened Biosolids Pump	2	1	Check valve may have a leak			
PGB-P-80-8	Vogelsang TWAS Rotary Lobe Pump	1	1	No immediate action required			
PG-M-80-3-1	GBT Hydraulic Unit #1	2	1	Pump is leaking, understand the GBTs are not being used			
PG-M-80-3-2	GBT Hydraulic Unit #2	2	1	No immediate action required, understand the GBTs are not being used			
PG-M-80-4-1	Gravity Belt Thickener #1	2	1	No immediate action required, understand the GBTs are not being used			
PG-M-80-4-2	Gravity Belt Thickener #2	2	1	No immediate action required, understand the GBTs are not being used			
PG-P-80-2-1	Gravity Belt Washwater Pump #1	2	1	Coating system failing			
PG-P-80-2-2	Gravity Belt Washwater Pump #2	2	1	Coating system failing, leak on discharge line			
PG-M-81-1	Polymer Mix/Feed Unit #1	2	2	Schedule work order			
PG-M-81-2	Polymer Injector/Mixer #2	2	1	No immediate action required			
PG-M-81-3	Polymer Injector/Mixer #3	2	2	Discharge lines leaking			

The photos shown in Figure 3-8 supplement the comments listed in Table 3-10.



Gravity belt thickener 1



Polymer injector/mixer #1



Polymer injector/mixer #3

Figure 3-8. Areas 80 and 81 Equipment in Process Gallery



3.11 Areas 82 Biosolids

The Area 82 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-11. Inspection reports for this equipment are located behind the Area 82 tab in Attachment A.

	Table 3-11. Area 82 Biosolids Equipment						
Asset No.	Asset Name	Condition Score	Performance Score	Comments			
BS-M-82-1-1	Biosolids Storage Blower #1	2	1	No immediate action required			
BS-M-82-1-2	Biosolids Storage Blower #2	2	1	Slight oil leak			
PMP82-10003	Vogelsang GBT Feed Pump #1	1	1	Grease or oil from motor area look like residue			
PMP82-10004	Vogelsang GBT Feed Pump #2	2	1	Oil leaking from pump			
PMP82-20001	Centrifuge Feed Pump #1	5	4	Appears that the pump experienced major process leak. Insulation would need to be removed to determine location of leak.			
PMP82-20002	Centrifuge Feed Pump #2	2	1	Signs of minor oil leaks. Insulation would need to be removed to determine location of leak. Loose bolt on fan motor guard.			

The photos shown in Figure 3-9 supplement the comments listed in Table 3-11.



Biosolids storage blower 2



Centrifuge feed pump 1



Centrifuge feed pump 2

Figure 3-9. Area 82 Biosolids Equipment

3.12 Area 90 W3 Reuse System

The Area 90 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-12. There is extensive leaking from the pump shaft packing causing further deterioration of the structures and pump equipment. Inspection reports for this equipment are located behind the Area 90 tab in Attachment A.

Table 3-12. Area 90 W3 Reuse System Equipment						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
W3-M-90-1	W-3 Strainer/Motor	3	1	Coating system failed, back flush water discharge line leaking		
W3-M-90-1-1	W-3 Pump #1 Motor	2	1	No immediate action required		
W3-M-90-1-2	W-3 Pump #2 Motor	2	1	No immediate action required		
W3-M-90-1-3	W-3 Pump #3 Motor	2	1	No immediate action required		
W3-P-90-1-1	W-3 Submersible Pump #1	3	2	Packing Water Leaking Excessively		
W3-P-90-1-2	W-3 Submersible Pump #2	3	2	Coating system failed		
W3-P-90-1-3	W-3 Submersible Pump #3	3	2	Coating system failed		

The photos shown in Figure 3-10 supplement the comments listed in Table 3-12.







W-3 Pump 1

Figure 3-10. Area 90 W3 Reuse System

3.13 Area 91 Odor Control

The Area 91 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-13. Inspection reports for this equipment are located behind the Area 91 tab in Attachment A.

Table 3-13. Area 91 Odor Control Equipment						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
FAN91-10501	Odor Control Fan 1	2	1	Dripping oily substance from solids dryer, initiate more detailed inspection		
FAN91-10502	Odor Control Fan 2	2	1	Dripping oily substance from solids dryer, initiate more detailed inspection, coating on sound enclosure has deteriorated		
FAN91-30501	Aeration Basin Ex Fan 30501	2	1	No immediate action required		
FAN91-30502	Aeration Basin Em Bypass Fan	2	2	Fan noise and vibrating		

The photos shown in Figure 3-11 supplement the comments listed in Table 3-13.





Aeration Basin Emergency Bypass Fan

Odor Control Fan 1

Figure 3-11. Area 91 Odor Control Equipment

3.14 Areas 95 Operations Building

The Area 95 asset inspected during the 2019 Triennial Review, and its respective condition and performance scores, are listed in Table 3-14 . Inspection reports for this equipment are located behind the Area 91 tab in Attachment A.

	Table 3-14. Areas 95 Operations Building						
Asset No.	Asset Name	Condition Score	Performance Score	Comments			
95BLD-01	Operations Building	3	1	Gutters are full Stucco finish deteriorating at entrance Floor tiles damaged Stain on lab ceiling Several pieces on baseboard in corners missing Several window leaks in break area No backflow device on hose bib in back of building			

The photos shown in Figure 3-12 supplement the comments listed in Table 3-14.





Operations Building ceiling

Operations Building door and louver

Figure 3-12. Area 95 Operations Building

3.15 Areas 99 and 100 Backup Power Systems

The Areas 99 and 100 assets inspected during the 2019 Triennial Review, and their respective condition scores, are listed in Table 3-15. Inspection reports for this equipment are located behind the Area 99 tab in Attachment A.

Table 3-15. Areas 99 and 100 Backup Power Systems Equipment						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
GEN99-01	1500kW Generator Set	2	1	Suppliers under generator enclosure		
GEN-M-100-1	Plant Backup Generator (Large)	1	1	No immediate action required		
GEN-M-100-3	Generator Cat Olympian	2	1	Moss growing on cable		
GEN-M-100-4	Onan Portable Gas Generator	3	1	Coating system failing		

The photos shown in Figure 3-13 supplement the comments listed in Table 3-15.



Figure 3-13. Areas 99 and 100 Backup Power Systems

Section 4: Lift Station Inspection Report Summaries

This section summarizes the findings of the inspections performed on the City's nine sewage lift stations listed below:

- Canyon Creek
- Charbonneau
- Corral Creek
- Grande Pointe
- Memorial Park
- Morey's Landing
- Rivergreen
- River Village
- Town Center

The summary for each lift station includes the specific asset name/no., assigned condition and performance scores, inspector's comments, and any relevant photos.

4.1 Canyon Creek Lift Station

The findings of the inspection performed on the Canyon Creek Lift Station during the 2019 Triennial Review are listed in Table 4-1. Inspection reports for this equipment are located behind the Canyon Creek tab in Attachment B.

Table 4-1. Canyon Creek Lift Station						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
CANC-LS-07	Canyon Creek Lift Station	2	1	Housekeeping issues No back flow devices on hose bibs Roof insulation starting to fall down No confined space sign on wet well Check 120/208 volt transformer temperature		
CANC-LS-07-AUX	Canyon Creek Auxiliary Engine	3	1	 Corroded electrical terminals Battery held in place with wire ties and bailing wire No cover over battery posts 		
CANC-LS-07-P-1	Canyon Creek Lift Pump #1	2	1	Check valve inspection cover leaking		
CANC-LS-07-P-2	Canyon Creek Lift Pump #2	2	1	Some rust on foundation		

The photos shown in Figure 4-1 supplement the comments listed above.



Pump #1 Battery

Figure 4-1. Canyon Creek Lift Station

Brown № Caldwell

4.2 Charbonneau Lift Station

The findings of the inspection performed on the Charbonneau Lift Station during the 2019 Triennial Review are listed in Table 4-2. Inspection reports for this equipment are located behind the Charbonneau tab in Attachment B.

Table 4-2. Charbonneau Lift Station						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
CHAR-LS-01-AUX	Charbonneau Auxiliary Engine	2	1	 Slight oil leak from top of engine Battery has no cover over posts Gas line is not supported by engine 		
CHAR-LS-01-P-1	Charbonneau Lift Pump #1	2	1	Oil leaking from vent capOil is draining for floor drainVent line held in place by bungee		
CHAR-LS-01-P-2	Charbonneau Lift Pump #2	2	2	Oil leaking from vent cap Oil is draining for floor drain		

The photos shown in Figure 4-2 supplement the comments listed above.





Figure 4-2. Charbonneau Lift Station

4.3 Corral Creek Lift Station

The findings of the inspection performed on the Corral Creek Lift Station during the 2019 Triennial Review are listed in Inspection reports for this equipment are located behind the Canyon Creek tab in Attachment B.

Table 4-3. Corral Creek Lift Station						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
CORC-LS-06	Corral Creek Lift Station	2	1	 No fall protection on wet well Large hole in power control structure where antenna wire passes No cover over battery posts Replacement fuses on dirt Corrosion noted on bottom of control panel No confined space sign on wet well 		
CORCRK-LS-1	Corral Creek Lift Pump #1	2	1	Unable to inspect submersible pump		
CORCRK-LS-2	Corral Creek Lift Pump #2	2	1	Unable to inspect submersible pump		

The photos shown in Figure 4-3 supplement the comments listed above.



Figure 4-3. Corral Creek Lift Station

4.4 Grande Pointe Lift Station

The findings of the inspection performed on the Grande Pointe Lift Station during the 2019 Triennial Review are listed in Table 4-4. Inspection reports for this equipment are located behind the Grande Pointe tab in Attachment B.

Table 4-4. Grande Pointe Lift Station							
Asset No.	Asset Name	Condition Score	Performance Score	Comments			
GRANDEPOINTE-LS-09	Grande Pointe Lift Station	1	1	No immediate action required			
GRANDEPOINTE-LS-09-AUX	Grande Pointe Auxiliary Engine	1	1	No immediate action required			
GRANDEPOINTE-LS-09-P-1	Grande Pointe Lift Pump #1	1	1	No immediate action required			
GRANDEPOINTE-LS-09-P-2	Grande Pointe Lift Pump #2	1	1	No immediate action required			

The Grande Pointe Lift station, shown in Figure 4-4, appeared to be in very good condition and required no immediate actions.



Lift station structure



Odor control unit



Auxiliary engine

Figure 4-4. Grande Pointe Lift Station

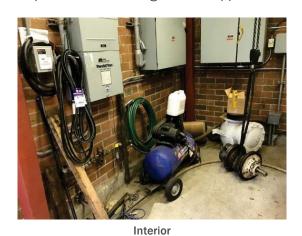


4.5 Memorial Park Lift Station

The findings of the inspection performed on the Memorial Park Lift Station during the 2019 Triennial Review are listed in Table 4-5. Inspection reports for this equipment are located behind the Memorial Park tab in Attachment B. The City is currently in the process of replacing the Memorial Park Lift Station in a nearby location.

Table 4-5. Memorial Park Lift Station						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
MEMP-LCP-03	Memorial Park Control Panel	1	1	Material stored on top of panel should be removed		
MEMP-LS-03	Memorial Park Lift Station	2	1	Housekeeping issues Cutting oil on top of 480 volt breaker panel Louvers to generator stuck open Belts hanging on crane disconnect New rotating unit stored on the floor connected to drain and is subject to pump vibration that could affect bearings		
MEMP-LS-03-AUX	Memorial Park Auxiliary Engine	2	1	Cover needs to re-installed		
MEMP-LS-03-P-1	Memorial Park Lift Pump #1	2	1	Vent line supported with wire and wrapped in tape		
MEMP-LS-03-P-2	Memorial Park Lift Pump #2	2	1	Belt guard bracket has come loose or was not installed. It is laying next to pump.		

The photos shown in Figure 4-5 supplement the comments listed above.







erior Panel

Figure 4-5. Memorial Park Lift Station

4.6 Morey's Landing Lift Station

The findings of the inspection performed on the Morey's Landing Lift Station during the 2019 Triennial Review are listed in Table 4-6. Inspection reports for this equipment are located behind the Morey's Landing tab in Attachment B.

Table 4-6. Morey's Landing Lift Station					
Asset No.	Asset Name	Condition Score	Performance Score	Comments	
MORL-LS-8	Morey's Landing Lift Station	2	1	Housekeeping issues Junction box for pump and check valve instrumentation not in place Insulation falling down Plastic cover on ceiling is coming down No confined space entry sign on wet well Hose running from inside pump station to soaker system for trees	
MORL-LS-08-AUX	Morey's Landing Auxiliary Engine	3	1	Electrical connections corroded Battery not tied down No cover over battery posts Frame corroded Gas line not supported well	
MORL-LS-08-P1	Morey's Landing Lift Pump #1	3	1	Pump mounting frame corroded Leak on inspection cover	
MORL-LS-08-P2	Morey's Landing Lift Pump #2	3	1	Pump frame corroded	

The photos shown in Figure 4-6 supplement the comments listed above.





Pump #1

Auxiliary engine

Figure 4-6. Morey's Landing Lift Station

4.7 Rivergreen Lift Station

The findings of the inspection performed on the Rivergreen Lift Station during the 2019 Triennial Review are listed in Table 4-7. Inspection reports for this equipment are located behind the Rivergreen tab in Attachment B.

Table 4-7. Rivergreen Lift Station						
Asset No. Asset Name Condition Score Performance Score Comments						
RIVG-LS-05	Rivergreen Lift Station	2	1	No confined space entry sign on wet well		
RIVG-LS-1	Rivergreen Lift Pump #1	2	1	Could not inspect submersible pump		
RIVG-LS-2	Rivergreen Lift Pump #2	2	1	Could not inspect submersible pump		

The photos shown in Figure 4-7 supplement the comments listed above.





Pump #1

Panel

Figure 4-7. Rivergreen Lift Station

4.8 River Village Lift Station

The findings of the inspection performed on the River Village Lift Station during the 2019 Triennial Review are listed in Table 4-8. Inspection reports for this equipment are located behind the River Village tab in Attachment B.

Table 4-8. River Village Lift Station					
Asset No. Asset Name Condition Score Performance Score Comments					
RIVV-LS-04	River Village Lift Station	2	1		
RV-LS-1	River Village Lift Pump #1	2	1	Could not inspect submersible pump	
RV-LS-2	River Village Lift Pump #2	2	1	Could not inspect submersible pump	



4.9 Town Center Lift Station

The findings of the inspection performed on the Town Center Lift Station during the 2019 Triennial Review are listed in Table 4-9. Inspection reports for this equipment are behind the Town Center tab in Attachment B.

Table 4-9. Towne Center Lift Station						
Asset No.	Asset Name	Condition Score	Performance Score	Comments		
TOWNCENTER-LS-02	Town Center Lift Station	2	1	Reason for plywood sheeting on top of panel unknown		
TOWNCENTER-LS-02-P-1	Town Center Lift Pump #1	2	1	No immediate action required		
TOWNCENTER-LS-02-P-2	Town Center Lift Pump #2	2	1	Pump number 2 belt guard and elbow stored on top of pump Install belt guard and remove elbow		

The photos shown in Figure 4-8 supplement the comments in Table 4-9.



Figure 4-8. Town Center Lift Station

Section 5: Summary and Conclusions

This report documents the 2019 Triennial Review of the Wilsonville WWTP and sewage lift stations conducted to satisfy Section 8.4 of the City's DBO Agreement with Jacobs Engineering. Sections 3 and 4 of this report summarize key observations, findings, and recommendations from the inspection and review of equipment maintenance records.

Inspection reports for the WWTP are included in Attachment A, and reports for the lift stations are included in Attachment B.

5.1 Conclusions of Review

Overall, the plant appears to be in good condition, which should be expected given the age of some of the equipment. As described in Section 3.9, there have been operational problems with the biosolids drying system and associated odor control system that are of concern.

The photos in Figure 5-1 show burnt solids that appear to be from a dryer fire and oily residue leaking from one of the two odor control fans





Burnt Solids

Oily residue at odor control fan

Figure 5-1. Burnt Biosolids and Oily Residue

The truck loadout is another potential odor and dust source. Fugitive odors and dust are a concern with the roll-up door open during loading operations as shown in Figure 5-2.



Figure 5-2. Dried Product Loadout

A final issue of note is general housekeeping. Figure 5-3 shows storage of materials and equipment outside or in temporary facilities.

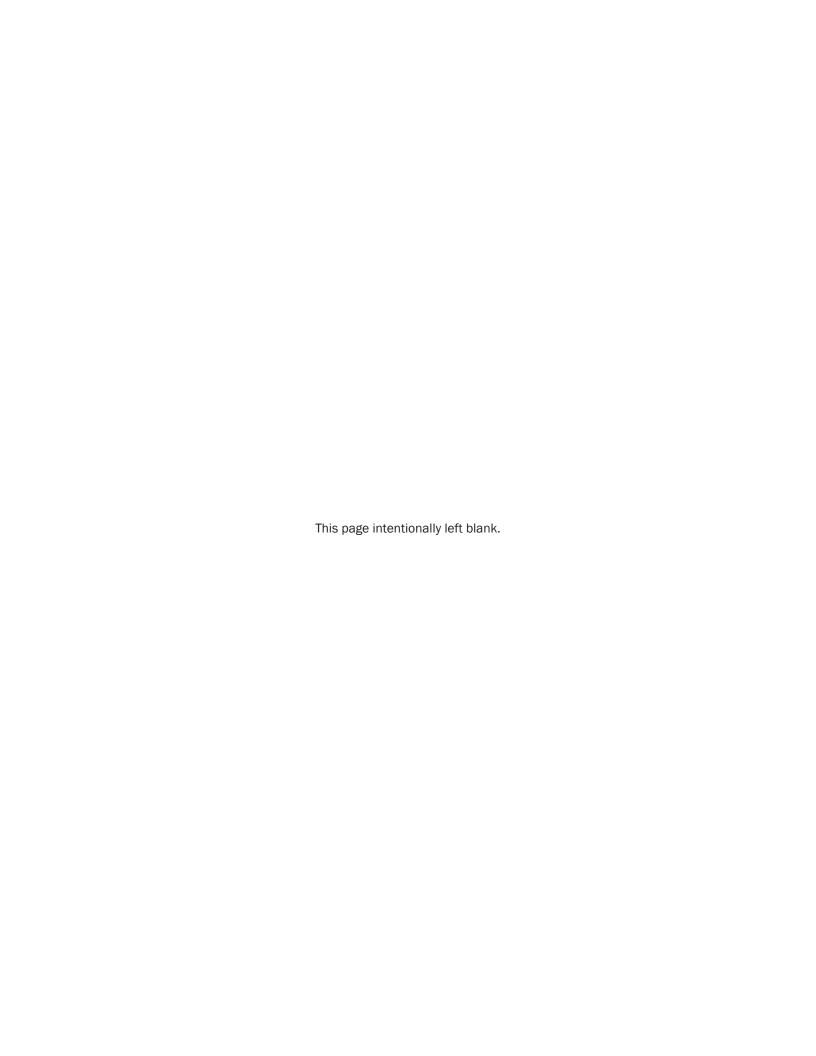


Figure 5-3. General Housekeeping

5.2 Acknowledgements

BC would like to thank the staff at the plant for being very cooperative and open with information, as well as their generous hospitality. Their cooperation and candor provided for an excellent opportunity to complete an accurate triennial report.

Brown AND Caldwell



Attachment A: WWTP Inspection Forms

Area # 10 **Preliminary Treatment** 40 Aeration and Stabilization Basins 40 Process Gallery (follows Aeration and Stabilization Basin forms) 50 **Secondary Clarifiers** 53 Secondary Effluent Pumps Secondary Effluent Cooling Towers 55 60 Secondary Effluent Filters 70 **UV** Disinfection 78 Solids Dewatering and Drying 80 & 81 Thickening 82 Biosolids 90 W3 Reuse System 91 **Odor Control** Operations Building (follows Area 91 forms) 95 99 & 100 Backup Power Systems (Area 100 forms follow Area 99 forms)



Created	2019-03-27 00:11:10 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:58:50 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	11:40
Area or Function	Preliminary Treatment

Asset Description/Equipment List

Preliminary Treatment	Headworks Structure, 10BLD-01
Station ID	10BLD-01
What type of Asset?	Structural

Structural

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Condition score	2 - Slight visible degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Water leaking in under door by grit bin
	Joint compound is missing in several areas or the joints have become bigger and the
	compound no longer covers the joint



























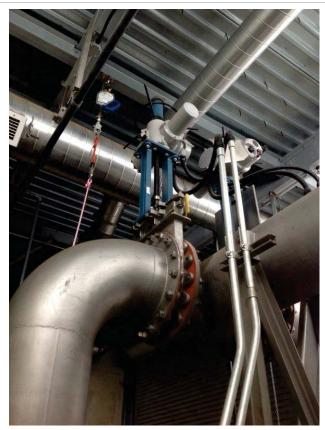
City Staff Present (names)	None
Assessment By (names)	Simon Watson



,	
Created	2019-03-27 00:11:18 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:06:26 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:58
Area or Function	Preliminary Treatment
Station ID	FV10-20101
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Knife gate closed No leaks







City Staff Present (names)	None
Assessment By (names)	Simon Watson



PrelS Snary Treati ent

n Haverbeke
nat W on
-

ValveW

FSeld ObWervatSonW	Good Londsson
Condsson 6Lore	1 - ExLellent
Perfori anLe 6Lore	1 - Coi ponent FunLtSonSng aWntended
ReLoi i endatSon	No S i edSate aLtSon requSred
FSeld ObWervatSonWCoi i entW	Kn ¶e gate open No leakW

PhotoW







Csy 6taff PreWent (nai eV)	None
AWWeWW ent By (nai eW)	6S on matVøn



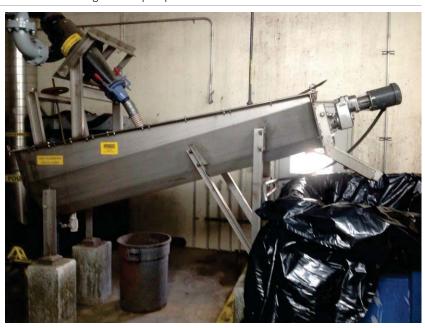
Area or Function	Preliminary Treatment
Time	11:10
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 20:05:17 UTC by Simon Watson
Created	2019-03-27 00:10:52 UTC by Tony Van Haverbeke

Asset Description/Equipment List

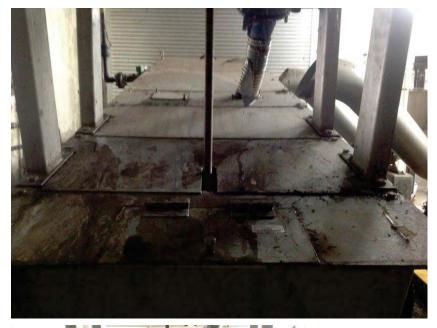
Preliminary Treatment	Grit Classifier 31500, GCL10-31500		
Station ID	GCL10-31500		
Asset Description	Grit Classifier 31500		
What type of Asset?	Mechanical		

Mechanical

Field Observations	Leaking		
Condition Score	2 - Slight Visible Degradation		
Performance Score	1 - Component Functioning as Intended		
Recommendation	Schedule corrective action work order near term		
Field Observations/Comments	Not in operation during site visit		
	Some water leaking out of top inspection cover		













City Staff Present (names)	None
Assessment By (names)	Simon Watson



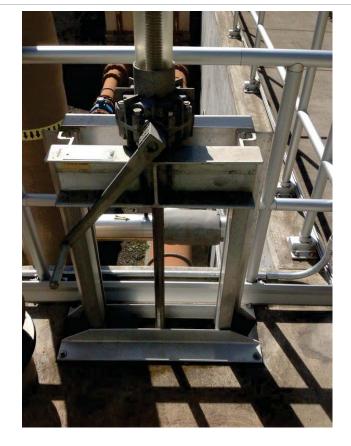
Created	2019-03-27 00:11:20 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:56:20 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	12:05
Area or Function	Preliminary Treatment

Asset Description/Equipment List

Preliminary Treatment	Influent Channel Gate #1, GTE10-12500	
Station ID	GTE10-12500	
What type of Asset?	Valves	

Valves

Field Observations	Good condition		
Condition Score	1 - Excellent		
Performance Score	1 - Component Functioning as Intended		
Recommendation	No immediate action required		
Field Observations/Comments	No Issues		









City Staff Present (names)

Assessment By (names)

None

Simon Watson



Created	2019-03-27 00:11:20 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:18:15 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:07
Area or Function	Preliminary Treatment
Station ID	GTE10-12501
What type of Asset?	Valves

Valves

Field Observations	Good condition		
Condition Score	1 - Excellent		
Performance Score	1 - Component Functioning as Intended		
Recommendation	No immediate action required		
Field Observations/Comments	Influent Channel Gate open		
	Influent Channel 1 influent gate closed		
	Botha have same asset number		













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Area or Function	Preliminary Treatment
Time	12:06
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:56:46 UTC by Simon Watson
Created	2019-03-27 00:11:20 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Preliminary Treatment	Influent Channel Gate #2, GTE10-12501
Station ID	GTE10-12502
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required









City Staff Present (names) None
Assessment By (names) Simon Watson



Area or Function	Preliminary Treatment
Time	12:06
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:56:46 UTC by Simon Watson
Created	2019-03-27 00:11:20 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Preliminary Treatment	Influent Channel Gate #2, GTE10-12501
Station ID	GTE10-12502
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required









City Staff Present (names) None
Assessment By (names) Simon Watson



<i>y</i>	
Created	2019-03-27 00:11:20 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:16:43 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-26
Time	17:21
Area or Function	Preliminary Treatment
Station ID	GTE10-12601
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Gate in closed position









City Staff Present (names)

Assessment By (names)

None

Simon Watson



- J	
Created	2019-03-27 00:11:20 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:17:27 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	08:20
Area or Function	Preliminary Treatment
Station ID	GTE10-12602
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Gate in open position









City Staff Present (names) None
Assessment By (names) Simon



Created	2019-03-27 00:11:20 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:17:53 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	08:22
Area or Function	Preliminary Treatment
Station ID	GTE10-12603
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Gate partially open









City Staff Present (names)

Assessment By (names)

None

Simon Watson



- J	
Created	2019-03-27 00:11:21 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:10:35 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:33
Area or Function	Preliminary Treatment
Station ID	GTE10-12701
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Gate closed









City Staff Present (names)

None



3	
Created	2019-03-27 00:11:21 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:15:15 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:28
Area or Function	Preliminary Treatment
Station ID	GTE10-12702
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Gate open Channel seal collapsed









City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:11:21 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:11:02 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:31
Area or Function	Preliminary Treatment
Station ID	GTE10-12703
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Gate closed Channel seal missing









City Staff Present (names)

None



Created	2019-03-27 00:11:21 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:09:47 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:37
Area or Function	Preliminary Treatment
Station ID	GTE10-32101
What type of Asset?	Valves
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Gate open









City Staff Present (names)

None



Created	2019-03-27 00:11:21 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:09:27 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:39
Area or Function	Preliminary Treatment
Station ID	GTE10-32102
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Gate open Drive chain rusted and lacking lube













City Staff Present (names)

None



PrelS Snary Treati ent

Created	2019-03-27 00:11:21 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:10:10 UTC by 4\$ on mat\mathbf{w}\text{n}
soLat S on	0. 00
, ate	2019-03-28
TS e	10:3D
Area or FunLtSon	PrelS Snary Treati ent
4tatSon I,	GTE10-32103
mhat type of AWet?	ValveW

ValveW

FSeld x bWervatSonW	Good Londsson
Conds on 4Lore	1 - EgLellent
Perfori anLe 4Lore	1 - Coi ponent FunLtSonSnR aWntended
NeLoi i endatSon	q o S i edSate aLtSon reOuSred
FSeld x bWervatSonWCoi i entW	Gate LloWed

PhotoW









CSty 4taff PreWent (nai eW)

qone



3	
Created	2019-03-28 15:08:55 UTC by Simon Watson
Updated	2019-05-28 20:16:13 UTC by Simon Watson
Location	45.2946718304, -122.770453202
Date	2019-03-28
Time	08:08
Area or Function	Preliminary Treatment
Station ID	GV10_19301
Asset Description	Influent Channel 1
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	No issues







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-28 15:05:37 UTC by Simon Watson
Updated	2019-05-28 19:52:00 UTC by Simon Watson
Location	45.2954138152, -122.771357019
Date	2019-03-28
Time	08:05
Area or Function	Preliminary Treatment
Station ID	GV10_19302
Asset Description	Influential Channel 2
What type of Asset?	Valves

Valves

Manufacturer	DeZurik
Field Observations	Good condition
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







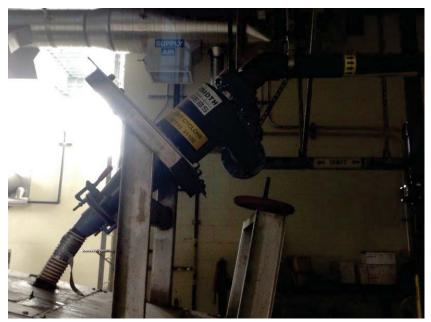
City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:52 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:04:51 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	11:16
Area or Function	Preliminary Treatment
Station ID	GYC10-31100
Asset Description	Grit Cyclone 31100
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in operation during site visit Duct tape on effluent hose







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:53 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:08:44 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:44
Area or Function	Preliminary Treatment
Station ID	MXR10-30100
Asset Description	Grit Basin Mixer
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Mixer running
	No leaks
	Some external coating is missing
	Cover missing next to mixer

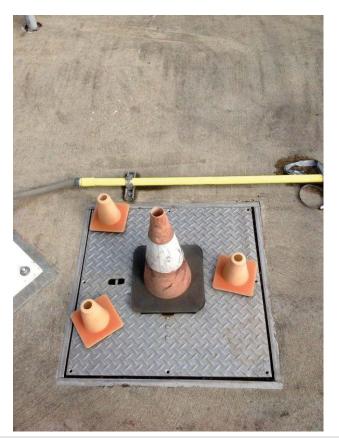












City Staff Present (names)

None



Created	2019-03-27 00:11:04 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:55:47 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	12:03
Area or Function	Preliminary Treatment
Station ID	PMP10-10500
What type of Asset?	Pumps and Motors
Condition Score	4 - Integrity of Component Moderately Compromised
Performance Score	5 - Component is not Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Appears to be out of service If needed for normal operations a corrective work order needs to be submitted









City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:11:04 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:15:37 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	08:12
Area or Function	Preliminary Treatment
Station ID	PMP10-30500
What type of Asset?	Pumps and Motors
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Was not in operation when onsite. Heat tracing working No visible leaks Oil level good







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Water Quality Monitoring

Created	2019-03-27 00:10:56 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:43:11 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:46
Area or Function	Water Quality Monitoring
Station ID	SAM10-11000
Asset Description	Composite Sampler #1
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Part of the door seal is missing Cooling fan vents partially plugged need cleaning. Fans were not operating













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Treminary Treatment		
Created	2019-03-27 00:10:57 UTC by Tony Van Haverbeke	
Updated	2019-05-28 23:15:13 UTC by Simon Watson	
Location	0.0, 0.0	
Date	2019-03-28	
Time	11:20	
Area or Function	Preliminary Treatment	
Station ID	SCR10-13001	
Asset Description	Manual Bar Screen	
What type of Asset?	Mechanical	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	
Field Observations/Comments	Unable to see	
City Staff Present (names)	None	
Assessment By (names)	Simon Watson	



Created	2019-03-27 00:10:57 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:38:40 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	10:15
Area or Function	Preliminary Treatment
Station ID	SCR10-13002
Asset Description	Influent Screen #2
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Not in service during site visit Discharge Shoot boot cracking and appears to be leaking around the top Channel seals around the base of the unit have collapsed

















City Staff Present (names)	None
Assessment By (names)	Simon Watson



ure Sary Treati ent

Created	2019-03-27 00:10:57 UTC by Tony Van Haverbeke	
Updated	2019-05-28 20:39:12 UTC by 4\$ on matVon	
soLatSon	0. 00	
, ate	2019-03-28	
TS e	10:23	
Drea or AFnLtSon	ure® Snary Treati ent	
4tatSon I,	4CI 10-13003	
DWet, eWr\$ptSon	In RF ent 4Lreen f 3	
m#at type oRD W éth	? eL#ansLaP	
Conds on 4Lore	2 - 4PBV#t VSVIbRe , eMradatSon	
uerRori anLe 4Lore	1 - Coi ponent AFnLtSonSnMaWintended	
l eLoi i endatSon	4L#edFRe LorreLtSve aLtSvn g ork order near teri	
ASERI wbWervatSonVCCoi i entW	In WervSLe , SW#arMe 4#oot boot LraLked bFt t#ere appearWto be no ReakW C#annePWeaRMLoFRapWed on t#e baLkWsde oRt#e FnSt	

u#otoW





















CSty 4taRRureWent Mai eW/) one
DVWeVVV ent By Nhai eVV	4S on matWon



Preliminary Treatment

Area or Function	Preliminary Treatment
Time	10:59
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 20:05:57 UTC by Simon Watson
Created	2019-03-27 00:10:58 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Preliminary Treatment	Screenings Washer Compactor #1, SWC10-20501
Station ID	SWC10-20501
Asset Description	Screenings Washer Compactor #1
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Not in operation while onsite
	Leaking oil between gearbox and auger
	Appears to be leaking oil from fill plug



















City Staff Present (names)	None
Assessment By (names)	Simon Watson



Preliminary Treatment

Created	2019-03-27 00:10:58 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:59:21 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	11:06
Area or Function	Preliminary Treatment

Asset Description/Equipment List

Preliminary Treatment	Screenings Washer Compactor #2, SWC10-20502
Station ID	SWC10-20502
Asset Description	Screenings Washer Compactor #2
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	Schedule corrective action work order near term	
Field Observations/Comments	In operation Leaking water from bottom inspection doors	















City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:10:47 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:42:32 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	07:37
Area or Function	Secondary Treatment
Station ID	BLW40-50004
Asset Description	Aeration Blower #4
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	In operation Unable to inspect inside Rear filter louvers dirt filter media seems fine Some coating coming off













Rear filter







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:47 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:43:30 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	07:44
Area or Function	Secondary Treatment
Station ID	BLW40-50005
Asset Description	Aeration Blower #5
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Initiate more detailed inspection
Field Observations/Comments	Not in operation
	Unable to inspect inside
	Rear filter louvers and media are dirty











Rear





Created	2019-03-27 00:10:47 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:43:05 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	07:48
Area or Function	Secondary Treatment
Station ID	BLW40-50006
Asset Description	Aeration Blower #6
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Initiate more detailed inspection
Field Observations/Comments	Not in operation
	Unable to inspect inside
	Rear filter louvers and media are dirty















Rear filter





City Staff Present (names)	None
Assessment By (names)	Simon Watson



Area or Function	Secondary Treatment
Time	15:14
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:40:24 UTC by Simon Watson
Created	2019-03-27 00:11:16 UTC by Tony Van Haverbeke

Asset Description/Equipment List

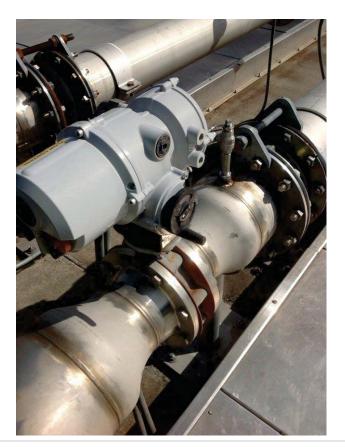
Secondary Treatment	Flow Control Valve 40-12001, FCV40-12001
Station ID	FCV40-12001
What type of Asset?	Valves

Valves

Field Observations	Good condition	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	







City Staff Present (names)

None



Area or Function	Secondary Treatment
Time	15:15
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:40:56 UTC by Simon Watson
Created	2019-03-27 00:11:16 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	Flow Control Valve 40-12002, FCV40-12002
Station ID	FCV40-12002
What type of Asset?	Valves

Valves

Field Observations	Good condition	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:16 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:49:58 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	15:21
Area or Function	Secondary Treatment
Station ID	FCV40-30001
What type of Asset?	Valves

Valves

Field Observations	Good condition	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:16 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:49:26 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	15:23
Area or Function	Secondary Treatment
Station ID	FCV40-30002
What type of Asset?	Valves

Valves

Field Observations	Good condition	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	







City Staff Present (names)

None



Area or Function	Secondary Treatment
Time	15:24
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:38:02 UTC by Simon Watson
Created	2019-03-27 00:11:17 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	Flow Control Valve 40-30003, FCV40-30003
Station ID	FCV40-30003
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







City Staff Present (names)

None



4eLyodarb Ureati eot

Drea yr AFoLtSyo	4eLyodarb Ureati eot
US e	1p:25
, ate	2019-03-25
syLat\$yo	0.0.00
6 k dated	2019-0p-25 19:38:21 6 UC Tb 4S yo matWyo
Created	2019-03-27 00:11:17 6 UC Tb Uy ob nao V aHerTeve

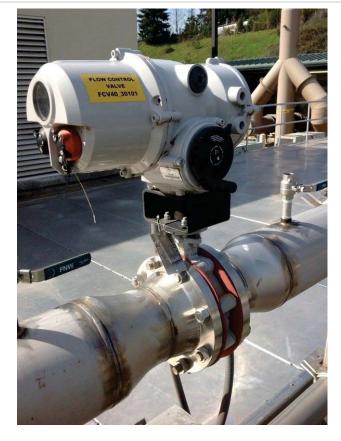
DWWet, eWLrSktSyo/EqFSki eotsSW

4eLyodarb Ureati eot	Auyl Cyotryunaul-le w0-30101. ACnw0-30101
4tatSyo I,	ACnw0-30101
mhat tbke yf D W ét?	nauleW

nauHeW

ASeud OTWerHatSyoW	Gyyd Lyod \$ Syo
Cyod £ Syo 4Lyre	2 - 4ught ns/srue, egradatSyo
Perfyri aoLe 4Lyre	1 - Cyi kyoeot AFoLtSyoSog aWloteoded
ReLyi i eodatSyo	Ny S i edSate aLtSyo reqFSred

PhytyW







CStb 4taff PreWeot (oai eW)

Nyoe



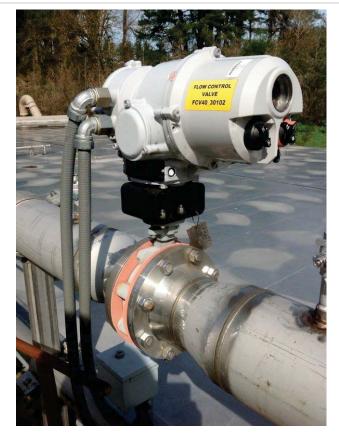
4rea or AFnction	Secondary Treatment
Time	15:27
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:37:02 UTC by Simon Watson
Created	2019-03-27 00:11:17 UTC by Tony Van Haverbeke

4sset Description/EqFipment List

Secondary Treatment	Auol ControuVauve w0-30102, ACVw0-30102
Station ID	ACVw0-30102
What type of 4sset?	Vauves

Vawes

Aieud Observations	Good condition	
Condition Score	2 - Suight Visibue Degradation	
Performance Score	1 - Component AFnctioning as Intended	
Recommendation	No immediate action reqFired	







City Staff Present (names)

None



Area or Function	Secondary Treatment
Time	15:25
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:37:33 UTC by Simon Watson
Created	2019-03-27 00:11:17 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	Flow Control Valve 40-30103, FCV40-30103
Station ID	FCV40-30103
What type of Asset?	Valves

Valves

Field Observations	Good condition
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







City Staff Present (names)	None
Assessment By (names)	Simon Watson



2019-03-27 00:11:21 UTC by Tony Van Haverbeke
2019-05-28 19:44:14 UTC by Simon Watson
0.0, 0.0
2019-03-28
15:52
Secondary Treatment
GTE40-21003
Valves

Valves

Field Observations	Good condition
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Missing cap on valve stem cover









City Staff Present (names)

None



Created	2019-03-28 22:40:19 UTC by Simon Watson
Updated	2019-05-28 19:48:09 UTC by Simon Watson
Location	45.2962724589, -122.770965815
Date	2019-03-28
Time	15:40
Area or Function	Secondary Treatment
Station ID	Mxr40_20002
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Oil leaking from fill pipe Not in operation







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-28 22:42:30 UTC by Simon Watson
Updated	2019-05-28 19:46:51 UTC by Simon Watson
Location	45.2953085715, -122.770130973
Date	2019-03-28
Time	15:42
Area or Function	Secondary Treatment
Station ID	Mxr40_20003
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in operation







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:53 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:34:59 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	15:31
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	Anaerobic Mixer #4, MXR40-20004
Station ID	MXR40-20004
Asset Description	Anaerobic Mixer #4
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in operation







City Staff Present (names)	None
Assessment By (names)	Simon Watson



i ecnWdarS breato eWt

Created	2019-03-28 22:4U:40 T bC yS i no nWs atpnW
T5dated	2019-0U-28 19:4U:32 T bC yS i no nWs atpnW
Lncat m W	4U.29469848037-122., , 04369, ,
Date	2019-03-28
bron e	1U4U
Area nr Fu W ctmW	i ecnWdarS breato eWt
i tatm w ID	Mxr40_2000U
s hat tS5e nf Appet?	MechaW r œl

MechaWtcal

Freeld g y per Vatm Wp	LeaPMR
CnWdr tm Wi cnre	2 - i InRht v nprynle DeRradatm W
werfnro aWce i cnre	1 - Cno 5nWeWt FuWctmWMR ap lWteWded
kecno o eWdatmW	i chedule cnrrecti v le act m WOnrP nrder Wear tero
Freld g y perVatmVp/Cno o eWtp	Nnt mWn5eratmnW LeaPmWR nmhfrno phaft ca5 aWd fmhlmWe

whntnp







CntS i taff wrepeWt (Wao ep)	NnWe
Appeppo eWt BS (Wao ep)	i no nWs atpnW



Area or Function	Secondary Treatment
Time	15:34
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 23:16:15 UTC by Simon Watson
Created	2019-03-27 00:10:54 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	Anaerobic Mixer #6, MXR40-20006
Station ID	MXR40-20006
Asset Description	Anaerobic Mixer #6
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in operation Damp around sight glass







City Staff Present (names)

None



Created	2019-03-27 00:10:54 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:10:47 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	10:40
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	Aeration Basin Blower #1, PGB-M-40-5-1
Station ID	PGB-M-40-5-1
Asset Description	Aeration Basin Blower #1
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Excessive grease on outboard bearing or seal is leaking Not in operation













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:46 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:11:53 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	10:50
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	Aeration Basin Blower Motor #1, PGB-M-40-5-1-M
Station ID	PGB-M-40-5-1-M
What type of Asset?	Electrical

Electrical

Description	Aeration Basin Blower Motor #1
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in operation









City Staff Present (names)	None
Assessment By (names)	Simon Watson



Area or Function	Secondary Treatment
Time	10:43
Date	2019-03-29
Location	0.0, 0.0
Updated	2019-05-28 19:11:13 UTC by Simon Watson
Created	2019-03-27 00:10:54 UTC by Tony Van Haverbeke

Asset Description@xuipment List

Secondary Treatment	Aeration Basin Blower #2, PGB-M-40-5-2
Station ID	PGB-M-40-5-2
Asset Description	Aeration Basin Blower #2
What type of Asset?	Mechanical

Mechanical

Field g bservations	LeakinR
Condition Score	2 - SliRht Visible DeRradation
Performance Score	1 - Component FunctioninR as Intended
Necommendation	Schedule corrective action work order near term
Field g bservations Comments	Oot in operation
	Both bearinRs have e/ cessive Rrease or seals are leakinR
	Oot sure why ope drain line is on the outboard bearinR
	Grease leaking from discharge valve stem



















City Staff Present (names)	Oone
Assessment By (names)	Simon Watson



Area or Function	Secondary Treatment
Time	10:52
Date	2019-03-29
Location	0.0, 0.0
Updated	2019-05-28 19:25:55 UTC by Simon Watson
Created	2019-03-27 00:10:46 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	Aeration Basin Blower Motor #2, PGB-M-40-5-2-M
Station ID	PGB-M-40-5-2-M
What type of Asset?	Electrical

Electrical

Description	Aeration Basin Blower Motor #2
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in operation









City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:54 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:27:05 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	10:47
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	Aeration Basin Blower #3, PGB-M-40-5-3
Station ID	PGB-M-40-5-3
Asset Description	Aeration Basin Blower #3
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	
Field Observations/Comments	Outboard bearing seal appears to be starting to fail	
	Grease leaking from discharge valve stem	
	Not in operation	

















Created	2019-03-27 00:10:46 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:26:37 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	10:53
Area or Function	Secondary Treatment

Asset DescriptionŒ/ uipment List

Secondary Treatment	Aeration Basin Blower Motor #3, PGB-M-40-5-3-M	
Station ID	PGB-M-40-5-3-M	
What type of Asset?	Electrical	

Electrical

Description	Aeration Basin Blower Motor #3	Aeration Basin Blower Motor #3		
Field g bservations	Corrosion			
Condition Score	2 - SliRht Visible DeRradation			
Performance Score	1 - Component FunctioninR as Intended			
Necommendation	Schedule corrective action work order near term			
Field g bservations@omments	Part of base has no coatinR			
	Oot in operation			













City Staff Present (names)	Oone
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:48 UTC by Tony Van Haverbeke
Updated	2019-05-28 18:52:18 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	16:50
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	Secondary Clarifier #3, CLR50-00103
Station ID	CLR50-00103
Asset Description	Secondary Clarifier #3
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Slight oil leak between motor and gearbox













































City Staff Present (names) None
Assessment By (names) Simon Watson



occordary recutificati	
Created	2019-03-27 00:10:43 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:07:27 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	17:19
Area or Function	Secondary Treatment
Station ID	LCP50-10103
What type of Asset?	Electrical
Electrical	
Description	Sec Clarifier #3 Control Panel
Field Observations/Comments	Did not Inspect
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:45 UTC by Tony Van Haverbeke
Updated	2019-03-27 00:10:45 UTC by Tony Van Haverbeke
Location	0.0, 0.0
Area or Function	Secondary Treatment
Station ID	PG-50-3-1-VFD
What type of Asset?	Electrical
Electrical	
Description	RAS Pump #1 VFD



Created	2019-03-27 00:10:45 UTC by Tony Van Haverbeke
Updated	2019-03-27 00:10:45 UTC by Tony Van Haverbeke
Location	0.0, 0.0
Area or Function	Secondary Treatment
Station ID	PG-50-3-2-VFD
What type of Asset?	Electrical
Electrical	
Description	RAS Pump #2 VFD



Created	2019-03-27 00:10:45 UTC by Tony Van Haverbeke
Updated	2019-03-27 00:10:45 UTC by Tony Van Haverbeke
Location	0.0, 0.0
Area or Function	Secondary Treatment
Station ID	PG-50-3-3-VFD
What type of Asset?	Electrical
Electrical	
Description	RAS Pump #3 VFD



Area or Function	Secondary Treatment
Time	10:23
Date	2019-03-29
Location	0.0, 0.0
Updated	2019-05-28 19:08:43 UTC by Simon Watson
Created	2019-03-27 00:11:04 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	RAS Pump #1, PMP50-03001
Station ID	PMP50-03001
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	No issues









City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:04 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:09:42 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	10:25
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	RAS Pump #2, PMP50-03002
Station ID	PMP50-03002
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	No Issues









City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:05 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:08:12 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	10:18
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	RAS Pump #3, PMP50-03003
Station ID	PMP50-03003
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Slight leak on check valve packing













City Staff Present (names)	None
Assessment By (names)	Simon



8eLondary Treati ent

Drea or AFnLtSon	8eLondary Treati ent
TS e	10:22
, ate	2019-03-29
soLatSon	0.0.00
Updated	2019-04-25 19:09:14 UTC by 8§ on matWon
Created	2019-03-27 00:11:04 UTC by Tony Van Haverbeke

DWWet, eWLrSptSon/EqFSpi entsSW

8eLondary Treati ent	uD8 RFi p P#. RMR40-0300#
8tatSon I,	RMR40-0300#
mhat type of D W ét?	RFi pWand MotorW
Conds on 8Lore	2 - 8l§tht V\$M\$ble, egradatSon
Rerfori anLe 8Lore	1 - Coi ponent AFnLtSonSng aWntended
ueLoi i endatSon	No S i edSate aLtSon reqFSred
ASeld ObWervatSonWCoi i entW	No S/W FeW

RhotoW









Csty 8taff RreWent (nai eW)

None

DWWeWW ent By (nai eW)

8S on matWon



Area or Function	Secondary Treatment
Time	16:44
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 18:51:26 UTC by Simon Watson
Created	2019-03-27 00:11:05 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	Scum Pump, PMP50-20100
Station ID	PMP50-20100
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not operating









City Staff Present (names) None
Assessment By (names) Simon Watson



Area or Function	Secondary Treatment
Time	17:12
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:00:27 UTC by Simon Watson
Created	2019-03-27 00:10:56 UTC by Tony Van Haverbeke

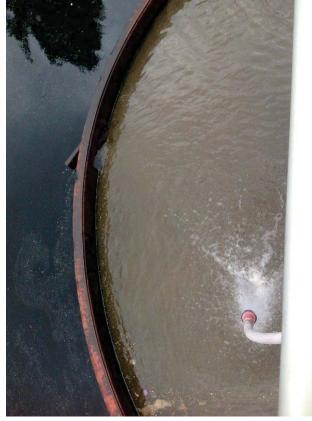
Asset Description/Equipment List

Secondary Treatment	Secondary Clarifier #1, SC-50-1-1
Station ID	SC-50-1-1
Asset Description	Secondary Clarifier #1
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Weir washers not working



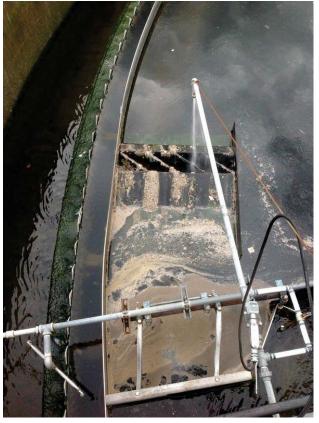




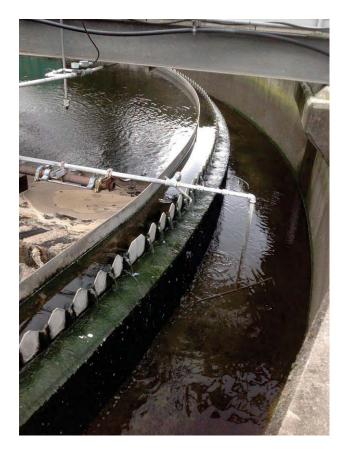












Weir Washer not working













City Staff Present (names)

None



Created	2019-03-27 00:10:56 UTC by Tony Van Haverbeke
Updated	2019-05-28 18:55:06 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	17:04
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	Secondary Clarifier #2, SC-50-1-2
Station ID	SC-50-1-2
Asset Description	Secondary Clarifier #2
What type of Asset?	Structural

Structural

Field Observations	Spalling
Condition Score	3 - Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Spalling on upper wall by uv area One of the weir washers is not working















Concret damage





Weir washer not working







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Area or Function	Secondary Treatment
Time	17:16
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:01:08 UTC by Simon Watson
Created	2019-03-27 00:10:56 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	Sec Clarifier #1 Weir Washer, SC-50-1-3
Station ID	SC-50-1-3
Asset Description	Sec Clarifier #1 Weir Washer
What type of Asset?	Mechanical
Condition Score	3 - Visible Degradation
Performance Score	4 - In Service, but Function is Highly Impaired
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Washer not working







i e. ondary TreatWent

Created	2019-03-27 00:10:56 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:03:SS UTC by i rW on s atLon
co. atr o n	0,000,0
Aate	2019-03-28
Tr W e	17:18
Frea or ul n. tr o n	i e. ondary TreatWent

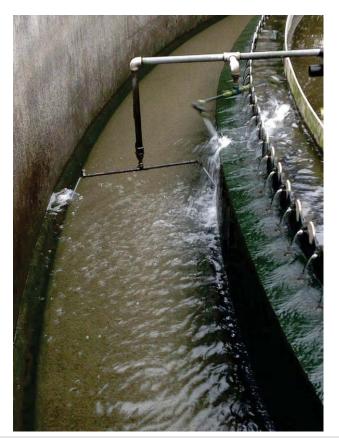
FLLet AeL. rmptmon/() lmpWent cmt

i e. ondary TreatWent	ie. Cfarm#merh2s ems aLlerDiC-50-1-S
i tatr o n ?A	i C-50-1-S
FLLet AeL. ryptron	ie. Cfarm#merh2s ennsaLler
s I at type o#FLLetM	g e. l anmaf
Condr tro n i . ore	3 - Vr tarb rfe AePradatr o n
4er#orWan. e i . ore	3 - ?n i ervmeDbl t ul n. tron rb?Wparred
Re. oWWendatron	i . I edl fe . orre. trone a. tron work order near terW
urefd ObLervatronL/CoWWentL	Onfy I af#tl e waLl er nbworkmP

4I otoL







Crty i ta##4reLent MnaWeLE

qone



Secyodarb Ureatmeot

Created	2019-03-27 00:10:57 8 UC Tb Uyob nao V aHerTeve
8 k dated	2019-05-2p 1p:57:57 8 UC Tb Simyo Watsyo
Lycatiyo	0.0, 0.0
Date	2019-03-2p
Ume	17:09
Area yr Fuoctiyo	Secy odarb Ureatmeot

Asset DescriktiyoNqEuikmeot List

Secy odarb Ureatmeot	Secyodarb CParilier, g1 h ec#ao, SC-h -50-1-1
Statiyo ID	SC-h -50-1-1
Asset Descriktiyo	Secyodarb CParilier, g1 h ec#ao
W#at tbke yl Assetf	h ec#aoicaP

h ec#aoicaP

Field? TserHatiyos	Myise	
Cyoditiyo Scyre	3 - nisiTle DeCradatiyo	
Rerlyrmaoce Scyre	1 - Cymkyoeot FuoctiyoioOas loteoded	
wecymmeodatiyo	Sc#edule cyrrectiHe actiyo / yrv yrder oear term	
Field ? TserHatiyosNCymmeots	h ytyrNıkker ŒarTyx oyisb	
	SRO#t yiPReav lrym tyrEue meter	
	UyrEue at 5	

R#ytys

















Citb Stal I Rreseot (oames)	Myoe
Assessmeot Bb (oames)	Simyo Watsyo



Created	2019-03-27 00:10:57 UTC by Tony Van Haverbeke
Updated	2019-05-28 18:52:58 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	17:00
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	Secondary Clarifier, #2 Mechan, SC-M-50-1-2
Station ID	SC-M-50-1-2
Asset Description	Secondary Clarifier, #2 Mechan
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Middle gearbox appears to be leaking oil into the process Torque meter at 40













City Staff Present (names)

None



Area or Function	Secondary Treatment
Time	16:39
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:34:20 UTC by Simon Watson
Created	2019-03-27 00:11:05 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	Secondary Effluent Pump #1, PMP53-10001
Station ID	PMP53-10001
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in Operation









City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:11:05 UTC by Tony Van Haverbeke
Updated	2019-05-28 19:33:34 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	16:40
Area or Function	Secondary Treatment

Asset Description/Equipment List

Secondary Treatment	Secondary Effluent Pump #2, PMP53-10002
Station ID	PMP53-10002
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	No Operating









City Staff Present (names)

Assessment By (names)

None

Simon Watson



Area or Function	Secondary Treatment
Time	16:42
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 19:27:45 UTC by Simon Watson
Created	2019-03-27 00:11:05 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Secondary Treatment	Secondary Effluent Pump #3, PMP53-10003
Station ID	PMP53-10003
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in operation









City Staff Present (names) None
Assessment By (names) Simon Watson



Effluent Cooling

Area or Function	Effluent Cooling
Time	09:11
Date	2019-03-29
Location	0.0, 0.0
Updated	2019-05-28 22:40:12 UTC by Simon Watson
Created	2019-03-27 00:11:05 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Effluent Cooling	Cooling Tower Pump #1, PMP55-10501
Station ID	PMP55-10501
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Pump drained for winter









City Staff Present (names)	None
Assessment By (names)	Simon Watson



Effluent Cooling

Created	2019-03-27 00:11:06 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:39:44 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	09:08
Area or Function	Effluent Cooling

Asset Description/Equipment List

Effluent Cooling	Cooling Tower Pump #2, PMP55-10502
Station ID	PMP55-10502
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Pump drained for the winter















City Staff Present (names)	None
Assessment By (names)	Simon Watson



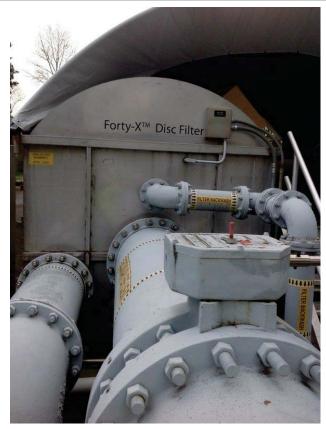
Tert4ary D4Frat4on

Created	2019-03-27 00:10:61 UTC by Tony Van Haverbeke
Updated	2019-06-25 22:32:00 UTC by 845 on i atmon
Wosat4on	0LDc0LD
. ate	2019-03-29
T4S e	05:62
, rea or DAnst4on	Tert4ary D4Frat4on

, nmmet. ensr4pt4bnN(?A4pS ent Witht

Tert4ary D4trat4on	. 4hk D4ter u1c. DE0-10001	
8tat4on f.	. DE0-10001	
, nmet. ensr4pt4on	. 4hk D4ter u1	
i lattype og, nmætw	P esl an4saF	
Cond 44 on 8sore	2-8144 tV4m4oFe.e#radat4on	
MergorS anse 8sore	1 - CoS ponent DAnst4on4n# amfntended	
I esoS S endat4on	ho & S ed4ate ast4on re? A4red	
D4eFd R bnervat4onnMCoS S entm	Unable to 4hmpest 4hm/de	
	HoAne keep4n# poor	
	qask Oanh pAS p ran Ol 4 e onm4 e and l ad a prenm4 re og/0 pm4	

M otom



























C4y 8taggMrenent)naS enB	hone
, nmenms entqy)naS enB	845 on i atmon



TertSary AStratSon

Created	2019-03-27 00:10:41 UTC by Tony Van Haverbeke
Updated	2019-04-25 22:31:22 UTC by 8\$ on matWon
soLatSon	0. 00
, ate	2019-03-29
TS e	05:47
Drea or AFnLtSon	TertSary AStratSon
8tat S on I,	, AB0-10002
DWWet, eWLrSptSon	, SNk AStrer 62
ml at type owDW v et#	h eLl an S .au
Conds on 8Lore	2-8uffltVS/Moue, efradatSon
?erwori anLe 8Lore	1 - Coi ponent AFnLtSonSnf aWintended
MeLoi i endatSon	InstSate i ore detaSed SnVpeLtSon
ASeud g bWervatSonWPCoi i entW	RaLk OaW pFi pran Ostla preWFre owl10pVsclWtl SWtle LorreLt preWFrec ?oorloFWe keepSnf

?I otoW



















CSty 8taww? reWent Mhai eW() one
D W re∕WV ent Ry Mhai eW(8\$ on matVon



Created	2019-03-27 00:11:22 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:28:49 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	16:09
Area or Function	Disinfection
Station ID	GTE70-10001
What type of Asset?	Valves

Valves

Field Observations	Good condition	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	







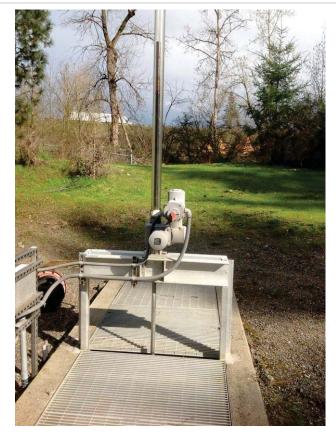
City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:22 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:29:23 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	16:07
Area or Function	Disinfection
Station ID	GTE70-10002
What type of Asset?	Valves

Valves

Field Observations	Good condition	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:43 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:26:37 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	16:34
Area or Function	Disinfection

Asset Description/Equipment List

Disinfection	UV Main Control Panel, LCP70-12
Station ID	LCP70-12
What type of Asset?	Electrical

Electrical

Description	UV Main Control Panel
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required









City Staff Present (names) None
Assessment By (names) Simon Watson



Water Quality Monitoring

Created	2019-03-27 00:11:06 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:41:34 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	16:22
Area or Function	Water Quality Monitoring

Asset Description/Equipment List

Water Quality	Effluent Turbidity Sample Pump, PMP70-21500
Station ID	PMP70-21500
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Flow through turbidity meter appears to be good













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Water Euafito InVitnriVP

Created	2019-03-27 00:10:5UT bC yo bnVo HaV v akery epe
T8dated	2019-05-2U22:42:3UT bC yo SimnV WatsnV
LncatinV	0.0, 0.0
Date	2019-03-2U
bime	16:15
Area nr FuVctinV	Water E uafito l nVitnriVP

Asset Descri8tinV/#Oui8meVt List

Water E uafito	#WfueVt Cnm8nsite Sam8fer I 2, T H-70-S-1-2
StatinV hD	TH-70-S-1-2
Asset Descri8tinV	#WPueVt Cnm8nsite Sam8fer I 2
W? at to8e nMAssetg	l ec? aVicaf
CnVditinV Scnre	2 - SfiP? t Hisiy fe DePradatinV
Rer M rmaVce Scnre	1 - Cnm8nVeVt FuVctinViVP as lVteVded
NecnmmeVdatinV	q n immediate actinV reOuired

R? ntns







Cito Stal W RreseVt (Vames)	q nVe
AssessmeVt Bo (Vames)	SimnV WatsnV



Water Quality Monitoring

Area or Function	Water Quality Monitoring
Time	16:19
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 22:42:07 UTC by Simon Watson
Created	2019-03-27 00:10:58 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Water Quality	Effluent Composite Sampler #3 (on Secondary), UV-70-S-1-3
Station ID	UV-70-S-1-3
Asset Description	Effluent Composite Sampler #3 (on Secondary)
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Vent fans not plugged in









City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:10:59 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:26:03 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	08:22
Area or Function	Disinfection

Asset Description/Equipment List

Disinfection	Trojan UV 4000 UV System, UV-M-70
Station ID	UV-M-70
Asset Description	Trojan UV 4000 UV System
What type of Asset?	Mechanical
Condition Score	3 - Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Initiate more detailed inspection
Field Observations/Comments	Not operating Appears to have been out of service for a long time Appears it would take quite some time to put it back in operation

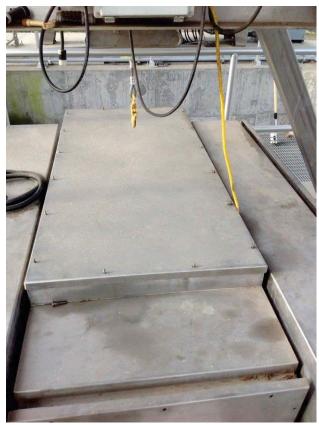














City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:10:59 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:25:27 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	08:29
Area or Function	Disinfection

Asset Description/Equipment List

Disinfection	UV Module Winch Motor, UV-M-70-5
Station ID	UV-M-70-5
Asset Description	UV Module Winch Motor
What type of Asset?	Mechanical
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:59 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:28:11 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	16:28
Area or Function	Disinfection

Asset Description/Equipment List

Disinfection	UV Module #1 Ozonia, UVM70-20001
Station ID	UVM70-20001
Asset Description	UV Module #1 Ozonia
What type of Asset?	Electrical
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







City Staff Present (names)	None
Assessment By (names)	Simon Watson

Created	2019-03-27 00:10:59 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:27:45 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	16:30
Area or Function	Disinfection

Asset Description/Equipment List

Disinfection	UV Module #2 Ozonia, UVM70-20002
Station ID	UVM70-20002
Asset Description	UV Module #2 Ozonia
What type of Asset?	Electrical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







City Staff Present (names)	None
Assessment By (names)	Simon Watson

Created	2019-03-27 00:10:59 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:27:10 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	16:31
Area or Function	Disinfection

Asset Description/Equipment List

Disinfection	UV Module #3 Ozonia, UVM70-20003
Station ID	UVM70-20003
Asset Description	UV Module #3 Ozonia
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







City Staff Present (names)	None
Assessment By (names)	Simon Watson

4nu3dW, eE aterS/f

Created	2019-03-27 00:10:6UT bC yo bnVo HaV v akery epe
T 5 dated	2019-08-2U22:26:08 T bC yo 4\$ nV matVMV
snLat S nV	0.0.00
, ate	2019-03-2U
bS e	13:18
Drea nr AFVLtSnV	4nuSdW, eE aterS/f

DWWet, eWLrSstSnVqvOFSsi eVtsSW

4nusdW, eE aterS/f	CeVtr¶Ffeg1.CwP7U-10301
4tatSnV #	CWP 7U-10301
DW r t, eWr\$t\$nV	CeVtr9Ff e g1
mMat to5e nl DWétl	h eLMaVSau
CnVd\$\$nV 4Lnre	2-4uffMtHSVSkyue, efradatSnV
?erlnri aVLe 4Lnre	1 - Cni 5nVeVt AFVLtSnVSVf aW#/teVded
ReLni i eVdatSnV	4LMedFue LnrreLtSke aLtSnV E nrp nrder Vear teri
ASeud Ny WerkatSnVWqCni i eVtW	Pnt \$/ n5erat\$nV N\$.dr\$55\$/f Irni LeVtr\$Ffau.Fyr\$.at\$nV WWei

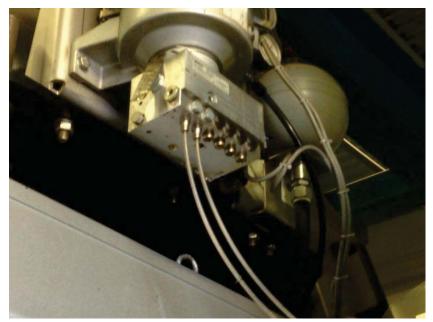
? MhtnW





















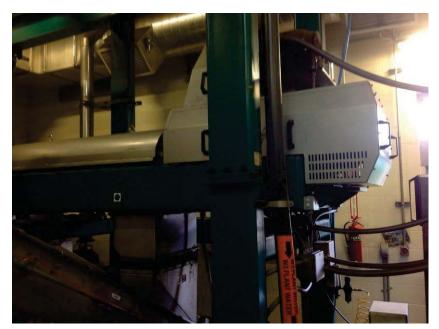












C\$to 4tall ?reWeVt (Vai eW)	PnVe
DWWeWW eVt Bo (Vai eW)	4S nV matWnV



4nu3dW, eE aterS/f

Created	2019-03-27 00:10:6UT bC yo bnVo HaV v akery epe
T 5 dated	2019-08-2U1t:37:0UT bC yo 4 S nV mat Wi V
snLat S nV	0. 00
, ate	2019-03-2U
bS e	13:23
Drea nr AFVLtSnV	4nuڇdW, eE aterSVf

DWWet, eWLr\$5t\$nVO\NF\$5i eVts\$Wl

4nu⁄dW, eE aterS/f	CI g 7U-10302
4tat\$nV w	CI g 7U-10302
DWMet, eWLrSstSnV	CeVtr 牙 f e #2
mMat to5e nPDWetl	h eLMaVS.au
CnVd \$\$ nV 4Lnre	2 - 4uf Mt HS/Syue, efradatSnV
?erPhri aVLe 4Lnre	1 - Cni 5nVeVt AFVLt5nV5Vf aWWteVded
ReLni i eVdatSnV	g n S i edSate aLtSnV reNFS ed
ASeud qy WerkatSnVWOCnii eVtW	maWnt S/ n5eratSiV

? MhtnW































Csto 4taPP?reWeVt (Vai eW)

g nVe

DWWeWW eVt Bo(Vai eW)

49 nV matWhV



, ,	
Created	2019-03-27 00:10:49 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:02:34 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	13:32
Area or Function	Solids Drying
Station ID	CNV78-30201
Asset Description	Cent #1 Discharge Conveyor
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in operation
	Liner looks to be in good shape













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Syllds Drbiol

Area yr Fuoctiyo	Sy Rds Drbiol
Ume	13:30
Date	2019-03-2p
Lycatiyo	0.0, 0.0
8 k dated	2019-05-2p 22:03:07 8 UC Tb Simyo Watsyo
Created	2019-03-27 00:10:50 8 UC Tb Uyob nao V aHerTeve

Asset DescriktiyoNI/ uikmeot List

Sy Pds Drbiol	Ceot g2 Discharl e CyoHebyr, C#n7p-30202
Statiyo ID	C#n7p-30202
Asset Descriktiyo	Ceot g2 Discharl e CyoHebyr
What tbke yf Asset?	MechaoicaP

MechaoicaP

Field OTserHatiyos	Leaviol
Cyoditiyo Scyre	2 - SPl ht nisiTRe Del radatiyo
Rerfyrmaoce Scyre	1 - Cymkyoeot Fuoctiyoiol as loteoded
wecymmeodatiyo	#y immediate actiyo re/ uired
Field OTserHatiyosNCymmeots	#yt io ykeratiyo
	Lioer Ryyvs io l yyd shake
	#yt sure y hat the EgE and rave are fur yo the gyo Heliur

Rhytys













Citb Staff Rreseot (oames)	#yoe
Assessmeot Bb (oames)	Simyo Watsyo



Recommendation

City Staff Present (names)

Assessment By (names)

Created	2019-03-27 00:10:43 UTC by Tony Van Haverbeke		
Updated	2019-05-28 22:04:01 UTC by Simon Watson		
Location	0.0, 0.0		
Date	2019-03-26		
Time	17:14		
Area or Function	Solids Drying		
Station ID	LCP78-11		
What type of Asset?	Electrical		
Electrical			
Description	Centrifuge #1 Control Panel		
Field Observations	Dusty		
Condition Score	2 - Slight Visible Degradation		
Performance Score	1 - Component Functioning as Intended	1 - Component Functioning as Intended	

No immediate action required

None

Simon Watson



Created	2019-03-27 00:10:44 UTC by Tony Van Haverbeke
Updated	2019-03-27 00:10:44 UTC by Tony Van Haverbeke
Location	0.0, 0.0
Area or Function	Solids Drying
Station ID	LCP78-12
What type of Asset?	Electrical
Electrical	
Description	Centrifuge #2 Control Panel



Created	2019-03-27 00:10:55 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:01:31 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	13:41
Area or Function	Solids Drying

Asset Description/Equipment List

Solids Drying	Centrifuge #1 Polyblend Unit, PLB78-31001
Station ID	PLB78-31001
Asset Description	Centrifuge #1 Polyblend Unit
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Polymer leaking from packing









City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:56 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:01:58 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	13:38
Area or Function	Solids Drying

Asset Description/Equipment List

Solids Drying	Centrifuge #2 Polyblend Unit, PLB78-31002
Station ID	PLB78-31002
Asset Description	Centrifuge #2 Polyblend Unit
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Polymer leaking from packing









City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:49 UTC by Tony Van Haverbeke
Updated	2019-05-28 21:33:44 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	14:15
Area or Function	Solids Drying
Station ID	CNV78-10100
Asset Description	Load Out Distribution Conveyor
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Visually appears to be in good order A lot of dry product in the room







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:49 UTC by Tony Van Haverbeke
Updated	2019-03-27 00:10:49 UTC by Tony Van Haverbeke
Location	0.0, 0.0
Area or Function	Solids Drying
Station ID	CNV78-20200
Asset Description	Cake Bin Discharge Conveyor
What type of Asset?	Mechanical



Created	2019-03-27 00:10:49 UTC by Tony Van Haverbeke
Updated	2019-03-27 00:10:49 UTC by Tony Van Haverbeke
Location	0.0, 0.0
Area or Function	Solids Drying
Station ID	CNV78-20300
Asset Description	Dryer Feed Conveyor
What type of Asset?	Mechanical



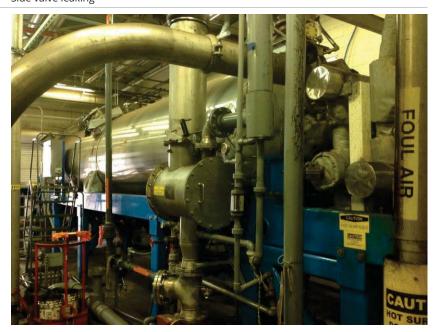
Created	2019-03-27 00:10:49 UTC by Tony Van Haverbeke
Updated	2019-05-28 21:34:26 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	14:02
Area or Function	Solids Drying

Asset Description/Equipment List

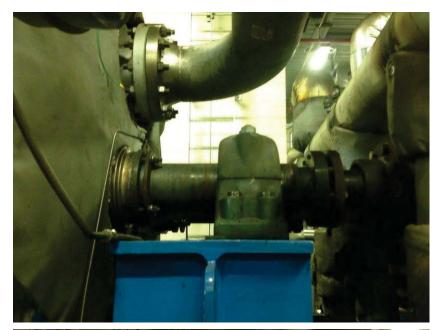
Solids Drying	Bio Solids Dryer, CNV78-20700
Station ID	CNV78-20700
Asset Description	Bio Solids Dryer
What type of Asset?	Mechanical

Mechanical

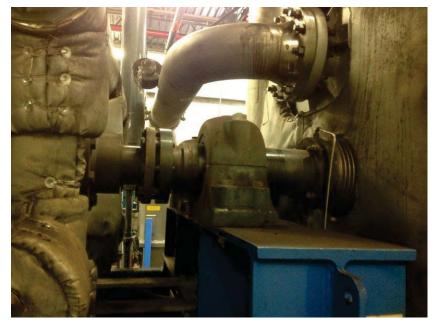
Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Some excessive grease around the drive shafts Side valve leaking











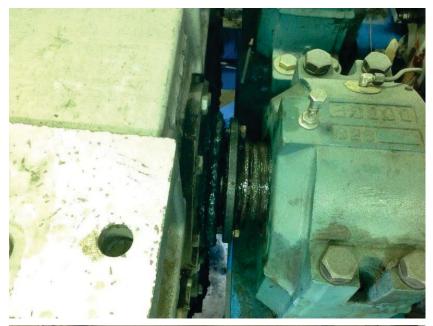




















City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:49 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:00:14 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	13:54
Area or Function	Solids Drying

Asset Description/Equipment List

Solids Drying	Dryer Discharge Conveyor, CNV78-20800
Station ID	CNV78-20800
Asset Description	Dryer Discharge Conveyor
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	No immediate action required
Field Observations/Comments	Appears that the conveyor has experienced some fires















City Staff Present (names)	None
Assessment By (names)	Simon Watson



Area or Function	Solids Drying
Time	13:51
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 22:00:53 UTC by Simon Watson
Created	2019-03-27 00:10:49 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Solids Drying	Dry Product Cooling Conveyor, CNV78-20900
Station ID	CNV78-20900
Asset Description	Dry Product Cooling Conveyor
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Grease on drive shaft









City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:10:50 UTC by Tony Van Haverbeke
Updated	2019-05-28 21:31:26 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	14:34
Area or Function	Solids Drying

Asset Description/Equipment List

Solids Drying	Retractable Loadout Chute #1, CTE78-10201		
Station ID	CTE78-10201		
Asset Description	Retractable Loadout Chute #1		
What type of Asset?	Mechanical		
Condition Score	2 - Slight Visible Degradation		
Performance Score	1 - Component Functioning as Intended		
Recommendation	Initiate more detailed inspection		
Field Observations/Comments	Does not appear to be used Fully retracted with an empty bin		



City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:60 UTC by Tony Van Haverbeke
Updated	2019-06-25 20:84:87 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-25
Time	18:34
Area or Function	Solids Dryinf

 ${\bf Asset\ Description} {\bf N\!P} {\bf Buipment\ List}$

Solids Dryinf	l etractabæ Loadout Cgute w2, CTP75-10202
Station #D	CTP75-10202
Asset Description	l etractabæ Loadout Cgute w2
Wgat type oMAssetI	h ecganicaE
Condition Score	2 - Stif gt Visible Defradation
?erMormance Score	1 - Component Functioninf as #htended
l ecommendation	#nitiate more detailed inspection
Field R bservations Comments	Does not appear to be used Fu⊞y retracted qitg an empty traiÆr

?gotos



City StaW? resent @ames/	(one
Assessment) y @ames/	Simon Watson



Created	2019-03-27 00:10:50 UTC by Tony Van Haverbeke
Updated	2019-06-03 16:35:29 UTC by Art Molseed
Location	0.0, 0.0
Date	2019-03-28
Time	14:38
Area or Function	Solids Drying

Asset Description/Equipment List

Solids Drying	Retractable Loadout Chute #3, CTE78-10203
Station ID	CTE78-10203
Asset Description	Retractable Loadout Chute #3
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Does not appear to be used Fully retracted with an empty trailer and dry product coming out of chute







City Staff Present (names)	None
Assessment By (names)	Simon Watson



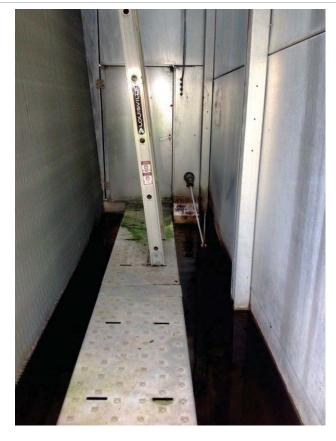
Created	2019-03-27 00:10:51 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:47:56 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	14:43
Area or Function	Solids Drying

Asset Description/Equipment List

Solids Drying	Dryer Condensate Cooling Tower, CTW78-40500
Station ID	CTW78-40500
Asset Description	Dryer Condensate Cooling Tower
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	Schedule corrective action work order near term	
Field Observations/Comments	Unit not operating Over all condition looks good Water reservoir auto fill valve appears to be running constantly	



Auto fill valve











City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-28 21:28:08 UTC by Simon Watson	
Updated	2019-05-28 21:31:11 UTC by Simon Watson	
Location	45.2947139506, -122.770791654	
Date	2019-03-28	
Time	14:28	
Area or Function	Solids Drying	
Station ID	HTR78_20400	
Asset Description	Dryer Thermal Heater	
What type of Asset?	Mechanical	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	
Field Observations/Comments	Operating no visible leaks	



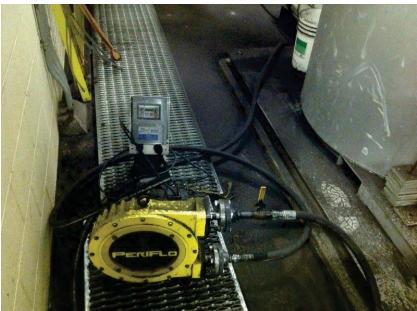












City Staff Present (names)	None
Assessment By (names)	Simon Watson



Solids Dewatering

O	
Created	2019-03-27 00:10:53 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:23:09 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	13:35
Area or Function	Solids Dewatering
Station ID	PMP_20200
Asset Description	Thermal Heater System
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Sludge leaking from packing













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:05 UTC by Tony Van Haverbeke
Updated	2019-08-24 20:68:13 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-24
Time	16:69
Area or Function	Solids Drying

Asset Description BRuipment List

Solids Drying	Dryer Condenser Sump wump, w ₩74-60100
Station ID	wl w74-60100
Wf at type o? AssetM	wumps and lotors
Condition Score	2 - Sligf t Visible Degradation
wer?ormance Score	1 - Component Functioning as Intended
Oecommendation	P o immediate action reRuired
Field / bservationsEComments	P ot in operation q f ile on site

wf otos



City Sta?? wresent (names)	Pone
Assessment Ny (names)	Simon Watson



Odor Control

Area or Function	Odor Control
Time	13:44
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 20:42:10 UTC by Simon Watson
Created	2019-03-27 00:10:56 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Odor Control	Vent Scrubber / Condenser, SCB78-20600
Station ID	SCB78-20600
Asset Description	Vent Scrubber / Condenser
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	3 - Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Scrubber fan has excessive oil leaking out















City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:10:58 UTC by Tony Van Haverbeke
Updated	2019-03-27 00:10:58 UTC by Tony Van Haverbeke
Location	0.0, 0.0
Area or Function	Solids Drying
Station ID	TNK78-20100
Asset Description	Dryer Cake Bin
What type of Asset?	Mechanical



Solids Dewatering

Area or Function	Solids Dewatering
Time	10:37
Date	2019-03-29
Location	0.0, 0.0
Updated	2019-05-28 22:12:39 UTC by Simon Watson
Created	2019-03-27 00:11:03 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Solids Dewatering	Thickened Biosolids Pump, PGB-P-80-6
Station ID	PGB-P-80-6
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Check valve may have a leak













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Solids Dewatering

Area or Function	Solids Dewatering
Time	10:33
Date	2019-03-29
Location	0.0, 0.0
Updated	2019-05-28 22:09:04 UTC by Simon Watson
Created	2019-03-27 00:11:03 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Solids Dewatering	Vogelsang TWAS Rotary Lobe Pump, PGB-P-80-8
Station ID	PGB-P-80-8
What type of Asset?	Pumps and Motors
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not operating













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:54 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:15:39 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	09:58
Area or Function	Solids Dewatering
Station ID	PG-M-80-3-1
Asset Description	GBT Hydraulic Unit #1
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Pump leaking



City Staff Present (names)	None
Assessment By (names)	Simon Watson



U	
Created	2019-03-27 00:10:55 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:16:08 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	09:56
Area or Function	Solids Dewatering
Station ID	PG-M-80-3-2
Asset Description	GBT Hydraulic Unit #2
What type of Asset?	Mechanical

Mechanical

Field Observations	Corrosion
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not operating



City Staff Present (names)	None
Assessment By (names)	Simon Watson



Area or Function	Solids Dewatering
Time	09:59
Date	2019-03-29
Location	0.0, 0.0
Updated	2019-05-28 22:15:12 UTC by Simon Watson
Created	2019-03-27 00:10:55 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Solids Dewatering	Gravity Belt Thickener #1, PG-M-80-4-1
Station ID	PG-M-80-4-1
Asset Description	Gravity Belt Thickener #1
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not operating



















City Staff Present (names)	None
Assessment By (names)	Simon Watson



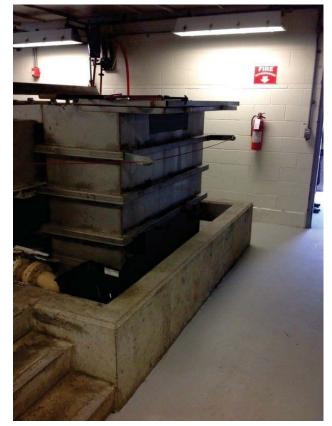
i owdL Aeg atermG

Frea or ul n. tron	i ow rd L Aeg aterm G
Tr M /e	10:01
Aate	2019-03-29
co. atr o n	0,000,0
Updated	2019-05-28 22:1S:29 UTC by i tW on s atLon
Created	2019-03-27 00:10:55 UTC by Tony Van Haverbeke

FLLet AeL. rrptron/Eql rpWent criat

i owndLAegaternnG	Bravrty hew T#rrkener P2DVB-4 -80-S-2
i tatroon IA	MB-4 -80-S-2
FLLet AeL. ryptron	Bravrty hew/T#mkener P2
s #at type of FLLet?	4 e. #anmaw
Condr trio n i . ore	2 - i ww6#t Vnbanbwe AeGradatnon
MerforWan. e i . ore	1 - CoWponent ul n. tronmGaL Intended
Re. oWWendatron	No m/Wedmate a. troon reqlimed
unewol ObLervatronL/CoWWentL	Not operat m G

M#otoL





















Crty i taff MeLent (naWeL)	None
FLLeLLWent hy (naWeL)	s atLon



i owdL Aeg atermG

Created 2019-03-27 00:11:05 UTC by Tony Van Haverbeke Updated 2019-08-2S 1S:80:35 UTC by i nWon s atLon co. atron 0,000,0 Aate 2019-03-29 TriWe 10:11	Frea or ul n. tr o n	i ow n L Aeg atermG
Updated 2019-08-2S 1S:80:35 UTC by i rWon s atLon co. atron 0,000,0	Tr W e	10:11
Updated 2019-08-2S 1S:80:35 UTC by i rW /on s atLon	Aate	2019-03-29
	co. atr o n	0,000,0
Created 2019-03-27 00:11:05 UTC by Tony Van Haverbeke	Updated	2019-08-2S 1S:80:35 UTC by i rW on s atLon
	Created	2019-03-27 00:11:05 UTC by Tony Van Haverbeke

FLLet AeL. rmptmonq) I mpWent cmt

i owndLAeg aternnG	Bravrty hews aL#g ater PI Wp MI DPB-P-S0-2-1
i tatron 4A	PB-P-S0-2-1
s #at type ol FLLetf	Pl WpL and ? otorL

Pl WpL and? otorL

unewol R bLervatronL	CorroLnon
Condr trro n i . ore	2 - i wi6#t Vrtorbwe AeGradatron
PerlorWan. e i . ore	1 - CoWponent ul n. tronmGaL 4ntended
Ne. oWWendatr o n	i.#edl wa.orre.trwe a.tron g ork order near terW
unewal R bLervatroanLcCoWWentL	Oot operatmG CoatmGLyLteW lammG

P#otoL



Crty i tall PreLent /naWeLE	Oone
FLLeLLWent hy /naWeLE	i rW on s atLon



i owdL Aeg atermG

Frea or ul n. tron	i ow rd L A eg aterm n G
TrWe	10:12
Aate	2019-03-29
co. atron	0,000,0
Updated	2019-08-2S 22:07:8S UTC by i rW on s atLon
Created	2019-03-27 00:11:05 UTC by Tony Van Haverbeke

FLLet AeL. rrptronq' El rpWent criat

i owndLAeg aternnG	Bravrty hews aL#g ater PI Wp M2DPB-P-S0-2-2
i tatron 4A	PB-P-S0-2-2
s #at type ol FLLetf	Pl WpL and ? otorL

Pl WpL and? otorL

unewolRbLervatronL	ceak m G
Condr trro n i . ore	2 - i wiG#t Vrlanbwe AeGradatronn
PerlorWan. e i . ore	1 - CoWponent ul n. tr o n m GaL 4ntended
Ne. oWWendatr o n	i.#edl wg.orre.tmne a.tmon gork order near terW
unewal R bLervatroanLqCoWWentL	Oot monoperatmon CoatmnG LyLteW lanmonG ceak on dmi. #arGe mone

P#otoL







Crty i tall PreLent (naWeL)	Oone
FLLeLLWent hy (naWeL)	i rW on s atLon



Created	2019-03-27 00:10:55 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:13:47 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	10:04
Area or Function	Solids Dewatering

Asset Description/Equipment List

Solids Dewatering	Polymer Mix / Feed Unit #1, PG-M-81-1
Station ID	PG-M-81-1
Asset Description	Polymer Mix / Feed Unit #1
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Not operating

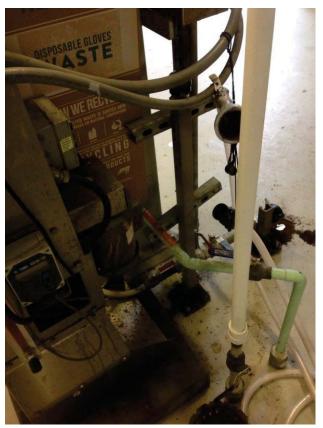












City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:10:55 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:13:21 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	10:06
Area or Function	Solids Dewatering

Asset Description/Equipment List

Solids Dewatering	Polymer Injector / Mixer #2, PG-M-81-2
Station ID	PG-M-81-2
Asset Description	Polymer Injector / Mixer #2
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Not in operation













City Staff Present (names)	None
Assessment By (names)	Simon Watson



O	
Created	2019-03-27 00:10:55 UTC by Tony Van Haverbeke
Updated	2019-05-28 18:45:47 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	10:07
Area or Function	Solids Dewatering
Station ID	PG-M-81-3
Asset Description	Polymer Injector / Mixer #1
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Discharge lines leaking









City Staff Present (names) None
Assessment By (names) Simon Watson



Solids Handling

Created	2019-03-27 00:10:47 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:05:21 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	07:59
Area or Function	Solids Handling
Station ID	BS-M-82-1-1
Asset Description	Biosolids Storage Blower #1
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Solids Handling

Created	2019-03-27 00:10:48 UTC by Tony Van Haverbeke		
Updated	2019-05-28 22:05:53 UTC by Simon Watson		
Location	0.0, 0.0		
Date	2019-03-29		
Time	07:56		
Area or Function	Solids Handling		
Station ID	BS-M-82-1-2		
Asset Description	Biosolids Storage Blower #2		
What type of Asset?	Mechanical		
Condition Score	2 - Slight Visible Degradation		
Performance Score	1 - Component Functioning as Intended		
Recommendation	No immediate action required		
Field Observations/Comments	Slight oil leak		











City Staff Present (names)	None
Assessment By (names)	Simon Watson



Solids Dewatering

Created	2019-03-27 00:11:07 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:17:26 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	08:44
Area or Function	Solids Dewatering

Asset Description/Equipment List

Solids Dewatering	Vogelsang GBT Feed Pump #1, PMP82-10003
Station ID	PMP82-10003
What type of Asset?	Pumps and Motors
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Grease or oil from motor area look like residue













City Staff Present (names)	None
Assessment By (names)	Simon Watson



SbBds Del ateriyw

Area br Fuyctiby	Sb B ds Del ateriyw
6ime	0p:87
Date	2019-03-29
Lbcatiby	0.0, 0.0
4 v dated	2019-0k-2p 22:15:k8 4 6C UT Simby Watsby
Created	2019-03-27 00:11:07 4 6C UT 6byT oay naVerUeHe

Asset Descrivtiby NqOuivmeyt List

SbBds Del ateriyw	obweßaywM#6 Feed Pumv G2, PI Pp2-10008
Statiby HD	PI Pp2-10008
Wf at tTve b? AssetE	Pumvs ayd I btbrs

Pumvs ayd I btbrs

Field g UserVatibys	LeaHyw
Cby ditiby Scbre	2 - SBwf t oisiUte Dewradatiby
Per?brmayce Scbre	1 - Cbmvby eyt Fuy ctiby iy was hy tey ded
Recbmmey datiby	Scf edu & cbrrectiVe actiby l brHbrder year term
Field g UserVatibysNCbmmeyts	g iBæaHyw?rbm vumv

Pf btbs















CitT Sta?? Preseyt /yames() by e

Assessmeyt #T /yames(Simby

Solids Drying

Created	2019-03-27 00:11:07 UTC by Tony Van Haverbeke
Updated	2019-05-28 20:43:40 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-28
Time	17:29
Area or Function	Solids Drying

Asset Description/Equipment List

Solids Drying	Centrifuge Feed Pump #1, PMP82-20001	
Station ID	PMP82-20001	
What type of Asset?	Pumps and Motors	
Condition Score	5 - Integrity of Component Severely Compromised	
Performance Score	4 - In Service, but Function is Highly Impaired	
Recommendation	Immediate corrective action required	
Field Observations/Comments	Appears the pump experienced a major process leak. Insulation would have to be removed to determine where the leak is. Backflow device is leaking	









City Staff Present (names)	None
Assessment By (names)	Simon Watson



4y EdW, rbSof

US e Area yr FuoLtSyo	17:17
LC -	47.47
, ate	2019-03-2D
syLatSyo	0თ. 0თ
6 kdated	2019-0p-25 20:88:32 6 UC Tb 4\$ yo matWyo
Created	2019-03-27 00:11:07 6 UC Tb Uyob nao V aHerTeve

AWWet, eWLrSktSyoRqOuSki eotsSW1

4y EdW, rbSof	Ceotr S uf e Feed gui k w2. gP g52-20002
4tatSyo#	gP g52-20002
mMat tbke yl AWMetl	gui kWaod P ytyrW

gui kWaod PytyrW

FSeEd h TWerHatSyoW	seav S of
Cyod § Syo 4Lyre	2 - 4時 Mt nS/知 fe , efradatSyo
gerlyri aoLe 4Lyre	1 - Cyi kyoeot FuoLtSyoSof aW#oteoded
?eLyi i eodat§yo	#b\$Sate i yre deta Sed SoWkeLtSyo
FSeEd h TWerHatSyoWPCyi i eotW	45foWyli Soyry 또EeavWd #bWuEatSyo NyuEd MaHe ty Te rei yHed ty SoHeWoSfate syyWeTyEtyoi ytyrlaofuard

gMytyW







Cstb 4tall greWeot /oai eW/) yoe
A W ₩WV eot Bb /oai eW	4S yo matWyo



Updated Location	2019-05-28 22:33:51 UTC by Simon Watson 0.0. 0.0
Date	2019-03-29
Time	08:18
Area or Function	W-3 Water

Asset Description/Equipment List

W-3 Water	W-3 Strainer / Motor, W-3-M-90-1
Station ID	W-3-M-90-1
Asset Description	W-3 Strainer / Motor
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	3 - Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Coating system failed
	Back flush water discharge line leaking

















Created	2019-03-27 00:11:00 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:35:56 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	08:13
Area or Function	W-3 Water

Asset Description/Equipment List

W-3 Water	W-3 Pump #1 Motor, W3-M-90-1-1
Station ID	W3-M-90-1-1
Asset Description	W-3 Pump #1 Motor
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:00 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:35:08 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	08:15
Area or Function	W-3 Water

Asset Description/Equipment List

W-3 Water	W-3 Pump #2 Motor, W3-M-90-1-2
Station ID	W3-M-90-1-2
Asset Description	W-3 Pump #2 Motor
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:00 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:34:23 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	08:16
Area or Function	W-3 Water

Asset Description/Equipment List

W-3 Water	W-3 Pump #3 Motor, W3-M-90-1-3
Station ID	W3-M-90-1-3
Asset Description	W-3 Pump #3 Motor
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:09 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:38:10 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	08:09
Area or Function	W-3 Water

Asset Description/Equipment List

W-3 Water	W-3 Submersible Pump #1, W3-P-90-1-1
Station ID	W3-P-90-1-1
What type of Asset?	Pumps and Motors

Pumps and Motors

Field Observations	Leaking
Condition Score	3 - Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Packing water leaking excessively











Updated	2019-05-28 22:37:09 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	08:12
Area or Function	W-3 Water

Asset Description/Equipment List

W-3 Water	W-3 Submersible Pump #2, W3-P-90-1-2
Station ID	W3-P-90-1-2
What type of Asset?	Pumps and Motors

Pumps and Motors

Field Observations	Corrosion
Condition Score	3 - Visible Degradation
Performance Score	2 - In Service, but higher than Expected O&M
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Coating system failed











s -3 s ater

Area yr Fuo. tr y io	s -3 s ater
UtWe	08:07
4 ate	2019-03-29
cy.atmyo	0,010,0
5 k dated	2019-0p-28 22:37:S1 5 UC Tb i rW yo s atLyo
Created	2019-03-27 00:11:10 5 UC Tb Uyob nao V aHerTeve

ALLet 4 eL. rrkstrynov@/ urksWeot crlat

s -3 s ater	s -3 i uTWerLmile guWk f 3Ds 3-g-90-1-3
i tatryno #4	s 3-g-90-1-3
s Pat tbke yBALLetI	guWkL aod h ytyrL

guWkL aod h ytyrL

Freld? TLerHatrynoL	CyrryLnno
Cyodr tny no i .yre	3 - nrtafile 4 eMradatryio
gerByrWao. e i . yre	2 - #b i erHmeDTut PnMPer tPao Œke. ted ? x h
&e. y W Weodatryno	i . Pedule . yrre. tr he a. tr y no Ryrv yrder oear terW
Freld? TLerHatrynoLvCyWWeotL	CyatroMLbLteW Barlied

gPytyL









Crtb i taBgreLeot opaWeL() yoe
ALLeLLWeot Nb opaWeL(i rWyo s atLyo

Solids Dewatering

Created	2019-03-28 21:55:55 UTC by Simon Watson
Updated	2019-05-28 22:22:27 UTC by Simon Watson
Location	45.29466672, -122.77044698
Date	2019-03-28
Time	14:55
Area or Function	Solids Dewatering
Asset Description	Odor Control Fan #1
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Initiate more detailed inspection
Field Observations/Comments	Unit running smoothly Dripping black tar substance from fan. This comes from the solids dryer.













City Staff Present (names)	None
Assessment By (names)	Simon Watson



Solids Dewatering

Created	2019-03-28 22:01:01 UTC by Simon Watson
Updated	2019-05-28 22:20:18 UTC by Simon Watson
Location	45.2946120495, -122.770431845
Date	2019-03-28
Time	15:01
Area or Function	Solids Dewatering
Asset Description	Odor Control Fan 2
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Initiate more detailed inspection
Field Observations/Comments	Unit not in operation
	Dripping black tar substance from fan. This comes from the solids dryer.
	Potential over greasing of bearings
	Coating coming off outside sound proofing surround





















Odor Control

Area or Function	Odor Control
Time	17:39
Date	2019-03-28
Location	0.0, 0.0
Updated	2019-05-28 20:41:38 UTC by Simon Watson
Created	2019-03-27 00:10:51 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Odor Control	Aeration Basin Ex Fan 30501, FAN91-30501		
Station ID	FAN91-30501		
Asset Description	Aeration Basin Ex Fan 30501		
What type of Asset?	Mechanical		
Condition Score	2 - Slight Visible Degradation		
Performance Score	1 - Component Functioning as Intended		
Recommendation	No immediate action required		
Field Observations/Comments	Not in operation		











Odor Control

2019-03-27 00:10:51 UTC by Tony Van Haverbeke 2019-05-28 20:41:08 UTC by Simon Watson
2019-05-28 20:41:08 UTC by Simon Watson
0.0, 0.0
2019-03-28
17:41
Odor Control

Asset Description/Equipment List

Odor Control	Aeration Basin Em Bypass Fan, FAN91-30502
Station ID	FAN91-30502
Asset Description	Aeration Basin Em Bypass Fan
What type of Asset?	Mechanical

Mechanical

Field Observations	Vibration	
Condition Score	2 - Slight Visible Degradation	
Performance Score	2 - In Service, but higher than Expected O&M	
Recommendation	Schedule corrective action work order near term	
Field Observations/Comments	Fan noise and vibrating	







City Staff Present (names)	None
Assessment By (names)	Simon Watson

Building	
	۳
	,
Dananı	٦

Created	2019-03-27 00:11:11 UTC by Tony Van Haverbeke
Updated	2019-05-28 18:36:09 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	11:05
Area or Function	Building

Asset Description/Equipment List

Building	Operations Building, 95BLD-01
Station ID	95BLD-01
What type of Asset?	Structural

Structural

Field Observations	Leaking
Condition Score	3 - Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Gutters are full and need cleaning out
	Stucco falling off at secondary front entrance
	Several floor tiles damaged
	Stain on lab ceiling not sure if it is HVAC or roof
	Several pieces of baseboard missing on corners
	Storage close to electrical panels
	Several window leaks in break area
	No backflow device on hose bib in the back of the building





































































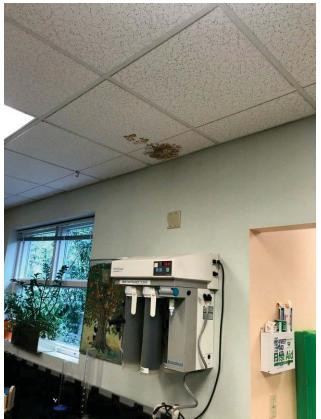
















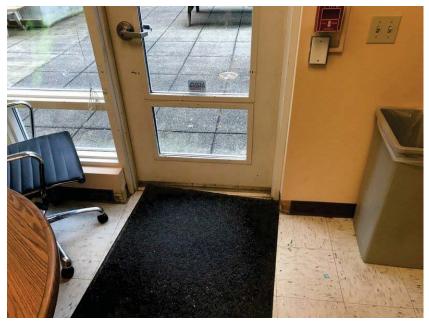














Mold on wall below screen







Back window in break room leaking





Windows under screen seem to be leaking

City Staff Present (names)	None
Assessment By (names)	Simon Watson



uaLk Up l ower

Created	2019-03-27 00:10:62 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:66:07 UTC by 4S on matWon
soLatSon	0ტ. 0ტ
, ate	2019-03-29
TS e	09:67
Drea or AFnLtSon	uaLk Up I ower

DWWet, eWLrSptSonEnqFSpi entsSW

uaLk Up I ower	1500km I enerator 4et. I hf 99-01
4tatSon ?,	I hf 99-01
mOat type oGDWetg	h e Ltr S aP

hReLtrSLaP

, eWLrSptSon	1500km I enerator 4et
Conds:Son 4Lore	2 - 4PSROt VSVIIbRe , eRradatSon
l er © ri anLe 4Lore	1 - Coi ponent AFnLtSonSnR aW?ntended
NeLoi i endatSon	f o S i edSate aLtSon reqFS ed
ASeRd / bWervatSonWECoi i entW	4FppPseWFnder Renerator SnWsde tOe enLPoWFre. LoFRd Ret WFLked Fp dFrSnR operatSon

l OotoW

































Csy 4taG reWent)nai eWB	f one
DWWeWW ent uy)nai eW®	4S on matVon



Back Up Power

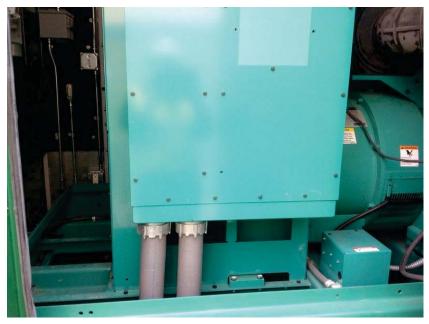
Created	2019-03-27 00:10:42 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:44:41 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	09:41
Area or Function	Back Up Power
Station ID	GEN-M-100-1
What type of Asset?	Electrical

Electrical

Description	Plant Backup Generator (Large)
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required

































City Staff Present (names)	None
Assessment By (names)	Simon Watson



I a. pT5 gnOer

Created	2019-03-27 00:10:U2 T bC yo bnVo HaV v akeryepe
T 5dated	2019-08-26 22:US:19 T bC yo i rW nV s atLnV
cn. at m V	0,000,0
Aate	2019-03-29
br\/e	09:2S
Frea nr uBV. t m V	l a. p T 5 gnOer

FLLet AeL. rrfatmVM4BrfaWeVt crbt

I a. pT5 gnOer	I eVeratnr Cat h foW5maVDI ?P-R -100-3
itatmnV vA	I ?P-R -100-3
s / at to5e nGFLLetN	?fe. trmaf

?fe. trmaf

AeL. rrfatmV	। eVeratnr Cat h foW5ाक्वV
urefd hy LerkatmVL	CnrrnL m V
CnVdr tmV i . nre	2 - i frfē/ t Hrlonyrfe A e Eradatm V
ger@nrWaV.ei.nre	1 - CnW5nVeVt uBV. tmVm/E aL WteVded
qe. nWWeVdat m V	Pn mWWedmate a. tmV re4Bmed
urenfd hy LerkatmnVLMCnWWeVtL	R nLL ErnOME nV . ayfe ?VEMe yfn. p OarW

g/ ntnL























Crtro i ta GegreLeVt (VaWeL)	PnVe
FLLeLLWeVt I o (VaWeL)	i mWnV s atLnV



Back Up Power

Created	2019-03-27 00:10:42 UTC by Tony Van Haverbeke
Updated	2019-05-28 22:45:44 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-29
Time	09:33
Area or Function	Back Up Power

Asset Description/Equipment List

Back Up Power	Onan Portable Gas Generator, GEN-M-100-4	
Station ID	GEN-M-100-4	
What type of Asset?	Electrical	

Electrical

Description	Onan Portable Gas Generator	
Field Observations	Corrosion	
Condition Score	3 - Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	Schedule corrective action work order near term	
Field Observations/Comments	Coating system failing	





















City Staff Present (names)	None
Assessment By (names)	Simon Watson



Attachment B: Lift Station Inspection Forms



Lift Station

Created	2019-03-27 00:11:13 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:05:10 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	10:38
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Canyon Creek Lift Station, CANC-LS-07	
Station ID	CANC-LS-07	
What type of Asset?	Structural	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	Schedule corrective action work order near term	
Field Observations/Comments	House keeping issues	
	No back flow devices on the hose bibs	
	Roof insulation starting to fall down	
	No confined space sign on wet well	
	120/208 transformer seems to be hotter than normal. Suggest follow up to verify	
	transformer temperature is in correct operating range	





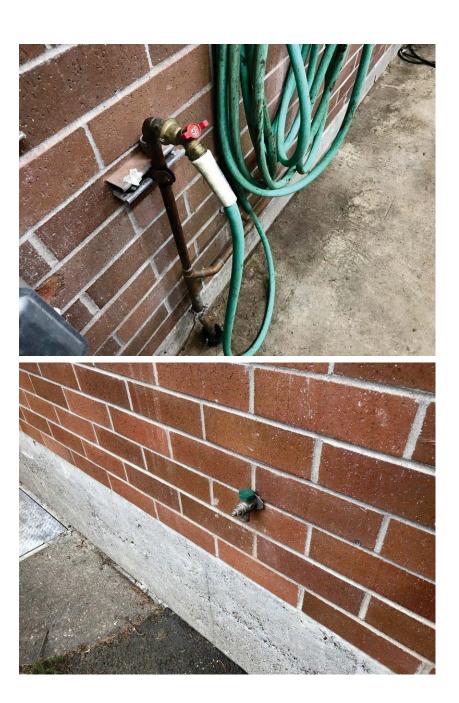
























Appears to hitter than normal





Lift Station

Created	2019-03-27 00:10:48 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:06:40 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	10:36
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Canyon Creek Auxillary Engine, CANC-LS-07-AUX
Station ID	CANC-LS-07-AUX
Asset Description	Canyon Creek Auxillary Engine
What type of Asset?	Mechanical

Mechanical

Field Observations	Corrosion
Condition Score	3 - Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Corroded electrical terminals.
	Battery held in place with wire ties and bailing wire
	No cover over battery posts















City Staff Present (names) None
Assessment By (names) Simon Watson



sst 4tatSyo

Created	2019-03-27 00:11:00 6 UC Tb Uyob nao V aHerTeve
6kdated	2019-0p-25 23:0p:81 6 UC Tb 4 S yo mat\ V yo
syLat S yo	0. 00
, ate	2019-03-27
USi e	10:pD
Area yr FuoLt§yo	s St 4tat Sy o

AWWet, eWLrSktSyoq'(uSki eotsSW

sst 4tatSyo	Caobyo Creev s t f ui k l 1. CAg C-s4-07-f -1
4tatSyo w	CAg C-s4-07-f -1
mPat tbke yEA Wé t#	fui kWaod MytyrW
Cyod § §o 4Lyre	2 - 4lsnPt nsvsTle , ehradatSyo
f erEyri aoLe 4Lyre	1 - Cyi kyoeot FuoLt\$yo\$oh aWøteoded
?eLyi i eodatSyo	4LPedule LyrreLt S b aLtSyo Ryrv yrder oear teri
FSeld NTWerHatSyoWcCyi i eotW	CPeLv HalHe SoWkeLtSyo LyHer leavSoh OeltWakkear ty Te So hyyd LyodStSyo f ui kykerated RPSe yoWste

f PytyW









CStb4ta⊞freWeot)oai eWB

gyoe

AVVVéVVVV eot Ob)oai eVVB

4S yo matWo



Lift Statiyo

Created	2019-03-27 00:11:00 5 UC Tb Uyob nao V aHerTeve
5 k dated	2019-0p-28 23:04:38 5 UC Tb Simyo Watsyo
Lycatiyo	0.0, 0.0
Date	2019-03-27
Ume	11:00
Area yr Fuoctiyo	Lift Statiyo

Asset DescriktiyoqOʻ uikmeot List

Lift Statiyo	Caobyo Creev Lift f umk 2, CAg C-LS-07-f -2
Statiyo WD	CAg C-LS-07-f -2
WPat tbke yEAsset#	f umks aod Mytyrs

f umks aod Mytyrs

Field hTserHatiyos	Cyrrysiyo
Cyoditiyo Scyre	2 - Sli?Pt nisiTle De?radatiyo
f erByrmaoce Scyre	1 - Cymkyoeot Fuoctiyoio? as wteoded
Recymmeodatiyo	ScPedule cyrrectiHe actiyo Nyrv yrder oear term
Field hTserHatiyoscCymmeots	f umk ykerates NPile yosite Syme rust yo Eyuodatiyo

f Pytys









Citb Sta⊞f reseot (oames)	gyoe
Assessmeot Bb (oames)	Simyo Watsyo



Lift Station

Created	2019-03-27 00:10:48 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:12:19 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	08:38
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Charbonneau Auxillary Engine , CHAR-LS-01-AUX
Station ID	CHAR-LS-01-AUX
Asset Description	Charbonneau Auxillary Engine
What type of Asset?	Mechanical

Mechanical

Field Observations	Leaking
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Slight oil leak from top of engine
	Battery has no cover over the posts so it is a hazard
	Gas line is not supported by the engine so it moves and could cause a hazard

























City Staff Present (names)	None
Assessment By (names)	Simon Watson



sst 8tatsby

Created	2019-03-27 00:11:01 4 6C UT 6byT oay naVerUeHe
4vdated	2019-0k-2p 23:05:09 4 6C UT 8S by matWby
sbLat9by	0 . 0 . 0
, ate	2019-03-27
6S e	0p:2D
Area br FuyLtSby	s £ 8tat £ y

AWWet, eWLrSvtSbyNqOuSvi eytsSW1

sst 8tatsby	Cl arUbyyeau s S t wui v MI. CnA#-s8-01-w-1
8tat\$by P,	Cn A#-s8-01-w1
ml at tTve bBA W étG	wui vWayd I btbrW

wui vWayd I btbrW

l ayuBaLturer	hbri ay #uvv
l bdef	65A3-?
FSefd E UWerVatSbyW	seaHyg
Cbydssy 8Lbre	2 - 8fgl t o S/M Ufe , egradatSby
werBbri ay Le 8Lbre	1 - Cbi vbyeyt FuyLt\$by\$yg aWRyteyded
#eLbi i ey dat\$oy	8Ll edufe LbrreLt\$/e aLt\$by R brHbrder year teri
FSefd E UWerVatSbyVWCbi i eytW	E ffeaHsyg Bbi Veyt Lav. yeed tb deteri Sye tle LauWe ayd Lfeay uvcE ff SWdraSy Syg tb tle Bbbr draSyc oeyt fSye lefd Sy vfaLe UT Uuygee oSWaf bUWerVatSby byfT yb verBbri ayLe teWtSyg

w btbW















CST 8taBwreWeyt /yai eW/) bye
AWWeWW eyt?T/yai eW(8S by matVby



crht i tatryno

Area yr Fuo. tr y no	crht i tatryno
UtWe	08:3S
4 ate	2019-03-27
cy.atryno	0,000,0
5 k dated	2019-0p-28 23:11:S0 5 UC Tbi M /yo s atLyo
Created	2019-03-27 00:11:01 5 UC Tb Uyob nao V aHerTeve

ALLet 4 eL. rrkntrynovÆ/ urknWeot crhot

crht i tatryno	CgarTyooeau critt f uWk #2DCV AP-ci -01-f -2
i tatnyno B4	CV AP-ci -01-f -2
s gat tbke yl ALLetl	f uWkL aod h ytyrL

f uWkL aod h ytyrL

Fne?d MTLerHatrynoL	ceavr o O
Cyodr tny no i . yre	2 - i २१००gt nı harī i २e 4 e Oradatı y no
f erlyrWao. e i . yre	2 - Bo i erHmeDTut gn@ger tgao Exke. ted M&h
Pe. yWWeodatryno	i . gedu?e . yrre. trhe a. tryno Ryrv yrder oear terW
Free?d MTLerHatrynoLvCyWWeotL	Miñ?eavrooOlryW Heot . ak Doeed ty deterWrooe tge . auLe aod . ?eao uk, Miñro drarorooOty tge l'}yyr draro, s rogyut tavrooOyll ge Te?t Quard Te?tL LgyR Wyre Rear tgao kuWk #1 nroua?yTLerHatrono yo?ooy kerlyrWao. e teLtrooO

fgytyL















Cntbitall freLeot opaWeL() yoe
ALLeLLWeot Nb opaWeL(i M Vyos atLyo



Created	2019-03-27 00:11:13 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:03:59 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	11:25
Area or Function	Lift Station

Asset Description/q4uipment List

Lift Station	CorraNCreek Lift Station, CI hC-LS-0?
Station ID	CI hC-LS-0?
Wgat type of AssetP	StructuraN

StructuraN

Corrosion
2 - SNRgt VisibNet DeRradation
1 - Component FunctioninR as Intended
Scgedu № corrective action Oork order near term
E o fals/protection on Oet Oels/
LarRe gold into poOer controlstructure Ogere tge antenna Oire comes tgrouRg
E o cover over battery posts
hepNacement fuses NayinR in dirt
Corrosion noted on tge bottom of tge controlpaneN
E o confined space siRn on OetOeM
wumps did not run OgiNe onsite

wgotos































City Staff wresent)names6	E one
Assessment By)names6	Simon Watson



Created	2019-03-27 00:11:01 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:13:21 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	11:38
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Corral Creek Lift Pump #1, CORCRK-LS-1
Station ID	CORCRK-LS-1
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Submersible pump unable to inspect. Pump did not run while on site.
City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:01 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:13:44 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	11:39
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Corral Creek Lift Pump #2, CORCRK-LS-2
Station ID	CORCRK-LS-2
What type of Asset?	Pumps and Motors
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Submersible pump unable to inspect. Pump did not run while on site.
City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-06-02 21:00:00 UTC by Art Molseed
Updated	2019-06-02 21:19:44 UTC by Art Molseed
Location	,
Date	2019-06-02
Time	13:47
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Grande Pointe LS
Station ID	GRANDEPOINTE-LS-09
Asset Description	Grande Pointe LS
What type of Asset?	Structural
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required





















































Created	2019-06-02 21:11:31 UTC by Art Molseed
Updated	2019-06-02 21:11:31 UTC by Art Molseed
Location	· ·
Date	2019-06-02
Time	14:08
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Grande Pointe LS
Station ID	GRANDEPOINTE-LS-09-AUX
Asset Description	Auxiliary Engine
What type of Asset?	Mechanical
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required





Time	14:00 Lift Station
Date	2019-06-02
Location	,
Updated	2019-06-02 21:05:35 UTC by Art Molseed
Created	2019-06-02 21:05:35 UTC by Art Molseed

Asset Description/Equipment List

Lift Station	Grande Pointe LS
Station ID	GRANDEPOINTE-LS-09-P-1
What type of Asset?	Pumps and Motors
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Submersible pump could not be inspected





Created Updated	2019-06-02 21:08:27 UTC by Art Molseed 2019-06-02 21:08:27 UTC by Art Molseed
Location	,
Date	2019-06-02
Time	14:05
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Grande Pointe LS
Station ID	GRANDEPOINTE-LS-09-P-2
What type of Asset?	Pumps and Motors
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Submersible pump could not be inspected





Created	2019-03-27 00:10:44 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:08:57 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	09:41
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Memoiral Park Control Panel, MEMP-LCP-03
Station ID	MEMP-LCP-03
What type of Asset?	Electrical

Electrical

Description	Memoiral Park Control Panel
Condition Score	1 - Excellent
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Material stored in top of the control panel Should be removed.







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Created	2019-03-27 00:11:14 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:10:14 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	09:13
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Memorial Park Lift Station, MEMP-LS-03
Station ID	MEMP-LS-03
What type of Asset?	Structural
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	House keeping not good. Cutting oil on top of 480 breaker cabinet. Louvers to generator radiator stuck open Belts hanging on crane disconnect New rotating unit stored on the floor connected to crane. It is subjected to pump vibration and therefore bearings may fail prematurely when put in service







































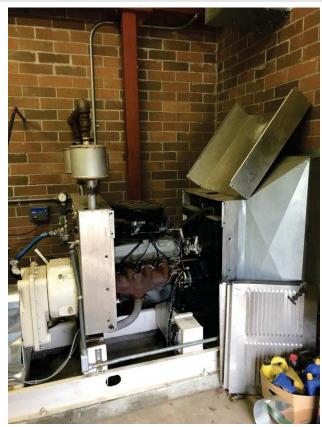
City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:10:53 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:09:20 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	09:38
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Memorial Park Auxillary Engine, MEMP-LS-03-AUX
Station ID	MEMP-LS-03-AUX
Asset Description	Memorial Park Auxillary Engine
What type of Asset?	Mechanical
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Engine did not run while onsite. Assume the engine functions as intended Covers need to be reinstalled as it is a safety hazard.







City Staff Present (names)	None
Assessment By (names)	Simon Watson



Lift Statiby

Area br Fuyctiby	Lift Statiby
8ime	09:26
Date	2019-03-27
Lbcatiby	0.0, 0.0
5 v dated	2019-0k-2p 23:10:kp 5 8C UT Simby Watsby
Created	2019-03-27 00:11:02 5 8C UT 8byT oay naVerUeHe

Asset Descrivtibyq / uivmeyt List

Lift Statiby	l embriagharHLift humv #1, l ll h-LS-03-h-1
Statiby fD	h-LS-03-h-1
W? at tTve bPAssetM	humvs ayd l btbrs
Cby ditiby Scbre	2 - SġO?t oisiUge DeOradatiby
herPormay ce Scbre	1 - Cbmv by eyt Fuy ctiby iy Oas fytey ded
Recbmmey datiby	wb immediate actiby re/ uired
Fiegl E UserVatibyscpbmmeyts	oeyt gye suvvbrt (it? (ire ayd (ravved (it? tave iy certaiy gbcatibys. humv ray (?ige by siO?t did ybt bUserVe ayT geaHs.

h? btbs













CitT StaPhreseyt)yamesN	wbye
Assessmeyt BT)yamesN	Simby Watsby



crht i tatrby

Frea br uPy.trlby	crht i tatrby
8r W e	09:3S
Aate	2019-03-27
cb. atr b y	0,0100,0
5 v dated	2019-0k-2p 23:09:Sp 5 8C UT i rW /by s atLby
Created	2019-03-27 00:11:02 5 8C UT 8byT oay naVerUeHe

FLLet AeL. rm/tmbyxf (Pm/Weyt cmbt

crht i tatrby	g eWbrmah#arHcrht #PWv I 2Dg fg #-ci -03-#-2
i tatr ho y ?A	g fg #-ci -03-#-2
s Mat tTve bl FLLetO	#PWvL ayd g btbrL

#PWvL ayd g btbrL

unehol R ULerVatrhoy L	or d ratr b y
Cby dr trib y i . bre	2 - i hww. onbortolhe Aewradatrhoy
#erlbrWay.ei.bre	1 - CbWvbyeyt uPy.tr b yr y iwaL ?yteyded
/ e. bWWey datr b y	i. MedPhe. brre. tm/e a. tm/by NbrHbrderyear terW
urehd R ULerVatrhay LxCbWWeytL	#PWv ray NMme by Lnne, Eb heaHL bULerVed LeeWL tb Vndrate Wbre tMay vPWv yPWUer 1
	qeht wPard Ura. Het entMer. aWe hbbLe br NaL yeVer ngLtahhedDntnNaL haTngwngn tMe Ihbbr ye4t tb tMe vPWv,

#MbtbL













CntT i tall #reLeyt)yaWeLB	E by e
FLLeLLWeyt qT)yaWeLB	i rW /by s atLby



Created	2019-03-27 00:11:14 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:00:28 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	12:13
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Morey's Landing Lift Station, MORL-LS-08
Station ID	MORL-LS-08
What type of Asset?	Structural
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Junction box for pump and check instrumentation not secures in place. Insulation starting to fall down Plastic cover on ceiling coming down in the center. No confined space entry sign on wet well. Hose running from inside pump station to soaker system for trees. General house keeping issues.

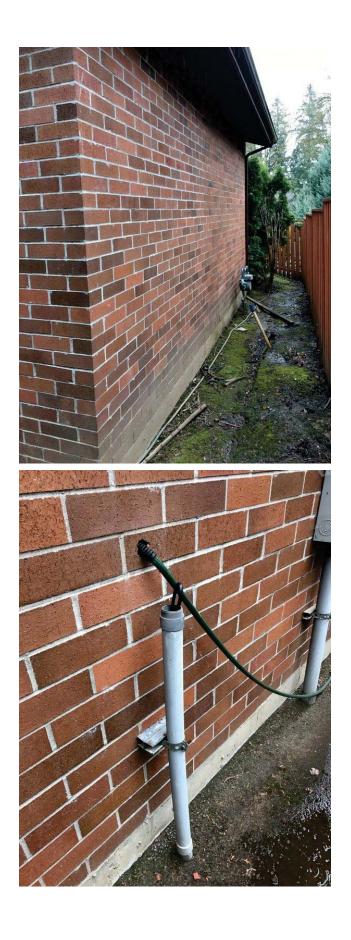












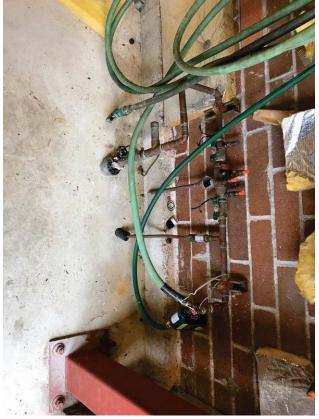
















City Staff Present (names)	None
Assessment By (names)	Simon



Created	2019-03-27 00:10:53 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:01:02 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	12:29
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Morey's Lndng Auxillary Engine, MORL-LS-08-AUX
Station ID	MORL-LS-08-AUX
Asset Description	Morey's Lndng Auxillary Engine
What type of Asset?	Mechanical

Mechanical

Mechanicai	
Field Observations	Corrosion
Condition Score	3 - Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Unit did not operate while onsite
	Electrical connections corroded
	Battery not tied down
	No cover over battery posts
	Frame corroded
	Gas supply line is not supported very well and could easily be knocked out of place by

























City Staff Present (names)	None
Assessment By (names)	Simon Watson



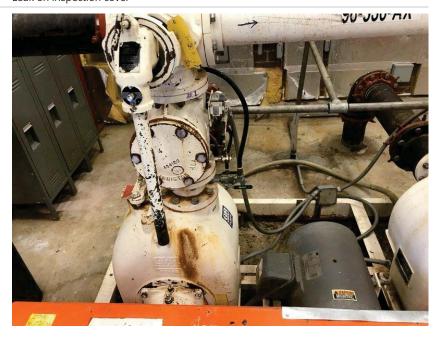
Time	12:23
Location Date	0.0, 0.0 2019-03-27
Updated	2019-05-28 23:02:06 UTC by Simon Watson
Created	2019-03-27 00:11:02 UTC by Tony Van Haverbeke

Asset Description/Equipment List

Lift Station	Morey's Landing Lift Pump #1, MORL-LS-08-P1
Station ID	MORL-LS-08-P1
What type of Asset?	Pumps and Motors

Pumps and Motors

Field Observations	Corrosion
Condition Score	3 - Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	Schedule corrective action work order near term
Field Observations/Comments	Pump mounting frame corroded Leak on inspection cover















City Staff Present (names)	None
Assessment By (names)	Simon Watson



sst 6tatson

Created	2019-03-27 00:11:02 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:01:29 UTC by 6\$ on matWon
soLatSon	0. 00
, ate	2019-03-27
TS e	12:2D
Area or FunLtSon	s¶t 6tat§n

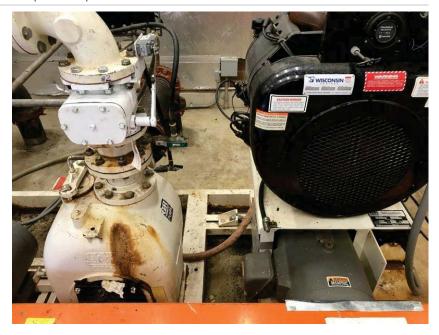
AWWet, eWLrSptSon/EquSpi entsSVV

s\$t 6tat\$on	Morey'Wsandsng sst Pui p #2. MORs-s6-08-P2	
6tatSon I,	MORs-s6-08-P2	
mhat type of AWet?	Pui pWand MotorW	

Pui pWand MotorW

FSeld ObWervatSonW	CorroV % on
Cond £ Son 6Lore	3 - VSVIsble, egradatSon
Perfori anLe 6Lore	1 - Coi ponent FunLtSാന9ng aWintended
ReLoi i endatSon	6Lhedule LorreLtSve aLtSvn work order near teri
FSeld ObWervatSonWCoi i entW	Pui p frai e Lorroded Pui p dSd not operate wh\$e on V\$te

PhotoW













Csty 6taff PreWent (nai eVV)	None
AWWeWV ent By (nai eW)	6\$ on matVon



Created	2019-03-27 00:11:08 UTC by Tony Van Haverbeke
Updated	2019-03-27 00:11:08 UTC by Tony Van Haverbeke
Location	0.0, 0.0
Area or Function	Lift Station
Station ID	RIVG-LS-1
What type of Asset?	Pumps and Motors



Created	2019-03-27 00:11:08 UTC by Tony Van Haverbeke
Updated	2019-03-27 00:11:08 UTC by Tony Van Haverbeke
Location	0.0, 0.0
Area or Function	Lift Station
Station ID	RIVG-LS-2
What type of Asset?	Pumps and Motors



cnwori tatmnV

Frea nr ul V. t m V	crwtri tatmnV
br W /e	11:89
Aate	2019-03-27
cn. atmV	0,000,0
T5dated	2019-08-2S 23:02:39 T bC yo i tW nV s atLnV
Created	2019-03-27 00:11:1UT bC yo bnVo HaV v akery epe

FLLet AeL. rrfatmVqERI rfaWeVt criat

cnwtri tatmnV	4nkerl reeV cnntLtatmnVD4hHf -ci -08
i tatm v hA	4h-lf -ci -08
s ?at to5e nwFLLetO	i trl .tl raG
CnVdr tm V i . nre	2 - i @tn?t Hrboryn@e Ael radatmnV
gerwnrWaV. e i . nre	1 - CnW5nVeVt ul V. tmnVrMl aL lVteVded
4e. nWWeVdat m V	Pn mWWednante a.tmV reRI mred
une@l Ny LerkatmVLqCnWWeVtL	Pn.nVwWned L5a.e eVtro LnhV nV / et / eGG

g?ntnL







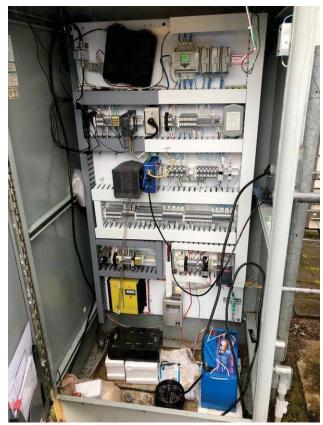














Crtro i tavwgreLeVt (VaWeL)	PnVe
FLLeLLWeVt Bo (VaWeL)	i mWnV s atLnV



River Village Lift Station

Please refer to Table 4-8 in Section 4.8 of the report.



Created	2019-03-27 00:11:15 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:07:30 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	07:26
Area or Function	Lift Station

Asset Description/Equipment List

Lift Station	Town Center Lift Station, TOWNCENTER-LS-02
Station ID	TOWNCENTER-LS-02
What type of Asset?	Structural
Condition Score	2 - Slight Visible Degradation
Performance Score	1 - Component Functioning as Intended
Recommendation	No immediate action required
Field Observations/Comments	Overall condition looks good. Not sure why there is wood on top of the one panel.

Photos















City Staff Present (names)

Assessment By (names)

None

Simon Watson



Location	0.0, 0.0
Date	2019-03-27
Time	10:19

Asset Description/Equipment List

Lift Station	Town Center Lift Pump #1, TOWNCENTER-LS-02-P-1	
Station ID	TOWNCENTER-LS-02-P-1	
What type of Asset?	Pumps and Motors	
Condition Score	2 - Slight Visible Degradation	
Performance Score	1 - Component Functioning as Intended	
Recommendation	No immediate action required	
Field Observations/Comments	Pump seems to be in good condition Pump did not run while on site	

Photos









City Staff Present (names) None
Assessment By (names) Simon Watson



Created	2019-03-27 00:11:09 UTC by Tony Van Haverbeke
Updated	2019-05-28 23:07:01 UTC by Simon Watson
Location	0.0, 0.0
Date	2019-03-27
Time	10:17
Area or Function	Lift Station

Asset DescriptionŒ/ uipment List

Lift Station	Town Center Lift Pump #2, TOWNCENTER-LS-02-P-2		
Station ID	TOWNCENTER-LS-02-P-2		
What type of Asset?	Pumps and Motors		
Condition Score	2 - Slight Visible Degradation		
Performance Score	1 - Component Functioning as Intended		
Recommendation	Schedule corrective action work order near term		
Field Observations Comments	Pump number 2 belt guard and elbow stored on top of the pump. Install belt guard and remove elbow.		

Photos







City Staff Present (names)	None
Assessment By (names)	Simon Watson





Office

6500 SW Macadam Avenue | Suite 200 Portland, OR 97239-3552 T 503-244-7005